1-1-2023

Perinatal Mental Health For Indigenous Women And Birthing People

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PERINATAL MENTAL HEALTH FOR INDIGENOUS WOMEN AND BIRTHING PEOPLE

by

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A Dissertation in Practice
Submitted to the Graduate Faculty

of the

University of North Dakota
in partial fulfillment for the requirements

for the degree of

Doctor of Philosophy

Grand Forks, North Dakota

August
2023

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Amy Stiffarm

July 25, 2023

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ACKNOWLEDGEMENTS

When I think about my privilege to work on this important subject, the hard work and sacrifice of those who came before me to carve out this path is not lost on me. My parents have always believed in my abilities, even when I didn't. I think about my paternal grandfather, Peter Stiffarm who received his bachelor's degree in 1949 from Montana State College after he returned home from the war with a purple heart. I can't imagine how hard that must have been, but I know him being there as well as the contributions of other Indigenous scholars, paved the way for me and many other Indigenous students; my paternal Grandmother Ruby Chief Goes Out Stiffarm, who rode in a vehicle in the 50s from Rocky Boy to Fort Belknap Agency to give birth to my father. I never got to meet my Grandma Earthside, but I always wondered why they traveled that far; I think about my mom's mom, Ella Faye Monroe Wetzel, who always reminded me to relax and not take life too seriously and to be good to people- she was my first college roommate and let me live with her when I decided to attend SKC. My grandparents are no longer with us, but they've played a major role in my life and work.

I'd like to thank my brothers Eric and Pete and your families; my lifelong friends and other relatives from Fort Belknap, and my family in Rocky Boy and Browning; and my friends on the Flathead Rez. All of these people helped shape who I am today.

I also would like to thank the amazing faculty that I was able to learn from in this program; the other researchers, organizations, advocates, and other birthworkers whose paths I've been blessed to cross; my cohort and the other students in the program. Learning from you all the past three years has truly been an honor.; all my previous teachers and mentors for your role in getting me to this point; my coworkers at HMHB for being absolutely amazing.

I also want to thank my little family here at home. Daniel, you've truly been such a blessing in my life;. My girls- Tahmya Lynn and Kisiah Faye. You were right there with me and sacrificed a lot for me to be here, but you've always been my biggest cheerleaders and my motivation to not only further my education to do better for you as a parent, but to try and make the world better for you when you become Mothers, if you choose to do so.

Thank you to my committee for believing in this work and for supporting me. Ginehayan to everyone that has supported me and my daughters along the way. Throughout the challenges of this program, I have been grateful for the reminders of how incredible my support system is. Please know that moving forward, I will do my best to make it easier for the ones coming next.

I dedicate this PhD to the mothers in my family who are responsible for who I am.

Ruby Chief Goes Out Stiffarm, Ella Faye Monroe-Wetzel, and Barbara Stiffarm.

And to all the Indigenous Mothers who are doing the best they can in the world we live in. I see you; I hear you. May our communities remember again that without Mothers, we could not be. Let the strengths of our communities hold us up while we birth and parent the future generations with all the power and love passed on to us from our ancestors.

ABSTRACT

Before for the impacts of colonization, Indigenous women and birthing people were deeply cared for by their communities during pregnancy, birth, and the postpartum period. There is a serious lack of literature on perinatal mental health (PMH) for Indigenous Peoples in the US. Based on what limited data does exist, high rates of PMH complications are consistently reported for Indigenous birthing people. Exploring the unique circumstances experienced by Indigenous birthing people is crucial to addressing the PMH disparity gap.

A concept map illustrating the systematic, community, and individual levels of PMH complications for Indigenous Peoples was used to organize and guide the dissertation. The process paper outlines a community asset mapping process and includes crucial considerations when engaging Tribal communities to address PMH disparities including community-based participatory approaches and mechanisms to include strengths and resources from Traditional Knowledge. A cultural safety toolkit was designed to help health providers in Montana improve care for Indigenous women and birth givers by deepening their knowledge on content related to cultural safety tenets during the perinatal period. Finally, a secondary quantitative data analysis was conducted to investigate the association between adverse childhood experiences vs. symptoms of depression and smoking postpartum using North Dakota Pregnancy Risk and Assessment Monitoring System data. The manuscript contained context was provided to emphasize the Indigenous experience of PMH complications. The work presented in this dissertation emphasized the importance of engaging Indigenous communities to address PMH disparities through strength-based approaches grounded in local cultural values.

Introductory Chapter

Positionality

To best analyze and address my dissertation topic, I must first ground myself in this work by recognizing my positionality to the subject. I am an Indigenous woman and emerging Indigenous Health Researcher. I am from the Fort Belknap Indian Community where I am an enrolled Aaniiih Tribal Member. I also descend from the Cree and Blackfeet Nations. My ceremonial name is Mahs-kwah Kah-wi-che-wah-t, which translates from the Cree language to English as 'Goes with the Bear (Black Bear) Spirit'. My Grandmother (Great Aunt), Amy (Chief Goes Out) Chief Stick gifted me her Cree name so that I carry both her English and Cree names.

I had the unique experience of attending a Tribal College where I received my bachelor's degree in Life Sciences. The curriculum requirement at my college required coursework to be related to culture and there were many culturally congruent courses available to me. While I was learning the western scientific method, I was also learning about Indigenous Science and the importance of being grounded in Indigenous Culture, no matter what subject I was studying. I went into the public health field for graduate school in the hopes of finding ways to bridge western and Traditional medicines. However, much of the content from my master's degree was based on Eurocentric ideals and philosophies. I was discouraged by missing out on the opportunities to dive deeper into Indigenous health and research, so I decided not to further my education at that time.

When I began the Indigenous Health PhD program at the University of North Dakota, I felt like I belonged. I was able to begin learning about public health topics and my Indigenous perspective was encouraged, not suppressed. The centering of Indigenous experiences within lectures and coursework has allowed me to better understand the differences between common

deficit-based research explorations into Indigenous communities and strength-based, resiliency narratives often captured by other Indigenous Researchers. This educational experience has helped me gain confidence in my ability to engage in research respectfully and effectively in Indigenous Health topics as an emerging researcher.

I approach research questions with an Indigenous epistemology, where Indigenous Traditional Knowledge has value, equitable to western-based research. This epistemology recognizes that knowledge acquired during ceremony, dreams, etc. is just as valuable as information or data gained utilizing research. My ontology includes the belief of holism, that all beings are interconnected and rely on each other for existence. This belief system recognizes our more than human relatives as well as spiritual entities. My axiology is based on my relational responsibility to my community. As an Indigenous Researcher I commit my work to embody respect, relevance to Indigenous communities, reciprocity, and responsibility when working with community.

An important note about my positionality is that I came to study perinatal mental health (PMH) through my lived experience. During my Master of Public Health degree, I gave birth to my two daughters into the world- Tahmya in 2014 and Kisiah in 2016. After having my first born, a passion for maternal child health grew and I spent the rest of my degree studying topics surrounding Indigenous breastfeeding/chest feeding. During my second pregnancy I struggled with both depression and anxiety postpartum. In my healing and educational journeys, I've learned many things that could have been helpful to me then and prior. I've learned how I was considered at risk and how restoring balance in my life was healing for me. When determining the focus of my PhD research, I decided that I would focus on PMH to better understand systematic issues contributing to PMH racial inequities. I imagined a world where future mothers

and birthing people didn't experience the shame and guilt I felt about my pregnancy and postpartum period. I imagined a better perinatal experience for my daughters. It is with this education, experience, and humility that I step forward into my work as an Indigenous Researcher studying PMH.

Background

Postpartum depression (PPD) is often what most people think of when it comes to PMH. However, PMH covers an array of issues that can be present from pregnancy into parenthood including depression, anxiety disorders, obsessive-compulsive disorder, post-traumatic stress disorder, bipolar illness, psychosis, and substance use disorders. The term 'perinatal mental health (PMH) issues' is used to encapsulate all issues listed above that occur during pregnancy and postpartum.

Exploring the unique circumstances experienced by Indigenous Peoples is important as Indigenous women experience higher risk of PMH issues than the general population, even though it is believed that these issues are underreported (Owasis et al., 2020; Heck, 2021). Even more unrecognized, are the strengths found within Indigenous knowledge and culture that can be utilized to prevent and heal PMH issues.

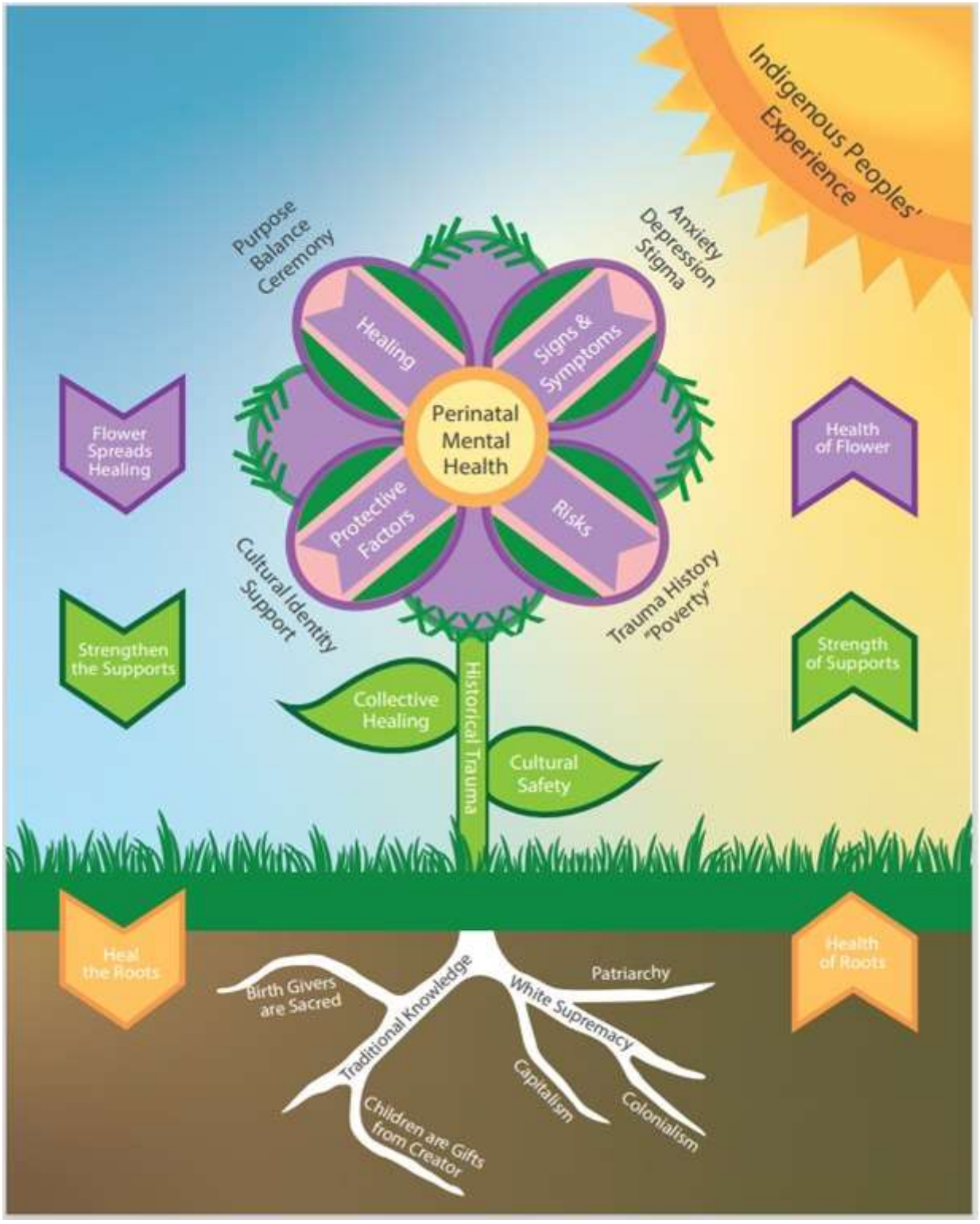
The products I created to complete my dissertation in practice include: a process paper that highlighted my experience conducting a community asset mapping project with the reservations in Montana and a state-wide non-profit organization; a cultural safety toolkit designed to help perinatal health providers better serve Indigenous women and birth givers, and a secondary quantitative data analysis manuscript to investigate an association between adverse childhood experiences (ACEs) and symptoms of PPD and postpartum smoking using North Dakota Pregnancy Risk and Assessment Monitoring System (PRAMS) data.

Concept Map

To organize and guide the research required for the dissertation process, a concept map I developed in Dr. Nicole Redvers' Principles of Indigenous Health II course was used (Figure 1). The concept map was based on the social ecological model and was created to illustrate the PMH experience for Indigenous birthing people. A flower was utilized to represent the beauty of Motherhood and birthing. Additionally, plants and humans have a sacred connection as we are in a reciprocal relationship with them (Kimmerer, 2015). Plants provide humans with nourishment and medicine, and we honor them and help them spread and grow. The sun is used to shine light on PMH for Indigenous women and birthing people and our unique experiences and world views. Each dissertation product addressed one level represented within the concept map.

Figure 1

Concept Map Illustrating the Perinatal Mental Health Experience of Indigenous Women and Birthing People



The Roots

The macro or systems level is symbolized by roots. How Indigenous women and birthing people experience health is deeply influenced by first and foremost, Traditional Knowledge. Many Indigenous cultures hold the belief that birth givers are sacred due to their ability to bring life into this world. With that knowledge is also the belief that our children are gifts from the Creator and they travel from the Spirit World to Earth Side from their Mother's/Birthing Parent's womb. Some Indigenous People will say 'Birth is Ceremony' to acknowledge this sacred moment. Also within the Traditional Knowledge realm is the fact that pre-colonization Indigenous communities knew how to take care of women and birth givers in pregnancy, birth, and in the postpartum period. There were many roles present within families and communities to take care of both the birthing person and the baby during this sacred time.

Colonization is a rotten root of the flower of Motherhood and birthing as it continues to disrupt Indigenous traditional teachings, including parenting (Goldhammer, 2016). The capitalism that comes from western colonization has disrupted communal support systems and often birthing people are forced to work very quickly after childbirth to bring income into the home to survive. Needing to prioritize money over the wellbeing of birthing people and babies deeply disrupts the sacred period of bringing a child Earth Side.

Similar to colonization white supremacy is at the root of PMH issues as it historically only placed value on Eurocentric ideals including western medicine and methodologies (Lucero, 2011; Held, 2019; Redvers et al., 2020; Hayward et al., 2021). Stemming from white supremacy is patriarchy. Residuals of patriarchy have been left over in many Tribal communities after colonization and Indian boarding schools that many Indigenous children were forced to attend (The National Native American Boarding School Healing Coalition, n.d.; McKay, 2015).

Residuals of patriarchy can be seen in some Tribal communities when cultural revitalization efforts focus on male-dominant teachings and ceremonies. Male-centered cultural revitalization is not conducive to a support system of collective healing. The lack of teachings relevant to women and birthing people not only affects the strength of cultural identity as a protective factor in a negative way, but also reduces the potential for healing through ceremony.

At the systems level a process paper addressed deep rooted issues relevant to colonization and focused on the strengths of culture from Traditional Knowledge. In this product I highlighted the need to shift away from pushing interventions based on western principles onto Tribal communities and instead illustrate ways to create space to engage Tribal communities so they can determine their own strengths and needs based on their worldviews and community expertise.

The Stem and Leaves

The stem and leaves represent the meso, or community level. Coming from the roots is the stem of how historical trauma continues to impact Indigenous women and birthing people. Many Indigenous communities are suffering from disparities caused by the unhealed trauma from colonization and genocide that occurred in America's attempts to destroy then "civilize" Indigenous Peoples (Brave Heart, 1998; Brave Heart, 2003; Whitbeck et al., 2009; Walls & Whitbeck, 2012; Warne & Lajimodiere, 2015). Coming from the stem is one leaf of collective healing to represent the Traditional Knowledge that remains and how it can still be utilized to heal Indigenous Communities (Alvarez & Farinde-Wu, 2022). Healthy mothers and birthing people can be found in healthy communities. Because of the value of relationality and interconnectedness common among Indigenous Peoples, healing the collective instead of only focusing on the individual must be considered (Wilson, 2005).

The other leaf from the stem is cultural safety. Cultural safety encompasses providers' awareness of power dynamics and practicing critical reflection regarding their interaction with Indigenous patients and clients (Curtis, 2019; Hall, 2023). Cultural safety in health care is an important component of PMH as the care that a birthing person receives during their pregnancy can impact them forever. Providing culturally safe care during pregnancy and for the baby and birthing parent afterward will allow Indigenous patients/clients to feel supported and more secure in their cultural identity. Cultural safety can also improve trust and communication between patient and provider, which would allow the birthing person to speak openly about any potential PMH issues (Groot et al., 2020). When a person is receiving care relevant to the perinatal period, that care needs to be culturally safe as well. Birthing people receiving these services should feel free and safe to receive care from both western medicine and Traditional Knowledge practices if available. Utilizing the best of western medicine and Traditional healing aspects should not be seen as a competition but instead an opportunity to advance healing.

For the meso or community level a cultural safety toolkit was created for Montana providers who serve Indigenous women and birthing people during the perinatal period. Instead of focusing solely on PMH, the toolkit is generalizable to perinatal health, as this education can ultimately impact mental health. Broadening the focus to perinatal health in general also broadens the target audience for the toolkit, ultimately educating more providers in Montana.

The Petals

The petals of the flower represent the micro level of PMH issues and focus more on the personal experiences of the birthing person. The flower is made of four petals to represent the protective factors, the risks, the signs and symptoms and the healing associated with PMH and what an Indigenous birthing person may experience.

Protective Factors

Protective factors are represented by one of the petals and help protect against experiencing PMH issues. The factors of note here include cultural identity and support. A strong Indigenous cultural identity can serve as a protective factor for many mental health issues (Morris et al., 2021). Being strong in cultural identity may make you connected to your language, ceremonies, land, traditional foods, or other powerful healing tools. Support is very crucial in pregnancy and parenthood. The importance of strong partner support is known for all people having a baby, but for Indigenous Peoples, extended family and community can also play important roles. Cultural identity and support are both influenced strongly by colonization and the historical trauma that remains. However, Traditional Knowledge is still alive and well for most communities. Even information that may have been impacted by disruptions of colonization can always be revived through spirituality and connection to land. The resurgence of Indigenous Doulas is one way that Traditional Knowledge relevant to the perinatal period as well as support systems are reawakening within Indigenous communities (Ireland et al., 2019; Cidro et al., 2021; Doenmez et al., 2022).

Risks

The next petal of the flower represents the factors that put Indigenous birthing people at increased risk for PMH issues. Poverty is listed as a risk factor, as financial stability is a powerful influence factor in most people's lives. But for Indigenous communities, wealth systems were quite different than the current capitalistic global economy. While Indigenous people may be wealthy in family or culture it doesn't equate to the same power that high financial income has. "Poverty" adds stress and lowers stability for families. Another risk is trauma history. Having a past trauma increases a person's risk for PMH issues (Choi & Sikkema,

2016; Räisänen et al., 2014). This can include birth trauma, but most notable for Indigenous birthing people is the historical trauma that is experienced widely (Brave Heart, 1998; Brave Heart, 2003; Whitbeck et al., 2009; Walls & Whitbeck, 2012; Warne & Lajimodiere, 2015). The prominent knowledge already available on historical trauma alone builds a strong case for the need for more PMH work in Indigenous communities.

Signs and Symptoms

Signs and symptoms are represented by the next petal of the flower. There are many signs and symptoms associated with PMH issues, but most can be categorized under depression and anxiety. Depression signs and symptoms include hopelessness, lack of motivation, loss of interest, feelings of anger or regret and others (Centers for Disease Control and Prevention (CDC), 2023). Anxiety signs and symptoms include feeling worried or stressed, having scary thoughts, or feeling restless (Texas Children's Hospital, n.d.). Another symptom of PMH issues is the stigma that is associated with mental health issues. Mothers and birthing parents experience feelings of shame and guilt for feeling the way they do or for struggling at all. Additional stigma could be due to the heavy emphasis on the sacredness of having children in Indigenous cultures and from the insane amounts of social pressure put on mothers and birthing parents in general (Rodsky, 2019; Lenz, 2020). PMH issues' symptoms are caused by risks, however awareness and recognizing the signs could lead to healing.

Healing

The final petal of the flower to discuss is healing. Ceremony can be used to heal PMH issues if it is accessible to the birthing person. Health can also be achieved by returning to balance. Western paradigms view mental health as illness within a person, but Indigenous perspectives view mental illness as something that occurs when the physical, mental, emotional,

and spiritual realms are out of balance (Mehl-Madrona, 2009). The illness is within the relationships the person experiences, not within the person themselves. Ultimately through healing a greater awareness and purpose can be achieved. Someone who has experienced healing may come out on the other side not only healthy, but with a better understanding or greater purpose in life. Of course, a person's ability to heal also depends on their support and the larger systems in which they experience life.

The PMH field lacks research necessary to better understand unique risks for PMH among Indigenous birthing people. While there is a better understanding of historical trauma in the context of adverse childhood experiences (ACEs) and health disparities for Indigenous People, there is still limited information on the relationship between ACEs and PMH (Brockie et al., 2015; Warne & Lajimodiere, 2015; Kenney & Singh, 2016; Warne et al., 2017; Giano et al., 2021; Elm, 2020; Richards et al., 2021). At this level a secondary analysis of Pregnancy Risk Assessment Monitoring System (PRAMS) data was conducted to examine a potential relationship of maternal ACEs and PPD and smoking among Indigenous women and birthing people in North Dakota.

Relationships

An essential idea of the concept map is how the levels relate to one another. Relationships and interconnectedness are a foundational component of many Indigenous worldviews (Wilson, 2008). The arrows around the flower highlight how the health of the roots impact the stem and leaves and how the stem and leaves are able to support and nourish the flower. At the root level the health of the roots and how this affects the stem must be considered. The stem and leaves support and nourish the flower. How strong is this support? This strength impacts the health of the flower.

In looking closer at the petals, the protective factors and risks cancel one another out. Risks can lead to signs and symptoms. However, from an Indigenous perspective signs and symptoms are only bad if they are not recognized and addressed. Signs and symptoms can be seen as messengers or opportunities to heal. Healing can reduce these signs and symptoms, which is why there is a two-way arrow between the petals. Healing may come easier for Indigenous birthing people with more protective factors and healing further provides people with protective factors. Therefore, these petals also have two-way arrows from the petals. Once a flower is healthy, the flower can help spread this healing. By healing the individual, collective healing of the community can occur. Healing makes the support stronger and sends healing further down to the roots. Healing and strengthening the roots means increasing Traditional Knowledge translation and reducing the impacts of colonization and white supremacy.

The issue of PMH is on the rise and many researchers and advocacy groups are dedicated to garnering better support for women and birthing people during this crucial time of their reproductive life. However, we must acknowledge that Indigenous people may experience PMH differently based on cultural differences such as worldviews on health and wellness. These differences must be acknowledged and addressed to provide improved, culturally relevant programming and interventions that are specific to unique Tribal communities. Creating healing environments for mothers and birth givers will deeply impact the health of the next generation. Healthy communities start with healthy mothers and birthing people.

Product One: Community Asset Mapping with Tribal Communities: A Strength-based Approach to Perinatal Mental Health Support

Product Type: Process Paper

Alignment with Career and Personal Goals

This product aligns with my career goals to help bridge western therapies and research with Indigenous Traditional Knowledge. Through this work I was able to guide a non-profit in Montana in respectfully engaging with Tribal communities. I was also able to link Tribal communities to PMH resources in the process. This process paper adds to the literature and guide other organizations who can tailor the project to their local landscape and replicate the engagement process. This project allowed me the opportunity to finally do work within Tribal communities in my state of Montana, including my own community. I was able to initiate relationships with key stakeholders in maternal health at both the tribal and state levels.

The work from this project led to the creation of my position at Healthy Mothers, Healthy Babies- the Montana Coalition (HMHB) where I am now the Native American Initiatives Program Manager. Through this position I am able to engage Indigenous communities in efforts related to the mission of HMHB- improving the health, safety, and well-being of Montana families by supporting mothers and babies, age zero to three. Being able to do perinatal health work with Tribal Nations in the state of Montana is a dream come true.

Skills Development

I gained crucial skills during this project. I practiced communicating with diverse populations, including seven distinct Reservation communities. I also had to practice giving critical feedback to funding organizations concerning Tribal self-determination and sovereignty in a way that would help educate and not burn bridges, all of which were key lessons from the

Indigenous Leadership course. I practiced key community-based participatory principles that I learned in CBPR in Tribal communities coursework. I organized and hosted virtual focus group-like sessions to gather feedback and foster relationship building with each of the seven Tribal Nations in Montana. Learning to develop a sound protocol guide in the Qualitative Methods course was very useful to this project. Writing the process paper assisted my learning on collaborating with organizations doing PMH work and allowed me to practice writing content aimed at organizational leadership.

Personal Responsibility Statement

HMHB has been responsible for compiling the resource guide data and maintaining the live guide on the website. They are responsible for any updates at this point in the project. I was only responsible for compiling the information and coordinating and facilitating the follow-up meetings. I was personally responsible for every aspect of the writing. I had the responsibility of working with the non-profit to ensure that accurate information is provided. It was also my responsibility to ensure that human subjects are not mentioned in the narrative, in accordance to IRB guidelines, as this is a paper on programmatic processes, not the findings of the project. I am also responsible for ensuring that the paper was written from a strengths-based standpoint that highlights the strengths of the communities and doesn't paint a disparate picture of the Tribal communities in Montana.

Product Two: Cultural Safety for Indigenous Mothers and Birthing People in Montana

Product Type: Toolkit

Alignment with Career and Personal Goals

This product aligns with my career goals to help educate providers within the state of Montana on how to work with Tribal communities and Indigenous Peoples to improve perinatal

health. I am often asked to present at conferences or meetings on subjects covered within the toolkit. Creating a toolkit will make the content more accessible to providers working in the state. The toolkit will create the potential for future trainings on the subject.

Creating a toolkit allows me to give back to the Indigenous communities in my home state of Montana. So much of my prior research and public health work has taken place in other states or at national organizations that aren't doing work in Montana. Creating the toolkit allowed me to use my experience, research, and education to strengthen allyship by sharing information and resources to non-Indigenous people that serve or work with Indigenous clients and communities. Through my work at HMHB I have already begun tailoring content of the toolkit and giving presentations to various organizations throughout Montana that are invested in delivering about how their organization can implement cultural safety to better serve Indigenous women and birthing people.

Skills Development

Creating this toolkit allowed me to practice skills that are essential to future work. Before taking Principles of Indigenous Health I with Dr. Nicole Redvers, I hadn't even heard about cultural safety. To meet the needs/requests of groups in Montana I needed to take a deep dive into learning about cultural safety during the perinatal period and how to guide people in that work. I had to gather complex information and present it in a way that is easily digestible and tangible to the audience. I needed to practice being succinct in my writing and be very mindful in selecting which information and data I brought forward in the toolkit and which resources I connected the audience to outside of the toolkit. I used skills and knowledge gained in the policy courses so that I could give information on how Federal Indian Policy impacts Indigenous women and birthing people. I needed to ensure that all the resources I gather are organized in a

logical format and that the overall document was cohesive. I practiced approaching this work with compassion and realization that non-Indigenous people in the state do care and do want to learn, they just don't know where to get the information. These are all skills that will be useful when working with various perinatal health organizations and individuals in the future.

Personal Responsibility Statement

Healthy Mothers, Healthy Babies- the Montana Coalition (HMHB) has provided funding for this portion of my dissertation work through salary. Moving forward, HMHB and myself will work together to think through dissemination and future training regarding the toolkit content. I, alone, was responsible for collecting and vetting the content for the toolkit. After an initial draft of the content was created, I secured a grant from the UND Graduate School to provide compensation for feedback from relevant experts, mainly from Montana, in the maternal child health field. The draft toolkit was edited to produce a finished product based on guidance from that feedback.

Product Three: Quantitative Analysis

Product Type: Manuscript

Alignment with Career and Personal Goals

Writing a quantitative analysis manuscript aligns with my career goals of publishing research on PMH for Indigenous women and birthing people to fill the research gap on the subject. I want to be able to add to the scientific literature on this subject to help give important context from an Indigenous standpoint that will help other scholars in conducting future work. Being able to analyze data and interpret results will be very useful for my career so that I can continue to disseminate findings to a variety of audiences.

Skills Development

This project allowed me to gain experience with the institutional review board submission process. Quantitatively analyzing data required me to implement skills and knowledge gained in Biostatistics, Epidemiology and Quantitative Research Methods courses. I sharpened my skills required to use data software and to use appropriate tests for research questions. Writing the manuscript helped me gain skills in writing for a scientific audience while still including context that is ethically relevant to Indigenous Peoples when describing the results of the study. Knowledge and skills gained from the Indigenous Research Methods course was very helpful in learning how to balance a standard quantitative analysis while staying true to my Indigenous standpoint. Writing a manuscript also helped me learn the process of finding an academic journal that the study findings would be a good fit for and tailoring the manuscript to the author requirements of the journal.

Table 1

Table of Required Elements

REQUIRED ELEMENT	PRODUCT 1: Process Paper	PRODUCT 2: Tool Kit	PRODUCT 3: Manuscript
Comprehensive definition of "community"	**X**		
Community/participant demographics	**X**		**X**
Community participatory approach	**X**	**X**	
Indigenous research data considerations	**X**	**X**	**X**
Culturally grounded research approach	**X**	**X**	
Institutional Review Board (IRB) approval			**X**
Ethical considerations (outside of IRB)	**X**	**X**	**X**
Community deliverables/benefit	**X**	**X**	**X**

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Community Asset Mapping with Tribal Communities: A Strength-based Approach to Perinatal Mental Health Support

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Introduction

In December 2022, the Advisory Committee on Infant and Maternal Mortality (ACIMM) issued a report to the Health and Human Services Secretary recommending strategies to improve maternal and infant health among American Indian and Alaska Native (AIAN) mothers and babies. The recommendations included prioritizing the health of Indigenous mothers and infants by "engaging and centering AIAN communities as active, empowered leaders and decision makers in working towards solutions to the challenges facing AIAN mothers and infants in Tribal and Urban Settings" (Advisory Committee on Infant and Maternal Mortality, 2022). There are many successful relationships with non-Indigenous led organizations and Tribal communities to promote health. However, examples of strategies that organizations have taken to engage with and center Tribal communities to build these relationships are limited in the published literature. Furthermore, literature on collaborations with the aim of improving perinatal mental health (PMH) is nonexistent to the knowledge of the author.

This paper illustrates a collaborative strategy applied by Healthy Mothers Healthy Babies- The Montana Coalition (HMHB) in executing the Linking Infants and Families to Supports (LIFTS) in Indian Country Resource Guide project. The purpose of this paper is not to share the results of the project but to explain the process in which the project was completed. The valuable lessons learned through completing the LIFTS in Indian Country project can be shared with other organizations who wish to work collaboratively with Indigenous communities within health promotion efforts. This paper shares the story of HMHB's asset mapping process and follow-up meetings with the seven American Indian Reservations in Montana.

Positionality

The first author is also the project lead of this work by HMHB. They are an Indigenous woman and mother from the Fort Belknap Indian Reservation. They are enrolled Aaniiih (Whiteclay or "Gros-Ventre") and descend from the Chippewa Cree and Blackfeet Tribes of Montana as well. When hired by HMHB to lead this work, the first author was a first year PhD student in the Indigenous Health Program at the University of North Dakota studying PMH among Indigenous women and birthing people in the United States (US). Their research interests stem from their personal experiences as an Indigenous woman and mother. With their second child, they experienced depression and anxiety during pregnancy and postpartum. It is also worth noting that the first author was living on the Flathead Indian Reservation during the time that they led this project and had been living as a guest there for approximately 15 years.

In 2020, the first author served on a panel at the Montana Perinatal Mental Health Conference, hosted annually by HMHB, to discuss their lived experience with PMH issues. Later, HMHB would contract with the first author to help build a statewide, prenatal to age three (P3) online resource guide with the LIFTS in Indian Country Project. HMHB felt it was appropriate to have an Indigenous person from Montana lead efforts in collecting information on resources from the seven reservations in the state. The first author accepted the offer to lead the work on the project. As an Indigenous person, the first author understands the power that comes from working as a collective. As an Indigenous Researcher, they believe Indigenous communities can identify their own needs and that the solutions will come from within their own communities. The first author is responsible to Indigenous communities by not only demonstrating ethically sound work, but to support learning for people and organizations from non-Indigenous communities on how to respectfully engage and work with Indigenous communities. It is with the author's stated positionality that this work was led.

Terminology

When discussing people who experience PMH, the terms women and birthing people will be used to be inclusive of all genders that can become pregnant and give birth. Using inclusive language is especially important when working with Indigenous communities and when discussing sensitive topics such as mental health. Before the efforts of colonization on Indigenous Peoples of what is now known as the US, many genders existed on this land. Eurocentric worldviews are based on physical traits and reflect a rigid dichotomy of boy or girl (Re:searching for LGTBQ2S+ Health, n.d.). An Indigenous worldview of gender is more fluid and is based on a person's spirit or gift. Words have power and should be used with care. Not being inclusive of all people that give birth can cause additional harm to people that are already marginalized by health systems (Re:searching for LGTBQ2S+ Health, n.d.). The term birthing people recognizes a person's sacred ability to give birth and bring life into this world.

Indigenous is the word used to describe the original inhabitants of a specific land. In the US, it is recognized that Tribal Nations were the original inhabitants and therefore Indigenous to this land. *American Indian* is the term used in Federal Indian Law and governmental programs. *Native American* is also used to describe Indigenous Peoples in the US, as they are native to this land. In Montana, state and Tribal relations use the term *American Indian*, however, there is still variability in the terms that are used in Montana. Some funding and programs use *American Indian*, while some use *Native American*. It is proper when working with specific communities to use the terms that they choose to identify with (i.e., specific names of Tribes or reservations). However, for this paper the term *Indigenous* will mostly be used while *American Indian* and *Native American* will only be used when referencing programs or research that utilize those

terms. Additionally, the title of this project was called LIFTS in Indian Country. Indian Country is defined as anyplace where communities of Indigenous Peoples live.

Background

Perinatal mental health (PMH) is a growing concern in the US. PMH issues include depression, anxiety, bipolar disorder, post-traumatic stress disorder (PTSD), substance use disorders (SUDs) and similar issues that occur during pregnancy and up to one year postpartum. Research on the general population has found mental health issues are the most common complication during the perinatal period (Mughal et al., 2022). Researchers believe that 75% of people with symptoms will go untreated (Maternal Mental Health Leadership Alliance, 2020). While Indigenous birthing people in the US are hardly represented in research and datasets, it is believed that they experience higher rates of PMH issues than the general population (Owais et al., 2020; Heck, 2021). Indigenous Peoples in the US have been found to suffer from postpartum depression (PPD) at rates of 14% - 29.7%, compared to a rate of 12.5% for the general population (Heck, 2021; Center for Disease Control & Prevention (CDC), 2023). However, the data and studies producing PDD amd other PMH rates for Indigenous populations are often conducted within specific regions and should not be considered generalizable to Indigenous women and birthing people as a whole. Furthermore, PMH issues are likely underreported by Indigenous women and birthing people due to shame, guilt, and fear caused by the stigma of mental health. In Indigenous communities, fear of stigma is heightened by the historical context of Indigenous children being unjustly removed from families and other instances that created mistrusting relationships (US Department of the Interior, 1967; Palmiste, 2011; Bual, 2018 Bombelles, 2022).

Research to determine accurate rates of PMH among Indigenous Peoples is severely needed. Data from 2016-2020 Montana Pregnancy Risk Assessment and Monitoring System (PRAMS) report an overall prevalence rate of 13.4% for PPD symptoms among all birthing people in Montana (PRAMS, 2020). Montana PRAMS does not include rates specific to Indigenous women and birthing people in their reporting and accurate data on PMH for Indigenous women and birthing people does not exist elsewhere. However, new data demonstrates poor maternal health in general for Indigenous populations. Among nearly 30K hospital-based births that took place in Montana between 2016-2018, Indigenous women and birthing people had three times greater risk of experiencing severe maternal morbidity (SMM), a range of pregnancy complications that cause significant consequences to health, compared to white women in Montana (Woo & Glover, 2021). Disparities also exist within access to healthcare for Indigenous women as only 48.3% have accessed prenatal care in the first trimester compared to 98.6% for all individuals (Woo & Glover, 2021). Additionally, Indigenous women and birthing people in Montana must travel 24.2 miles farther for perinatal health care than their white counterparts and were 20 times more likely to give birth at a hospital without obstetric services (Thorsen, 2022). Accessing prenatal care is crucial to addressing PMH issues. Screening for PMH issues is one of the most critical patient safety considerations as it can identify those at risk for developing mental health complications (Allen, 2023). While screening alone will not address all PMH issues or the social structures creating maternal health disparities, PMH screening during prenatal appointments helps to identify mental health complications earlier.

While research and programs are relatively well established for PMH in the general population, there is limited research and information available on the unique experiences of Indigenous women and birthing people regarding this topic (Baker et al., 2005; Heck, 2021).

Without accurate data and information relevant to Indigenous communities, interventions will continue to focus on the general population only. Indigenous communities have unique circumstances and worldviews that require different methods and strategies on all levels of the continuum of care, from screening through intervention and prevention work. The specific needs and solutions of Indigenous women and birthing people can be found by engaging Indigenous communities and allowing communities to lead efforts. Addressing specific needs and identifying solutions for Indigenous communities can be accomplished by programs and organizations utilizing community-based approaches.

Indigenous Culture as Strength

For Indigenous communities, culture has proven to protect people from experiencing mental health issues (Morris et al., 2021). A publication about building cultural awareness for Indigenous Peoples by the US Substance Abuse and Mental Health Services Administration (SAHMSA) included the following ten items as strengths in Indigenous communities (SAHMSA, n.d.):

1. Extended family and kinship ties;
2. Long-term natural support systems;
3. Shared sense of collective community responsibility;
4. Physical resources (e.g., food, plants, animals, water, land);
5. Indigenous generational knowledge/wisdom;
6. Historical perspective and strong connection to the past;
7. Survival skills and resiliency in the face of multiple challenges;
8. Retention and reclamation of traditional language and cultural practices;
9. Ability to "walk in two worlds" (mainstream culture and the AI/AN cultures); and
10. Community pride.

The list of strengths SAHMSA provides is not exhaustive and it is important to know that variations will exist as each Indigenous community is unique. However, SAHMSA's list creates a great starting point for non-Indigenous people to identify the various strengths from within

Indigenous communities. The guide created by SAMHSA also challenges readers to look beyond problems and recognize the strengths in Indigenous communities (SAMHSA, n.d.). Recognizing strengths within Indigenous communities is essential to identifying solutions and interventions. What other strengths and resources do Indigenous communities have to offer the field of PMH?

Population

The land now known as Montana contains seven Indian Reservations. The Amskapi Pikuni occupy the Blackfeet Nation, the Ksanka (Kootenai) and Confederated Selis (Salish) and Qlispe (Pend d'Orielle) Tribes make up the Flathead Reservation, the Apsalooke (Crow) on the Crow Reservation, the Aaniiih (White Clay or Gros-Ventre) and Nakoda (Assiniboine) occupy the Fort Belknap Indian Community, the Nehiyawk and Anishinaabe (Chippewa-Cree) reside on the Rocky Boy Reservation, the Nakoda, Lakota, and Dakota (Assiniboine Sioux) live on the Fort Peck Reservation, and the Tsististas and Suhtaio (Northern Cheyenne) live on the Northern Cheyenne Reservation (Montana Office of Public Instruction (OPI), 2019). Anishinaabe and Metis (Little Shell Chippewa) Tribe have landholdings in Great Falls, MT, but are not a reservation community. Resources relevant to the families in Great Falls were included in the resource guide from prior work and not collected during the LIFTS in Indian Country project. There are also many "Urban Indian" communities in Montana. However, the LIFTS in Indian Country project focused only on the reservation communities at this time. The map below in Figure 1 shows some of the original territories of the various Tribal Nations and the current day reservations in Montana. The various reservations were formed from 1851 to 1889 with acreage diminishing throughout the years (Montana Office of Public Instruction (MT OPI), 2019). American Indians currently make up 6.6% of the Montana population (US Census Bureau, 2010).

Figure 1

Tribal Territory Map of Montana from Montana Office of Public Instruction (MT OPI, 2019).

Healthy Mothers, Healthy Babies, The Montana Coalition

Healthy Mothers Healthy Babies, The Montana Coalition (HMHB) has been serving the state of Montana as a 501(c)(3), non-profit organization since 1987. HMHB's mission is to improve the health, safety, and well-being of Montana families by supporting mothers and babies, age zero to three. HMHB works with various organizations at the local, state, and national levels to provide services, advocacy, and leadership with the common goal of establishing safe and healthy beginnings for all babies in Montana. Early work of HMHB included getting the Montana Initiative for the Abatement of Mortality in Infants (MIAMI) project into the Montana Department of Health and Human Services (MT DPHHS) through

legislation that passed in 1989 and currently operates under the name "The Healthy Montana Families Program." HMHB's projects have evolved over time but the vision to improve the health, safety, and well-being of Montana families has remained the same. Current projects of the organization include supporting sites in the Montana Healthcare Foundation's Meadowlark Initiative; partnership with Frontier Psychiatry in the Psychiatric Referrals, Intervention, and Support in Montana (PRISM) telepsychiatry consultation line for PMH; coordination with hospitals on the Period of PURPLE crying intervention; sharing the stories and experiences of mothers through the MotherLove podcast and an annual magazine publication; distributing safe sleep kits and car seats to partner organizations serving families; and finally creating and managing the LIFTS Online Resource Guide for resources focused on prenatal to age three (P3) populations.

Prior to beginning the LIFTS in Indian Country project, HMHB had established contacts with two of the seven reservations. Emerging national and state data, though sparse, were beginning to highlight the growing racial disparities for PMH among Indigenous women and birthing people. HMHB knew it would be important to include Reservations in the LIFTS Resource Guide to address racial PMH disparities. However, HMHB wanted to approach engaging with Tribal communities in Montana carefully and respectfully.

Two-Eyed Seeing in Health Promotion

Two-Eyed Seeing is a term that was coined by Mi'kmaw Elder, Albert Marshall (Bartlett, Marshall, & Marshall, 2012). Essentially, Two-Eyed Seeing describes an approach where one eye is used to see all the strengths and benefits of Western ways of knowing and other eye can see the strengths and benefits of Indigenous ways of knowing. When both eyes are used when working on health promotion efforts, more avenues of healing can be seen—from the best of

both worlds. Applying Two-Eyed Seeing in health promotion is a new concept, as Indigenous knowledge has not always been valued by western approaches. In fact, colonization and related white supremacy aimed to destroy Indigenous knowledge systems. This destruction of knowledge is called epistemicide. Epistemicide was carried out through genocide, removal of Indigenous Peoples from their traditional homelands, forced attendance at Indian boarding schools, illegal adoption practices, in addition to other ways colonization disrupted the translation of Indigenous knowledge from one generation to the next (Hall & Tandon, 2017; Redvers et al., 2020).

While colonialism seeks to acquire control over other's lands, settler-colonialism's goal is to remove Indigenous Peoples from the land so that settlers can occupy the land instead (Morris, 2019). Despite the efforts of settler-colonialism to rid America of Indigenous Peoples and their cultures, Indigenous Traditional Knowledges and cultures have prevailed. Today, many Tribes have culture and language preservation programs in place. Every reservation in Montana also now has a Tribal College that offers courses on American Indian history, policy, and local culture and language. Tribal Colleges are structures of resistance to settler-colonialism as they provide a space within Tribal communities where people can earn degrees, learn their culture, and not have to be separated from their families, communities, or culture. Tribal Colleges are a great resource for reservation communities as they are pivotal to preserving cultural knowledge and passing that knowledge down to future generations. Tribal Colleges are not only for Indigenous students as many non-Indigenous students attend and become better educated on how to respectfully work with Indigenous Peoples in fields such as nursing and mental health. Educating non-Indigenous nurses, therapists, and other healthcare workers on the importance and strengths of Indigenous cultures and how to respectfully interact with Indigenous clients is

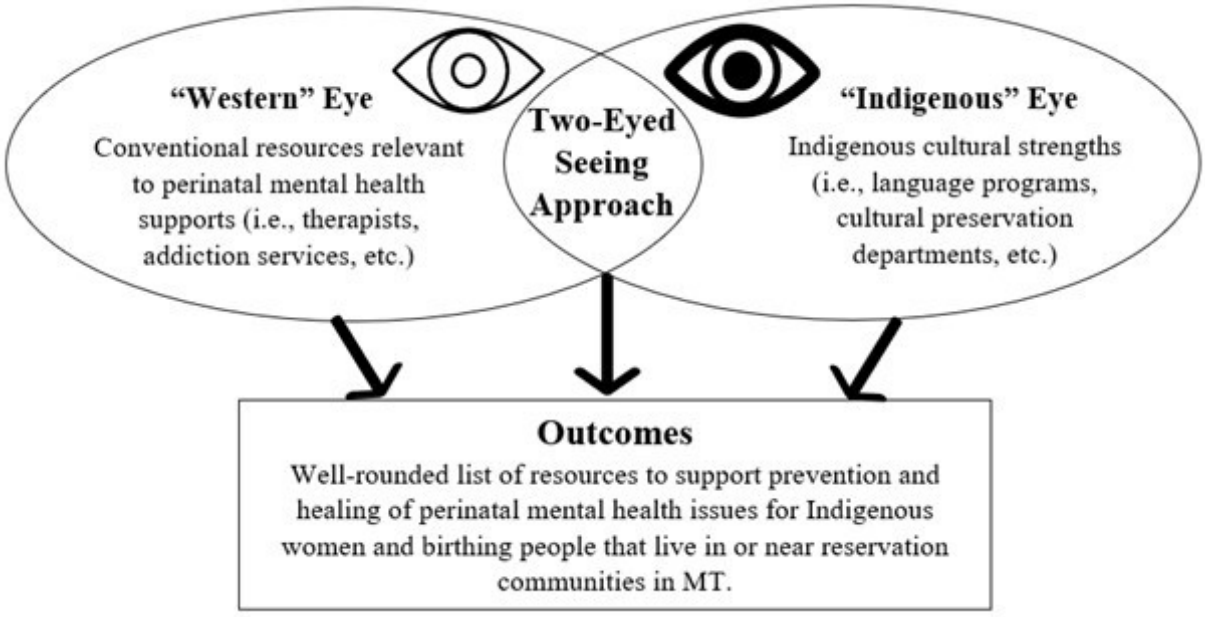
critical to improving how Indigenous women and birthing people seek help and access care for PMH issues.

In the present day, thanks to national Indigenous education efforts and the hard work of many Indigenous scholars and those who practice allyship, Indigenous knowledges are increasingly valued by western research systems. This is evident in the surge of publications on Indigenous Methodologies that are used for education and health research. A recent literature review on the application and use of Indigenous Research Methodologies in social sciences, seventeen articles were assessed from 1994-2005 while over sixty were published from 2006-2015 (Pidgeon & Riely, 2021). When HMHB engaged an Indigenous Health researcher to assist in the LIFTS in Indian Country project, the opportunity arose to apply a "Two-Eyed Seeing" approach when mapping the assets relevant to PMH within reservation communities (Figure 2) (Bartlett, Marshall, & Marshall, 2012). From a Western methodological standpoint, resources relevant to supporting perinatal to age three (P3) populations were collected for the general population in Montana county by county. The resources were then entered into the online resource guide and categorized by service type (i.e., pediatricians, mental health providers, and support groups). Only applying those original categories of service types to Reservations made Tribal communities appear disparate, as many don't have therapists that specialize in PMH or other resources more abundant in less rural locations. However, applying a "Two-Eyed Seeing" methodological approach created space for Indigenous cultural strengths to be included in the LIFTS Resource Guide (Bartlett, Marshall, & Marshall, 2012). Adding a service type category unique to Indigenous culture enabled Reservation communities to highlight and access strengths from both Western and Indigenous ways of knowing. With guidance from community feedback meetings, an additional service type category called "Native Cultural Connections" was added to

the LIFTS Resource Guide so that resources such as language programs, powwow dance classes for families, and other cultural programs were included. By adding the Native Cultural Connections service type, Indigenous culture would be available as a protective factor, mitigating effects of PMH issues (Morris et al., 2021). For a "Two-Eyed Seeing" approach to be employed effectively, organizations must ensure that they are including Indigenous communities in the process of research, intervention development, and programming (Bartlett, Marshall, & Marshall, 2012).

Figure 2

Application of the Two-Eyed Seeing Approach for LIFTS in Indian Country Project



Community Based Participatory Approach

In order to adequately map resources in Tribal communities, it is crucial to engage communities. This was done using principles from a 'Community Based Participatory Approach' (CBPA). Schulz et al. (2002) previously emphasized the need for CBPA to focus on the social determinants of health (SDoH). The World Health Organization (WHO) established the

‘Commission on Social Determinants of Health’ in 2005 with one of their aims being to create “better social conditions for health, particularly among the most vulnerable people (WHO, 2008). The social determinants of health are defined by the WHO as “the conditions in which people are born, grow, live, work and age and are shaped by the distribution of money, power, and resources at global, national and local levels” (WHO, 2008). There are five key areas of SDoH that were outlined in the Healthy People 2030 framework: healthcare access and quality, education access and quality, social and community context, economic stability, and neighborhood and built environment (US Department of Health and Human Services, n.d.). Social determinants of health are influenced by policies, systems, and environments. CBPA can be an effective way to adequately address SDoH (Schulz et al., 2002).

Indigenous Peoples in the US experience unique SDoH due to settler-colonialism (Loppie & Wien, 2022). Historical trauma caused by settler-colonialism impacts is associated with many health disparities among Indigenous Peoples (Brave Heart, 1995; Brave Heart, 1998; Warne & Lajimodiere, 2015). Loppie & Wien (2022) have outlined SDoH that are relevant to Indigenous Peoples’ health at the distal, intermediate, and proximal levels. White supremacy and racism are SDoH for Indigenous Peoples that relate to colonization. The historical process and ideas behind colonization is rooted in the belief that western, Eurocentric ways of being are superior and that anything else is inferior. Colonization is still a contemporary reality as racism remains an issue and impacts health. Redvers et al. (2020) describes Eurocentrism as a worldview that is centered on Western civilization and points out how health and educational institutions are rooted in Eurocentrism. Eurocentrism in health practice creates circumstances where medicine and research are often conducted in a western way that only recognizes Eurocentric ideals.

Community-based participatory approaches (CBPAs) are essential for working with Indigenous Peoples, as past unethical research and health practices from outsiders have made many Tribal communities distrusting of "help" from outside of the community (Arambula Soloman & Randall, 2014, Parker, 2017; Wallerstein et al., 2017). The work of Shulz et al. (2002) in CBPA suggests that public health practices and research must shift away from focusing on individuals and risk factors to addressing the health disparities among racial groups. CBPA is one way to create space for diverse perspectives through collaboration and partnership. When we practice programming that empowers communities and allows them to have control, trust can be built. CBPA has the foundations necessary to start rebuilding trust and to move towards healing solutions with Indigenous communities.

CBPA principles can be applied to the PMH field to improve research and intervention outcomes. Research and programming with Indigenous Peoples requires unique considerations due to the difference in worldview and associated values compared to western approaches. The practice of centering community (i.e., CBPA) aligns well with the many values held by Indigenous communities. Including the knowledge and voices of community in projects and initiatives allows the differences in worldviews and cultural value considerations to be approached in a respectful, power-sharing way (Arambula Soloman et al., 2014; Held, 2019; Wallerstein et al., 2017). Including community is especially important when considering health research and programming as Indigenous worldviews value collective healing (Alvarez & Farinde-Wu, 2022). For PMH, approaching health inequities with values relevant to the local community may help develop new perspectives within research and practice.

The CBPA principle, "CBPA builds on strengths and resources within the community," acknowledges that there are strengths within Indigenous communities. Acknowledging strengths

allows researchers and programming efforts to shift away from deficit-based narratives that perpetuate stereotypes. When we stop placing blame on communities for disparate situations they may find themselves in, and instead hold space for them to tell us what already works. Communities may share or come up with processes and solutions that may be overlooked by western research and medicine. CBPA may provide the foundations necessary to allow research and intervention projects to build upon the assets that already exist in Indigenous communities.

Western researchers and organizations tend to push research and interventions developed for the general population onto Indigenous communities (Lucero, 2011). Even when research and practice efforts are well intended, harm to communities may still occur. PMH efforts with Indigenous women and birthing people seemingly follow this same trend of imposing interventions created for the general population. What may be important or relevant for PMH for the general population may not translate in the same way for Indigenous women and birthing people. We must be able to drop Eurocentric values and ideals if they are not in alignment with the values of the Indigenous community we are working with and focus instead on what the community wants and the unique strengths they offer to the various initiatives.

Power-sharing is a crucial part of CBPA. Researchers and organizations hold power, whether they realize it or not. Researchers and organizational leaders have the privilege of being educated in the western system, and this allows them a certain level of power to receive funding for research or intervention projects, to write papers, and to have a platform to present the work being done. When organizations truly collaborate with the community, they are willing to share their power and privilege with the community to meet common goals. CBPA may serve as a foundation for these types of projects as it facilitates collaborative, equitable partnerships, and involves an empowering and power-sharing process that attends to social inequalities

(Wallerstein et al., 2017). However, caution must be used around the power-sharing principle, as we must not approach Indigenous communities as if they are completely powerless.

There have been too many well-intentioned people that have caused harm to Indigenous communities. Approaching research and practice within Indigenous communities with the mindset that the researcher or organization has all the solutions is symptomatic of the "White Savior Phenomenon" (Healthline, 2021). The "White Savior Phenomenon" is an idea in which a white person or white culture feels as though they can rescue people of color (Healthline, 2021). Organizations operating from outside of the community must be critical of themselves and recognize if their interest in the project comes from a place of saviorism. Instead, power-sharing must be done by practicing critical allyship, where allyship is an ongoing reflective practice and not a static identity (Nixon, 2019). Critical allyship will support achieving the goals of systematic change to address social inequalities that create health disparities. Nixon's (2019) paper on critical allyship notes the shift required to dismantle harmful systems. To practice critical allyship, one must reorient their internal motivation from: 'I wish to help the less fortunate' to 'I use my expertise to reduce inequalities for marginalized populations by following the commitments outlined below'.

1. I seek to understand my own role in upholding systems of oppression that create health inequities.
2. I learn from the expertise of, and work in solidarity with, historically marginalized groups to help me understand and take action on systems of inequality.
3. This includes working to build insight among others in positions of privilege and *mobilizing in collective action* under the leadership of people on the bottom on the coin [those who have disadvantages others do not]. (Nixon, 2019)

Indigenous communities are full of strengths and resiliency. Solutions to social inequalities can be found and cultivated from within the community. However, it is often outside researchers and organizations that hold the resources. When true collaboration occurs, power is

shared by giving the community the resources necessary to address whatever issues they choose, however they choose.

When addressing PMH among Indigenous women and birthing people, a power-sharing model would look like researchers and/or organizations recognizing their own privilege and power and then choosing to share their power, funding, and resources with communities to engage in partnership. Power-sharing would also create space that allows the perspectives and knowledge of the community to lead the project. The people with the power cannot come into communities and set objectives or aims that have been successful in other communities. Outside organizations must be willing to share their power so that projects regarding Indigenous women and birthing people are led by Indigenous perspectives.

Including members of the community in recruitment and the implementation of varied initiatives is not enough and is performative. Performative inclusion during research and health initiatives is when it appears as though community helped with the entirety of the project, but in reality, the projects are not Indigenous-led. To truly address perinatal health issues affecting Indigenous women and birthing people, Indigenous communities must be included in all phases of projects. To change the trajectory of PMH racial disparity gaps, a foundational powershift must take place. Organizations and researchers must share power and resources with the communities to identify what problems exist, what they want to address, how they want to address it, and work to make sure they are able to access the necessary resources to do so. Uplifting Indigenous narratives on PMH will allow for new perspectives in the field.

Case Example

The Linking Infants and Family to Supports (LIFTS) Online Resource Guide was years in the making. The guide was created from the work of many different partnerships between HMHB and other Montana groups.

Readiness Assessment

Years prior to the idea of creating an online resource guide, HMHB conducted a state-wide needs and readiness assessment and identified gaps around supporting pregnant people and families with infants that are struggling with perinatal mood and anxiety disorders (PMADs). The results from this previous assessment work prompted HMHB to begin work on the LIFTS Online Resource Guide.

Healthy Outcomes from Positive Experiences (HOPE) Project

In 2019 HMHB and other organizations worked with the Montana Department of Health and Human Services to incorporate a 7-item 'Positive Childhood Experiences Survey' into the Montana Behavioral Risk Factor Surveillance (BRFSS) data collection tool (Bethell, 2019). In 2021, HMHB contracted with the Montana Institute to conduct a study on the associations between Positive Childhood Experiences (PCEs) and adult substance use behaviors. The Executive Summary of the findings of the BRFSS and PCEs study can be found in Appendix A. The key finding of the work by the Montana Institute was that positive childhood experiences do in fact have buffering impacts on adult substance use behaviors (The Montana Institute, n.d.). One positive experience that stood out to the HMHB team, was "enjoyed participating in community traditions." Participating in community traditions reduced the risk of becoming a smoker (46% reduced risk), currently being a smoker (39% reduced risk), drinking (19% fewer drinks in the past month, 10% in the past month, 11% fewer binge drinking occasions, and 7%

fewer drinks in their max drinking occasion), and illicit drug use (48% reduced risk) (The Montana Institute, n.d.).

The findings of the HOPE Project study as well as the gaps identified in the previous readiness assessment inspired HMHB leadership to develop connections to resources and positive experiences for Montana families. Years prior, in 2018, HMHB received a grant through Blue Cross Blue Shield to create resource guides for families to address common problems identified across Montana communities. HMHB and partners understood how isolating the first period of parenting is and how difficult it was for tired parents to navigate finding resources and connections in their communities. HMHB understood that resource guides were not novel, however they recognized a unique need in rural Montana. Health care providers and other professionals were serving people from various communities and needed support in identifying and tracking resources in multiple communities. Knowing the difficulty families were having in learning about local resources and the struggle providers had in connecting patients from different communities to their local resources, HMHB decided to develop a state-wide resource guide that both families and providers could use to find support in Montana communities.

Key Partnerships

The initial funding for the LIFTS Online Resource guide was primarily from the 'Overdose Data to Action Grant' within the 'Injury Prevention Department' at the Montana State Department of Health and Human Services (MT DPHHS). The Montana Obstetrics and Maternal Support (MOMS) program also became a crucial partner in this work. In 2018, Montana was awarded funding through the Health Resources and Service Administration (HRSA) of the US Department of Health and Human Services (HHS) to improve maternal health outcomes in the state. Montana DPHHS partnered with Billings Clinic to operate the MOMS Program. The

MOMS program, along with several other perinatal health improvement initiatives housed within DPHHS worked in collaboration with HMHB, allowing for braided funding with a common goal to create a statewide resource hub to support families who are pregnant or raising young children. Through strong collaborative partnerships, HMHB was able to begin the LIFTS Online Resource Guide work in 2021. Soon after the collection of county-specific resource guide data, MOMS provided the specific funding used to launch the LIFTS in Indian Country Project.

The first step HMHB took in starting the LIFTS in Indian Country project was hiring an Indigenous person from Montana to carry out the work for the project. HMHB wanted to find an Indigenous person from Montana who had experience with maternal child health (MCH) resources to carry out asset mapping for each of the seven reservation communities in Montana. HMHB acquired a contract with the first author, who was pursuing a PhD in Indigenous Health with an emphasis on PMH and had lived experience as a mother, to lead the project. Hiring and paying Indigenous Peoples to help with projects relevant to Tribal communities is vital. Acquiring Indigenous project leaders and team members diversifies the perspectives and expertise of the staff working on the project. Hiring Indigenous Peoples for projects also extends the funding to someone directly impacted by the work. When organizations begin to work with Tribal communities, they must be willing to pay for that expertise and knowledge.

Asset Mapping

Prior to focusing on the reservations in Montana, HMHB partnered with Early Childhood Coalitions throughout the state to map resources in their communities. A template of service categories was already created for the counties, and this was initially used when first mapping assets for reservations. The schedule for the order in which the information for each reservation would be collected was based around common knowledge about community events (i.e.,

powwows, ceremony times, etc.). An initial environmental scan of each community was completed by the project lead/first author. Due to the impacts of the COVID-19 pandemic, availability of personnel across the state was limited, but particularly so on reservations. In response to the disproportionate impacts of the pandemic on reservations, as much information as possible was collected via information available online. When appropriate or needed, contact with reservation community members and program staff was made to request information on resources. Contacts were made through the first author's personal networks or through connections already in place through HMHB. The primary way outreach was completed was through email and social media messaging. The most successful way to establish a connection was by making an initial phone call to introduce the organization and the LIFTS in Indian Country project and then follow up by email to gather resource information. In many cases, communities already had some resource guides that they were using for various things (i.e., housing, childcare, etc.) and communities were able to supply HMHB with preexisting guides.

As stated earlier, the resource categories or community assets relevant to PMH were already determined, and through pre-established relationships with Early Childhood Coalitions, counties throughout the state were providing details about their community's support for families. However, when work started with the Tribes, there was no relevant category to list well-known assets and protective factors for mental health issues such as culture. To remedy this, the organization had to create space for Tribes to self-determine their own resources and recognize that reservation communities were unique from the counties in Montana.

By creating the space for Tribal communities to determine their own strengths and resources, communities that at first seemed to lack resources (i.e., mental health providers that specialized in PMH or support groups) were able to list resources relevant to their own needs

(i.e., cultural programs and parent language classes). This approach provided the mechanism for Indigenous communities to highlight all their strengths and resources and not be viewed as desolate compared to non-Indigenous populations. The new resource categories and assets (e.g., culture) challenge the misconceptions of a complete lack of resources within reservation communities. Most importantly, by incorporating Indigenous sources of strength and resiliency into the resource guide, Indigenous women and birthing people that utilize the resource guide will become more aware of the assets within the community that they can access for help. CBPA projects can make the necessary space for assets in the community to be highlighted and utilized to improve PMH conditions for Indigenous women and birthing people.

Follow-up Meetings with Tribal Communities

After the asset-mapping data was collected on each of the seven reservations, the project lead debriefed with HMHB leadership on the asset mapping project. The project lead explained that the project needed to better include community and it was decided that HMHB would host a virtual meeting with relevant community members on each of the reservations. The project team acknowledges that ideally, meeting with Tribal communities should have been done first. With humility and respect, the project team felt that approaching the communities at this stage and taking the resources back to communities to present them for feedback was the appropriate thing to do. The approach of taking additional time to engage with the seven reservation communities through virtual meetings was presented to the MOMS program partners, and MOMS agreed to fund the meetings. The meetings with HMHB and the reservation communities had four main purposes:

1. Share information about HMHB and the programs the organization offers to the community.
2. Verify and improve the results of the asset-mapping work by the community.
3. Improve the accuracy of the service categories.

4. Introduce the MOMS Maternal and Child Health Needs Assessment and ask programmatic questions.

Similar to the first asset mapping phase of the project, a strategic schedule was made to determine when to approach which communities. Being strategic with planning the schedule allowed the project team to consider the timing of community events, ceremonies, etc. when drafting the schedule. For feasibility's sake and to respect many of the strict COVID-19 protocols still in place on many of the reservations, meetings were held virtually utilizing Zoom online meeting software.

For this project, "community" is defined as people living or working on or near one of the seven reservations in Montana. Respondent-driven sampling (RDS) methods were utilized to recruit community participants for the meetings with special focus on staff of programs serving pregnant people, moms, birthing people, babies, and children aged 0-3 (Tolley et al., 2016). The project team insisted that the contacts invite whoever they felt was relevant to the resources in question, including Elders and other community members with lived experience as a mom or birthing person. Community members were invited utilizing an email script as well as through phone calls. The initial email outreach effort was followed by a scheduling email to the contacts to get input on the meeting date and time. Finally, a meeting invitation email was sent that contained Zoom meeting information and a PDF of the resources previously collected for that community. Reminder emails and calls were made to community members if necessary.

A protocol guide was created to help guide the meetings (see Appendix B). A Mural Board, an online whiteboard facilitation tool, was utilized by HMHB staff to capture the notes from the meetings. A blank template of the Mural Board utilized for the meetings can be found in Appendix C (Healthy Mothers Healthy Babies- the Montana Coalition, 2022). The notes

collected during the meeting were always shared with the meeting attendees. Gift cards were given to meeting participants in exchange for their time and expertise.

During the initial asset-mapping phase for the reservation communities, it became apparent that not many programs and people were aware of HMHB and the programs they offered. The communities could utilize many of the HMHB programs available but were simply not doing so because the communities did not know about HMHB or their programs. For many community contacts, the first time they had heard of HMHB was when the project lead initially reached out to collect information on resources. The virtual meeting served as an opportunity to build the foundation for programmatic relationships. To help reservation communities learn more about HMHB, the project team wanted to provide information about HMHB's programs during the virtual meetings. The HMHB presentation included a high-level summary of the following programs offered by the organization. The slides used to relay information on HMHB to the reservation communities can be found in Appendix D.

1. Essentials for Babies; care seat and safe sleep kit distribution
2. Period of Purple Crying Program
3. Montana Early Childhood Coalition
4. Perinatal Mental Health Conference
5. Meadowlark Initiative
6. PRISM for Moms
7. Look Closer; public messaging campaign for mothers and birthing people struggling with substance use
8. Support for local programs
9. LIFTS Online Resource Guide

The project team also explained the LIFTS Online Resource Guide asset mapping process. The presentation described the process of how the resource guide was created and how the resources were gathered. Then, there was a demonstration on how the web-based resource guide can be used to access services to manually enter resources in the community. During the

last part of the meeting, the participants were referred to the PDF copy of their respective community resources sent in prior emails and then the project team solicited feedback to ensure what was listed in the resource guide was accurate and representative of the resouces in place. The feedback from the participants was collected by asking each group the following questions:

1. Resources Listed
    a. Are these places still active?
    b. Does the information (phone number and address) look right?
    c. What is missing? What should be listed but isn't?
2. Categories
    a. Are there categories you don't feel are relevant for your community?
    b. Are there resource categories we missed?
3. Resource Guide Materials
    a. Would you like HMHB to provide printed materials of the resource guide?
    b. What kind of materials about the resource guide would work well for your community?

To not duplicate efforts, the MOMS Program asked the project team to include questions for their Community Needs Assessment during the meetings. At the end of the meetings, participants were asked questions that would help guide the MOMS Program's efforts. The following questions were asked and reported back to the MOMS Program:

1. What else you do think pregnant people and moms in your community need?
2. What do babies and young children in your community need?

In an effort to continue building relationships with Tribal communities in the state, one final question was posed to the meeting participants to garner information on how HMHB could help their communities.

1. Now that you know about HMHB, is there anything you see the organization helping your community with?

Results

Notes and attendance information were collected and kept for programming purposes only. For the purpose of this paper, only results relevant to the process of how the LIFTS in Indian Country project was conducted will be covered. There is not any information included in this paper that is relevant or specific to one reservation. The results of this paper focus on the changes that occurred after undergoing the processes described above.

Strengths in Tribal Communities

The data on community assets that were collected for the LIFTS in Indian Country project, created a list of resources for every reservation across the state. After consulting with Tribal communities, the 'Connection to Native Culture' service category was created. As mentioned previously in this paper, culture plays a protective role in many health issues for Indigenous Peoples, especially mental health. If HMHB had only collected information from the service categories that were used for the general population, resources specific to culture would have been excluded from the guide. Programs relevant to culture include cultural preservation, Indigenous language programs, and other similar programs. Furthermore, after conducting the follow-up meetings and getting more information, HMHB was able to add additional resources listed for the reservations. Information on corrections and edits to resource listings were also collected during the follow-up meetings to improve the accuracy of the resource guide.

Need for Facilitated Communication and Collaboration

At the beginning of each meeting HMHB took time to ensure proper introductions were made and gave everyone time to introduce themselves as well as their role in the community. Within this first part of the meeting when people introduced themselves, an unanticipated benefit to the meetings was found. Hearing about other local resources and programs was an added bonus for participants of the meeting. Several participants expressed the limited interactions they

have with one another and how learning about their services and offerings was helpful to their work.

Search Options

For non-reservation communities, the resource guide was listed and searchable by counties and towns in Montana. Listing by counties and towns was problematic for reservations, as many Tribal lands in Montana span across multiple counties and can contain several towns. Reservations are their own distinct communities. To adjust for the distinction of reservation communities, HMHB took additional efforts to ensure that people could search by reservations, not just counties for resources. Making the reservations searchable on their own was quite a big effort and required assistance from HMHB's contracted web developer. The process of listing by reservations made both HMHB and their programming contractor aware of the coding limitations regarding the geographic boundaries of reservations. The erasure of Tribal communities by not including reservations as distinct communities was of great concern. To ensure reservations would be listed as distinct communities, HMHB used additional funding resources to the pay for the additional time it took the contracted web developer to create code that allowed for sorting and searching services by reservation within the resource guide.

Locations

Initially, the services listed in the LIFTS Online Resource Guide had street addresses. However, street addresses are something that not all Indigenous community members utilize. Issues with street addresses is commonly mentioned when discussing voting rights for Native Americans. Many people among the Native American population do not have street addresses. Many offices and buildings within rural reservations sometimes have streets that have never been systematically numbered or named. While some reservation communities do have street

addresses, not everyone in the community knows or uses physical addresses to describe places in their community (Mask, 2018). Relevant to land-based values and noting that Indigenous languages are very descriptive in nature, in some Indigenous Communities, directions are given by describing where something is. For example, “the building behind the ABC building,” or “the old XYZ offices,” are typical descriptions of some locations given within reservation communities. While descriptive locations do not match or fit with locations with street addresses for information on the counties, descriptive locations are often utilized by Tribal communities. How useful is listing a street address in a local community resource if people don’t use the street names? To ensure usability of the resource guide by reservation communities, some resource locations in the guide give descriptive locations instead of physical addresses. The resource guide was created to list community resources. These resources belong to the community and information must be relevant and specific to those communities to be helpful.

Native American Initiatives Program

One major result from the LIFTS in Indian Country project, was the creation of the new Native American Initiatives program at HMHB. While HMHB programs were always open to Indigenous communities in the state, and some Tribal communities were already aware of HMHB and utilizing HMHB programs, there was a need to invest in and improve engagement with Tribal communities. After witnessing the success of LIFTS in Indian Country and hearing of the needs in the virtual meetings with Tribal communities, HMHB created a new program with a sole focus on improving the health and wellbeing for Indigenous birthing people during the perinatal period and their families. The Native American Initiatives program of HMHB will now offer training to providers in the state that serve Indigenous women and birthing people in the perinatal period. The new program will also continue to engage Tribal communities in

Montana to further build impactful relationships and work in partnership to further community efforts to promote healthy, safe pregnancies and early childhoods in Indian Country.

Lessons Learned

Communication Efforts

Flexibility in planned approaches was crucial for inviting people to attend the follow-up meetings. When the project team initially reached out to people on the reservations to participate in the follow-up meetings, emailing was utilized. However, this route was not always successful. Outreach calls were also challenging because getting people on the phone was often difficult. While initially it felt defeating to not be able to make connections with communities, the project team recognized that the people who were invited to attend were extremely busy people, oftentimes going above and beyond their full-time hours to serve their people. Patience and consistency in emailing and calling was important. Sometimes getting in touch with one person on the reservation would result in getting more attendees, as community contacts used their relationships to connect with and invite other relevant people. The project team also utilized social media to make connections with community members and organizations. When working with Tribal communities, understanding that programs are often underfunded and understaffed and that the people doing the work are very busy serving their communities, is crucial to meaningful engagement. Employing multiple communication efforts to get in touch with people is imperative. Contacting community members and program staff is just the first step in building relationships, and making additional attempts to reach out is definitely worth the extra time.

Timing the Project for the Communities

While planning for the follow-up meetings, the project team had to consider the timing that worked best for the communities and not just the deadlines relevant to the funding. When

deciding in which order to initiate communications with each reservation for both the initial asset mapping and the follow-up meetings, the project team took community social and ceremonial events into consideration. Because HMHB had hired an Indigenous person to lead the project, they had knowledge and personal experience of these events and several contacts with Tribes across Montana. This expertise made planning around weeks where programs would be busy with events like powwows easier. With the use of modern technology, dates of social events can often be found online and are usually held at the same time year after year (i.e., third weekend of July). Knowing these timings was beneficial in planning when to reach out to communities.

Recognition of Tribal Sovereignty & Culture

To properly include Tribal communities in the resource guide, the project team had to ensure that the guide would be useful to the people whom the guide was made for. If the same process used with counties in the state and the same service categories of resources were collected had been applied to the LIFTS in Indian Country project, the guide would only have marginally useful. HMHB had to recognize that Tribes in Montana were not just communities, but sovereign nations with their own unique cultural constructs. Framing reservations as unique communities with unique resources made it obvious to make the necessary changes to properly include the reservations in the search fields, to utilize addresses that were relevant to the communities, and to include Indigenous cultural strengths within the resource guide. The effort to make these changes did take additional time and required additional funding for coding work by the contracted web developer. However, making these changes was necessary to ensure that the resource guide was relevant to and usable by Tribal communities. Creating space for resources and strengths from both western-based knowledge and Traditional Knowledge aligns with the "Two-Eyed Seeing" approach to health practices (Bartlett, Marshall, & Marshall, 2012.

Reciprocity

The strategy of one person gathering asset information can be improved by utilizing a community-based approach from the start. Ideally, communities would be engaged during the planning phase. However, there wasn't a mechanism in place for HMHB to engage with reservations communities in the same way that Early Childhood Coalitions were engaged for the collection of county assets. The project lead suggested that HMHB host meetings with people on the reservations to share the information that was found during the asset mapping process and give community members space to provide feedback. The virtual meetings with reservation communities were reminiscent of Indigenous traditions of gift giving. The presenting of the data that HMHB collected during the asset mapping and providing information on HMHB's programs may be viewed as an offering of information and in exchange the communities shared their knowledge and resource information back to the project team. The exchange of knowledge that occurred during the virtual meetings between HMHB and the reservation communities aligns well with a common Indigenous cultural value of reciprocity, the process of exchanging things, such as gifts. Furthermore, the project team was able to express the value of the participants' time and expertise by offering an honorarium for attending the meetings. The knowledge exchange process was meaningful and beautiful, and the project team approached each meeting with care and respect for the community and the knowledge they wished to share.

Conclusion

The LIFTS in Indian Country project highlights how HMHB consciously began building relationships with the reservation communities in Montana. Essential to the success of the project was power-sharing collaborations and remaining flexible and open to necessary changes during the project. "Two-Eyed Seeing" and CBPA were crucial to ensuring that the LIFTS Online

Resource Guide would be useful to women and birthing people within the reservation communities in Montana (Bartlett, Marshall, & Marshall, 2001; Schulz et al., 2002).

The Advisory Committee on Infant and Maternal Mortality's guidance to engage with Tribal communities is crucial in reducing racial disparities in PMH. Improving PMH complications among Indigenous Populations is vital, and progress will be made by centering the voices and values of Indigenous communities while also following the leadership of Indigenous partners. HMHB's work to engage Tribal communities in Montana is not over. Future directions of the LIFTS in Indian Country project include continuation of meetings with reservation communities and intentionally engaging with Urban Indian programs. There is a great need throughout Montana for more PMH supports for Indigenous women and birthing people. HMHB will continue working with Tribal communities throughout the state to share resources and encourage and support local solutions to PMH issues.

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EXECUTIVE SUMMARY

Study of the Associations between Positive Childhood Experiences And Adult Substance Use Behaviors

PURPOSE OF THE STUDY: The purpose of the study is to answer the question, "Do positive childhood experiences (PCEs) have a buffering impact on adult substance use behaviors?"

INTRODUCTION & CONTEXT: Childhood is a critical stage in human development, and what happens in childhood experientially doesn't stay in childhood physically or mentally. A large body of research details the harmful and lasting impacts of child abuse, maltreatment, neglect and other traumatic childhood experiences as they manifest in negative adult health outcomes. Far less is known about the long-term adult health correlates of the positive experiences occurring in childhood such as feeling safe and protected by an adult at home, feeling a sense of belonging in high school, feeling supported by friends, having at least two nonparent adults who took a genuine interest, feeling able to talk to family about feelings, enjoying participating in community events, and feeling family stood by you during difficult times.

In 2019, the original investigation of Bethell, Jones, Gombojav, Linkenbach and Sege entitled, "*Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample, Associations Across Adverse Childhood Experience Levels*," published in JAMA Pediatrics, demonstrated that PCEs are correlated with lower rates of adult mental and relational health disorders, and that the correlation existed regardless of the number of adverse childhood experiences (ACEs) reported by participants. This 2022 study seeks to expand this field of inquiry on the buffering effect of PCEs by examining possible correlations with adult substance use behaviors found in data collected from the 6,495 English and Spanish-speaking participating in the 2019 Montana Behavioral Risk Factor Surveillance System (BRFSS) phone survey. This BRFSS survey did not collect data on ACEs, only PCEs.

SUMMARY OF KEY FINDINGS: The answer to the question posed by this study is, "Yes, positive childhood experiences do have a buffering impact on adult substance use behaviors, specifically cigarette, alcohol and illicit substance use." The 2019 MT BRFSS data indicate that the positive adult outcomes of PCEs extend beyond lower risks of physical and mental health to include a lower likelihood of cigarette and illicit drug use and lower likelihood of problem drinking behaviors. Key findings include:

1. **A positive community norm exists in Montana regarding positive childhood experiences reported by adults.** Most Montana adults report experiencing each of the PCEs often or very often in their childhoods. The strongest of these norms include 90.8% feeling safe and protected by an adult at home, 82.8% feeling supported by friends in high school, and 81.4% feeling their family stood by them during difficult times in childhood.

2. **The more total PCEs reported, the lower the prevalence of having ever been a cigarette smoker.** Those who reported having experienced the highest levels of PCEs demonstrated a 68% reduced risk of having been a cigarette smoker compared to those who reported having experienced the lowest levels of PCEs. This relationship also exists across each individual PCE with the greatest risk reductions being tied to "feeling family stood by them during difficult times" (46% reduced risk of having been a cigarette smoker), "feeling safe and protected by an adult in their home" (45% reduced risk), and "enjoying participating in community traditions" (42% reduced risk).

3. **The more total PCEs reported, the fewer alcoholic beverages consumed in the past 30 days**. Of those who reported drinking in the past 30 days, those having experienced the highest levels of PCEs reported consuming 26% fewer drinks than those who reported the lowest levels of PCEs. All PCEs except "having two nonparent adults take a genuine interest" were associated with significantly fewer drinks (12%-19% fewer) consumed in the past month.

4. **The more total PCEs reported, the fewer drinks consumed per occasion**. Those experiencing the highest levels of PCEs reported consuming 12% fewer drinks per occasion than those who reported the lowest levels of PCEs. Specific PCEs correlated to this significant reduction in drinks per occasion include "feeling safe and protected by an adult in their home," "enjoyed participating in community traditions," and "felt family stood by them during difficult times."

5. **Those who reported the lowest levels of PCEs reported more incidents of binge drinking in the past month.** Those experiencing the fewest PCEs reported 25-26% more binge drinking occasions than those who reported experiencing moderate to high levels of PCEs. The most salient positive childhood experiences to this outcome include "feeling a sense of belonging at high school," and "feeling safe and protected by an adult in their home."

6. **The fewer total PCEs reported, the higher the maximum number of drinks consumed in a single occasion.** Compared to those who experienced the most PCEs, those with the fewest reported consuming 9% more drinks during their heaviest drinking occasion in the past 30 days. The most salient positive childhood experiences to this outcome include "feeling safe and protected by an adult in their home" (13% fewer drinks reported), and "felt family stood by them during difficult times" (9% fewer drinks reported).

7. **Those experiencing the most PCEs reported the lowest prevalence of lifetime illicit drug use.** Those who reported experiencing the highest levels of PCEs reported 71% lower odds of lifetime illicit drug use (i.e., cocaine, including crack, heroin, methamphetamine, also known as meth, crank, or ice, hallucinogens, inhalants, stimulants, and sedatives) compared to those reporting the lowest levels of PCEs. Across ALL the PCEs, those who endorsed the given childhood experience often or very often were at significantly lower odds of having ever used an illicit drug, with those who felt safe and protected by an adult in their home often or very often having a 61% reduced risk.

RECOMMENDATIONS:

- **Efforts to promote the existing positive community norm of PCEs in Montana** could help raise awareness of these critical buffering experiences in childhood, increase understanding of the power and prevalence of PCEs, increase positive parenting practices, increase safe and supportive adult involvement in the lives of children, increase efforts to promote belonging among high school students, and increase prevalence of and participation in positive community events and traditions.
- **Funding and promotion of evidence-based programs and services and promising practices that include education about positive childhood experiences (home visiting programs, positive parenting classes, etc.) is critical to seeing these long-term, positive health outcomes realized .** The initial investment of empowering parents and other adults with the knowledge and skills to provide these PCEs to the children in their lives and community is likely to produce a high return on investment due to the fact that most of the PCEs included in this survey do not require a monetary investment by parents and community members to implement.
- **Making equitable adjustments in the processes and policies of systems** that fund and promote these programs and services as needed will ensure that all families have proportionate access to needed supports and the resulting positive outcomes .

Tribal LIFTS Focus Group Protocol

Name of researcher: Amy Stiffarm

Focus Group Date:

Location: Virtual Zoom Meeting with [redacted] Community Members

Research team members present and their role: Stephanie Morton & Amy Stiffarm

Checklist

- Make list of names of focus group attendees
- Welcome people as they arrive
- post doc in the chat/ ask for questions
- Record meeting

Amy's Introduction

Hello everyone. Thanks for being here. My name is Amy Stiffarm. I'm working with HMHB on this resource guide for the reservations.

Steph's Introduction

Purpose (Amy)

[insert nice, radical information here]

Reminders (Amy)

- The focus group will take 1.5 hours
- Steph will email the Amazon gift cards out
- Also, a reminder that we will send out the updated version of the resource guide that we come up with today. Probably sometime next week.
- Steph will be taking some notes during this time. We will be recording this meeting just to make sure we don't miss anything. We won't be publishing any personal information about the meeting attendees publicly at all.
- We are so grateful we have a lot of people here today, let's use the hand raising function if you have something to say. And also feel free to put things in the chat.
- Are there any questions right now before we begin?

Focus Group Members' Introduction

So, let's start with some quick introductions.

1. Name
2. Tell us about your organization and the work you do.
3. What brings you to this kind of work? What's in your heart?

Question & Answer

Before we get into some of our questions for you all, Stephanie is going to go over a brief presentation about HMHB and the LIFTS program.

Questions on Resource Guide

1. Categories
    a. Are there categories you don't feel are relevant for your community?
    b. Are there resource categories we missed?
2. Resources Listed
    a. Are these places still active?
    b. Does the information (phone number and address) look right?

MOMS Needs Assessment- [get language from MOMS folks]

If you recall this work is partly funded by MOMs. They are doing a needs assessment and we are helping them get input from people like you on needs for moms and young children. HMHB is also interested in this so we can better understand how to support you.

1. Other Needs in Your Community
    a. What else you do think Moms and young children in your community need?
    b. Now that you know about HMHB, is there anything you see us helping your community with?
    c. How can HMHB help your organization?

Thank you (Amy)

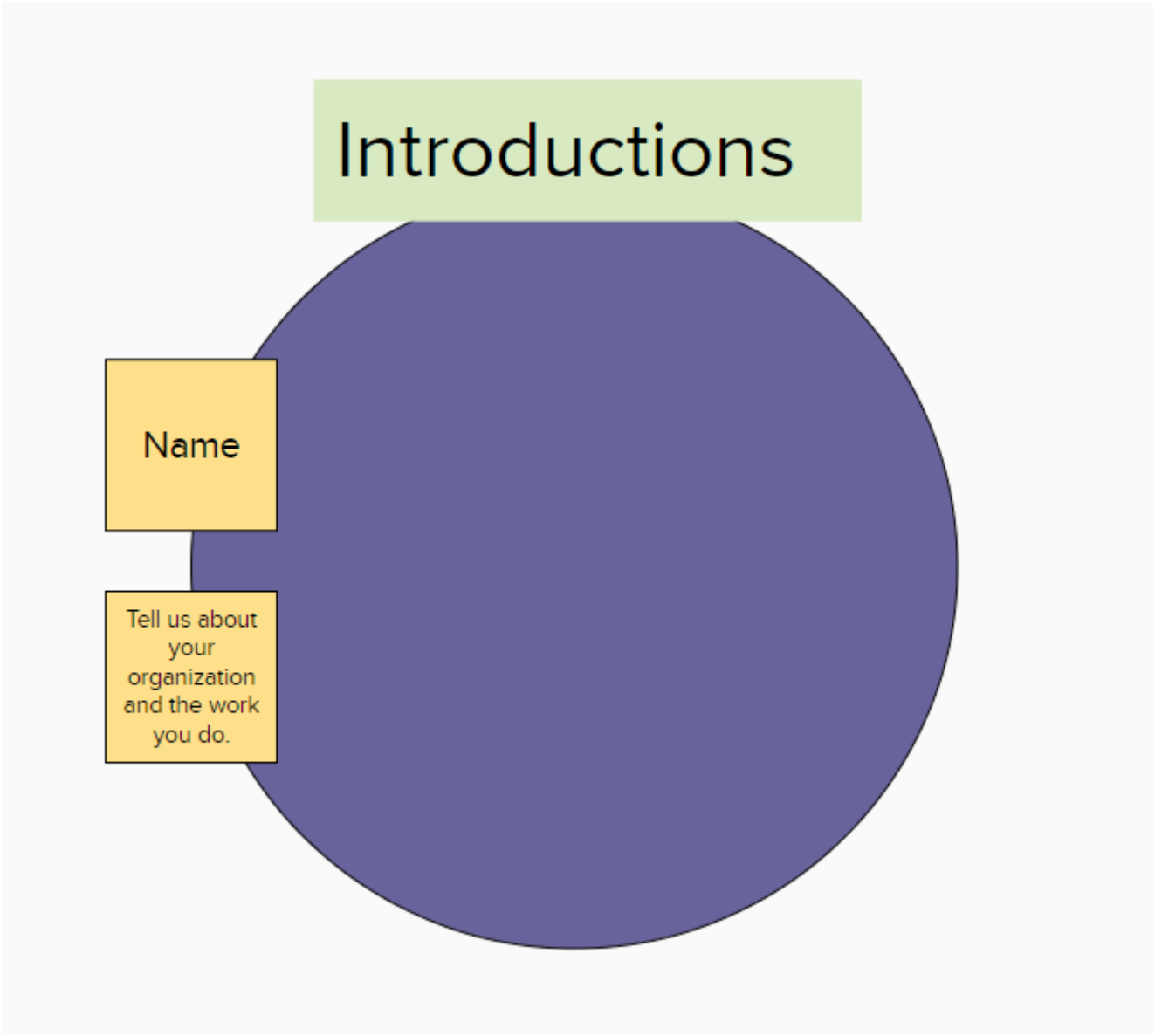
Thank you so much for taking time to share today. We are truly grateful for all the input you gave today. I can tell how much you all care about your communities. I really believe that together we can really help moms and babies.

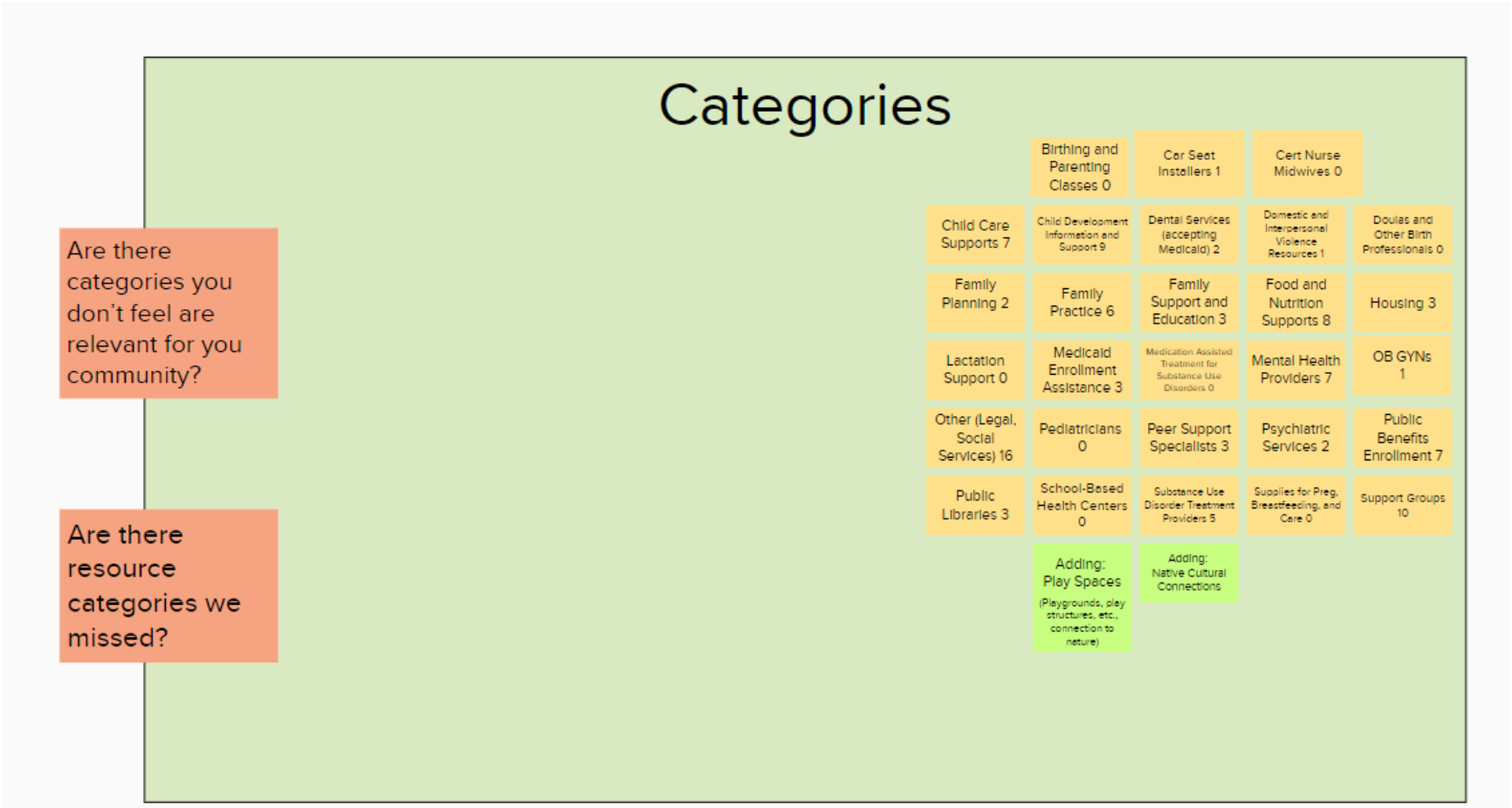
Reminder About Follow up

Just a quick reminder, Stephanie will be emailing out gift cards, if you do not get a gift card by tomorrow please follow up with us. Next week sometime we will be sending out the notes and summary of meeting and next steps for HMHB. You will have the chance to make additional edits or make additions at that time. Thanks again so much for your help with this.

End Meeting

- Thanks again, everyone! Take care!
- End meeting for all


Introductions
Name
Tell us about your organization and the work you do.


Categories
Are there categories you don't feel are relevant for you community?
Are there resource categories we missed?
Birthing and Parenting Classes 0
Car Seat Installers 1
Cert Nurse Midwives 0
Child Care Supports 7
Child Development Information and Support 9
Dental Services (accepting Medicaid) 2
Domestic and Interpersonal Violence Resources 1
Doulas and Other Birth Professionals 0
Family Planning 2
Family Practice 6
Family Support and Education 3
Food and Nutrition Supports 8
Housing 3
Lactation Support 0
Medicaid Enrollment Assistance 3
Medication Assisted Treatment for Substance Use Disorders 0
Mental Health Providers 7
OB GYNs 1
Other (Legal, Social Services) 16
Pediatricians 0
Peer Support Specialists 3
Psychiatric Services 2
Public Benefits Enrollment 7
Public Libraries 3
School-Based Health Centers 0
Substance Use Disorder Treatment Providers 5
Supplies for Preg, Breastfeeding, and Care 0
Support Groups 10
Adding: Play Spaces
(Playgrounds, play structures, etc., connection to nature)
Adding: Native Cultural Connections


Resources Listed
Are these places still active?
Does the information (phone number, address, etc.) look right?
What did we miss? What should be listed but isn't?


Community Needs
What do pregnant people and moms in your community need?
What do babies and young children in your community need?
Now that you know about HMHB, is there anything you see us helping your community with?
How can HMHB help your organization?

HMHB-MT

www.hmhb-mt.org

Mission

Healthy Mothers, Healthy Babies endeavors to improve the health, safety, and well-being of Montana families by supporting mothers and babies, age zero to three.

Vision

There will be a safe and healthy beginning for all babies in Montana.

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HMHB Programs

- Essentials for Baby
  - Safe Sleep for Baby
  - Safe Seats for Baby
  - Care Items
  - Safe Infant Sleep Public Messaging

- Period of PURPLE Crying Program
  - Shaken baby syndrome/ abusive head trauma prevention project

The Period of PURPLE Crying®

- Montana Early Childhood Coalition (MTECC)
  - Partnership work with local coalitions

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HMHB Programs (cont.)

Perinatal Mental Health

- Annual Conference, protocols, resources
- Meadowlark Initiative, community resources & groups
- PRISM for Moms
  - perinatal psychiatric teleconsultation line
- Look Closer
  - Public messaging campaign target women of childbearing age and substance use
- Trainings and local support upon requested
- LIFTS Online Resource Guide and Magazine

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LIFTS, Built to Assist

LIFTS
Linking Infants & Families to Supports

- Improving awareness of and access to community-based services and events for caregivers from pregnancy through age 3
- Empowers parents to look for help on appealing, easy to use website
- A helpful tool for providers making prenatal to three (P3) referrals
- Mobile-friendly

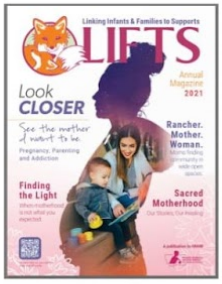
8

The LIFTS Family of Supports

LIFTS Online Resource Guide

The LIFTS Warmline

Call Us (406) 430-9100



LIFTS Magazine

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Healthy Mothers, Healthy Babies
The Montana Coalition

Locally Driven Resource Gathering

- Coordinating with early childhood coalitions and organizations around state to collect county-level data
  - Also focused on gathering resources from all 7 reservations
- Links on every page to update or share new services and events

LIFTS
Linking Infants & Families to Supports

10

Healthy Mothers, Healthy Babies
The Montana Coalition

What's on LIFTS

- Currently lists more than 2,500 resources across 38 counties, all 7 reservations and grows weekly
- Listings of family friendly, substance free/limited events
- Created a warmline for Montana parents to use for help in finding services, staffed by HMHB

Call the LIFTS Warmline for help finding resources:

Call Us (406) 430-9100

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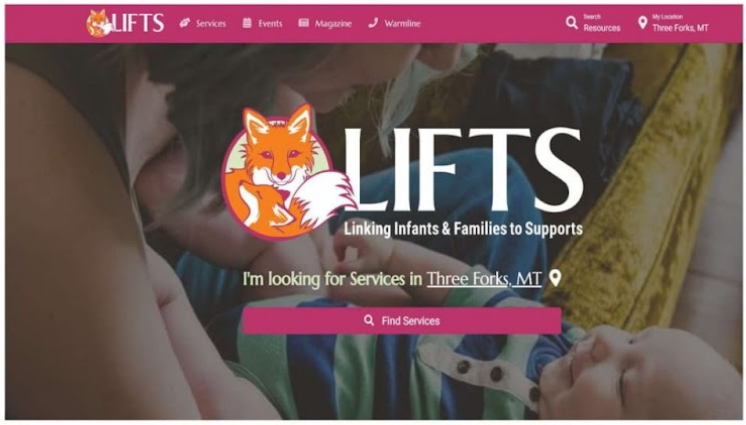
How to Participate in LIFTS



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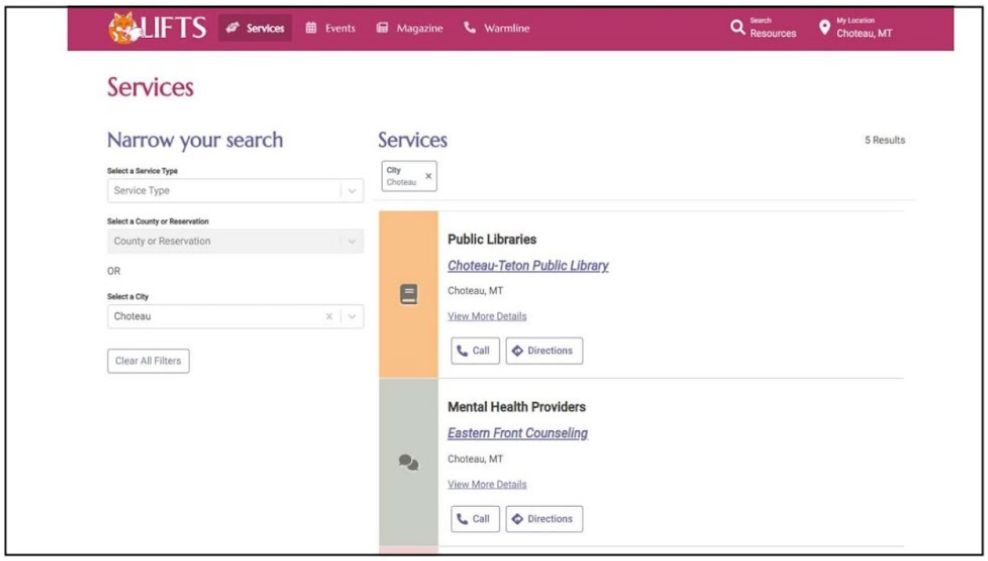

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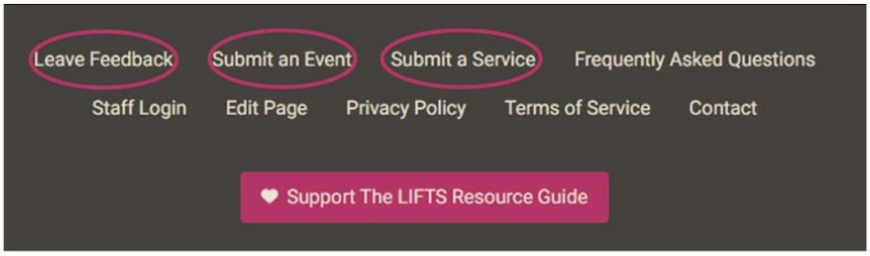
How to Participate in LIFTS

Leave Feedback – Submit an Event – Submit a Service



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Healthy Mothers, Healthy Babies
The Montana Coalition

LIFTS Magazine

- Raise awareness of helpful resources; drive readers to LIFTS Online Resource Guide
- Normalize accessing parent & caregiver supports
- Sharing stories about "what helps" by Montana caregivers
- Distributed 16,000 copies to birthing hospitals, WIC clinics, home visiting teams, and more
- Second edition expected in mid September 2022

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MOMS
Montana Obstetrics & Maternal Support

Interested in learning more about MOMS? mtmoms.org

- **MOMS Program**: Montana received a HRSA State Maternal Health Innovation Program grant in November 2019 for a five-year period to address maternal health disparities and improve maternal health outcomes. The Montana Obstetrics & Maternal Support (MOMS) program was created to provide support, training, and innovation to improve prenatal, delivery, and postpartum care in Montana's unique rural health care setting.

- **MOMS Needs Assessment**: The MOMS program is conducting a statewide maternal health system needs assessment. The purpose of this needs assessment is to gather information on the maternal health system and services in Montana to identify areas of strength and need. The assessment focuses on health system capacity, delivery of services, and the experiences of the patient population. The needs assessment will inform the support and resources provided by the MOMS program in the coming years.

- **MOMS Needs Assessment Survey**: The MOMS survey collects information on the strengths and needs of your organization and community. The survey will inform program activities and potential future funding opportunities offered through the MOMS program. This survey will not be used for research. It is strictly for needs assessment purposes. The survey will take 5 minutes to complete. All responses will be anonymous.

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Cultural Safety Practices for Working with Indigenous Birth Givers in Montana

Amy Stiffarm

University of North Dakota

Cultural Safety Practices for Working with Indigenous Birth Givers in Montana

Part 1: Overview

Who Will Benefit from this Toolkit?

This toolkit was inspired by a request from the Montana Obstetrics Maternal Support Program which was funded by the Health Resources and Services Administration (HRSA) Maternal Health Innovation Program. While presenting to their leadership council on topics relevant to Indigenous maternal health, cultural safety was mentioned as a means to strengthen support for Indigenous Peoples seeking perinatal health care, or care during pregnancy, birth, and the postpartum period. The Montana Obstetrics Maternal Support Program wanted to learn more about cultural safety and how it could help Indigenous Peoples in Montana. Since then, more research has been carried out and requests continue to be made by other providers and organizations wishing to learn more about cultural safety. This toolkit is designed for all providers that serve Indigenous birthing people during the perinatal period. Most of the examples, exercises, and resources are relevant to Montana, but the toolkit may also be helpful for out of state groups looking for a place to start. If you, your clinic or organization are currently providing care or services to Indigenous women and birthing people in Montana, this toolkit is for you. Examples of providers this toolkit may benefit include: Family Practitioners, Nurses, OBGYNs, Therapists, WIC Counselors, Home Visitors, Lactation Consultants, Midwives, Doulas, Social Workers, and other individuals that seek to broaden their understanding of cultural safety to help better serve Indigenous Peoples.

What You Will Learn

The overall goal of creating this toolkit is to better inform providers on how to implement culturally safe care to Indigenous patients and clients during the perinatal period. Due to

systematic education issues that fail to properly acknowledge non-dominant cultures, many people lack foundational knowledge about the Indigenous populations in Montana. We cannot address perinatal health issues until we are fully informed on the circumstances that created the environment for significant health inequities to occur. Even more important for Indigenous perinatal health is the cultural knowledge and strengths that are relevant to pregnancy, birth, and the postpartum period. We need to understand historical contexts to truly understand the power dynamics at play when Indigenous birth givers come to our clinics and offices. We will also learn more about data collection with Indigenous communities and considerations for planning a project that includes data or research. Later in the toolkit we will dive deeper into the principles of cultural safety and outline steps we can take to implement culturally safe care. Lastly, we will learn about ways to systematically incorporate cultural safety tenets into our organizations. Exercises are provided for most of the topics discussed in the toolkit. The exercises and other resources listed are by no means exclusive and are meant to get you started on exploring the basics of cultural safety in Indigenous perinatal health. The resources can also be useful in taking a deeper dive into subjects of interest.

What is Cultural Safety?

Cultural safety seeks to achieve better care through improving the awareness of power relationships, implementing reflective practice, and by allowing the patient to determine whether a clinical encounter is safe (Curtis, 2019). Continuous critical reflection and commitment to addressing power imblances experienced by oppressed people are ways to promote cultural safety (Hall et al., 2023). Cultural safety is an expansion of cultural competence (see definition in Table 1). However, “cultural competence” has been increasingly scrutinized due to the risk of advancing the false idea that someone could ever truly become “competent” in someone else’s

culture thereby reducing understandings of Indigenous culture to merely sets of skills and behaviors (Curtis, 2019). Cultural safety acknowledges power dynamics that are crucial to understand in order to provide equitable and quality care. Table 1 provides the definitions of other terms that are sometimes used in varied forms of professional training to help better serve Indigenous Peoples. While cultural humility and cultural safety both acknowledge power dynamics, cultural safety will be the term used for the purpose of this toolkit. The goal with the toolkit is to ensure that Indigenous women and people who give birth feel safe in their interactions with providers.

Table 1

Definitions Relevant to Cultural Safety

Term	Definition
Cultural awareness	Acknowledgement of differences in cultures.
Cultural sensitivity	Builds off cultural awareness by adding the importance of respecting other cultures.
Cultural competence	Fusion of both cultural awareness and sensitivity while adding behaviors, attitudes, and policies that support working with diverse populations. (Darroch et al., 2017).
Cultural humility	A lifelong commitment to self-evaluation and critique, to redressing power imbalances…and to develop beneficial and non-paternalistic partnerships (Tervalon & Murray-Garcia, 1998).
Cultural safety	Having awareness of power relationships and addressing them by implementing reflective practice, and by allowing the patient to determine whether a clinical encounter is safe (Curtis, 2019).

Terminology & Language

Language is powerful and important for patient and client care. Many Indigenous cultures recognize that there is power in the words that we use. Because of the power of language, it is important to practice using accurate and respectful terminology when engaging with patients and clients. Terminology can be complex and difficult to make changes to. We recognize these challenges but urge you to practice the terminologies and language examples described below.

Indigenous

A study from the United Nations defined Indigenous Peoples by stating the following:

> Indigenous communities, peoples and nations are those which, having a historical continuity with pre-invasion and pre-colonial societies that developed on their territories, consider themselves distinct from other sectors of the societies now prevailing on those territories, or parts of them. They form at present non-dominant sectors of society and are determined to preserve, develop and transmit to future generations their ancestral territories, and their ethnic identity, as the basis of their continued existence as peoples, in accordance with their own cultural patterns, social institutions and legal system (Martinez Cobo 1983).

There are over 476 million Indigenous Peoples globally, spanning across 90 countries (United Nations, n.d.). In the United States alone, there are over 9.7 million people who self-identified as American Indian or Alaska Native alone or in combination with other races in the 2020 census (US Census Bureau, 2022). Indigenous Peoples account for 2.9% of the population in the United States (US) (US Census Bureau, 2022). As of 2020 there are currently 574 federally recognized Tribes in thirty-five states in the US (National Congress of American Indians (NCAI), 2020). Tribal Nations that are not federally recognized sometimes will get recognized by the state. There are currently sixty Tribal Nations in the US that have state recognition (NCAI, 2020). State recognition is usually achieved through legislative action, as a way of building state-Tribal collaborations and acknowledging historical and cultural contributions. State-recognized Tribes do not have the same federal rights as federally recognized Tribes. Specific to Montana, the Little Shell Tribe of Chippewa Indians received state-recognition from Montana in 2000 and gained federal recognition in 2019 via the National Defense Authorization Act (Montana Little Shell Tribe, n.d.). Their Tribal headquarters is in Great Falls, MT. Nationally, federally, and state-recognized Tribes encompass 334 reservations (NCAI, 2020). However, it is important to note that not all Tribal Nations have formal

recognition by the respective state or the US government. All of these noted groups of Indigenous Peoples (recognized or unrecognized) have cultures that are specific and unique to their respective nation, community, family, etc. so it is important to recognize the variability among Indigenous cultures.

There are many different terms you may have heard or come across that describe Indigenous Peoples in the US. *Indigenous* is a term used to describe people who are original inhabitants of the land. This is the case for Tribal Nations in the US. *American Indian* and *Alaska Native* are the legal terms that are used in Federal Indian policies and law, and in many health data sets and is abbreviated as *AIAN*. However, some Indigenous Peoples may disagree with the term *American Indian* because it can be seen as being politically incorrect by the fact that the Indigenous Peoples that lived in what would become America were termed *Indians* because Christopher Columbus thought he landed in India (US National Park Service, 2022). European contact by Columbus and other explorers like him had devastating impacts to Indigenous Peoples, so some Indigenous Peoples prefer not to be called *Indian*. Additionally, it is recommended to not celebrate Columbus and other explorers like him as celebrating exploration that resulted in colonialism, dismisses the immense losses experienced by Indigenous Peoples. Instead, opt for celebrating Indigenous Peoples' Day (The Smithsonian, 2023). *Native American* is also a term commonly used. Some Indigenous Peoples may take issue with the fact that American is used at all as America is named after the Italian explorer Amerigo Vespucci, who was said to be the first to "discover" the New World (Library of Congress, 2003).

Additionally, you may hear the term *Turtle Island* commonly used by some Indigenous Peoples to describe what is now known as North America. *Indian County* is also a common term used to describe anywhere, rural or urban, where Indigenous Peoples live. Furthermore,

recognizing that Indigenous Peoples existed prior to America, many people prefer the term *Indigenous*, and this term is becoming much more common. The terms *American Indian, Indian, Native, Native American* and *Indigenous* are all generally acceptable, but people often prefer to be called by their specific Tribal name. More information on specific Tribal names for the Tribal Nations in Montana will be provided later in the toolkit. It's important to recognize that each Tribe has its own unique name. We'll learn later that an important part of cultural safety is to learn how your patients and clients choose to identify. It could be different than the federally recognized name of your patient's or client's Tribe. Some communities have preferred terms for their Tribal Nation, it is important to know your patient's or client's preference for the term to use when acknowledging their nation.

When using terminology for Indigenous Peoples in written form, it's important to also consider capitalization. *Elements of Indigenous Style* is a writing guide by and about Indigenous Peoples and asserts clearly that any term relating to Indigenous identity, institutions, or rights should likely be capitalized (Younging, 2018). Capitalization recommendations from Younging's (2018) style guide state that:

- the term Indigenous should always be capitalized;
- when referencing multiple Tribal Nations use the term Indigenous Peoples;
- when referencing a distinct Tribal Nation, Indigenous People should be used;
- Indigenous people refers to people who identify with a Tribal Nation but is used in a context where their specific affiliation or identity is not an issue (Younging, 2018).

Gender Inclusive Language

Before the US was colonized, Indigenous communities recognized that many genders existed on this land. Eurocentric worldviews are based on physical traits that reflect a rigid dichotomy of boy or girl. An Indigenous worldview of gender is not dichotomous but more fluid.

Instead, gender is based on a person's spirit or gift. Two-spirit is often used to describe someone with both masculine and feminine spirits. When discussing people who give birth, the terms *birthing people* or *birth givers* can be used to be inclusive of all genders that give birth. Using inclusive language is crucial when working with Indigenous communities especially when discussing sensitive topics such as perinatal mental health. Words have power, therefore we must be careful with how we use language and make sure our words do not cause harm. Not being inclusive of all people that give birth can cause additional harm to people that are already marginalized by health systems (Re:searching for LGTBQ2S+ Health, n.d.). The terms *birth giver* or *birthing person* recognizes the person's sacred ability to give birth and bring life into this world.

Based on Strengths

Much of the past research and work relevant to Indigenous Health in the US is deficit based, where an emphasis is put on poorer health outcomes in one group as compared to another group (Hyett et al., 2019). Deficit-based narratives are harmful because they can perpetuate negative stereotypes. When we only talk about, write about, and hear about negative qualities from a group of people, it's easy to believe that only negative traits exist among that group. There are many strengths within Indigenous communities. Indigenous cultures have enabled Indigenous Peoples to survive through much adversity despite negative policies by the federal government and other impacts of colonization that will be discussed later in this toolkit. Camie Goldhammer (Sisseton-Wahpeton Oyate), founder and director of Hummingbird Family Services and a leading voice for Indigenous maternal health often says,

"There's nothing wrong with Native Women. We are perfect the way we are and like all mothers, we want the best for our babies. It's the system that is failing <u>*US*</u> [Native Women]" (Goldhammer, 2022).

When we stop placing blame on communities for disparate situations and hold space for communities to determine their own solutions, we will find knowledge and resources that may have been overlooked by western research and medicine.

We know there are disparities that exist and these need to be clearly acknowledged and addressed, however, we must be careful when talking about and discussing disparities to avoid placing blame on individuals and communities. The continued focus only on deficits in research with Indigenous Peoples is problematic as it makes it appear as though being Indigenous automatically puts you at risk for poor outcomes while minimizing the inherent strengths that Indigenous Peoples have. We must move beyond only identifying individual risks and instead seek to better understand why various risks exist collectively amongst Indigenous Peoples and communities.

Learning Exercises:

1. Follow the link below to learn about the Indigenous Milk Medicine Collective and their use of inclusive language:
   https://lllusa.org/an-update-on-indigenous-milk-medicine-week/
2. Please follow the link of at least one of the resources listed below to learn more about inclusive language and proper terminology use:

Resources for Learning More About Tribal Nations & Using Respectful Language:

1. To learn more about Tribal Nations in the US please see "Tribal Nations and the United States: an introduction" created by the National Congress of American Indians:
   https://www.ncai.org/tribalnations/introduction/Indian_Country_101_Updated_February_2019.pdf
2. The Smithsonian's Native Knowledge 360° Education Initiative has additional resources to learn new perspectives on Native American history and cultures. They also have a helpful FAQ section:
   https://americanindian.si.edu/nk360/about/native-knowledge-360
3. For tips on using appropriate terminology for Indigenous Peoples, please see this resource from The Smithsonian:
   https://americanindian.si.edu/nk360/informational/impact-words-tips#:~:text=American%20Indian%20or%20Native%20American,would%20like%20to%20be%20addressed.

4. News Article on the Historical Federal Recognition of the Little Shell Tribe of Chippewa Indians: https://www.greatfallstribune.com/story/news/2019/12/20/montana-little-shell-tribe-chippewa-indians-federal-recognition/2439763001/
5. Mental Health Technology Transfer Center (MHTTC) Recovery-Oriented Language Toolkit: https://mhttcnetwork.org/sites/mhttc/files/2020-08/Final%20Peer%20Language%20Toolkit.pdf
6. Mental Health Technology Transfer Center (MHTTC) Racial Equity and Cultural Diversity Toolkit: https://mhttcnetwork.org/centers/global-mhttc/racial-equity-and-cultural-diversity-toolkits.
7. Elements of Indigenous Style Guide: Younging, G. (2018). *Elements of indigenous style a guide for writing by and about indigenous peoples*. Edmonton, Alberta: Brush Education.
8. CDC Health Equity Guiding Principles for Inclusive Communication: https://www.cdc.gov/healthcommunication/Health_Equity.html.
9. Re:Searching for LGTBQ2S+ Health: "Two-Spirit Community." Re:searching for LGBTQ2S+ Health. https://lgbtqhealth.ca/community/two-spirit.php

Part 2: Historical Context

Racial health equity is defined by the Centers for Disease Control and Prevention (CDC) as the state in which everyone has a fair and just opportunity to attain their highest level of health (Centers for Disease Control Health Equity Office, 2022). The CDC also acknowledges that to achieve health equity, systems and policies that have created injustices resulting in racial and ethnic health disparities must be addressed. We often hear of racial disparities regarding the health of Indigenous Peoples, but we don't always get the full picture of why these disparities exist. Racial disparities for Indigenous Peoples in the US are rooted within various historical impacts that will be discussed in this section of the toolkit. In this section you will learn crucial parts of history that many of us were not taught in school. Learning these contexts will allow us to better understand beliefs and behaviors that Indigenous patients and clients might have that impact the care they access or receive. There is much to learn about the systems that have created an environment that lacks trustworthiness from Indigenous Peoples. We will walk through each

of the various eras of Federal Indian Policy and learn specific examples of how these polices impact perinatal health. Please note that the exact dates and years of the various Federal Indian Law periods or eras vary among the literature. For the purpose of this toolkit, we will abide by the periods and dates provided by the Montana Office of Public Instruction's Indian Education for All curriculum and honor the expertise of the curators of the educational materials (MT Office of Public Instruction (MT OPI), 2019).

Doctrine of Discovery & Colonization Period (1492-1800s)

The Doctrine of Discovery was the basis for land acquisition of Turtle Island including what is now known as the US. The Doctrine of Discovery was used to justify the colonizing and the taking of lands that were not inhabited by Christians and was first issued via decrees from Popes' from 1452-1493 (Chappell, 2023). The decrees authorized Spain and Portugal to seize lands and dominate people in the lands of Africa and Turtle Island. Colonialism is different than settler-colonialism in that while colonialism seeks to acquire control over other's lands, settler-colonialism's goal is to remove Indigenous Peoples from the land so that settlers can occupy the land instead (Morris, 2019). When settler-colonialism is viewed as the practice of non-Indigenous people living on appropriated land we can recognize that settler-colonization isn't just history but is actually an ongoing practice occurring today (Morris, 2019). In 1823, the Doctrine of Discovery was invoked in a US Supreme Court ruling that Indigenous Peoples only had rights to occupy the land, not own it (Miller, 2005; Frichner, 2010). The Supreme Court ruling opened the land that Indigenous Peoples have long lived in relationship with to settlers to own. The sacred relationships between Indigenous Peoples and specific land is noted in many Tribes' creation stories as they include specific landmarks across Turtle Island. It is important to

note that many Indigenous cultures value land, not by which to take ownership of it, but by having a sacred relationship with it (Kimmerer, 2015).

The colonizing of the US and other settler-colonial state lands was done through war tactics aimed at Indigenous birthing people. *Reproduction on the Reservation*, gives historical accounts of Unites States war officers explaining their practice of killing Indigenous women and children as a means to exterminate the Indigenous populations as a whole (Theobald, 2019). Therefore, violence on Indigenous women's and birthing people's bodies was seen as a necessity to establishing the US. Colonial violence was the beginning of the Missing and Murdered Indigenous Women (MMIW) epidemic. Today, it is estimated that four of five Indigenous women or girls will be a victim of violence in their lifetime in the US (National Indigenous Women's Resource Center, 2022). Equally alarming, is the lack of federal help to locate missing Indigenous women and girls. In 2016, the National Crime Center reported that there were over 5,700 reports of Indigenous women and girls missing in the US but only 116 cases in the Department of Justice's federal missing person database (Native Hope, n.d.). MMIW is an epidemic that many Indigenous birthing people are well aware of and many live in fear for themselves and their children. Montana has the 5th highest missing and murdered girls and women in the country (Lucchesi, A. & Echo-Hawk, A., 2018). Making the effort to learn about the current issues faced by Indigenous women and girls is imperative to better serving Indigenous birthing people.

It was not until 2023 that the Vatican rebutted this justification to colonialism, stating, "The Catholic Church therefore repudiates those concepts that fail to recognize the inherent human rights of Indigenous peoples, including what has become known as the legal and political 'doctrine of discovery.' " A quote from the Pope's visit to Canadian residential schools was also

cited in the repudiation, “Never again can the Christian community allow itself to be infected by the idea that one culture is superior to others, or that it is legitimate to employ ways of coercing others" (Chappell, 2023).

White Supremacy and racism are the foundations of colonization. The historical process and ideas behind initially colonizing Indigenous Peoples is rooted in the belief that western, Eurocentric ways of being are superior or normal and that anything else is inferior or alternative. Colonization is still a contemporary issue as racism continues to impact health. Redvers et al. (2020) describes Eurocentrism as a worldview that is centered on Western civilization and points out how many health and educational institutions are rooted in Eurocentrism. Eurocentrism in health practice creates circumstances where medicine and research are often conducted in a western way that only recognizes Eurocentric ideals. While the Doctrine of Discovery has officially been denounced, its impact on Indigenous knowledge systems is felt today, especially in the ways that perinatal health is commonly approached.

Learning Exercises:

1. Read this article about the Doctrine of Discovery: https://www.npr.org/2023/03/30/1167056438/vatican-doctrine-of-discovery-colonialism-indigenous
2. Follow this link to learn more about Missing and Murdered Indigenous Women: https://www.nativehope.org/missing-and-murdered-indigenous-women-mmiw

Treaty-Making and Removal Periods (1778 - 1871)

Treaties were made to end violence and cede land from Indigenous Peoples. Within these treaties were promises of health care among other promises such as education, hunting rights, etc. These promises for health care didn’t become formalized until the passing of the Snyder Act in 1921 (National Indian Health Board, n.d.). This legislation solidified the US’ trust responsibility to provide health care to federally enrolled Indigenous Peoples in the US and the

Indian Health Service (IHS) was created to facilitate this obligation. During the Treaty-Making and Removal time periods, 367 treaties were ratified (Prucha, 1994). The treaties were created between the US government and distinct, sovereign Tribal Nations. The recognition of tribal sovereignty asserts that treaty law is the supreme Law of the Land and situates the treaties with Tribal Nations above the laws and jurisdiction of states. Treaties that affect Montana Tribal lands are shown in Table 2.

Table 2

Treaties and Tribes in Present-day Montana (Montana Office of Public Instruction (MT OPI), 2019)

Treaty	Montana Tribes
Fort Laramie Treaty of 1851	Dakota, Cheyenne, Assiniboine and Crow
Hellgate Treaty of 1855	Salish, Kootenai, Pend Oreille
Lame Bull Treaty of 1855	Blackfeet
Fort Belknap Treaty of 1866	Aaniiih (Gros Ventre) and Nakoda (Assiniboine)
1868 Agreement with the Gros Ventres	Aaniiih (Gros Ventre)

Land Acknowledgements

The map depicted in Figure 1 illustrates the original Tribal territories and the current reservations in Montana. This map and other similar maps are often used when creating land acknowledgments. Land acknowledgements are meant to be thought provoking exercises for folks whose ancestors are not the original habitants of specific lands and places. The act of acknowledging Indigenous land is the very least we can do. Many institutions and organizations in Montana have made statements to acknowledge land. Please note that it is not appropriate to ask Indigenous Peoples to publicly acknowledge their own homelands. Instead, effort should be made by non-Indigenous people and organizations to do the work of gathering the information and creating an appropriate land acknowledgement. Asking Indigenous Peoples to do the work of

creating land acknowledgement statements or reusing blanket land acknowledgements can cause harm. Use the opportunity to learn about the land being acknowledged and which people had to sacrifice and endure hardships so an organization, a building, a town, etc. could occupy the land.

Figure 1

Map of Tribal Territories in Montana from the MT Office of Public Instruction (MT OPI, 2019)

Furthermore, a land acknowledgement should also be carried out with an act of reciprocity to the Indigenous Peoples of the land you're occupying. An act of reciprocity can be done through gift giving (i.e., donating money to local Indigenous-led organizations or offering discounts/scholarships to Indigenous Peoples who wish to attend your event). Below is an example from the Montana Non-Profit Association's (MNA's) Fundraising Summit. They worked with ACLU Montana to draft a statement that is kept on their website (MNA, 2022). MNA opened the summit with this land acknowledgement, and they also took action by partnering with a local organization to share a call to action on voting efforts for Tribal

communities. MNA also made a donation to a local, Indigenous-led non-profit. Take note of how the land acknowledgement was created not only for the location of the summit, but also for the purpose of the summit. MNA also included information on how others can learn more and take action as well.

> Montana is the traditional homeland and common hunting grounds of several tribes, including the Assiniboine, Blackfeet, Chippewa Cree, Crow, Gros-Ventre, Kootenai, Little Shell, Northern Cheyenne, Pend d'Oreille, Plains Cree, Salish, Sioux, Hidatasa, Mandan, and Arikara. Today this land is home to twelve sovereign tribes with over 67,000 enrolled members.
> We are currently on the ancestral lands of the Salish and Blackfeet tribes, founded as a gold mining town, and named Helena. Land acknowledgements cannot repair inequity or return stolen land. No one entity can fix these issues, it will take a community guided by duty, responsibility, reciprocity with care for each other and the land.
> As we gather to learn about fundraising best practices, it is important to recognize only 0.4% of philanthropic funding by large US Foundations is directed towards Native communities. We incite you to learn more about disparities in funding and opportunity, and how to embody the generosity and collaboration of Community-Centric Fundraising Principles at nativephilanthropy.candid.org and communitycentricfundraising.org (MNA, 2023).

Removal Era Events

One well known event within the Removal Era is the Cherokee Trail of Tears. In the 1930s the Cherokee Tribe was removed from Georgia and thousands of Cherokee People, including Elders and children died on their way to Oklahoma (Cherokee Historical Association, n.d.). Forty years later, within the Reservation and Allotment Eras, the Bitterroot Salish experienced something similar, though not as long a distance. From 1873 - 1891, the Bitterroot Salish were forcibly removed from the Bitterroot Valley in what is now present-day Stevensville, MT. The last to leave were Chief Charlo and a band of around 300 others. In the month of October 1891, Elders and children traveled for 2 nights and 3 days to the Jocko Church on the Flathead Indian Reservation, covering a span of 51 miles (Kidston, 2022). Confederated Salish

and Kootenai Tribal (CSKT) member Anna Whiting-Sorrell was quoted during the "Return to Homeland" walk to honor the historical event.

> To think about how old people, and young people, and mammas with babies did this walk, …and it was the start of the winter season. So, when you think about that, emotionally I think that's as hard as it is physically. (Grant, 2016).

The impact on Indigenous Peoples during the removal period, wasn't so much the issue of losing ownership of land. As stated earlier, Indigenous Peoples are in relationship with land. Relevant to perinatal health was the consequences of removing people from homelands which resulted in losing access to familiar, nutritious foods and plant medicines as well as historic sites relevant to praying and other ceremonies, including those pertinent to birth.

Learning Exercises:

1. See if your place of work has done a formal land acknowledgement, if not take the time to create one. Use these resources to assist you in creating one or editing your current version if needed:
   Native Governance Center's Guide to Indigenous land Acknowledgment:
   https://nativegov.org/news/a-guide-to-indigenous-land-acknowledgment/
   Native Governance Center's Beyond Land Acknowledgment series:
   https://nativegov.org/news/a-self-assessment/
   Montana University System's Land Acknowledgment States Resources:
   https://mus.edu/AIMA/land-acknowledgement-resources.html
2. Learn more about the Removal of the Selis people by visiting at least one of the links below.
   https://www.mtpr.org/montana-news/2016-10-13/salish-walkers-retrace-exodus-from-the-bitterroot
   https://bitterrootstar.com/2016/10/salish-retrace-trail-of-tears/
   https://montanawomenshistory.org/mary-ann-pierre-topsseh-coombs-and-the-bitterroot-salish/
   http://www.csktsalish.org/index.php/history

Reservation Period -Allotment and Assimilation (1887 - 1934)

Following the removal of Indigenous Peoples from their homelands, Tribal members were confined to reservations by the federal government. Reservations are lands that have been reserved by or for the Tribes for their exclusive use as permanent homelands. Some reservations

were established through treaties, while others were created by statutes and executive orders. Some reservations are a part of the traditional land base of the Tribe, but not all. Some Tribes were forced to share reservations with other Tribes. Establishing reservations was an effort to "Americanize" Indigenous Peoples by forcing cultural changes onto the population. The intentional disruption in culture is evident in the Second Annual Report of the Indian Rights Association where it is stated,

> "the Indian as a savage member of a tribal organization cannot survive, ought not to survive, the aggressions of civilization, but his individual redemption from heathenism and ignorance, his transformation to that of an industrious American citizen, is abundantly possible" (Campbell, n.d.; Indian Rights Association, 1885).

Today in the US there are 326 reservations, including the seven in Montana (Table 3).

Table 3

Montana Reservations and Tribe(s) (MT OPI, 2019)

Reservation	Tribe(s)
Blackfeet	Amskapi Pikuni (Blackfeet)
Crow	Apsaalooke (Crow)
Flathead	Selis (Bitteroot Salish), Ksanka (Kootenai), and Qlispe (Pend d'Oreille)
Fort Belknap	Aaniiih (Whiteclay or Gros Ventre) and Nakoda (Assiniboine)
Fort Peck	Nakoda, Lakota, Dakota (Assiniboine & Sioux)
Northern Cheyenne	Tsististas & Suhtaio (Northern Cheyenne)
Rocky Boy's	Anishinaabe & Nehiyawk (Chippewa Cree)
Little Shell (Landholdings in Great Falls, MT)	Anishinaabe, Metis (Little Shell Chippewa)

Confining once nomadic Tribes to reservations had devastating health results. Not only did removal prevent access to traditional foods, but it also completely disrupted the once active lifestyle of Indigenous Peoples. Many scholars point to the lack of nutritious foods and ability to

hunt wild game as the beginnings of many chronic disease epidemics including higher rates of obesity, diabetes, and heart disease (Warne & Lajimodiere, 2015).

The Reservation Era also introduced the foreign concept of blood quantum as a way to limit rights of Indigenous Peoples. The idea of blood quantum was first applied in the colonial periods but more formally utilized in 1884 as the Bureau of Indian Affairs (BIA) assigned blood quantum amounts through Census rolls (Native Governance Center, 2022). This quantum is what is used to determinate who is eligible to be enrolled in a Tribal Nation. Scholars suggest that this imposes on the reproductive autonomy of Indigenous birth givers (Kozhimannil et al., 2022). Pre-colonization Tribal Nations used lineage to determine membership and granted citizenship through adoption and marriage (Native Governance Center, 2022). Now Indigenous birth givers are forced to calculate blood quantum to see if a child with a potential partner will be eligible for enrollment. Blood quantum restricts choices of partners and puts additional burden on birth givers to ensure adequate numbers of membership necessary for things like federal funding for the Tribe that is based on the population of enrolled Tribal members.

The Reservation Era also greatly impacted traditional cultural activities, including the practice of Traditional Medicine (Redvers et al., 2020). On May 7, 1880, the US government outlawed all Indigenous ceremonies that were deemed "uncivilized." Making ceremonies illegal meant that healers and Medicine People would be arrested and prosecuted for practicing traditional ways, including those relevant to pregnancy and birth. The outlawing of ceremonies wasn't reversed until 1978 with the passing of the American Indian Religious Freedom Act (Vile, 2009). The nearly 200-year ban on traditional ways interfered with knowledge sharing and stripped away important and sacred knowledge and practices. In explaining these breaks in knowledge transmission, we must be careful not to use words like *lost*. Traditional Knowledge

wasn't misplaced or uncared for, this knowledge was taken by acts of colonialism and white supremacy. The ban on ceremonies also caused many Medicine People and ceremonial practices to be removed from public spaces to be hidden or gone 'underground' in an effort to continue these practices. Unfortunately, the need to hide ceremonies cultivated fear about practicing certain parts of Indigenous culture and healing creating an environment where practices were done in a secretive way. The need to practice culture in secret impacts access to cultural knowledge to this day. Major efforts to revitalize culture continue. Some of these cultural traditions can be seen today being utilized during birth, pregnancy, and parenting by Indigenous Peoples in Montana.

Learning Exercises:

1. To learn more about how blood quantum impacts reproductive choices please read the following photo essay by Tailyr Irvine that was published by the Smithsonian: https://americanindian.si.edu/developingstories/irvine.html
2. Learn more about treaties and the reservations in Montana by following the link below to access "Montana Indians Their History and Location" from the MT OPI IEFA Program. Choose to learn about at least one reservation, preferably one closest to the area you currently serve. https://opi.mt.gov/Portals/182/Page%20Files/Indian%20Education/Indian%20Education%20101/Montana%20Indians%20Their%20History%20and%20Location.pdf

Land Allotment

During the creation of reservations, non-Indian settlers moved across the West, now reaching coast to coast. In order to create room for incoming settlers, the Dawes Act was passed in 1887 (National Archives, 2022). Through the Dawes act, land on the reservations were pieced apart and parcels were given to individual families. The image below in Figure 2 shows an advertisement from this time period listing over 11,000 acres for sale in Montana for less than $10 an acre (Bill of Rights Institute, n.d.). Allotting segments of land in an effort to promote agriculture, broke up communal lands. The leftover land that was not allotted was made available

for sale to non-Indian buyers. This created a “checkerboard” pattern of Indigenous and non-Indigenous land ownership on reservations. The checkerboard pattern of ownership on the Flathead Indian Reservation is a result of the Dawes Act.

Figure 2

Flyer Advertising Indian Land. Image acquired from the Bill of Rights Institute (Bill of Rights Institute, n.d.)

INDIAN LAND FOR SALE

GET A HOME OF YOUR OWN

EASY PAYMENTS

PERFECT TITLE

POSSESSION WITHIN THIRTY DAYS

FINE LANDS IN THE WEST

IRRIGATED IRRIGABLE — GRAZING — AGRICULTURAL DRY FARMING

IN 1910 THE DEPARTMENT OF THE INTERIOR SOLD UNDER SEALED BIDS ALLOTTED INDIAN LAND AS FOLLOWS:

Location	Acres	Average Price per Acre	Location	Acres	Average Price per Acre
Colorado	5,211.21	$7.27	Oklahoma	34,664.00	$19.14
Idaho	17,013.00	24.85	Oregon	1,020.00	15.43
Kansas	1,684.50	33.45	South Dakota	120,445.00	16.53
Montana	11,034.00	9.86	Washington	4,879.00	41.37
Nebraska	5,641.00	36.65	Wisconsin	1,069.00	17.00
North Dakota	22,610.70	9.93	Wyoming	865.00	20.64

Assimilation & Boarding Schools

During this era, US policy was enacted to relocate Indigenous children to boarding schools. This was a shift from promoting Indian massacres, highlighted by the infamous quote from US General Phillip Sheridan, “The only good Indian is a dead one” to attempting to destroy Indigenous cultures highlighted by the quote from US General Richard Henry Pratt who stated, “Kill the Indian in him, and save the man” (The National Native American Boarding School Healing Coalition, n.d.). The schools were either government run or operated through religious groups such as the Catholic Church. Children slept in dormitories similar to military barracks.

They were known to be overcrowded and had poor food and hygiene which created illness and death at the schools (Montana State Library, n.d.). Most children were not sent voluntarily. Children as young as 3 years old were forcibly removed from their families. Families were threatened by withholding food rations or jail if they did not send their children.

By 1926, 83% of Indigenous school-aged children were in boarding schools (The National Native American Boarding School Healing Coalition, n.d.). At these schools the epistemicide, or destruction of Traditional Knowledge took place. Children were not allowed to speak their Indigenous language and they were not able to participate in Traditional Knowledge translation occurring back home with family and community. Camie Goldhammer (Sisseton-Wahpeton Oyate), the director of Hummingbird Doula Family Services in Washington, pointed to boarding schools as a cause of low chestfeeding/breastfeeding rates among Indigenous Peoples (Goldhammer, 2016). Simply put, children were not around to see how their families traditionally fed babies. This disruption in knowledge transmission for Indigenous Peoples is also true for other practices and knowledge relevant to pregnancy, birth, the postpartum period, and parenting. Furthermore, formal reports have been released, making more people aware of the extensive abuse, including sexual abuse that occurred at these boarding schools. Indian boarding schools are also where many Indigenous Peoples had their first interactions with western health care systems. We must recognize that these were traumatic experiences, and these memories and feelings are passed down to generations by means of historical trauma. In Montana there were 17 boarding schools across the state (The National Native American Boarding School Healing Coalition, n.d.). Many Indigenous birthing people of reproduction age today have parents and/or grandparents that were in boarding schools.

Learning Exercises:

1. Follow the link below to browse the American Indian Board School Healing Coalition. See which boarding schools were in Montana. Were there any near where you currently live and work?
   https://boardingschoolhealing.org/list/
2. Watch this short video from PBS, Montana Mosaic: *The Indian Boarding School Experience*:
   https://montana.pbslearningmedia.org/resource/2a54e6dd-d95a-48ff-b9d3-1d08ca2d2b69/montana-mosaic-the-indian-boarding-school-experience/
3. Watch this video by Camie Goldhamer as she explains the impacts of boarding schools on maternal health for AIAN People. It's over an hour long but would be great to watch with a whole department. Keep in mind this was in 2018, before we knew the importance of inclusive language:
   https://vimeo.com/545996034

Tribal Reorganization Period (1934 - 1953)

Assimilation policies were failing and American Indian culture prevailed despite political attempts of cultural genocide. The Reorganization Act of 1934 ended the allotment of Indian Reservations (MT OPI, 2019). Indian allotments were put into permanent trust status, which meant they could not be taxed. This also allowed Tribal Nations to take over governance of their people, subject to the ultimate authority of the Federal Government.

Termination and Relocation Periods (1953 - 1968)

During the termination era, numerous acts were passed that terminated the existence of Tribal governments and reservations. A total of 109 tribes were terminated from these Termination Era policies (Mann, 2021). Termination impacted around 2.5 million acres of trust land and over 12,000 Indigenous Peoples (Partnership with Native Americans, n.d.). None of the Montana reservations were affected by termination. However, relocation policies aimed to remove Indigenous Peoples, including those in Montana, from the reservations to bigger cities to find work and become assimilated into American society. Relocation is one of the reasons why there are so many "Urban Indian" communities. In Montana, cities like Missoula, Butte, and Glasgow were designated relocation cities. However, the relocations were not well documented.

During relocation there were significant impacts to perinatal health. Firstly, many of the people who moved away from home communities were not offered any assistance in finding jobs, housing, or health care. Many people that relocated were subjected to prejudice and discrimination. Women and birthing people were unable to utilize the traditional, communal, and extended family support systems in place on reservations. Women and birthing people were also unable to access cultural teachings from family and Elders relevant to pregnancy, birth, and postpartum. Discrimination in health care is a phenomenon still experienced by Indigenous Peoples today.

Learning Exercise:

1. Read this article to learn about a modern instance of discrimination in maternal health care against Indigenous birthing people: https://www.propublica.org/article/federal-investigation-finds-hospital-violated-patients-rights-by-profiling-separating-native-mothers-and-newborns

Resources to learn more about the Indigenous experience during the Termination Era:

1. *'There there'* is a book by Indigenous Author, Tommy Orange that is set during the relocation period.
   Orange, T. (2019). *There there*. Vintage.
2. *The Night Watchman* is by Indigenous Author, Louise Erdrich and it takes place during the termination era.
   Erdrich, L. (2020). *The Night Watchman*. HarperCollins.

Reproductive Injustices in the 60s and 70s

The Indian Child Welfare Act (ICWA)

In 1958, the US government launched the Indian Adoption Project to help make it easier for Indigenous children to be adopted (US Department of the Interior, 1967). The Indian Adoption Project lasted until 1967 and it's been estimated that over 12,000 children were adopted out of Indigenous communities during this period (Palmiste, 2011). Prior to the passing of the Indian Child Welfare Act (ICWA) of 1978, an estimated 75-80% of Indigenous families in

the US had lost at least one child to the foster care system. While Indigenous children only made up 9% of the population, they were overrepresented in foster care at 35% (Bombelles, 2022). In Montana the rate of Indigenous children placed in foster care was 13 times greater than that of whites prior to ICWA (Bual, 2018).

Historically, the child welfare systems in the US were not only ignorant, but indifferent to and insensitive to Indigenous culture. The lack of knowledge and bias by the child welfare systems caused many unwarranted adoption practices to take place. ICWA (25 U.S.C. § 1902) was enacted to "protect the best interests of Indian children and to promote the stability and security of Indian Tribes and families" (House of Representatives, 2009). ICWA set forth the requirement that caseworkers make considerations when dealing with ICWA cases such as: providing active efforts to the family; identifying a placement that fits under the ICWA preference provisions; notifying the child's Tribe and the child's parents of the child custody proceeding; and working actively to involve the child's Tribe and the child's parents in the proceedings. These considerations gave more protections to Indigenous children in the welfare system (i.e., that children be placed within Indigenous foster families so that they are no longer disconnected from their culture.)

Recent reports indicate that the rate of Indigenous children in foster care has declined nationally, but is still four times higher for Indigenous children than the general population (Bombelles, 2022). In Canada, which is another settler-colonial state, evidence exists of illegal adoption practices where Indigenous children were advertised through television commercials and newspaper ads. For Canadian history, this era was coined as "the Sixties Scoop" and many Indigenous Peoples in the US will refer to this time period as so.

Sterilization

Coinciding with the unwarranted removal of Indigenous children from their families was the forced sterilization of Indigenous women and birthing people in the US. Between 1970 and 1976 25-50% of Indigenous women were sterilized (Lawrence, 2000). An atrocious, estimated rate of 1 in 4 Indigenous women were sterilized by the Indian Health Service (IHS) without consent or knowledge (Lawrence, 2000). Eugenic sterilization laws were made legal by the Supreme Court in 1927 during the period where slaves were emancipated (Kozhimmanil et al, 2022). White supremacist thinking was responsible for these eugenic depopulation policies. Scholars have documented racial bias from physicians at that time with beliefs that Indigenous Peoples were morally, mentally, and socially defective. Some IHS physicians didn't feel that Indigenous women and birthing people were intellectually able to use family planning methods and the Indigenous population needed to be controlled (Lawrence, 2000). The results of these sterilization atrocities are still felt today. The history of forced sterilization are meaningful in regard to perinatal health as these family experiences affect how Indigenous women and birthing people interact with the health care system due to longstanding, justified, fear and mistrust. Unfortunately, we know the mistrust goes both ways. The mistrust is evident in the welfare system's failures to protect Indigenous children and the supremist need to impede on reproductive rights of Indigenous birth givers.

> Combined with the forced assimilation of Native American children of earlier generations in compulsory boarding schools and modern-day failures of social services to place Native American children in foster care with Native parents in accordance to modern child welfare laws, the forced sterilization of Native American women is another page in the long book of abuse brought upon Native peoples by the United States (Lawrence, 2000).

The Hyde Amendment

In 1976, the Hyde Amendment set the boundaries on what medically necessary abortions would be covered by federal funding such as Medicaid and the Indian Health Service (IHS). In general, it's important to know that IHS does not offer abortion care. Abortion access among Indigenous Peoples is a delicate topic, and care should be used when discussing the topic. The complexity on abortion access is a recurring phenomenon among populations that have survived genocide. Many Indigenous birthing people recognize birth as a resistance to the efforts of genocide and colonization, however Indigenous scholars have also pointed out Traditional Knowledge on plant medicines that were utilized by Indigenous Peoples to prevent unwanted pregnancies. A recently published article spoke to the racial injustices regarding abortion access (Kozhimannil et al., 2022). Important notes in that article include other infringements on reproductive rights for Indigenous Peoples including the topic of blood quantum that was discussed earlier in the Reservation Period section of Part 2 of the toolkit. Additionally, the author states that due to the highly disproportionate rates of death during pregnancy for Indigenous birth givers, abortion may be a safer choice than pregnancy and delivery in certain cases. Limited access to abortion care is another injustice to reproduction faced by many Indigenous birth givers.

Reproductive justice is defined as "the human right to maintain personal bodily autonomy, have children, not have children, and parent the children we have in safe and sustainable communities (SisterSong, n.d.). As we can see from previous policies listed in this toolkit, reproductive injustices have been forced upon Indigenous birth givers since colonization. Later in the toolkit more information about the devastating perinatal health impacts these historical injustices are currently causing will be presented. In 2007, the United Nation's Declaration of Indigenous Peoples (UNDRIP) was adopted by the General Assembly, making

the UNDRIP a legally non-binding resolution. The United Nations doesn't explicitly call out reproductive rights in the UNDRIP, however the Articles relevant to the improvement of economic and social conditions, protection against all forms of violence, and access to health services (Articles 21, 22, and 24, respectively) are related to perinatal health (United Nations, 2007). The relevant articles are listed below:

Article 21

1. **Indigenous peoples have the right, without discrimination, to the improvement of their economic and social conditions,** including, inter alia, in the areas of education, employment, vocational training and retraining, housing, sanitation, **health** and social security (United Nations, 2007).
2. **States shall take effective measures and, where appropriate, special measures to ensure continuing improvement of their economic and social conditions. Particular attention shall be paid to the rights and special needs of indigenous** elders, **women**, youth, children and persons with disabilities (United Nations, 2007).

Article 22

1. **Particular attention shall be paid to the rights and special needs of indigenous** elders, **women**, youth, children and persons with disabilities in the implementation of this Declaration (United Nations, 2007).
2. **States shall take measures, in conjunction with indigenous peoples, to ensure that indigenous women** and children **enjoy the full protection and guarantees against all forms of violence and discrimination** (United Nations, 2007).

Article 24

1. **Indigenous peoples have the right to their traditional medicines and to maintain their health practices,** including the conservation of their vital medicinal plants, animals and minerals. **Indigenous individuals also have the right to access, without any discrimination, to all social and health services** (United Nations, 2007)**.**
2. **Indigenous individuals have an equal right to the enjoyment of the highest attainable standard of physical and mental health.** States shall take the necessary steps with a view to achieving progressively the full realization of this right (United Nations, 2007).

Learning Exercises:

1. Follow this link to learn more about the Policy Basics of ICWA from the Montana Budget and Policy Center: https://montanabudget.org/post/policybasics_icwa
2. Or from the Montana Department of Public Health and Human Services: https://dphhs.mt.gov/cfsd/icwa/icwahistory

3. Follow this link to read an article about the Sixties Scoop: https://www.cbc.ca/news/canada/manitoba/sixties-scoop-americans-paid-thousands-indigenous-children-1.3781622
4. Read one or both of the following article on sterilization of Indigenous women and birthing people: https://www.cfp.ca/content/67/7/525 https://daily.jstor.org/the-little-known-history-of-the-forced-sterilization-of-native-american-women/

Resources for learning more about the lasting impacts of ICWA:

1. *Daughter of a Lost Bird* is a documentary about an adult Native adoptee reconnecting with her birth family and heritage. It's a great story relevant to ICWA and gives historical context throughout. https://www.daughterofalostbird.com/about-3
2. The second season of This Land Podcast is a great resource to learn more about the current importance of ICWA. https://crooked.com/podcast-series/this-land/

Indigenous Self-Determination Policy Era (1970s - Present)

During the civil rights movements, much needed attention was drawn to the injustices of Indigenous Peoples in the US. In 1970, President Nixon worked to end termination policies and reinstated the status of some Tribes that were terminated by previous policies (Mann, 2001). Public Law 93-638 is called the Indian Self-Determination and Education Assistance (ISDEA) Act and was passed in 1975, which officially ended the previous termination and relocation policies (IHS, 2017). This act recognizes Tribal Nations in the US as sovereign, domestic dependent nations. The idea behind self-determination was to allow Indigenous Peoples in the US to take responsibility for operating programs and funding that they are most affected by. By Tribes having more local control, the programs that serve AIAN people will be more tailored to the needs of the community and the funding could be more effectively utilized. Other programs such as police enforcement and social services can also be 638 programs. As sovereign nations, Tribes have the right to take over control of their health care and operate their own clinics versus

IHS facilities. As stated earlier, during this era is when the Indian Child Welfare Act (ICWA) was passed.

While situations are improving and Tribal Nations have more control over how they operate their programs, there are still many improvements to be made. Mistrust is something we often hear about when serving Indigenous patients and clients, but it's important to understand where that mistrust stems from. For the general population much of the information presented in this toolkit thus far may be new, or something they have vaguely heard about. For Indigenous Peoples, this mistrust was passed down by generations to try and protect against the injustices that had happened prior. Scholars have demonstrated how these horrible acts have created cycles of historical trauma in Indigenous families. Warne & Lajimodiere (2015) created a framework to show the pathways in which traumas from the past create conditions of Adverse Childhood Experiences (ACEs) and Adult Adverse Experiences (AAEs) which then lead to chronic diseases among AIAN Peoples. Understanding power dynamics is a crucial step in creating culturally safe interactions. When a pregnant, Indigenous birthing person is in your office or comes to your clinic, imagine yourself in their shoes, and wonder how they are feeling. Imagine the strengths it took them to leave their home communities and get to their appointments. Celebrate the resiliency of Indigenous patients and clients and provide them with the best, culturally safe care you can, because Indigenous women and birthing people deserve it.

Learning Exercise:

1. Follow the link below to learn more about Tribal 638 Clinics: https://www.ihs.gov/sites/selfgovernance/themes/responsive2017/display_objects/documents/TitleIandV.pdf
2. Read the following paper by Warne and Lajimodiere (2015) to learn more about the pathways between historical trauma and chronic disease among AIAN People:

Warne, D., & Lajimodiere, D. (2015). American Indian health disparities: Psychosocial influences. *Social and Personality Psychology Compass*, *9*(10), 567-579. https://doi.org/10.1111/spc3.12198

Treaty Obligations for Health

The following section will briefly go over how the US tries to fulfill the promise to provide health care to Tribal Nations. We will learn about the Indian Health Service (IHS), Tribal 638 Programs, and Urban Indian Health. This section will explain the systems that Indigenous Peoples are operating in to receive health care. Understanding the lack of adequate funding for IHS by Congress will provide better understanding as to why accessing perinatal and mental health resources is difficult for Indigenous birth givers.

The IHS is the principle federal health care provider for American Indian and Alaska Native (AIAN) People. As mentioned previously, Congress expends funds to IHS by law. It was the Snyder Act of 1921 that authorized Congress to fund American Indian Health care (National Indian Health Board, n.d.). Because of this law, IHS is funded by the federal government. Health Services for American Indians were first established in 1824 through the War Department (US Commission on Civil Rights, 2018). Currently, there are three health programs that provide health care services to federally recognized AIAN People. The Indian Health Service represents the "I", Tribal "638" Programs represents the "T", and Urban Indian Health Centers represent the "U". Each program has a unique legal basis for how they provide health services to AIAN People (IHS, n.d.).

"I" – Indian Health Service

In Montana, each reservation has an IHS Unit except the Crow and Northern Cheyenne Tribes who share one unit. The Little Shell Tribe of Chippewa also has an IHS facility in Great Falls, MT. Of these service units, only the one on the Blackfeet Reservation is currently

delivering babies. Both the Flathead and Fort Peck Reservation do have birthing facilities from outside organizations within the boundaries of the reservations. However, most Indigenous birth givers in the state need to travel to neighboring towns for prenatal appointments and labor and delivery services. A recent study conducted in Montana found that on average, Indigenous birth givers must travel 24.2 miles farther for perinatal health care than their white counterparts (Thorsen, 2022).

"T" – Tribal 638 Health Programs

The ISDEA Act serves as the legal basis for Tribes to negotiate establishing Tribal "638" Programs to administer their own health care services delivery programs. Tribal Nations enter into a Self-Governance Compact with the Secretary of Health and Human Services (HHS), allowing the Tribe, instead of IHS, to assume responsibility for all health-related functions, services, and activities (IHS, n.d.). The Tribal Nations currently operating all of the health care services through Tribal 638 Health Programs in Montana include CSKT (Flathead Reservation) and the Chippewa Cree Tribes (Rockyboy).

"U" – Urban Indian Health Centers

Urban Indian Health Centers are crucial for providing health care services for federally recognized AIAN People. As stated previously, the Indian Relocation Act in the 1950s promised a new life for Indigenous Peoples by offering an opportunity to relocate to urban areas from their reservations (National Archives, 2023). Health coverage by IHS does not pertain to AIAN people living out of an IHS service area and is not a form of "insurance" that AIAN people can take with them when they move away from the reservation. Currently in the US there are now 67% of the AIAN population living in urban areas (US Census, 2010). In 1976, Title V under the Indian Health Care Improvement Act (P.L. 94-437) was passed (US National Library of

Medicine, 2021). This $1.6-billion allocation by Congress allowed IHS to contract with urban American Indian non-profit organizations to provide health care to the urban AIAN population (US National Library of Medicine, 2021). The Urban Indian Health Clinics in Montana include: All Nations Health Center in Missoula, Billings Urban Indian Health and Wellness Center, Butte Native Wellness Center, the Indian Family Health Clinic in Great Falls and Lee Pocha Memorial clinic in Helena. These operate as Federally Qualified Health Centers (FQHCs) and can accept insurance and provide care to non-Indigenous people as well. The Bullhook Community Health Center in Havre is a FQHC and serves Urban Indian populations, however it is not operated by an American Indian non-profit.

Budgetary Issues

Currently, the budget used to fund IHS only covers an estimated 60% of the health care needs of eligible AIAN People (US National Library of Medicine, 2021). The extremely underfunded budget is why priority is given to issues where there is a life-threatening illness or injury. Patient referrals can be denied if the medical need isn't great enough for the amount of funding left for the fiscal year. Other health care programs like Medicaid or Medicare are entitlement programs. Access to these programs is granted to US citizens by federal law. The IHS is not an entitlement program but considered a discretionary program, meaning that the IHS and its clients (federally recognized AIAN People) are not entitled to funding and services. IHS funding and its capacity to provide adequate services is at the discretion of Congress and is not guaranteed (Office of Finance and Accounting- Division of Budget Formulation, 2022). The IHS budget is in competition with other Non-Defense Discretionary Programs that provide services such as environmental protection, border security, low-income assistance, and more. All of the funding for these programs are ultimately decided by Congress on an annual basis, whereas

entitlement programs like Medicaid are automatically funded every year and the budgets take into account population growth and the rising costs of health care through inflation (Office of Finance and Accounting- Division of Budget Formulation, 2022).

As mentioned earlier, the IHS is significantly underfunded. While there are current advocacy efforts underway to make IHS an entitlement program, there is still proper feasibility analysis needed to determine future implications (IHS, n.d.). In the meantime, we must consider how to provide adequate health care for Indigenous Peoples in the US with the IHS budget currently available. An important way to help AIAN People receive proper health care and stretch the IHS budget is by ensuring that all eligible IHS recipients are signed up for entitlement programs such as Medicaid and Medicare. In 1976, the Indian Health Care Improvement Act allowed the federal government to reimburse for services received through IHS facilities for eligible AIAN Medicaid beneficiaries (IHS, n.d.). Under 42 C.F.R 136.61, IHS is the payer of last resort (Code of Federal Regulations,1999). Being the payor of last resort means that if a person is eligible for both Medicaid and IHS services, then Medicaid must cover the costs of health care before IHS is billed. This billing hierarchy applies to all other alternate resources, meaning any health care resource other than IHS. Alternate health care resources could be private health insurance, state programs, Medicaid, Medicare, etc. Until an amendment is made to the Snyder Act of 1921 declaring IHS an entitlement program, the budget of the IHS and ability to provide adequate health care to AIAN People will be decided annually by Congress.

A report by the Medicaid and CHIP Payment and Access Commission (MACPAC) (2020) found that Medicaid covered 67.3% of births for Indigenous Peoples in the US out of 30,000 births. Medicaid is essential for the health of Indigenous Peoples in the US as the IHS is severely underfunded and recipients of IHS receive far less funding (~$4k per person) compared

to other government programs like Medicaid (~$8k per person) (Centers for Medicare & Medicaid Services, 2020; Indian Health Service, 2020). In Montana, 41.3% of births are paid for by Medicaid and as of January 2021 and over 15K of eligible Indigenous People were enrolled in Medicaid in the state (Semmens, 2021).

Learning Exercise:

1. Read one of the articles below on Montana Medicaid and Indigenous Peoples:
   https://www.macpac.gov/wp-content/uploads/2021/02/Medicaids-Role-in-Health-Care-for-American-Indians-and-Alaska-Natives.pdf
   https://montanabudget.org/report/medicaid-expansion-in-indian-country-improving-the-health-of-individuals-and-communities-2#_edn22

Additional Resources to learn more about topics discussed in Part 2:

1. To learn more about Montana Tribal Nations read the Indian Education for All's document on Essential Understandings Regarding Montana Indians through the MT Office of Public Instruction.
   https://opi.mt.gov/Portals/182/Page%20Files/Indian%20Education/Indian%20Education%20101/essentialunderstandings.pdf
2. To learn more about Missing and Murdered Women and Girls read this report by the Urban Indian Health Institute.
   https://www.uihi.org/resources/missing-and-murdered-indigenous-women-girls/

Part 3: Indigenous Perinatal Health Considerations

The traumatic experiences mentioned during Part 2 continue to impact Indigenous birthing people in negative ways, increasing risk for mental health issues and other pregnancy-related complications. However, there is power and healing in Indigenous culture. While many injustices and hardships were experienced by Indigenous Peoples in the US during the eras discussed previously, Indigenous cultural strengths have persevered. Indigenous culture keeps Indigenous Peoples resilient, or able to survive hardship. Indigenous Traditional Medicine and healing should be considered for health promotion efforts in Indigenous Communities. In a 2020 scoping review on Traditional Medicine, Redvers and Blondin provide a resource tool to better understand Traditional Medicine in North America that could inform policies and health care

practices (Redvers & Blondin, 2020). As the literature review mentions, Traditional Medicine within health care settings requires more research, but Traditional Medicine and cultural practices can potentially be useful for preventing health issues, including those relevant to perinatal health.

Indigenous Cultural Worldviews

"Birth is ceremony," is a widely known proverb for Indigenous Peoples as many Indigenous cultures recognize the extreme significance of women and birth givers carrying new life. Many Indigenous cultures hold the belief that women and birthing people are sacred due to the ability to bring life into this world. With that knowledge is also the belief that children are gifts from the Creator, and they travel from the Spirit World to us. The sacredness and ceremonial aspects of birth mean that some Indigenous birth givers will want to bring traditional aspects into the birthing experience. Integrating cultural components during labor and birth could be done in several ways, sometimes praying through songs or smudging. Smudging is when certain plant medicines are lit during prayer. Try to make sure you have policies that can accommodate ways for Indigenous families to incorporate ceremonial aspects into the birthing experience and let Indigenous families know what the policies are in advance.

Also within the Traditional Knowledge realm is the fact that pre-colonization Indigenous communities knew how to take care of people in pregnancy, birth, and postpartum. Extended kinship networks were strong, and a birthing person had an abundance of help and support throughout their pregnancy, birth, and postpartum. This support is evident in modern times when you may witness large groups of families waiting for the arrival of the new baby in hospitals and birthing centers. While some policies at clinics and hospitals may put limits on waiting room capacities and who all can be present during labor and delivery, we need to think about how

these policies impact Indigenous families. It's important to find alternatives so that Indigenous birthing people can have the support they deserve during the sacred time of birth. For example, maybe the waiting room in the labor and delivery unit is small, tell families where additional waiting rooms are, maybe there are other rooms that can be used.

"Native Culture" has been demonstrated to be a significant protective factor against mental health issues (Morris et al., 2021). Having a strong cultural identity means being connected to traditional language, ceremonies, land, traditional foods, or other powerful healing tools. Having a cultural identity also comes with a different way of looking at the world. Indigenous worldviews have different ways of looking at health and related topics. Collective health and healing are aligned with the understandings of Indigenous worldviews. Indigenous worldviews of health are more holistic than western views and include relationships with the environment and even other people. Because of the emphasis of co-relationality within Indigenous worldviews, focusing on improving the health of the collective versus the individual should be considered (Alvarez & Farinde-Wu, 2022).

Mental health issues during the perinatal period are on the rise, and Indigenous women and birthing people are subject to significant racial disparities within this realm. We will discuss data and statistics later, but it's important to consider how an Indigenous worldview approaches mental health compared to western medicine. Western paradigms view mental health as illness within a person, but Indigenous perspectives view mental illness as something that occurs when the physical, mental, emotional, and spiritual realms are out of balance (Mehl-Madrona, 2009). Healing from mental health issues can be achieved by returning to balance. Many Indigenous groups recognize the power of singing and dancing for healing. Many ceremonies for healing are

conducted with family and community members present. Traditionally, healing is not usually something one does on their own, but collectively instead.

Learning Exercises:

1. Review Substance Abuse and Mental Health Services Administration's (SAHMSA's) Culture Card: https://store.samhsa.gov/sites/default/files/sma08-4354.pdf
2. Read this commentary from one physician on their perspective on Indigenous Health from a settler standpoint: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6104323/

The Resurgence of Indigenous Doulas and Other Birth workers

There is a growing trend in implementing and advocating for doula care in the US. Doulas are trained to provide non-clinical emotional, physical, and informational support for people throughout their reproductive lifespan, prenatally, during childbirth and postpartum, as well as including all pregnancy outcomes such as abortion, miscarriage, and adoption (Bey et al., 2019). Community-based doulas are birth workers that usually serve families of people of color . Community-based doulas serve within a human rights framework to ensure that all people and families have access to safe, dignified, and culturally relevant care geared toward elevating health equity, reproductive justice, and all stages of perinatal health.

Indigenous doulas are different than mainstream doulas in that Indigenous doulas offer everything doulas do and can be considered community-based, but they may go a step further and often approach their work and care in a sacred way congruent to their culture and the culture of the community they are serving. Indigenous doulas view their patient holistically and can provide care that is in alignment with traditional Indigenous culture. Indigenous doulas have roles that were already well established in Indigenous communities before colonization. Thankfully, the roles of Indigenous doulas and other birth workers are making a comeback and in doing so, improving perinatal health conditions for Indigenous Peoples. Indigenous doulas are

also sometimes referred to as *birth workers* or other terms relevant to their specific Tribal community.

Research has shown that doulas are an important factor for helping pregnant people and birth givers during this impactful time of their lives and can aid in positive health outcomes for the mother and child (Gruber et al., 2013). Policies are being pushed by many advocacy groups for PMH to fund doula care for birthing people. Doulas are able to help prepare the birthing person for all aspects of birth, including preparing for managing stress and recognizing signs and symptoms of mental health issues. When Tribal communities offer Indigenous doula care, doulas can help to restore supportive relationships, provide culturally safe care, and reclaim ceremony that combats the loss of Traditional Knowledge (Cidro et al., 2018). Indigenous doulas can be the life force needed to address PMH issues for Indigenous birthing people by guiding families towards healing and restoring the sacred relationships between birthing people and community.

Learning Exercise:

1. Look through these Zoomcasts offered for free by Indigenous Midwifery and choose one to listen to: https://www.indigenous-midwifery.org/podcast

Access to Culture

Indigenous culture, Traditional Knowledge, and Medicine have also been deeply impacted by colonization through ethnocide or the systematic destruction of an ethnic group's culture (Hall & Tandon, 2017). Some scholars suggest that due to residual patriarchal worldviews left over in Indigenous communities from colonization, as well as efforts from various churches, cultural revitalization efforts have been male dominated (McKay, 2015). We've also already learned about the impacts of outlawing Traditional Medicine and ceremonies in 'Part 2: Historical Context.' Nonetheless, cultural revitalization efforts continue. Indigenous cultural knowledge and practices relevant to pregnancy, birth, and the postpartum period are

resurging. This resurgence is likely due in part to the growing increase of Indigenous birth work efforts across the nation and internationally such as Indigenous Doula Trainings, Indigenous Midwifery, and Indigenous Lactation Consultant Certification Training. While many cultural components are beneficial to promoting health and wellness, we must remember that culture is not always accessible to everyone. We need to be mindful that not every birthing person will want cultural components present in their health care. However, we need to be sure that when someone does, we do our best to support cultural revitalization efforts by individuals and communities. We need to all reflect on our practices and policies to examine whether we are actually supporting or hindering access to Indigenous cultural strengths.

Two-Eyed Seeing Approach

When implementing Indigenous culture in health care practices or public health work, it doesn't need to be western medicine vs. Traditional Medicine. It's not a competition. Both aspects can be beneficial when we use a "Two-Eyed Seeing" approach within health promotion (Hovey et al., 2017). The "Two-Eyed Seeing" approach was coined by Mi'kmaq Elder Albert Marshall and is used to identify and learn from the gift of multiple perspectives by considering both the world views and Traditional Knowledge of Indigenous People in Canada and western science and research knowledge (Bartlett, Marshall, & Marshall, 2012). Using a "Two-Eyed Seeing" approach (Bartlett, Marshall, & Marshall., 2012) acknowledges that there is a sacred space to acknowledge wisdom and practices of both Traditional and western medicine where deeper knowledge and healing can occur. Health and healing does not have to be solely one way or another. The best of both worlds can align to create a bridge to better care for all people. Indigenous birth givers deserve the best care of both worlds. Shared Decision Making (SDM) is one tool that may be helpful in equalizing power dynamics and rebuilding trusting relationships

by creating space for Indigenous worldviews within perinatal health care practices (Groot et al., 2020).

Learning Exercise:

1. Read this article on trust and world view in shared decision making with Indigenous patients:
   https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7154772/

Part 4: Data & Research

Indigenous Peoples have always been researchers. Indigenous cultures have knowledge that has been tried and tested throughout time. However, because of Eurocentric thinking and systemic colonization efforts, Indigenous knowledge has not been valued in the same way as western-based knowledge. Even worse, attempts have been made to destroy Indigenous knowledges. The intentional destruction of Indigenous knowledge systems is evident in the various policy eras discussed previously, with a specific highlight on the assimilation policies including the mandatory attendance at boarding schools. Colonization efforts have also utilized data and research to cause harm to Indigenous Peoples. The disregard for Indigenous Traditional Knowledges, unethical research practices, and other historical contexts creates a complex, mistrusting relationship between Tribal Nations and outside researchers or data collection efforts. To better protect Tribal Nations, many Tribes have begun to implement their own research review boards to review and monitor research conducted in their communities. Research review boards review and monitor research projects using different systems with some nations having their own separate committee, some will utilize local Tribal College Universities, and some others will have Tribal Councils oversee the review process entirely. Whether or not a Tribal Nation has a research review board separate from Tribal Council, usually Tribal Council approval is still needed to conduct research projects in the community. Tribal Research Review

is a crucial additional step that must be taken by researchers or other programs that wish to conduct research in a Tribal community. In Part 4 we will go over considerations in data collection and research regarding Indigenous birth givers.

Definitions

To better understand data considerations relevant to working with Indigenous Peoples and Tribal communities, see the definitions below:

- "**Indigenous data sovereignty** is the right of Indigenous peoples and tribes to govern the collection, ownership, and application of their own data" (Rainie et al., 2017).
- "**Indigenous data governance** is decision making. It is the power to decide how and when Indigenous data are gathered, analyzed, accessed and used" (Walter et al., 2018).
- **"Decolonizing data** occurs as Indigenous Nations and other data agents replace external, non-Indigenous norms and priorities with Indigenous systems that define data and inform how it is collected and used" (Carroll et al., 2020).
- **"Data genocide** is the continued erasure of Indigenous peoples through elimination or lack of inclusion of Indigenous Peoples in data collection and reporting. Examples of how this is done is by racial misclassification or "othering" data relevant to Indigenous Peoples by lumping them into one category" (Wade, 2020; Urban Indian Health Institute, 2021).

Perinatal Health Racial Disparities

Serious racial disparities within perinatal health research exist for Indigenous birth givers in Montana and the US broadly. Indigenous birth givers are three times more likely to experience a severe maternal morbidity event compared to white patients and nationally, are more than twice as likely to die of pregnancy-related deaths than white women (Woo & Glover, 2022; Trost, 2022; Hassanein, 2022). As stated earlier, a recent study also found significant disparities in access for prenatal care and delivery for Indigenous birthing people in Montana (Thorsen, 2022). The study found that Indigenous birth givers were traveling over 20 miles farther for perinatal health care and were 20 times more likely to give birth at a hospital without obstetric services (Thorsen, 2022).

Mental health issues during pregnancy and postpartum are a growing concern in the US. Nationally, suicide and overdose combined are the leading cause of death in the postpartum period (Trost, 2022). PMH issues include depression, anxiety, bipolar disorder, PTSD, substance use disorders (SUDs), and similar issues. Research on the general population has found PMH to be one of the most common complications of maternal health (Mughal et al., 2022).

Research Needs

While research and programs are well established for PMH in the general population, there is hardly any research or information on the unique experiences of Indigenous birth givers regarding PMH (Baker et al., 2005; Heck, 2021). Without accurate data and information, interventions and policies will continue to only focus on the general population. However, Indigenous communities have unique circumstances and worldviews that require tailored approaches- from screening up through interventions and prevention work.

Most of what little research exists is conducted from a western perspective, often by non-Indigenous researchers, and without the use of Indigenous research methodologies. Even more concerning is the deficit focused orientation of the research for perinatal health among Indigenous birth givers. For example, there is an overwhelming amount of literature surrounding the topic of substance use among Indigenous birth givers. However, there lacks research on solutions to Indigenous PMH issues. There is immense focus on the occurrence of this one area of perinatal health (i.e., substance use), but not very much literature to investigate the root causes of PMH disparities among Indigenous birthing people.

There is also a lack of perinatal health research that is conducted with Indigenous communities. So far studies often report on the rates and occurrences of perinatal health issues, but space must be created for more community participation in research. Research in partnership

with communities could lead to a better understanding of root causes of perinatal health disparities and the potential for healing within Indigenous culture. Perinatal health research with Indigenous communities should be based in local cultural values. Furthermore, to collect accurate data, culturally appropriate methodologies need to be utilized in research projects. One example of a methodology is the importance of storytelling among Indigenous cultures. Local cultural values must be considered when research teams are deciding how to collect data *with,* not *on,* Indigenous communities.

For Indigenous birth givers, one benefit of Indigenous-led research projects within the community is the possibility of Traditional Knowledge reclamation and/or preservation. While the topic of Traditional Knowledge must be approached respectfully, including creating and following data agreements stating that all data belongs to the community, there is great potential for reclaiming cultural practices and knowledge relevant to pregnancy, birth, and postpartum care. The specific needs and solutions of Indigenous birth givers can be found by engaging Indigenous communities and sharing power so projects can be driven by the community. Community-based participatory approaches in health practice and research is one pathway for power sharing with Indigenous communities.

Learning Exercises:

Read the following articles by leading Indigenous Data Experts in the Field:

1. Urban Indian Health Institute's Report Card to learn more about Data Genocide: https://www.uihi.org/projects/data-genocide-of-american-indians-and-alaska-natives-in-covid-19-data/
2. CARE Principles for Indigenous Data Governance: https://datascience.codata.org/articles/10.5334/dsj-2020-043

A Note on Allyship

Many health workers and researchers hold power, whether they realize it or not. This power comes in the shape of resources, formal western education, funding, and other structural

support. When we truly collaborate with communities, we must be willing to share our power and privilege with communities to meet common goals. In addition, caution must be used as we must not approach Indigenous communities as if they are powerless. Power-sharing can be achieved by practicing critical allyship. Where being an ally is suggested as a static state, critical allyship addresses social inequalities as an ongoing practice (Nixon, 2019). Too much harm has been caused by well-intended people working in Indigenous communities. Approaching projects with Indigenous communities with a mindset that we have the solutions they need leaves too much room for the white savior phenomenon. The white savior complex is an idea in which a white person or white culture as a whole feels as though they know what's best for Black, Indigenous and People of Color (BIPOC) and need to rescue or save BIPOC (Healthline, 2021). People from outside of Indigenous communities must be critical of themselves and be able to recognize if their interest in the project comes from a place of saviorism.

As mentioned previously, Indigenous communities and culture contain great strengths and resiliency. Solutions to social inequalities can be cultivated from within Indigenous communities. However, researchers and organizations outside of Indigenous communities often hold the resources necessary for addressing inequities. True collaboration occurs when outside, privileged organizations and funders give essential resources to community so that the community can address whatever issues they choose, however they choose. Perinatal health issues affecting Indigenous birthing people must be approached with projects led by Indigenous researchers and communities. If we keep utilizing only western worldviews and approaches, we will continue to come to the same conclusions. Uplifting Indigenous narratives on perinatal health will allow for new perspectives in the perinatal health field.

Learning Exercises:

1. Please read this article to learn more about critical allyship: https://www.researchgate.net/publication/337779936_The_coin_model_of_privilege_and_critical_allyship_Implications_for_health
2. Read this article from Healthline to learn more about the White Savior Complex: https://www.healthline.com/health/white-saviorism

Part 5: Cultural Safety & Perinatal Health Practices

Cultural safety requires health care professionals and their associated health care organisations to examine themselves and the potential impact of their own culture on clinical interactions and health care service delivery. This requires individual health care professionals and health care organisations to acknowledge and address their own biases,attitudes, assumptions, stereotypes, prejudices, structures and characteristics that may affect the quality of care provided.
In doing so, cultural safety encompasses a critical consciousness where health care professionals and health care organisations engage in ongoing self-reflection and self-awareness and hold themselves accountable for providing culturally safe care, as defined by the patient and their communities, and as measured through progress towards acheiveing health equity. Cultural safety requires health care professionals and their associated health care organisations to influence health care to reduce bias and achieve equity within the workforce and working environment (Curtis et al., 2019).

The concept of cultural safety was created by Maori (the Indigenous Peoples of Australia) nurses to address the inequitable health status of Maori People in Australia (Papps & Ramsden, 1996). Later work on cultural safety was developed in Australia for nurses working with Aboriginal cancer patients by the National Cancer Nursing Education (EdCaN). Aboriginal Peoples are the people Indigenous to Australia and include Maori Peoples. Australia is another settler-colonial state and the work on cultural safety with Aboriginal patients is very relevant to the US. In the education geared toward nurses, EdCaN outlines three steps towards cultural safety: 1. Cultural Consciousness, 2. Cultural Appraisal and 3. Cultural Safety and Communication (National Cancer Nursing Education, 2022). The work from EdCaN will be used as a foundation for Part 5 of the toolkit, and the cultural safety practices relevant to perinatal health will be translated from EdCaN's cancer-focused work. While the steps towards cultural

safety are numerical, the process shouldn't be interpreted as linear as much of this work is interconnected.

Step 1: Cultural consciousness or awareness of the constructs of one's own culture and recognition of unique and similar qualities of other cultural groups (National Cancer Nursing Education, 2022).

Learn About the People You Serve

In general, there is a lack of knowledge about Indigenous Peoples and Indigenous culture. This absence of understanding stems from systematic issues and the lack of required education on the subject. Also, the way health care and many health promotion systems were designed, does not allow much time or space to learn about the specific perspectives, values, and beliefs of the patients served. The first step towards cultural consciousness involves acknowledging that Indigenous Peoples have a different culture and worldview. We must now make an effort to learn about the Indigenous Peoples of Montana. The earlier parts of this toolkit have hopefully given you a better understanding. However, reading the toolkit is just the start. We must make an effort to learn more specifically about the Indigenous birth givers we are serving. Which Tribal Nations(s) are our patients and clients from? What resources do we have to learn more about Tribal Nations in Montana? Please note, making an effort to learn more about the Indigenous Peoples in the state does not mean to make patients and clients educate us about their culture. Making an effort means learning the cultural identification of the population we are serving and take the time to learn more about that Tribe. In general, we should all be trying to learn about the Indigenous Peoples here in Montana. We need to encourage other staff and coworkers to learn and ask that leadership mandate trainings or other educational opportunities that would allow staff to better understand Tribal Nations in Montana in conjunction with cultural safety initiatives.

Learn How Your Patient or Client Identifies

In the "Terminology" Section of this toolkit, we learned about the importance of knowing Indigenous patient's and client's preference for identifying their Tribal Nations. European naming of Indigenous Nations is not always accurate. Additionally, many people recognize the naming of other groups as an act of control with many present-day Indigenous groups starting to protest the names acquired by acts of colonialism. For example, Gros-Ventre is the federally recognized name of one of the Tribes of the Fort Belknap Indian Community. However, the Tribe was given this name due to the incorrect understanding of sign-language by French fur traders. While federally recognized as Gros-Vetnre, this Tribe refers to themselves as Aaniiih, or Whiteclay People. The sign-language to show who the Aaniiih were was to put your hands in front of you and make a motion similar to a waterfall to signify the white clay found below waterfalls, which is part of the Tribe's creation story. French fur traders misinterpreted the hand motion to be relevant to their stomachs and named the Tribe Gros-Ventre, which translates from French to English as big bellies (Garter Snake, 1980). The misnaming of the Aaniiih People is just one example of the importance of understanding the terminology and names relevant to the people you are serving.

Understand That There Is Heterogeneity Among Indigenous Nations and Cultures

As mentioned earlier, there are well over 574 Tribal Nations in the US and over a dozen in Montana. There are also many Urban Indian communities with people from various Tribes. We must also keep in mind that there are many Indigenous Peoples that live in Montana that are not from a Montana Tribe. We cannot assume that every Indigenous group has the same culture. While there may be some common, underlying values (i.e., relationship with land), we must remember that each nation, community, family, and individual are different. We cannot expect

that what is true for or relevant to one of our patients or clients of certain Tribal descent will be the same for all other patients or clients from other Tribes. Because of the impacts of colonialism, knowledge of and participation in culture varies greatly. Do not categorize Indigenous Peoples into one homogenous group. Instead, recognize the heterogeneity among Indigenous Peoples and let the patients or client decide which parts of their culture they feel comfortable sharing.

Recognize And Learn About Cultural Constructs That May Affect Interactions with Health Care Systems

One main construct of Indigenous culture in the US is colonization. It is important to realize that the western health care systems were introduced during very traumatic times for many Indigenous Peoples and may be associated with the intense oppression occurring during colonization efforts. As previously stated, the first interaction with western medicine usually occurred at boarding schools for many Indigenous families. Historical interactions with western systems and potential residual feelings must be considered when recognizing power dynamics with Indigenous birth givers.

Reflect on Personal Beliefs That Influence the Mode of Practice and Interaction with Indigenous Peoples

As stated earlier, most people were not required to learn about Indigenous Peoples and the accurate history of Indigenous Peoples and the US government. Most people's education and what is known about health care is based on Eurocentric thought. Furthermore, due to high volumes of deficit reporting on Indigenous issues along with other issues of white supremacy, many negative stereotypes exist about Indigenous Peoples and especially about Indigenous birthing people. Decolonization refers to the undoing of colonialism. There seem to be varying degrees of a consistent definition, but overall, decolonizing is more than social justice. One article stated the way to decolonizing paradigms is to include Indigenous ways of knowing in

academia and research and to value these ways of knowing in the same way as Eurocentric research is valued (Held, 2019). When working with Indigenous birth givers, we must decenter Eurocentric thoughts and beliefs and shift the power back toward our patient or client.

Learning Exercises:

1. Look up information on six well-known Indigenous people from Montana and learn more about what they are known for and their contributions.
2. Learn more about one of the Tribal Nations in Montana. Learn the accurate name of that particular tribe. Are there more resources to learn from?

Step 2: Cultural appraisal or assessment to identify cultural domains of difference that need to be considered for the [perinatal period] (National Cancer Nursing Education, 2022).

Develop Collaborative Relationships with Indigenous Stakeholders

We must take a relationship approach to accurately identify the cultural strengths of Indigenous communities. Identifying Indigenous cultural strengths can only occur with Indigenous Peoples. We also cannot better serve Indigenous birth givers, without learning from Indigenous birth givers themselves. We cannot learn about Indigenous communities and culture in an extractive way. We must intentionally engage with and start rebuilding trusting relationships with Indigenous communities. We must approach engaging with Indigenous communities in a power-sharing way. If your organization has the resources, hire Indigenous staff to lead projects. Organizations and clinics can create compensated, Indigenous-led boards to guide these efforts. When beginning to engage Indigenous communities, we need to ensure reciprocity is being considered. What do we have to offer that the community feels is important? Rebuilding trusting relationships will take time and likely additional resources, however, Indigenous birth givers are deserving of this effort.

Identify And Value Differences as Strengths Instead of Barriers

One example of Indigenous strengths is Indigenous kinship networks and extended family support. An example of differences creating barriers is when an Indigenous patient is at a hospital. Many of the patient's friends and relatives may wish to come to the hospital to see their loved one. However, large volumes of guests don't often align with waiting room or visitor policies. In the moment, hospital staff can feel upset that the patient has too many visitors. Especially during very special and sacred times such as birth, many Indigenous patients may have a high number of guests. From an Indigenous perspective, the birthing person having the support from family and extended kinship networks is a great strength. This is especially true during the postpartum period, when support for parents is of great importance.

Another example is when Elders accompany birthing people to appointments. Elders are highly valued in Indigenous communities, and they might be the grandmother, aunt, or a respected member of the family or community where there is a relationship built from respect. You may sometimes see that the birthing person will defer to their family and Elder(s) when communicating or making decisions. The birthing person may want to include their family in this process, and you may need to explain information to both the birthing person and their family. Needing to relay information to other people besides the patient or client can be viewed as another inconvenience or more work. However, having Elders or family present during appointments is also a strength and shows the birthing person's value of family and demonstrates that they have support from their family as well.

Situations where differences occur are when we must recognize where our own beliefs and feelings are coming from. We need to be aware of the strengths and the potential benefits relevant to Indigenous women and birthing people. The examples given about families, Elders, and extended kinship networks during hospital visits or appointments might not be relevant to all

who are reading this toolkit, however, you should consider other instances that may seem inconvenient and challenge yourself to see the strengths in a given situation.

Learning Exercises:

1. Have you witnessed any Indigenous cultural strengths in your practice? Discuss this with a coworker and practice using language and narratives that highlight Indigenous strengths.
2. Think about and discuss with coworkers how you can learn about the cultural strengths of a nearby Indigenous community. Who are some stakeholders you think would be important to assist with this effort?

Step 3: Cultural safety skill development of appropriate behaviors, attitudes, and communication strategies that reduce the gap of inequities in [perinatal health] outcomes (National Cancer Nursing Education, 2022).

Communication differences can impede access to care. However, it's important to keep in mind that one communication style is not better than the other- the styles are just different. Differences in styles can create miscommunication or give wrong messaging. We must be mindful of some common tenets among Indigenous cultures that may be relevant to the Indigenous birthing people you serve. However, remember that there is heterogeneity amongst Indigenous Peoples and don't assume you know their preferences. Instead, observe the person you are working with and let their style guide the interaction. Keep in mind that your style of communication can be very different to the patient's or client's and the people your patient or client may be used to communicating with. Recognize that your style could be overwhelming to the patient or client and adjust accordingly.

Non-verbal Communication

One common non-verbal communication difference you may come across when working with Indigenous birth givers is that regarding eye-contact. Some Indigenous Peoples find it aggressive to look at people in the eyes. Some Indigenous Peoples may have been taught to not stare at people when they talk, especially Elders. If there are Elders accompanying the birthing

person this will especially apply to them. To western society not looking at people in the eyes could be viewed as disrespectful, and some might assume that the patient or client is not paying attention. However, for some Indigenous Peoples it is rude to look at people directly when they are speaking, so looking down or away could actually be a way to show respect or at the very least be non-confrontational.

The Use of Silence

Another communication difference is the use of silence. Indigenous Peoples may use periods of silence when communicating with you. You may notice long pauses after you're done speaking and might worry that the patient or client is not going to answer you back. Allow time and space for moments of silence instead of interjecting with a question or more conversation. This silence is usually just a time of deep listening, where your patient or client is taking the time to understand what you said and wants to be intentional when responding. Indigenous cultures are careful with words because of the power that words can carry. Therefore, some Indigenous birth givers may need a moment of consideration before responding.

Differences In Perception of Time

Time is another common difference that can bring about miscommunications. Indigenous Peoples' cultural worldviews may see time as cyclical rather than the western view of time being linear. You can often notice this difference in concepts of time as Indigenous Peoples will acknowledge ancestors in the past and also future generations to demonstrate their high regard. Indigenous-based perceptions of time does not mean that Indigenous Peoples don't have clocks or aren't aware of western's society's view on time. You may have heard jokes about "Indian Time" as an excuse for people being late. However, the "Indian Time" joke does not explain the full story and is only a narrow point of view on the concept of time from an Indigenous world

view. Things will happen when they need to happen and if someone is late, it is understood that whatever the person is dealing with is more important at that time and had to be done. Do not take it personally if someone is late. Instead think of all the things you learned about in this toolkit that an Indigenous birthing person had to overcome to make it to your office and find ways to be more flexible for situations when patients may be late.

Learning Exercises:

1. Engage with Indigenous stakeholders in the community you serve and discuss ways to respectfully communicate with the Indigenous birth givers in your service area. Remember to do this in a way that shows value (monetary, gifts, or other) for their time and expertise.
2. Does time seem to be an issue when serving Indigenous birthing people? Think about ways to adapt in your scope of work or your organization to accommodate different perceptions of time.

Part 6: Systemic Application of Cultural Safety

Changing individual providers' beliefs, attitudes, and behaviors can only go so far. In order to make sustainable change, we must use a system-level approach. Curtis et al. made the following considerations for health care organizations and regulators (Curtis et al., 2019):

1. Mandate evidence of engagement and transformation in cultural safety activities as a part of vocational training and professional development;
2. Include evidence of cultural safety (of organizations and practitioners) as a requirement for accreditation and ongoing certification;
3. Ensure that cultural safety is assessed by the systematic monitoring and assessment of inequities (in health workforce and health outcomes);
4. Require cultural safety training and performance monitoring for staff, supervisors and assessors;
5. Acknowledge that cultural safety is an independent requirement that relates to, but is not restricted to, expectations for competency in ethnic or Indigenous Health

The First Nations Health Authority (FNHA) in Canada published their policy statement on cultural safety and humility (FNHA, n.d.). Within this document they list several recommendations around the areas of training, policies, evaluation, and more. A sample of some

of the recommendations from the policy statement are listed below (FNHA, n.d.). Please note that First Nations are one of the recognized groups of Indigenous Peoples of Canada:

1. Increase opportunities to educate health care professionals, those training to become health professionals, and others working in the health system on the history of First Nations health, as well as the concepts of cultural safety, and cultural humility and the relevance to First Nations health.
    a. Recognizing the First Nations Perspective on Health and Wellness and the role of culture, traditional medicine and healing.
    b. Involving First Nations individuals as the main decision-maker in their health.
2. Identify and address organizational and public policy barriers to creating culturally safe health care environments and health programming, including barriers to integrating First Nations approaches and traditional healing practices in the mainstream health system.
3. Conduct patient journey mapping to support ongoing improvement and learning.
4. Development of measures to assess cultural safety and humility across an organization or program, as a part of quality improvement.
5. Commit to evaluation, publicly reporting, and continuously improving cultural safety within the health system for First Nations.
6. Make specific efforts to ensure a workforce that includes First Nations leadership and staff are visible across all levels of the organization.
    a. Develop initiatives to recruit and retain First Nations health leaders, health care professionals and other employees.
    b. Encourage First Nations students to become health professionals (e.g. offer scholarships, outreach).
7. Create physical environments that are culturally safe for First Nations and that are connected with other services.

Accountability is an important part of health care systems and personal responsibility is essential so taking the time to learn from this toolkit is a great step in the right direction. We must now make efforts to impact our systems and organizations. An article on accountability in health care recommends formalizing values and vision (in this case, cultural safety); formalizing strategies at every level of the organization; encouraging communication; creating education and training opportunities; and creating measurable goals and monitor progress openly (PowerDMS, 2020).

We must remember the importance of health equity. To improve racial inequities in perinatal health in Montana, we have to make system-level changes. Ensure that cultural safety is in your mission statements and strategic plans. Don't limit cultural safety initiatives to perinatal

health departments, make them organization-wide, and educate all staff including administrative staff, leaders, and care providers. Promote conversations on cultural safety amongst staff, and discuss strategies to "call each other in" with grace to hold each other accountable to the tenets of culturally safe health care. By creating more opportunities for discussion and accountability, we can think about our own power and privilege and how we can use our voices to speak up when there are issues.

Work with Tribal Nations and local Indigenous communities nearby to monitor progress. This can be done through surveys and even focus groups with Indigenous patients/clients as examples. The Canadian Institute for Health Information (CIHI) has designed a framework for measuring cultural safety in health care settings that would be helpful in monitoring progress (Canadian Institute for Health Information, 2021). The National Collaborating Centre for Indigenous Health also has a resource for measuring cultural safety (Johnson & Sutherland, 2022.) The Birth Place Lab has developed evaluation tools to measure respectful care within perinatal services (Birth Place Lab, 2023). The Mothers on Respect index (MOR) assesses respectful patient-provider interactions, and the Mothers autonomy in Decision Making scale (MADM) assesses overall maternal care experiences (Vedam et al., 2017; Vedam et al., 2017). Be transparent about your goals and progress to show Indigenous birthing people that you are invested in providing culturally safe care.

Conclusion

We must shift away from education and training that only address cultural competency. Attempting to learn specifics about Indigenous culture is simply not enough. We must consider the power-dynamics at play, critically reflect, and practice providing care that ensures Indigenous birthing people feel safe to engage in healthcare settings or other offices relevant to

perinatal health. Addressing the disparity gap within Indigenous perinatal health demands effort and attention. We must approach closing the perinatal health disparity gap in relationship with Indigenous Peoples and Tribal Nations. Re-forming health organizations and clinics to provide culturally safe care in Montana will take great effort but will have meaningful effects for Indigenous communities in the state. Indigenous women and birthing people in Montana are deserving of safe and effective perinatal health care, and they are deserving of optimal health during the perinatal period.

Thank you for completing this toolkit!

Additional Cultural Safety Resources

1. This literature review is by Curtis et al. (2019) and it outlines why we need to consider power dynamics: https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-019-1082-3
2. This course was created by Education Cancer out of Australia. It was created for nurses who work with Aboriginal cancer patients: https://www.canceraustralia.gov.au/about-us/news/new-guide-deliver-culturally-respectful-indigenous-cancer-care
3. This is a free course on cultural safety from Frontier University designed for nurses: https://frontier.edu/news/new-introduction-to-cultural-safety-course-available-to-all/
4. This is a two-page printable document from Alberta Health Services that discusses cultural safety and lactation with Indigenous women and birthing people: https://www.albertahealthservices.ca/assets/info/hp/hcf/if-hp-hcf-bf-indigenous-mothers-printable.pdf
5. This is a document by First Nations Health Authority on their policy statement on cultural safety and humility: https://www.fnha.ca/documents/fnha-policy-statement-cultural-safety-and-humility.pdf
6. This paper published by the Canadian Institute for Health Information discusses a framework developed by Nohotout Consulting for measuring cultural safety: https://www.cihi.ca/sites/default/files/document/measuring-cultural-safety-in-health-systems-report-en.pdf
7. This document was published by the National Collaborating Centre for Indigenous Health as a resource for measuring cultural safety: https://www.nccih.ca/Publications/Lists/Publications/Attachments/10375/Cultural_Safety_Measurement_EN_Web_2022-06-01.pdf

Books Relevant to Indigenous Health and Research

1. Science of The Sacred
   Redvers, N. (2019). *The science of the sacred: Bridging global Indigenous medicine systems and modern scientific principles*. Berkeley, CA: North Atlantic Books.
2. The Seven Circles of Wellness
   Luger, C., & Collins, T. (2022). *The seven circles: Indigenous teachings for living well*. New York, NY: HarperOne, an imprint of HarperCollins Publishers.
3. Conducting Health Research with Native American Communities
   Arambula Soloman, T. G., & Randall, L. L. (2014). *Conducting health research with Native American communities*. Washington, DC: Alpha Press, an imprint of American Public Health Association.
4. Reproduction on the Reservation
   Theobald, B. (2019). *Reproduction on the Reservation: Pregnancy, childbirth, and colonialism in the long twentieth century (critical Indigeneities*). University of North Carolina Press.

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The Association of Adverse Childhood Experiences with Postpartum Depression Symptoms & Postpartum Smoking Outcomes Among American Indian Women and Birthing People (North Dakota PRAMS 2017-2020)

Amy Stiffarm (Aaniiih), Nicole Redvers, Maridee Shogren, Terri Wright, Brie MacLaurin, & Andrew D. Williams

Cover Letter for Manuscript Submission

Sara Mumby
Journal Manager
American Indian and Alaska Native Mental Health Research

Dear Ms. Mumby,

We are pleased to submit an original manuscript titled, "The Association of Adverse Childhood Experiences with Postpartum Depression Symptoms & Postpartum Smoking Outcomes Among American Indian Women and Birthing People (North Dakota PRAMS 2017-2020)" by Amy Stiffarm and Andrew Williams, for consideration for publication in the *American Indian and Alaska Native Mental Health Research Journal.*

We feel that the manuscript is a great fit for this journal because of the focus on mental health for American Indian (AI) populations. This study focuses on mental health during the perinatal period for AI women and birthing people. Specifically, our study investigates the association between adverse childhood experiences (ACEs) and postpartum depression systems and postpartum smoking- as smoking is a coping mechanism linked to depression and could be an indicator of further substance use. This study solely focuses on AI data, to shift away from deficit-based analysis where AI data is compared to non-AI. This study adds to a literature gap in examining ACEs and mental health among AI populations with a focus on the perinatal period. We feel that this rare look at mental health during the perinatal period for AI women and birthing people would be a great fit for the *American Indian and Alaska Native Mental Health Research Journal.*

We have no potential conflicts of interest to declare. The manuscript has not previously been published in a peer-reviewed journal and is not under consideration for publication elsewhere. Thank you for your time and consideration of the manuscript, "The Association of Adverse Childhood Experiences with Postpartum Depression Symptoms & Postpartum Smoking Outcomes Among American Indian Women and Birthing People (North Dakota PRAMS 2017-2020)" for publication in the *American Indian and Alaska Native Mental Health Research Journal.* Please contact us with any questions and we welcome any feedback that you may have. We look forward to your response.

Respectfully,

Amy Stiffarm, MPH
Doctoral Candidate
University of North Dakota

The Association of Adverse Childhood Experiences with Postpartum Depression Symptoms & Postpartum Smoking Outcomes Among American Indian Women and Birthing People (North Dakota PRAMS 2017-2020)

Abstract

Adverse childhood experiences (ACEs) are associated with negative health outcomes; however, sparse data exists regarding the impact of ACEs on perinatal mental health (PMH) among American Indians (AIs). This study seeks to determine prevalence rates of postpartum depression (PPD) symptoms and postpartum smoking, and to assess the risk of exposure to ACEs with the occurrence of PPD symptoms and postpartum smoking among AIs in North Dakota. Data from 566 AIs from the 2017-2020 North Dakota Pregnancy Risk Assessment and Monitoring System were analyzed. Prevalence of PPD symptoms, postpartum smoking, and ACEs were described. Logistic regression models estimated the association between ACEs and PPD symptoms, and postpartum smoking. Prevalence of PPD symptoms (23.54%) and high ACEs (41.08%) exposure was relative to other studies assessing AIs, and a high prevalence of postpartum smoking (60.93%) was noted. Increased risk for PPD symptoms (OR=1.65,95%CI:1.20,2.80) when exposed to high ACEs was observed. Findings contribute to the research gap on how maternal ACEs impact PMH for AIs. Further research assessing origins of ACEs and PMH complications among AIs is needed. Tailoring PRAMS data collection to local AI communities to better align with Indigenous data sovereignty and governance goals must be considered.

Background

Birth is ceremony for many American Indian (AI) families, indicating a sacred time for celebrating new life. Mothers and birthing parents are crucial vessels, gifted with the ability to bring life into this world. Perinatal mental health (PMH), which includes mental health during pregnancy and within the first year postpartum, is especially important during this sacred time. However, AI women and birthing people experience dire mental health disparities during the postpartum period. Mental health conditions are the leading cause of maternal death among AI women and birthing people, with 64% of these deaths occurring one week to one year postpartum (Trost, 2022).

PMH complications include depression, anxiety disorders, obsessive-compulsive disorder, post-traumatic stress disorder, bipolar illness, and substance use disorders (SUDs). Postpartum depression (PPD) occurs after pregnancy and is the most common pregnancy-related complication, affecting an estimated 12.5% of women and birthing people in the general population (Mughal et al., 2022; Centers for Disease Control and Prevention (CDC), 2023).There are limited data regarding PPD for AI women and birthing people, however, estimated prevalence ranges from between 14% to 29.7% (Baker et al., 2005; Owais et al., 2020; Heck, 2021; Goldstein & Brown, 2023). PPD is associated with adverse outcomes for birthing parents, including increased risk for suicide, as well as adverse outcomes for the baby including poor maternal-infant bonding, difficulties breast/chest feeding, negative parenting practices, and physical and psychological developmental delays (Madlala & Kassier, 2017). Of particular note, PPD increases risk of poor maternal health behaviors – such as smoking commercial tobacco – as a method to cope with PPD symptoms (Allen et al., 2009; Park et al., 2009).

SUD is a leading cause of pregnancy-associated deaths among the general population, with most deaths occurring during the postpartum period (Smid et al., 2019; Hall et al., 2020). Smoking commercial tobacco can be an indicator for use of other substances, such as cannabis, cocaine, opioids and may indicate recurrence of substance use disorder (Weinberger et al., 2018). Data from the Centers for Disease Control and Prevention (CDC) show that rates for smoking during pregnancy have declined by nearly one-third from 2016-2021 for the general US population from 7.2% to 4.6%, but North Dakota data still shows smoking rates higher than the national average at 8.5% (Martin, 2023). However, while smoking during pregnancy also declined among AI populations, rates of smoking during pregnancy were still higher than the North Dakota average (8.5%) among AI populations (12.7%) and three-fold higher than among the general populations (4.6%) (Martin, 2023).

Estimates from 2002 CDC data – the most recent available - found that 43.1% of women and birthing people in North Dakota (non-AI specific) that smoked prior to pregnancy, quit smoking during pregnancy (Tong, 2013). Estimates from 2010 CDC data found prevalence rates of postpartum smoking to be 17.2% for the US general population (Tong, 2013). Tong's (2013) analysis of CDC data reported a 21.8% prevalence rate for postpartum smoking in North Dakota using 2002 data, but specific-AI population data were not reported. A systematic review by Jones et al. (2016) investigated the rates of re-starting smoking postpartum among eleven different studies and found that 43% of those who ceded smoking during pregnancy restarted by 6 months postpartum. The Jones et al. (2016) analysis included over 500 women and birthing people but did not indicate whether or not any AI populations were included and did not report AI-specific results. Data specific to postpartum AI women and birthing people are limited, however, extant data suggests high smoking rates (57.8%) among AIs on Northern Plains Reservations with a

more recent study using South Dakota (SD) data finding more conservative smoking rates of 35.2% among AIs (Geishirt Cantrell et al., 2005; Warne, et al., 2017).

Smoking commercial tobacco has many negative impacts on health for women and birthing people, including increased risks for cancer, cardiovascular disease, respiratory disease, conception and fertility issues, and other reproductive complications (CDC, 2021). Postpartum smoking exposes infants to commercial tobacco smoke, increasing the risks of sudden infant death syndrome, ear infections, respiratory tract infections, asthma, and poor cognitive performance (Dybing & Sanner, 1999; Ey et al., 1995; Maughan et al., 2001; Cornelius & Day, 2000; Kahn et al., 2002).

The determinants for PPD are well documented in the literature globally and include a history of childhood abuse and developmental problems, as well as stress (Choi & Sikkema, 2016; Räisänen et al., 2014). Adverse childhood experiences (ACEs) are toxic stress-creating events that occur before the age of eighteen including violence, abuse, neglect, growing up with mental health or substance use problems in the home, and other household dysfunction (Felitti et al., 1998). Exposure to ACEs can cause negative changes relevant to stress response systems, structural changes in the brain, imbalances of neurotransmitters, epigenetic changes, and social and emotional development (Miller, 2009; Boullier, 2018). The pathology of PPD is still unclear, however it is thought that a combination of genetics, as well as hormonal, psychological, and social life stressors are responsible (Mughal et al., 2022). From an Indigenous worldview perspective, mental health issues occur when the physical, mental, emotional, and spiritual realms are out of balance (Mehl-Madrona, 2009).

Negative impacts of ACEs in adulthood include chronic health problems, mental health complications, and substance misuse in adulthood as well as early death (Felitti et al., 1998;

Kalmakis & Chandler, 2015; Giovanelli et al., 2016; Hughes et al., 2017; Warne et al., 2017; Gilgoff et al., 2020; CDC, 2021). ACEs have a dose-related response effect and individuals with higher ACEs (four or more) are more likely to develop worse health outcomes than those with lower ACEs exposure (three or less) (Giovanelli et al., 2016; Hughes et al., 2017). Mental health complications (i.e., depression, substance use disorders, and suicide) and associations with ACEs exposure are cited widely in the literature (Felitti et al., 1998; Sareen et al., 2013; Jones et al., 2018; Merrick et al., 2017; Warne et al., 2017).

Existing literature has found that maternal ACEs are a risk factor for PPD. A recent meta-analysis of seven studies indicates that a higher number of ACEs are associated with higher risk of PPD symptoms; however, this analysis did not include data specific to AI participants (Racine et al., 2021). Goldstein and Brown's (2023) South Dakota (SD) PRAMS analysis found 12% increased odds of PPD symptoms for each unit of ACE score among a sample of 2,343 AIs. Prior studies on the general population have also found associations between ACE exposure and smoking. A study using data (non-AI specific) from one large metropolitan area found a strong dose-response relationship between ACE scores and persistent smoking with an increase of odds of 52% (Edwards et al, 2007). A study using South Dakota Health Survey (SDHS) data, found high levels of ACEs increased odds of smoking by 39% among AIs in the study population (Warne et al., 2017).

Recent data estimate that 61% of the general population in the US has at least one ACE and that 16% have 4 or more ACEs (CDC, 2021). Prior research has consistently revealed higher ACE score means among AIs. Goldstein and Brown's (2023) SD PRAMS study found a higher percentage of four or more ACEs reported among AI women and birthing people than non-Hispanic White women (41.7% vs. 17.8%) One recent study found ACE score means of 2.32 for

AIs vs 1.56 for the overall sample (Giano et al., 2021). Another study found similar ACE score mean differences at 2.55 for AIs vs 1.73 for the overall sample as well as higher ACE score means for AI females (2.52) than AI males (2.12) (Cole et al., 2022). Prevalence rates of ACEs show higher rates among AIs (Giano et al., 2021; Richards et al., 2021; Elm, 2020; Mersky & Janczewski, 2018; Kenney & Singh, 2016). The SDHS AI data study found prevalence rates of high ACE scores (4 or more) for AI participants (32.38%), over twice as high as the national average (16%) (Warne et al., 2017; CDC, 2021).

High rates of ACEs among AIs have been linked to the traumatic impacts of settler colonialism and various attempts of assimilation and their subsequent intergenerational effects (Brave Heart, 1998; Brave Heart, 2003; Whitbeck et al., 2009; Walls & Whitbeck, 2012; Warne & Lajimodiere, 2015). Settler colonialism encompasses the forced removal of AIs from original homelands so that people could settle on AI land bases and establish the United States (US). The traumatic experiences caused by settler-colonialism may create negative feedback cycles between ACEs leading to adverse adulthood experiences and ultimately creating many health inequities and chronic disease disparities among AIs (Warne & Lajimodiere, 2015).

Specifically, some colonization strategies have uniquely impacted AI women and birthing people and therefore must be considered regarding PMH among AIs (Maxwell et al., 2022; Asher BlackDeer, 2023; Kozhimannil et al., 2022; Leason, 2021: Lawrence, 2000; Theobald, 2019). One example is the Indian Adoption Era (1950s-1970s) where assimilationist social welfare policies were biased against AI culture and families. This created an unprecedented number of unwarranted adoptions leading to the passing of the Indian Child Welfare Act (ICWA) in 1978 to “protect the best interests of Indian children and to promote the stability and security of Indian tribes and families” (25 U.S.C. § 1902) (US Department of the

Interior, 1967; Palmiste, 2011; Bual, 2018 Bombelles, 2022). Prior to ICWA, adopted AI children were often subjected to abuse, harsh labor practices, and discrimination, in addition to being unable to learn their culture (Palmiste, 2011; Bual, 2018 Bombelles, 2022). These ethnocidal practices severed Traditional Knowledge transmission of vital teachings and cultural practices, including those relevant to pregnancy, birth, postpartum and child-rearing practices. Environments resulting from the removal of AI children and other ethnocidal practices initiated complex, systematic symptoms of trauma, guilt, anger, shame, and substance use, compromising parenting capacity and intergenerational attachment among AI Peoples (Brave Heart, 1998; Brave Heart, 2003; Whitbeck et al., 2009; Walls & Whitbeck, 2012; Warne & Lajimodiere, 2015; Hanson, 2023). Disproportionate health inequities including PMH complications and ACEs are symptoms of these systematic traumas experienced by AIs. It is important to note these past atrocities done onto AIs by the US when discussing health inequities within AI Peoples and communities.

Past research has demonstrated relationships between poor health outcomes and the historically traumatic events imposed onto AI Peoples through colonization efforts (Brave Heart, 1998; Brave Heart, 2003; Whitbeck et al., 2009; Walls & Whitbeck, 2012; Warne & Lajimodiere, 2015). However, only one study to date has explored (qualitatively) historical trauma as a unique risk factor for PPD among AI women and birthing people (Maxwell et al., 2022). Other than Maxwell's (2022) study, research on PMH among AI women and birthing people rarely discuss potential impacts of historically traumatic events relevant to women and birthing people. Only one other study to date has invested ACEs and PPD among AIs (Goldstein & Brown, 2023). Now that research is demonstrating the impacts of ACEs and historical trauma

on PMH, further research investigating historical trauma as a unique risk factor for PPD must be completed.

Given the scarcity of published data regarding the association between ACEs and PPD solely focusing on AI women and birthing people, we analyzed 2017-2020 North Dakota Pregnancy Risk Assessment Monitoring System data to address this knowledge gap. This study sought to answer the following three research questions:

1. What are the rates of PPD symptoms for AI women and birthing people in North Dakota?
2. What are the rates of smoking among AI women and birthing people in North Dakota?
3. Do those with higher levels of ACEs have increased risk for PPD symptoms and postpartum smoking compared to those with lower levels of ACEs?

We hypothesized that exposure to maternal ACEs would increase the risks for PPD symptoms and postpartum smoking. A better understanding of the association between ACEs and PPD symptoms, and postpartum smoking will allow for identifying unique factors for PPD specific to AI women and birthing people. Including PPD and SUD, PMH complications among AI women and birthing people are a growing concern and can be better addressed by understanding what is driving these conditions. To draw attention to the severe PMH inequities experienced by AI women and birthing people, this study will provide numerical data regarding PMH among AIs in ND. The sample population of this study therefore only contained AI women and birthing people. Reporting AI-specific data alone is an answer to the call of other Indigenous Researchers to shift away from deficit-based quantitative analyses where AI data is compared to other populations (Walter & Anderson, 2013; Hayward et al., 2021). Instead, this study focused on PMH complications among AI women and birthing people only. Information regarding ACEs and PMH may be useful for Tribal leaders when making decisions on how to prevent and mobilize treatment support for PMH disparities in their communities.

Methods

Description of Researchers' Positionalities

Indigenous Research Methodologies encourage stating one's positionality when conducting research. The lead author of this manuscript is an enrolled member of the Aaniiih Nation of the Fort Belknap Indian Community and a descendent of the Blackfeet and Chippewa Cree Tribes of Montana. As an Indigenous person, the lead author approaches research with an Indigenous epistemology, where Traditional Knowledge has value, just as western-based research. Her ontology includes the belief of holism, that all beings are interconnected and rely on each other for existence. Her axiology is based on her relational responsibility to Indigenous communities. As an Indigenous Researcher she commits her work to embody respect, relevance to local Indigenous communities, reciprocity, and responsibility. The second author is of settler descent and is participating as a mentor practicing allyship in this research project. Both authors are affiliated with the University of North Dakota Indigenous Health PhD Program.

Sample

Data from the 2017-2020 North Dakota Pregnancy Risk Assessment Monitoring System (PRAMS) were utilized for this study. PRAMS provides data relevant to pregnancy and the first few months postpartum. The Centers for Disease Control and Prevention (CDC)- Division of Reproductive Health collaborates with North Dakota Health and Human Services to collect PRAMS data. PRAMS data is collected at the state-level on a monthly basis. PRAMS is site-specific and can be tailored to a state's individual needs. Because of the flexibility within the standard data collection for PRAMS, North Dakota and other sites are responsible for the collection of their own PRAMS data. A sample of women and birthing people that have had recent live births are drawn for birth certificate records from participating PRAMS sites. This

sample population is contacted by both mail and telephone attempts, with mail being the primary data collection mode and telephone being utilized for non-responders to the mail attempt. The timeframe for PRAMS data collection is two to six months after giving birth. More information on the specifics of the standard PRAMS data collection methodology has been published elsewhere (Shulman et al., 2018). In 2017-2020 North Dakota PRAMS administered an Adverse Childhood Experiences (ACEs) questionnaire supplement was issued as part of the questionnaire.

The ND PRAMS 2017-2020 sample included 2,938 AI women and birthing people. Participants within the sample with missing data for the questions regarding ACEs, PPD, postpartum smoking, age, marital status, education, insurance coverage at the time of completing the survey, body mass index, and questions about health conditions prior to pregnancy including depression, diabetes, high blood pressure, and drinking were excluded (n missing = 2,372) for a final study sample of 566. After the application of survey weights the analytic sample was 1,597.

Dependent Variables

Postpartum Depression Symptoms

The outcome of postpartum depression (PPD) symptoms is determined by responses "always" or "often" to at least one of the following questions from the PRAMS survey questionnaire: 1. "Since your new baby was born, how often have you felt down, depressed, or hopeless?" and 2. "Since your new baby was born, how often have you had little interest or little pleasure in doing things you usually enjoyed?" Each question was converted to a binary variable. If a respondent answered "yes" to either question, the value was set to 1.

Postpartum Smoking

Previous studies have found reliability and validity of smoking measures within PRAMS to be high and consistent (Allen et al., 2008). The outcome of smoking is determined by the response to the PRAMS survey question, "How many cigarettes do you smoke on an average day now?" The responses to this question were converted to a binary variable. If a respondent answered "I don't smoke now," the value was set to 0. All responses of "Less than 1 cigarette" through "41 cigarettes or more" were set to 1.

Independent Variable

Maternal ACEs are self-reported experiences of ten forms of adversity before age 18. The questions used to determine ACEs are listed in Table 1. Participants respond either "yes" or "no" to each individual ACE item, the amount of ACE items with the "yes" response are combined to provide a cumulative ACE score. For the purpose of this study the cumulative ACE score was divided into two categories of low (0 -3 ACEs) or high (4 or more ACEs,) which is consistent with prior research for AI women and birthing people (Goldstein & Brown, 2023).

Table 1

Adverse Childhood Experiences Questions from ND PRAMS Survey Questionnaire (North Dakota Health and Human Services, 2022)

ACE Category	**Question** *"During the first 18 years of your life…."*
Parental separation / divorce	Were your parents ever separated or divorced?
Family history of substance misuse	Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?
Family history of mental illness	Was a household member depressed or mentally ill, or did a household member attempt suicide? .
Incarcerated family member	Did a household member go to prison?
Sexual abuse	Did an adult or person at least 5 years older than you ever touch or fondle you or have you touch their body in a sexual way OR attempt or actually have oral, anal, or vaginal intercourse with you?
Emotional abuse	Did a parent or other adult in the household swear at you, insult you, put you down, or humiliate you OR act in a way that made you afraid

	that you might be physically hurt?
Physical abuse	Did a parent or other adult in the household push, grab, slap, or throw something at you OR ever hit you so hard that you had marks or were injured?
Emotional neglect	Did you feel that no one in your family loved you or thought you were important or special OR your family didn't look out for each other, feel close to each other, or support each other?
Physical Neglect	Did you feel that you didn't have enough to eat, had to wear dirty clothes, and had no one to protect you OR your parents were too drunk or high to take care of you or take you to the doctor if you needed it?
Domestic abuse in household	Was your mother or stepmother pushed, grabbed, slapped, or had something thrown at her OR sometimes, often, or very often kicked, bitten, hit with a fist, or hit with something hard OR ever repeatedly hit at least a few minutes or threatened with a gun or knife?

Control Variables

Control variables included age (younger than 20 years old, 21–35 years old, and older than 35 years old; self-report), education (below high school, high school, graduate and above; derived from birth certificate), marital status (yes, no; derived from birth certificate), income (less than $48,000 and greater than $48,000; self-report), insurance coverage post pregnancy (yes, no; self-report), body mass index (BMI) (less than 25, greater than 25; self-report), prior depression (yes, no; self-report), existing chronic illness and conditions (diabetes, high blood pressure, smoking or drinking prior to pregnancy; self-report), pregnancy intention (yes, no; self-report), and substance use during pregnancy (E-cigarettes, smoking, using marijuana and drinking; self-report).

Statistical Analyses

Descriptive statistics were summarized overall and by outcome. Prevalence of PPD symptoms and postpartum smoking by ACEs were examined. A series of logistic regression models estimated odds ratios (OR) and confidence intervals (95% CI) for the association between exposure to ACEs and the outcomes of PPD symptoms and postpartum smoking. For the interest of PPD symptoms, the first model estimated the crude association between PPD

symptoms and ACEs. For the second model, maternal sociodemographic factors were added. Third, medical factors were added to the model. The fourth model included pregnancy intention. Finally, the fifth model included an addition of substance use before pregnancy.

For postpartum smoking, the first model estimated the crude association between postpartum smoking and ACEs. For the second model, maternal sociodemographic factors were added to the model. The third model added medical factors. The fourth model included an addition of pregnancy intention. Prior literature suggests PPD is on the causal pathway between ACEs and postpartum smoking; therefore we fit a fifth model for postpartum smoking that included PPD symptoms as a covariate (Walsh & Cawthon, 2014.)

The proc survey commands in SAS OnDemand for Academics (SAS Institute Inc., Cary, NC, USA) were used for analyses. Survey weights account for sampling strata such as the oversampling of AI women and birthing people and non-response to be more representative of the AI population of North Dakota.

Ethical Considerations

The University of North Dakota is the IRB of record and has approved this secondary data analysis [IRB0005481]. Tribal affiliation data was not used for this study; therefore, no specific Tribal institutional review board approvals were required.

Results

Frequencies and percentages of PPD symptoms, postpartum smoking and covariates, overall and by ACEs level, are included in Table 2. Among AI women and birthing people, 23.56% had PPD symptoms, 60.94% reported postpartum smoking, and 41.08% had 4 or more ACEs. Columns 2 and 3 of Table 2 displays the prevalence of occurrence of PPD symptoms stratified by 4 or more ACEs, by individual ACEs, and by the control variables. Prevalence of

PPD symptoms were 32.62% among those with 4 or more ACEs and 17.22% ($p < 0.01$) among those with 3 or less ACEs. Columns 4 and 5 of Table 2 display the prevalence of postpartum smoking stratified by 4 or more ACEs, individual ACEs, and the control variables. Prevalence of postpartum smoking was 57.62% among those with 4 or more ACEs, and 63.23% ($p < 0.21$) among those with 3 or less ACE.

Logistic regression results for the association between ACEs and PPD symptoms are included in Table 3. The crude model indicated a 134% increase in the odds of PPD symptoms occurring when exposed to 4 or more ACEs (OR = 2.34, 95% CI: 1.57, 3.48). After adjusting for control variables, the odds were reduced by 69% to reveal a 65% increase in the odds of the occurrence of PPD symptoms (OR = 1.65, 95% CI: 1.07, 2.54). The individual ACEs of emotional neglect and physical neglect were also associated with PPD symptoms, with findings suggesting over 100% increase in odds for both (Emotional Neglect OR=2.13, 95% CI: 1.38, 3.31; and Physical Neglect OR=2.36; 95% CI: 1.42, 3.94).

Table 4 includes the results for the regression analysis for the association between ACEs and postpartum smoking. The crude model indicated a 21.1% decrease in the odds of postpartum smoking when exposed to 4 or more ACEs (OR = 0.78, 95% CI: 0.56, 1.10). After adjusting for control variables, the odds were increased by 3.9% closer to the null, and a 18% decrease in the odds of postpartum smoking was observed; however, the confidence interval for this observation is much wider and crosses the null (OR = 0.82, 95% CI: 0.57, 1.18).

Discussion

In this analysis of the association of ACEs and the outcomes of PPD symptoms and postpartum smoking among AI women and birthing people in North Dakota, we hypothesized that exposure to ACEs would increase the risks for PPD symptoms and postpartum smoking.

Findings from this study demonstrate an association of exposure to four or more ACEs significantly increases the odds of PPD symptoms. However, no significant association between ACEs and postpartum smoking was observed. Findings from the current study reveal a high proportion of the sample population exposed to high (4 or more) ACEs. The prevalence rate was 41.08% for high (4 or more) ACEs for the sample population, although national data reporting on ACEs estimates only 16% of people being exposed to four or more ACEs (CDC, 2021).

Postpartum Depression (PPD) Symptoms

This study discovered rates of PPD symptoms among the sample of AI women and birthing people in North Dakota to be 23.56%, which is within the range of other prevalence rates reported on AIs, however much higher than nationally reported data (12.5%) (Baker et al., 2005; Owais et al., 2019; Heck, 2021; Mughal et al., 2022, CDC, 2023; Goldstein & Brown, 2023). The analysis of SD PRAMS data noted a PPD symptoms prevalence rate of 24.8% among 785 AI participants, similar to the findings of the current study (Goldstein & Brown, 2023). Heck. (2021) conducted a literature review on nine studies on PPD that included AI and Alaska Native women and birthing people and found the range reported in the literature to be 14% - 29.9%. A study of 151 AIs from a rural clinic in North Carolina, sampled between 2002-2005, found prevalence of PPD symptoms over 23% (Baker et al., 2005). Although the Baker et al. (2005) study is a different geographic location, PPD symptoms prevalence is similar to the prevalence of PPD symptoms in ND, suggesting AI rates are similar in various part of the US, and have been persistent over the past 20 years. For a global perspective, a meta-analysis was conducted on 21 quantitative PPD studies that included Indigenous women and birthing people in the US, Australia, New Zealand, Canada (Owais et al, 2019). Results from this international study found Indigenous women and birthing people to have higher odds of experiencing PPD

(OR = 1.38, 95% CI: 1.15, 1.65) indicating that higher rates of PPD among AI women in North Dakota is a reoccurring phenomenon experienced globally (Owais et al., 2019).

Of this current study's sample of AI women and birthing people that had PPD symptoms, 32.62% had 4 or more ACEs, which is similar to other findings investigating maternal ACEs and PPD (Prentice et al., 2022). One study conducted in Pennsylvania used medical record data to identify patients that were diagnosed with PPD who then completed the ACE Questionnaire over the phone (Prentice et al., 2022). The findings of the Pennsylvania study found prevalence rates for the general population very similar to the findings for the AI sample of the current ND PRAMS study (34.1% vs 32.62%) (Prentice et al., 2022). While the Prentice et al. (2022) study did report race and ethnicity-specific results, AI population data was not included in the analysis

Other ACEs reports specific to AIs have higher prevalence findings of 4 or more ACEs when investigating other poor health outcomes. A study using a sample from five Midwest Great Lakes area Tribes found prevalence rates of participants with four or more ACEs with Type 2 Diabetes to be 39% (Elm, 2020). Another study assessing mental health among AIs living on a remote Great Plains reservation, found that of the participants with 6 or more ACEs, 57% had depressive symptoms and 37% had survived suicide (Brockie et al., 2015).

Brockie et al. (2015) and Warne et al. (2017) have demonstrated that six or more ACEs are associated with poor mental health outcomes among AIs, however, we found that AI women and birthing people with an ACE score of only 4 or higher had an increased risk of PPD symptoms. Though sparse, there is AI-specific data on maternal ACEs and PPD symptoms to contextualize our findings within. The SD PRAMS data analysis found that for each one unit increase in ACE score, the odds of PPD increased by 12% (OR = 1.12, 95% CI: 1.01, 1.26) (Goldstein & Brown, 2023). Racine et al. (2021) investigated the increased risk of PPD

associated with ACEs exposure in a meta-analysis of seven other studies from 2018-2020, none of which included any specific AI population data. The findings of the meta-analysis by Racine et al. (20121) produced a positive pooled effect size (r =.23) indicating that higher number of ACEs are associated with higher reports of PPD symptoms.

Not specific to the postpartum period, the SDHS AI data study found higher odds for depression for individuals exposed to 6 or more ACEs (OR =6.35, 95% CI: 3.99, 10.10) (Warne et al., 2017). Nationally, a recent study using AI population data from the 2015-2019 BRFSS (n=1,389) found an association between a unit increase in ACEs exposure was associated with nearly 30% odds of reporting poor mental health in adulthood (OR= 1.29, 95% CI: 1.20, 1.40) (Stefanescu & Hilliker, 2023).

Postpartum Smoking

Regarding postpartum smoking, our study found rates of postpartum smoking among the sample population of AIs were observed at 60.94%, much higher than postpartum smoking rates reported using CDC data for North Dakota (21.8%) and national (17.2%) populations (Tong et al., 2013). Existing non-perinatal related smoking rates among AIs include a paper by Geishirt Cantrell et al. (2005) indicating smoking rates of 57.8% overall among four Plains Indian Reservations and the SDHS AI data analysis by Warne et al. (2017) found prevalence of smoking to be 35.2%. The high prevalence rates of postpartum smoking among our study population are more similar to the Gieshirt Cantrell et al. (2005) study rates for overall smoking among AIs (57.8%).

We did not observe an association between ACEs and postpartum smoking in bivariate or regression analyses. This is in contrast to prior studies regarding ACEs and smoking in general among varied samples in the US. A study conducted among pregnant patients at Federally

Qualified Health Centers (FQHC) in Pennsylvania found that nearly 35% of the study population with 3 or more ACEs smoked during pregnancy (Chung et al., 2010). A study using data from one large metropolitan area found a strong dose-response relationship between ACE scores and persistent smoking (OR = 1.52, 95% CI: 1.19, 1.92) (Edwards et al., 2007). The FQHC study in Pennsylvania found an increased risk of smoking during pregnancy among participants with 3 or more ACEs (OR = 2.6, 95% CI: 1.77, 3.83) (Chung et al., 2010). The SDHS data analysis found higher odds for smoking with ACE scores six and higher among AIs (OR = 1.39, 95% CI: 0.94, 2.07) (Warne et al., 2017).

Implications

In December 2022, the Advisory Committee on Infant and Maternal Mortality (ACIMM) (2022) submitted recommendations of strategies to improve American Indian and Alaska Native maternal and infant health conditions to the US Secretary of the Department of Health and Human Services. The Pregnancy Risk Assessment and Monitoring System (PRAMS) was mentioned several times in the document. Specific recommendations regarding PRAMS by ACIMM included expanding surveillance strategies by incorporating more substance use and mental health questions into data collection efforts and supporting Tribal PRAMS initiatives (ACIMM, 2022). The innate flexibility needed to create site-specific initiatives is already present in the CDC's PRAMS protocol, making the ACIMM's recommendations achievable. Beyond ACIMM's recommendations, PRAMS data collection could also be more congruent to local AI communities in North Dakota.

Noteworthy methodologies for working within AI communities were utilized in data collection efforts of the SDHS AI data utilized for the Warne et al. (2017) study. SDHS AI data collection included specific Tribal outreach efforts informed by community-based participatory

research principles. SDHS Tribal outreach efforts involved meeting with Tribal Councils and other key stakeholders prior to data collection to promote participation, get feedback on survey drafts, and create frameworks for reporting data back to the Tribes (Warne et al., 2017). The SDHS methods included the use of local research assistants from AI communities for in-person follow-up data collection activities in participating reservation communities and in one urban area known for a high number of AI residents. Community-based participatory research approaches must be considered to support Tribal PRAMS initiatives (Arambula Soloman & Randall, 2014, Parker, 2017; Wallerstein et al., 2017).

PRAMS data collection efforts must also consider the inclusion of strengths-based measurements relevant to local AI culture such as those applicable to cultural wellbeing (i.e., participating in cultural events, access to Elders, access to land, sense of belonging, etc.) (Dirks, 2016; John-Henderson et al., 2020). Including measurements that are known to promote resiliency (i.e., cultural wellbeing) embodies a strengths-based approach to investigating unique protective factors against PMH complications. Furthermore, quantitative Indigenous research methodologies should be considered when tailoring PRAMS for data collection among AIs to advance Indigenous data sovereignty and governance (Hayward et al., 2021).

North Dakota PRAMS data does not currently distinguish between “traditional tobacco” or “commercial tobacco” cigarette use. “Traditional tobacco” is the term commonly used for tobacco that is used for traditional ceremonial or medicinal uses and can refer to other plants, not containing nicotine (Maron, 2018). However, “commercial or industrial tobacco” is more specific to the tobacco produced by companies for recreational use. A recent scoping review conducted by Redvers et al. (2022) on AI tobacco research in the Northern Plains calls attention to the need for community-derived and culturally congruent standards when collecting tobacco

use data among AI communities. Distinguishing the difference between "traditional" and "commercial" tobacco is especially important when collecting data in AI communities. Clarifying which tobacco cigarette use the PRAMS questionnaire is interested in, could change responses and prevalence rates.

Our research team recognizes Tribal sovereignty and Tribal Nation's inherent rights to self-determine their own health needs and solutions. The information provided is only meant as a tool to aid Tribal leadership in their decision-making process. Clinical implications from the study include recommendations on prevention, universal mental health screening, integrated prenatal and behavioral health initiatives, and interventions congruent to local AI cultural values. ACEs prevention work with Tribal communities is crucial and efforts to lessen the impacts of ACEs on future PMH complications are included in our recommendations. Prior research has demonstrated that having trusted adult support always available in childhood can lessen risks from exposure to ACEs (Bellis et al., 2017). The mitigation of risks via adult support is reminiscent of the role of "Aunties" in Indigenous communities. "Indigenous Aunty" is a term used to define the role of matriarchs in Indigenous communities that carry forward traditions, whether blood related or not (Allaire, 2022). Findings from a 2020 study conducted with a Northern Plains Tribe indicate that the association of ACEs exposure and markers of immune system inflammation was lessened by individual's "current sense of belonging and identification with their tribal community" (John-Henderson et al., 2020). Therefore, Tribal communities are encouraged to consider including ways to foster belonging within ongoing cultural preservation efforts.

Screening for ACEs prenatally can be one way to determine risk of PMH complications such as PPD and SUDs. Implementing interdisciplinary approaches to prenatal and postpartum

care such as integrated behavioral health services may improve PMH outcomes. There is also a growing body of research that identifies Indigenous doulas as a means to mitigate mental health complications including PPD and SUD (Ireland et al., 2019: Cidro et al., 2021; Doenmez et al., 2022) Indigenous Aunties can be important for preventing ACEs in childhood, but also have roles relevant to the perinatal period. An Indigenous doula group in Ottowa refers to themselves as "Aunties on the Road" and is using the term Aunty as a way to decolonize their work (Deer, 2018). Indigenous communities in New Zealand have utilized the powerful role of Aunties in developing maternal health interventions (Glover et al., 2016).

Any interventions or other health promotion efforts employed for use within AI communities should be community-led and grounded on the local cultural values and constructs of the community. We recognize that especially in Tribal communities, operationalizing clinical improvements is difficult to achieve due to systematic barriers such as the continual underfunding of the Indian Health Services (IHS) by the US Congress (Indian Health Service, n.d., 2022; National Indian Health Board, n.d.). Without adequate funding, local leadership and providers are unable to better meet the health needs of AI patients. The lack of funding is problematic for recruiting and retaining essential providers such as therapists. Mental health screening is an area that continuously proves inadequate due to budget restraints (Enomoto & Smith, 2016). Without a sufficient budget, IHS will be unequipped to address the present PMH complications and underlying ACEs. Therefore, we recommend that Congress appropriates realistic and necessary funding to IHS to better improve PMH complications such as PPD and SUDs.

Strengths and Limitations

This study has several strengths. First, it contributes to the literature gap regarding PMH of AI women and birthing people in ND, particularly regarding the effect of ACEs on PMH. This is especially notable given that ND has very high rates of maternal and infant mortality for AIs (Danielson et al., 2018). Next, while other studies have found an association between ACEs and PPD, this study considered the association of maternal ACEs and PPD symptoms through the lens of historic trauma, and explained why consideration of historic trauma specific to AIs is important for PMH. This study provides specific estimates of ACEs, PPD symptoms, and postpartum smoking for AI women and birthing people in ND and is the first study to do so. Next, the design of this study oversampled AI women and birthing people, allowing for the analysis to better represent this population of pregnant women in ND. The greater inclusion of AIs is important for improving maternal and infant health disparities and for centering AI communities and their culture.

Limitations of this study include the inability to make casual inferences due to the cross-sectional design of the study. Second, the data utilized for this study is mostly self-reported, therefore open to recall bias and subsequent misclassification, especially for the questions regarding childhood experiences. However, PRAMS data collection occurs 2-6 months postpartum and overall has high validity and reliability generally (Ahluwalia et al., 2013). However, 2–6-month time frame for data collection, limits PRAMS ability to monitor PMH concerns beyond 6 months. Not knowing occurrences of PPD symptoms or postpartum smoking from 6 months to one year postpartum could impair estimated prevalence rates. Additionally, the only substance use data collected within ND PRAMS is for postpartum smoking. While smoking is associated with an increased risk of SUD reoccurrence, only inferences regarding postpartum SUDs can be made utilizing PRAMS data (Weinberger, 2018). Furthermore, PRAMS data

collection does not distinguish between "commercial" or "traditional" tobacco for smoking cigarettes, a distinction that is crucial for research with AI communities. Finally, while the study population is AI women and birthing people, no Indigenous research methodologies were utilized during data collection or analysis. However, the main interpretation of the results is contextualized from an Indigenous lens by the first author that incorporates relevant ethical considerations.

Conclusion

This current study contributes important data regarding the association between ACEs and PMH among AI women and birthing people and highlights the importance of individual experiences in childhood among a population that is considered "high risk." High prevalence of postpartum smoking and high (4 or more) ACEs were detected among the study population. Having high (4 or more ACEs) revealed an association with increased risk for PPD symptoms. However, no significant association with ACEs and postpartum smoking was found. This study also contributes crucial contextual reflection to the literature as the results were interpreted from an Indigenous lens while outlining historically traumatic events relevant to colonization and AI women and birthing people. Implications relevant to PMH complications among AI women and birthing people were also discussed with emphasis on Tribal Nations' sovereign rights to self-determine their own needs and solutions to these issues. Future research examining the effects of historical trauma on PPD among AI women and birthing people is needed. Furthermore, PRAMS data collection must be better tailored to local AI communities to better support Indigenous data sovereignty and governance goals.

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Table 2.

Demographic characteristics of the weighted analytic sample listed overall, by prevalence of postpartum depression, and prevalence of postpartum smoking

	Overall (n=1597)	Postpartum Depression Symptoms	No Postpartum Depression Symptoms	Postpartum Smoking	No Postpartum Smoking
Variables					
Postpartum Depression Symptoms					
Yes	376 (23.54%)	-	-	254 (26.10%)	719 (73.90%)
No	1221 (76.46%)	-	-	122 (19.55%)	502 (80.45%)
P-Value					<0.09
Postpartum Smoking					
Yes	973 (60.93%)	254 (26.10%)	719 (73.90%)	-	-
No	624 (39.07%)	122 (19.55%)	502 (80.45%)	-	-
P-Value			<0.09		
4 or more Maternal ACEs					
Yes	656 (41.08%)	214 (32.62%)	442 (67.38%)	378 (57.62%)	278 (42.38%)
No	941 (58.92%)	162 (17.22%)	779 (82.78%)	595 (63.23%)	346 (36.77%)
P-Value			<.01		<0.21
Individual ACEs					
Parental Separation / Divorce					
Yes	1064 (66.63%)	254 (23.87%)	810 (76.13%)	634 (59.59%)	430 (40.41%)
No	533 (33.37%)	122 (22.89%)	411 (77.11%)	339 (63.60%)	194 (36.40%)
P-Value			<.080		<0.38
Family History of Substance Misuse					
Yes	811 (50.78%)	225 (27.74%)	586 (72.26%)	476 (58.69%)	335 (41.31%)
No	786 (49.22%)	151 (19.21%)	635 (80.79%)	497 (63.23%)	289 (36.77%)

	Overall (n=1597)	Postpartum Depression Symptoms	No Postpartum Depression Symptoms	Postpartum Smoking	No Postpartum Smoking
P-Value			<0.03		<0.30
Family History of Mental Illness					
Yes	515 (32.25%)	173 (33.59%)	342 (66.41%)	299 (58.06%)	216 (41.94%)
No	1082 (67.75%)	203 (18.76%)	879 (81.24%)	675 (62.38%)	407 (37.62%)
P-Value			<.01		<0.35
Incarcerated Family Member					
Yes	359 (22.48%)	124 (34.54%)	235 (65.46%)	211 (58.77%)	148 (41.23%)
No	1238 (77.52%)	252 (20.36%)	986 (79.64%)	763 (61.63%)	475 (38.37%)
P-Value			<.01		<0.57
Sexual Abuse					
Yes	391 (24.48%)	105 (26.85%)	286 (73.15%)	221 (56.52%)	170 (43.48%)
No	1206 (75.52%)	271 (22.47%)	935 (77.53%)	752 (62.35%)	454 (37.65%)
P-Value			<0.31		<0.24
Emotional Abuse					
Yes	610 (38.20%)	199 (32.62%)	411 (67.38%)	347 (56.89%)	263 (43.11%)
No	987 (61.80%)	177 (17.93%)	810 (82.07%)	626 (63.42%)	361 (36.58%)
P-Value			<.01		<0.16
Physical Abuse					
Yes	504 (31.56%)	174 (34.52%)	330 (64.48%)	296 (58.73%)	208 (41.27%)
No	1093 (68.44%)	202 (18.48%)	891 (81.52%)	677 (61.94%)	416 (38.06%)
P-Value			<.01		<0.49
Emotional Neglect					
Yes	458 (28.6%)	175 (38.21%)	283 (61.79%)	299 (65.28%)	159 (34.72%)
No	1139 (71.32%)	201 (17.65%)	938 (82.35%)	674 (59.17%)	465 (40.83%)
P-Value			<.01		<0.19
Physical Neglect					
Yes	253 (15.84%)	113 (44.66%)	140 (55.34%)	152 (60.08%)	101 (39.92%)
No	1344 (84.16%)	263 (19.57%)	1081 (80.43%)	822 (61.16%)	522 (38.84%)

	Overall (n=1597)	Postpartum Depression Symptoms	No Postpartum Depression Symptoms	Postpartum Smoking	No Postpartum Smoking
P-Value			<.01		<0.83
Domestic Abuse					
Yes	432 (27.05%)	141 (32.64%)	291 (67.36%)	234 (54.17%)	198 (45.83%)
No	1165 (72.95%)	235 (20.17%)	929.67 (79.83%)	739 (63.43%)	426 (36.57%)
P-Value			<.01		<.06
Control Variables					
Maternal Age in Years					
<=20	181 (11.33%)	51 (28.18%)	130 (71.82%)	90 (49.72%)	91 (50.28%)
21-35	1292 (80.90%)	293 (22.68%)	999 (77.34%)	802 (62.07%)	490 (37.93%)
>35	124 (7.77%)	33 (26.61%)	91 (73.39%)	81 (65.32%)	43 (34.68%)
P-Value			<0.63		<0.18
Education Level					
More than HS	614 (38.51%)	138 (22.48%)	476 (77.52%)	336 (54.63%)	279 (45.37%)
HS or Less	982 (61.49%)	238 (24.24%)	744 (75.76%)	638 (64.97%)	344 (35.03%)
P-Value			<0.67		<0.02
Married					
Yes	241 (15.09%)	34 (14.11%)	207 (85.89%)	126 (52.28%)	115 (47.72%)
No	1356 (84.91%)	342 (25.22%)	1014 (74.78%)	848 (62.54%)	508 (37.46%)
P-Value			<0.03		<0.07
Income					
$40,001 or above	626 (39.20%)	115 (18.37%)	511 (81.63%)	354 (56.55%)	272 (43.45%)
$40,000 or below	971 (60.80%)	261 (26.88%)	710 (73.12%)	619 (63.75%)	352 (36.25%)
P-Value			<0.03		<0.11
Insurance					
Yes	1533 (95.99%)	357 (23.29%)	1176 (76.71%)	932 (60.80%)	601 (39.20%)
No	64 (04.01%)	19 (29.69%)	45 (70.31%)	42 (65.63%)	22 (34.38%)
P-Value			<0.51		<0.69
BMI > 25					
Yes	992 (62.12%)	217 (21.88%)	775 (78.13%)	630 (63.51%)	362 (34.49%)

	Overall (n=1597)	Postpartum Depression Symptoms	No Postpartum Depression Symptoms	Postpartum Smoking	No Postpartum Smoking
No	605 (37.88%)	1596 (26.28%)	446 (73.72%)	343 (56.69%)	262 (43.31%)
P-Value			<0.29		<0.13
Prior Depression					
Yes	433 (27.11%)	171 (39.49%)	262 (60.51%)	247 (57.04%)	186 (42.96%)
No	1162 (72.76%)	203 (17.47%)	959 (82.53%)	724 (62.31%)	438 (37.69%)
P-Value			<.01		<0.29
Chronic Disease					
Yes	496 (31.06%)	192 (38.71%)	304 (61.29%)	286 (57.66%)	210 (42.34%)
No	1101 (68.94%)	184 (16.71%)	917 (83.29%)	687 (62.40%)	414 (37.60%)
P-Value			<.01		<0.33
Pregnancy Intention					
Did not want	168 (10.52%)	73 (43.45%)	95 (56.55%)	113 (67.26%)	55 (32.74%)
Wanted	1429 (89.48%)	303 (21.20%)	1126 (78.20%)	860 (60.18%)	569 (39.82%)
P-Value			<.01		<0.31
Prenatal Substance Use					
Yes	784 (49.10%)	238 (30.36%)	674 (85.97%)	680 (86.73%)	104 (13.27%)
No	813 (50.90%)	137 (16.85%)	546 (67.15%)	293 (36.04%)	520 (63.96%)
P-Value			<.01		<.01

Table 3

Odds ratio and 95% confidence intervals for the association between adverse childhood experiences and postpartum depression symptoms among American Indian women and birthing people in ND PRAMS 2017-2020 (n=1,597)

ACE	Model 1	Model 2	Model 3	Model 4	Model 5
	Postpartum Depression OR (95% CI)				
Total ACEs	1.185 (1.109, 1.266)	1.193 (1.115, 1.277)	1.133 (1.054, 1.219)	1.128 (1.048, 1.214)	1.114 (1.033, 1.201)
4 or more ACEs	2.343 (1.574, 3.486)	2.387 (1.594, 3.574)	1.834 (1.201, 2.801)	1.754 (1.145, 2.688)	1.652 (1.072, 2.546)
2 or More ACEs	1.638 (1.168, 2.296)	2.044 (1.300, 3.213)	1.570 (0.975, 2.527)	1.522 (0.940, 2.467)	1.448 (0.889, 2.358)
Parental Separation or Divorce	1.060 (0.693, 1.621)	1.093 (0.712, 1.678)	1.005 (0.641, 1.577)	0.981 (0.622, 1.548)	1.049 (0.729, 1.509)
Family History of Substance Misuse	1.615 (1.085, 2.403)	1.693 (1.131, 2.535)	1.342 (0.872, 2.066)	1.301 (0.844, 2.005)	1.233 (0.799, 1.903)
Family History of Mental Illness	2.180 (1.460, 2.932)	2.226 (1.486, 3.335)	1.738 (1.126, 2.683)	1.744 (1.126, 2.704)	1.667 (1.067, 2.604)
Incarcerated Family Member	2.083 (1.351, 3.254)	2.007 (1.296, 3.108)	1.622 (1.050, 2.507)	1.572 (1.020, 2.422)	1.537 (0.986, 2.394)
Sexual Abuse	1.275 (0.829, 1.961)	1.304 (0.841, 2.021)	0.902 (0.558, 1.458)	0.923 (0.570, 1.497)	0.840 (0.508, 1.388)
Emotional Abuse	2.218 (1.490, 3.300)	2.319 (1.547, 3.477)	1.844 (1.192, 2.854)	1.779 (1.152, 2.749)	1.672 (1.082, 2.583)
Physical Abuse	2.334 (1.558, 3.495)	2.463 (1.637, 3.705)	1.984 (1.280, 3.073)	1.854 (1.193, 2.882)	1.732(1.109, 2.706)
Emotional Neglect	2.892 (1.926, 4.342)	2.906 (1.915, 4.409)	2.342 (1.510, 3.632)	2.313 (1.487, 3.600)	2.133 (1.375, 3.310)
Physical Neglect	3.34 (2.097, 5.320)	3.483 (2.146, 5.654)	2.678 (1.646, 4.360)	2.638 (1.605, 4.335)	2.364 (1.418, 3.941)

ACE	Model 1	Model 2	Model 3	Model 4	Model 5
Domestic Abuse in Household	1.915 (1.267, 2.893)	1.968 (1.292, 2.999)	1.601 (1.013, 2.530)	1.604 (1.016, 2.531)	1.535 (0.965, 2.441)

Table 4

Odds ratio and 95% confidence intervals for the association between adverse childhood experiences and postpartum smoking among American Indian women and birthing people in ND PRAMS 2017-2020 (n=1,597)

ACE	Model 1	Model 2	Model 3	Model 4	Model 5
	Postpartum Smoking OR (95% CI)				
4 or more ACEs	0.789 0.561 1.109	0.793 (0.560, 1.124)	0.830 (0.577, 1.195)	0.820 (0.570, 1.181)	0.777 (0.537, 1.124)
2 or More ACEs	0.758 (0.533, 1.080)	0.777 (0.542, 1.115)	0.807 (0.552, 1.181)	0.800 (0.547, 1.170)	0.769 (0.524, 1.129)
Parental Separation or Divorce	0.842 (0.591, 1.201)	0.862 (0.598, 1.241)	0.847 (0.585, 1.226)	0.841 (0.580, 1.218)	0.842 (0.582, 1.219)
Family History of Substance Misuse	0.826 (0.591, 1.156)	0.850 (0.603, 1.200)	0.931 (0.655, 1.323)	0.924 (0.650, 1.314)	0.901 (0.632, 1.284)
Family History of Mental Illness	0.832 (0.585, 1.183)	0.847 (0.590, 1.215)	0.886 (0.608, 1.290)	0.884 (0.607, 1.288)	0.840 (0.574, 1.229)
Incarcerated Family Member	0.884 (0.599, 1.306)	0.828 (0.551, 1.246)	0.832 (0.551, 1.257)	0.822 (0.544, 1.244)	0.781 (0.515, 1.184)
Sexual Abuse	0.783 (0.536, 1.143)	0.726 (0.488, 1.079)	0.771 (0.511, 1.164)	0.775 (0.513, 1.170)	0.779 (0.514, 1.180)
Emotional Abuse	0.762 (0.540, 1.077)	0.769 (0.541, 1.095)	0.813 (0.564, 1.174)	0.806 (0.558, 1.163)	0.764 (0.528, 1.107)
Physical Abuse	0.871 (0.606, 1.250)	0.899 (0.619, 1.307)	0.935 (0.635, 1.376)	0.919 (0.623, 1.354)	0.869 (0.587, 1.285)
Emotional Neglect	1.299 (0.903, 1.870)	1.384 (0.954, 2.007)	1.534 (1.047, 2.248)	1.525 (1.041, 2.236)	1.444 (0.978, 2.130)
Physical Neglect	1.003 (0.634, 1.584)	1.003 (0.634, 1.584)	1.100 (0.696, 1.737)	1.086 (0.687, 1.717)	0.991 (0.619, 1.587)
Domestic Abuse in Household	0.682 (0.471, 0.988)	0.678 (0.465, 0.990)	0.725 (0.496, 1.060)	0.724 (0.495, 1.061)	0.690 (0.468, 1.017)