PREGNANT TEENS ACCESSING MENTAL HEALTH CARE IN NUNAVUT

Accessing Mental Health Care Among Pregnant Teenagers in Nunavut, Canada - Factors that Act as Barriers and Enablers; a systematic review

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Abstract

Not only does research convey that young mothers face multidimensional issues, but many scholars and the World Health Organization describe teenage pregnancy as a risk for both the mother and the child (WHO, 2016). Understandings of teenage pregnancy are nuanced, and different thoughts exist on both the negative and positive psychological and social outcomes for both the mother and the baby of teenage pregnancy within Canada. Pregnant Teenagers in Nunavut specifically face unique challenges that are different from the majority of Canada, such as the long-term effects of colonialism and colonial legacy systems, geographical isolation, extreme climates, and lack of accessibility to health care centres. Research has explored the mental health challenges faced by this population, but there remains a gap in understanding the factors that influence pregnant teenagers' access to mental health care services. This systematic review aims to answer the question: What factors serve as barriers or enablers for pregnant teenagers seeking mental health care in Nunavut? It is important to do research with and for Inuit pregnant teenagers in Nunavut that recognizes how the long-term consequences of colonialism and intergenerational trauma is critical to addressing the mental health needs and experiences of this population.

Methodology

A systematic review was conducted, and the following databases were used; Ovid MEDLINE, PubMed, Web of Science (WOS), Google Scholar, and CINAHL (EBSCO). Only English articles were included. Grey literature was found through different avenues: Pauktuutit, Qaujigiartiit Health Research Centre (QHRC), and Google Scholar. Initial search results yielded a total of 5989 articles, from which a refined search was conducted, yielding a total of 1369 articles. Of which 10 articles were included after meeting inclusion criteria. The research team

analyzed each of the 10 articles using a qualitative analysis approach to find common themes across articles.

Results

Across the 10 articles that were analyzed this systematic review answered the question of what factors act as either barriers or enablers for pregnant teenagers accessing mental health care in Nunavut. Major factors that are barriers include colonial history and legacy systems, support systems in place, unemployment and poverty, availability and accessibility of care and housing situations. These factors can stack with one another making access to culturally appropriate mental health care among pregnant teenagers challenging to access. Major factors that are enablers include the use of culturally appropriate resources having strong familial, friend, and social supports, having appropriate access to mental health care, a one-stop shop model to accessing health care, and understandings of Inuit SDH and Inuit ways of knowing.

Conclusion

While literature on Inuit culture as it relates to pregnancy, including teenage pregnancy, is seen as a gift, colonialism and western approaches have interrupted that practice and created long-standing negative health indicators. Understanding pregnancy as a gift of life, marking one's readiness for entry into adulthood, can help health care providers understand the significance of pregnancy without stigmatizing pregnant teenagers who are accessing mental health care. Literature consistently recommends Inuit led initiatives that include culturally appropriate and culturally sensitive care plans for pregnant teenagers to access mental health care and for this specific population, pregnant teenagers should be involved in the creation and implementation of culturally appropriate care.

Acknowledgements

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I would also like to express my gratitude to my family and friends who have been there for me at every point leading up to this thesis, how lucky I am to have a support system made up of all of you. Finally, I would like to express deep respect and gratitude to the researchers and advocates whose groundbreaking work has not only laid the foundation for this field but has also inspired and guided my own research. Their contributions have made this systematic review possible, and I am honoured to build upon their important work.

Statement of Positionality

I am a white cis-gender women settler, grand-daughter of European immigrants of Polish and Lithuanian descent who was born and raised on Indigenous land. My interest in women's health equity, mental health, and the Circumpolar North, has led to me completing courses in this field. I write this thesis as a component of my master's degree, for which I am completing at

McMaster University, homelands of the Mississauga and Haudenosaunee nations, and within the lands protected by the Dish with One Spoon wampum, an agreement to peaceably share and care for the resources around the Great Lakes. I recognize and acknowledge my privilege in being able to attend university, complete this master's degree, and write this thesis. In my pursuit to learn and continue learning, I have done my best at including Indigenous ways of knowing, as shared in digital literature, throughout this thesis. I acknowledge that I am not Indigenous and thus, my understandings of Indigenous ways of knowing are limited. I express my gratitude and appreciation for leaders in this field, who continue to break down systemic barriers to reduce injustices for women's mental health in the global north.

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List of Abbreviations

CASP: Critical Appraisal Skills Program

CHR: Community Health Representative

HBT: Healing By Talking

ITK: Inuit Tapiriit Kanatami

IQ: Inuit Qaujimajatuqangit

PTSD: Post-Traumatic Stress Disorder

QHRC: Qaujigiartiit Health Research Centre

RCMP: Royal Canadian Mounted Police

SES: Socioeconomic status

SDH: Social determinants of health

TB: Tuberculosis

WHO: World Health Organization

WOS: Web of Science

Introduction

Teenage pregnancy is a well-researched topic, with many scholars studying its implications on both mother and baby (Moison, et al., 2016). The World Health Organization describes teenage pregnancy as a risk for both the mother and the child (WHO, 2016). While pregnancy is highly regarded in some cultures, negative medical and psychosocial outcomes lived by both young mothers and their child include, but are not exclusive to, higher rates of stillborn births, preterm births, neonatal deaths, postpartum hemorrhaging, depression, anxiety, economical risks, psychological risks, among others (Siegel et al., 2014; Hayashi, 2019; Moison, et al., 2016; Xavier, Brown, & Benoit, 2017; Healey, et al., 2019). Not only does research convey that young mothers face multidimensional issues, but research also demonstrates that teenage mothers are often faced with barriers to continuing their education in order to care for their child, leading to fewer employment opportunities, which has long-term impacts on their earning potential, job stability, and on their psycho-social wellbeing (Moison, et al., 2016; Xavier, Brown, & Benoit, 2017). Furthermore, children of teenage mothers often have less favorable health outcomes when compared to older mothers due to a variety of factors, including family support, lower income, parenting skills, prematurity, and other developmental issues (Moisen, et al., 2016). For these reasons, and with the goal to reduce adverse reproductive outcomes, teenage pregnancy has been at the centre of many public health efforts across the world since the turn of the 20th century (Moison, et al., 2016; CDC, 2024; Baltzer & O'Donohue, 2022).

Consistent with other countries in the Northern Hemisphere, Canadian teenage pregnancies have declined since the 1990s due to successful public health interventions aimed at reducing teenage pregnancies and health promotion for contraceptive use, among other initiatives

(Moisan et al., 2016; Baltzer & O'Donohue, 2022). According to statistics Canada, in 2022, there were 4.4 births per 1000 teenage females between the age of 15 to 19 (Statistics Canada, 2023). In the same time period, in 2022, statistics demonstrate that there were four times more teen pregnancies in Inuit communities in Nunavut compared to the rest of Canada (Moisan et al., 2016). Furthermore, this likely does not reflect the true prevalence of teenage pregnancies across Canada as it does not include medically aborted teenage pregnancies, fetal loss pregnancies, and unreported teenage pregnancies. Specifically, in regard to this study, researchers have shown that communities in the Circumpolar North of Canada still observe high rates of teenage pregnancy, and that teenage pregnancy is a major health concern for Inuit communities (Moisan, et al., 2016). Of particular concern is the mental health crisis in Nunavut, highlighting the mental health needs of pregnant teenagers living in Nunavut.

In order to understand the current landscape for pregnant teenagers in the Circumpolar North, it is imperative to discuss three interconnected histories; the history of colonization and its implications in the Circumpolar North, specifically Nunavut, the history of teenage pregnancy, deemed by some the teenage pregnancy epidemic, and the history of mental health. In this thesis, the authors will first begin with a review of the commonly understood knowledge on each of these topics, followed by a systematic review that was conducted on the factors that act as a barrier or enabler for pregnant teenagers accessing mental health care in Nunavut.

With the goal of incorporating Indigenous ways of knowing and being throughout this thesis, the authors have paid careful attention to the literature that was selected and have incorporated information sharing throughout the entirety of this paper. Furthermore, in following the guidelines of Indigenous research approaches created by Librarian guidelines, the recognition of colonial pasts and of Indigenous Peoples will be recognized as best as possible, power

dynamics in research will be acknowledged and minimized by conducting a systematic review on already existing literature, and personal reflection methods will be used and encouraged beyond this paper (Loyer, 2024).

Teenage Pregnancy and Mental Health

Published literature consistently demonstrated that teenage pregnancy impacts the mental wellbeing of the teenage mother and acts as a significant risk factor for the teenage mother's health (Wong et al., 2020; Flemming, et al., 2013). Although research on the long-term impacts of teenage pregnancy is limited, scholars estimate that a lasting effect is likely due to commonalities between long-term negative health outcomes and poor mental health risk factors (Xavier, Brown, & Benoit, 2017). This population has been found to be more at risk for adverse social outcomes and short-term health issues compared to adult mothers above the age of 20 (Xavier, Benoit, & Brown, 2018). Social determinants of health can help researchers understand both the risks for teenage pregnancy and variables that may reduce disparities among populations already facing inequities (Fuller et al., 2016). Among the literature, identified risks from teenage pregnancies include physical risks for both mother and baby, economical risks, and psychological risks (Hayashi, 2019). Yet, the long-term mental health effects of teenage pregnancy on mothers remains unclear, despite studies aiming to demonstrate the long-term implications (Xavier, et al., 2018). Potential reasons for this may be due to normative patterns and stress accumulation in the years following adolescence. However, it is known that pregnant teenagers have higher rates of depression during pregnancy compared to mothers between 20 – 34 years old, and teenage mothers are more likely to engage in alcohol, tobacco, and cannabis use during pregnancy compared to adult mothers (Wong et al., 2020). Furthermore, teenage mothers are twice as likely to have postpartum depression compared to adult mothers, which if

left undiagnosed and/or untreated adversely impacts the individual, the baby, and their community (Ladores & Corcoran, 2019).

Some literature demonstrates a general understanding of the risks contributing to long-term poor mental health outcomes of young mothers, while other literature demonstrates the pride and positive outcomes of pregnancy, through views of it being a celebration of life (Abdul Rahim et al., 2024; Bexte, 2019; Varcoe et al, 2013). Yet, confounding factors, specifically, lower socioeconomic status (SES), low education attainment, social and family factors prior to parenthood, and insecure employment opportunities add complexities that make it hard to identify associations between teenage pregnancy alone and poor long-term mental health (Xavier, Brown, & Benoit, 2017). This is important to note, as teenage pregnancy alone does not account for the many psychosocial negative outcomes that young mothers face.

It should be explicitly stated that there are different trains of thought on themes surrounding teenage pregnancy and mental health. In fact, scholarship in the field of teenage pregnancy and young parenthood reflects a range of perspectives that are grounded in different models of health and wellness and vary widely in the discourses that they reflect through research. Indigenous perspectives on teenage pregnancy are grounded in history, culture, and tradition. An Inuit perspective brings an additional unique and important lens to the global health conversation on and about teenage pregnancy. This research focus, which is at the intersection of teenage pregnancy and mental health of pregnant teenagers living in Nunavut aims to attend to Inuit realities, while recognizing that the authors positionality will likely also emerge in my analysis.

Teenage Pregnancy and Mental Health in Nunavut

1) Mental Health Issues

The long-term impact of colonialism has resulted in historical and current day mental health challenges faced by young people living in Nunavut. Intergenerational trauma, poverty, the housing crisis, loss of language and connection to culture, and other cultural, social, and environmental losses all play a role in impacting mental health of young people in Nunavut. (Young, 2012). It is therefore not surprising that Nunavut faces one of the highest rates of teenage suicide in the world (Kral, et al, 2016). Importantly, factors such as access to care, transportation, climate, language barriers, among others are additional barriers to accessing mental health resources. Hence, in the Circumpolar North, where remote communities and environmental conditions present unique challenges, the importance of prenatal care is amplified compounding the psychosocial risks of pregnant teenagers (Young, 2012). This suggests the need for context specific prenatal and psychiatric care in Nunavut.

2) Accessing Mental Health Services

Improving access to mental health care across Canada is a public health priority (CIHI, 2023). With long wait times, limited availability, fragmented services, and lack of access many of those experiencing mental illness or substance use disorders in Canada do not get the care they need (CIHI, 2023). In approximately 70% of cases, symptoms of mental illness present themselves before the age of 18, thus care needed is often catered towards youth (CIHI, 2023; Farrah & Norris, 2022). However, once a care seeker turns 18, they must switch to adult care, which segments their care and often adds longer wait times in order to receive care (CIHI, 2023). Given these known challenges, the Canadian Government has implemented integrated youth services sites across Canada, with the goal of providing services that are; 1) easily accessible, 2) youth friendly and inclusive to help reach youth that traditionally face barriers, 3) in collaboration with community partners, 4) planned together with youth and family members, and

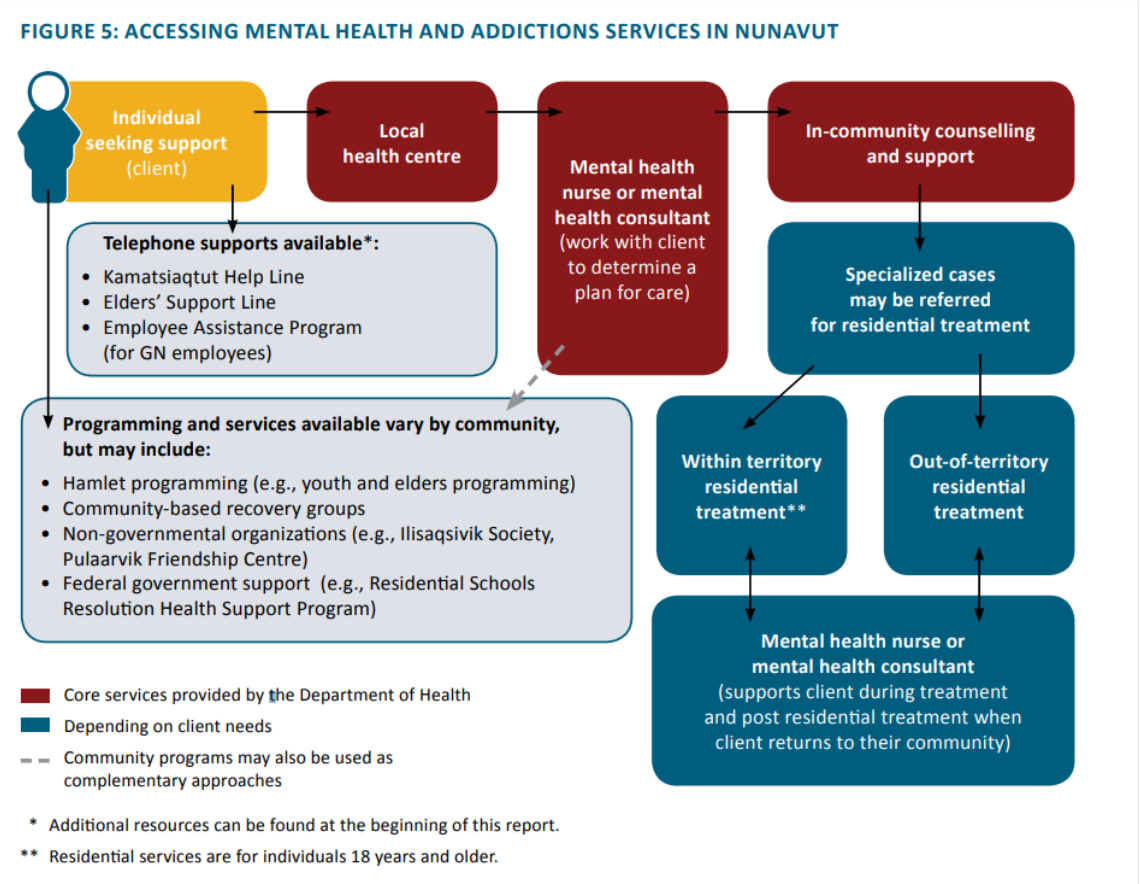
5) spread across the country to help vulnerable youth (CIHI, 2023). Yet, there are no service sites active or under development in Nunavut, highlighting a disparity among mental health access in Nunavut.

Currently mental health access for Nunavummiut (Nunavut residents) varies across the twenty-five different remote, fly-in communities (Representative for Children and Youth's Office, 2019). General mental health services include in-community counselling and support from local health centres delivered by mental health service providers, hamlet programming, telephone supports and help lines, residential treatment within the territory, and out-of-territory acute and residential treatment (Representative for Children and Youth's Office, 2019). While the local health centres have permanent nurses, community workers, as well as public health workers, patients who require urgent care often rely on medical evacuations via air travel to one of the closest hospitals, typically in Yellowknife, Edmonton, Winnipeg, Ottawa, or Montreal to receive treatment (Corosky & Blystad, 2016; McDonnell, et al., 2019). Once youth receive mental health care or treatment from a nurse or consultant from the out-of-territory residential treatment, those providers will at times support clients when they return to their communities for a certain period (Representative for Children and Youth's Office, 2019). Additional mental health supports in Nunavut include outreach workers who provide support through school and other community areas, Healing by Talking (HBT), school-based programs, TeleLink, which is a less used telehealth service that provides psychiatric services such as telephone or video calling, and a drop in counselling team based out of the Akausisarvik Mental Health Treatment Centre (Representative for Children and Youth's Office, 2019). Despite the high prevalence of youth mental illness and mental health concerns, there remains no mental health facilities specifically for children and youth within the territory (Representative for Children and Youth's Office,

2019). To get a better understanding of how to access mental health services, the Representative for Children and Youth's Office, provides a helpful visual portrayal of the Department of Health's *Accessing Mental Health and Addictions Services in Nunavut Flowchart*, see Figure 1 (2019).

Figure 1

Representative for Children and Youth's Office Accessing Mental Health and Addictions Services in Nunavut



Source: Representative for Children and Youth's Office, 2019 (P.15).

3) Barriers to Mental Health Care

Diving deeper to look at specific communities in Nunavut, it's easy to see how segmented the mental health care system in Nunavut is. Looking at Iqaluit, the only city in

Nunavut and the municipality with the largest population, home to 20% of Nunavut's population, there are only two health care centres, including the territory's only hospital, which serves 16,000 people in the Qikiqtaaluk Region (also known as the Baffin region) (City of Iqaluit, 2024; Society of Rural Physicians of Canada, 2024). Cases that are too complex, are referred to Ottawa (Rural Physicians of Canada, 2024). Similarly, Arviat, the second largest community, where in 2006, 40% of the demographic was under the age of 15 years old, there is one health centre with a medical clinic and no permanent physicians on staff (Corosky & Blystad, 2016; City of Iqaluit, 2024). Maternity care is similarly segmented, in the sense that pregnant women must leave their homes between 36 – 37 weeks of gestation to give birth in a different community (Healey, et al., 2019). In most cases, women are scheduled to evacuate by flight to either Iqaluit, Kangiqtiniq (also known as Rankin Inlet), Ottawa, Winnipeg, or Yellowknife (Helaey et al., 2019). Sometimes, surgical maternity care or emergency care requires a Medevac to the nearest birth centre (Healey, 2019). Leaving one's community to give birth can cause many stressors for young adults. Isolation while giving birth, language barriers, coupled with mental illness are among some of the factors that are stressors for this population.

Given these conditions, one can see how factors such as location, access to mental health care, instance of teenage pregnancy and experiences of mental illness or distress can compound to create an inequitable system of care. Generally, accessing mental health care during the perinatal period has been difficult in Canada, regardless of community or income (Hicks et al., 2022). One study found that among mental health care providers for perinatal patients, providers confirmed that 42% of patients waited at least two months for care (Hicks, et al., 2022). While global concerns such as the COVID-19 pandemic have put strains on the Canadian mental health care system, studies have yet to look at the compounding factors such as stigma, location, and

other factors that act as barriers for pregnant teenagers in Nunavut accessing care. Thus, a question begs to be asked; what factors act as barriers or enablers for pregnant teenagers accessing mental health care in Nunavut? This systematic review will look at 10 articles of research published between the years of 2000 to 2024, in Canada specifically to determine which factors are at play in either enabling better access to care or act as barriers to access mental health care. Results will be analyzed to determine the barriers to access mental health resources among pregnant teenagers. First, I will explain the Indigenous social determinants of health in Nunavut and how they must be considered when looking at barriers and facilitators/enablers of mental health care.

Philosophical Orientation

This research follows an interpretivism philosophical orientation, whereby the research team interprets themes and key domains of the systematic review. Interpretivism philosophy is associated with both positivism and idealism with an emphasis on qualitative analysis over quantitative analysis (Dudovskiy, 2018.). Interpretivism is a philosophical paradigm that sees reality as subjective, being constructed and interpreted by people based on their own lived experiences (Nickerson, 2024). Consistent with this orientation, the researchers appreciate the differences between people and how they interpret their lived experiences. In addition to an interpretivism philosophical orientation, this research also incorporates Indigenous ways of knowing which are based on a worldview and values that are relational, place-based, and composed of knowledge, beliefs, and practice (Held, 2019).

Background

Nunavut

This study looks specifically at Nunavut for a variety of reasons, including the geographical location, its mainly Inuit population, and its social and historical factors. Given Nunavut is situated in the Circumpolar North (a region that encompasses the arctic and subarctic), its habitants face health disparities that differ from their southern counterparts (Hueffer, et al., 2019; Young, 2012). Factors such as genetic susceptibility, the environment, living conditions, environmental quality, nutrition and physical activity, and smoking, alcohol and substance use, all play roles as determinants of health for inhabitants of the north (Young, 2012). The population in Nunavut is 85% Inuit, which is the highest population of Inuit among any region in Canada and allowing for an analysis to understand Inuit SDH (Neary, 2023; Young, 2012; Bexte, 2019). Finally, looking at the social and historical context of Nunavut, specifically colonialism and forced settlement, there are systematic barriers in place that have led to disproportionate access to health care among other barriers for mental health.

Inuit live in regions across Greenland, Alaska, and Canada. In Canada they live in Inuit Nunangat (also known as the Inuit Homeland), which is divided in four regions (Facing History & Ourselves, 2020). ITK represents Inuit in all four of these regions, namely, Inuvialuit (Northwest Territories), Nunavik (Northern Quebec), Nunatsiavut (Northern Labrador), and Nunavut (Facing History & Ourselves, 2020).

Figure 2

Map of Inuit Nunangat (4 regions of the Inuit Homeland)

Source: Indigenous Peoples Atlas of Canada

Nunavut constitutes less than 0.5% of Canada's population, while population trends have witnessed substantial growth, making it one of the fastest growing regions in all of Canada (Young, 2012; Bexte, 2019). The population of Nunavut as of 2023 was 40,000, an increase from previous years, and almost double the population of 1990, which was 21,580 (Neary, 2023; Young, 2012).

Teenage pregnancy in Nunavut

In 2009, the rate of teenage pregnancy in Nunavut was 161.3 per 1000, which was roughly four times higher when compared to the rest of Canada in the same year (Corosky & Blystad 2016: Moisan, 2016). Despite decreasing rates of teenage pregnancy across Canada, Nunavut and other circumpolar regions observed higher rates of teenage pregnancy, which could

correspond to Indigenous perspectives of pregnancy, viewing it as a celebration of life (Bexte, 2019). In the late 1990s one fourth of all births in Nunavut were to mothers under the age of 20 (Bains, 2024). Furthermore, 20% of all births in Nunavut in 2009 occurred among teenagers, specifically women aged between 15 years and 19 years (Corosky & Blystad, 2016; Moisen, et al., 2016). Thus, teenage pregnancy has been deemed a public health priority for Inuit Communities (Moisan, et al. 2016).

Given the demographics of Nunavut, namely, that 85% of the population is Inuit, it is important to note these statistics do not solely attribute to Inuit and include both Inuit and non-Inuit (Young, 2012; Neary, 2023; Baxte, 2019). Furthermore, due to the young median age of the Nunavut population, it provides some reasoning as to how teenage pregnancies account for such a high percentage of the territory's overall births. Notably, that the population of those under 20 years of age is higher than those older than 20 (Moisen et al., 2016).

Looking specifically at the Inuit population in Canada, Inuit women are at a greater rate for preterm deliveries, both before the 37-week and 32-week gestation period, which are known risk factors for perinatal death, infant mortality, and post-neonatal death (Moisen, et al., 2016). Studies suggest that social determinants of health likely play a role in creating these health disparities, highlighting the role of environmental factors and access to social services (Moisen et al, 2016).

Rates of teenage pregnancy in Nunavut are higher than the rest of the country (Corosky & Blystad, 2016). However, as will be noted in the findings, cultural attitudes towards pregnancy are different among Inuit, whereby pregnancy is celebrated and regarded as a step into adulthood (Bexte, 2019; Moisan, et al., 2016). Despite the known issues of teenage pregnancy, it is

important to look at teenage pregnancy in a holistic manner, accounting for cultural beliefs, societal influences, and SDH that impact teenage pregnancy.

One Health Paradigm

The One Health paradigm is an approach to address the historical, environmental, and cultural factors that play a role in these health disparities (Hueffer, et al., 2019). One Health is a holistic approach that is linked back to Indigenous ideologies and can be defined as;

> "An integrated, unifying approach that aims to sustainably balance and optimize the health of people, animals and ecosystems. It recognizes that the health of humans, domestic and wild animals, plants, and the wider environment (including ecosystems) are closely linked and interdependent." (WHO, 2024, P1).

Inuit Social Determinants of Health

When looking at any health disparities, it is crucial to understand the social determinants of health (SDH) and the role they play in overall wellbeing. SDH, as defined by the WHO, are,

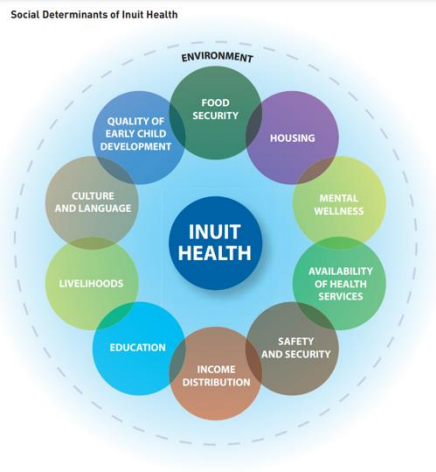
> "The non-medical factors that influence health outcomes. They are the conditions in which people are born, grow, work, live, and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems, development agendas, social norms, social policies and political systems." (WHO, 2024, p. 1).

Inuit Tapiritt Kanatami (ITK), the national Inuit organization, has outlined a list of 11 social determinants of health that are relevant to Inuit populations in Canada today (ITK, 2014). These determinants of Inuit health look at health indicators and contributing factors of the determinants of health, through a lens that includes socio-economic indicators while taking on a more Inuit-specific focus (ITK, 2014). For the purposes of this thesis, the following SDH will be used as factors to help analyze barriers and enablers to mental health care access in Nunavut.

1. Quality of Early Childhood Development

2. Culture and Language
3. Livelihoods
4. Income Distribution
5. Housing
6. Personal Safety and Security
7. Education
8. Food Security
9. Availability of Health Services
10. Mental Wellness
11. Environment

Figure 3: Social Determinants of Inuit Health



Source: ITK, 2014

Table 1

Social Determinants of Inuit Health and Their Definitions

Term	Definitions, source; ITK, 2014
Quality of Early Childhood Development	"A term to encompass all issues relating to maternal, fetal, infant, and children's health and wellness."
Culture and Language	"Inuit culture and language are seen as a crucial and inter-connected determinant of health. Overall, the current state of Inuit culture and language can be generalized as one of rapid change."
Livelihoods	"The concept of livelihoods is used in this document to encompass a wide range of social factors beyond concepts such as employment in order to include all ways in which families are generating income and supporting themselves. This conceptualization has been adopted since many Inuit men and women continue to work 'informally' by harvesting country food, producing goods, handicraft and artwork, and providing voluntary services in their communities. Although these activities are not usually considered employment, they should still be considered when addressing the social determinants of Inuit health"
Income Distribution	"Access to higher incomes allow for greater disposable income within families and can alleviate cycles of poverty. Overall, the impacts of income on health are strongly connected with a

	number of other determinants such as education attainment and employment status"
Housing	"For Inuit, the overcrowding of housing is viewed as a clear non-medical health indicator with direct connections to a number of related determinants. Since the majority of Inuit live in social housing units, the availability of adequate and safe social housing is a key concern. The issue of housing has become even more pressing since 1993 when the federal government cut spending to Inuit for social housing, such that all Inuit regions have witnessed a growing housing crisis, especially in Nunavut and Nunavik"
Personal Safety and Security	"Defined broadly to comprise the concept of personal safety from violence for both males and females of all ages."
Education	"Refers to learning throughout the life span and includes early childhood development initiatives, primary school, secondary school, post-secondary school and job skills training as well as learning in informal settings such as while participating in on-the-land activities"
Food Security	"Food security exists when all people, at all times, have physical and economic access to sufficient, safe, and nutritious food to meet their dietary needs and food preferences for an active and healthy life". Overall, food security suggests that "better

	nutrition means stronger immune systems, less illness and better health"
Availability of Health Services	"Canadian Inuit face significant challenges in accessing health services, not only relating to physical access, but also the nature, quality and appropriateness of the services"
Mental Wellness	"Mental wellness encompasses a wide range of factors such as mental health, suicide prevention, mental illness, violence reduction, and prevention and treatment of addictions and substance abuse. For Inuit, mental wellness refers to "physical, emotional, mental and spiritual wellness, as well as strong cultural identity"
Environment	"Environment as a concept is defined for this document as the land, sea and air environments surrounding Inuit communities, but also includes the indoor environments within homes and workplaces"

Source: adapted from ITK's Social Determinants of Health (ITK, 2014).

Models of Analysis

When discussing how to analyze the research question, 'what factors act as barriers or enablers to accessing mental health care among pregnant adolescents in Nunavut', the research team agreed that it was necessary to use the pillars of Inuit societal values as categorical points for discussion in order to capture the cultural and societal values of Inuit communities. This decision aligns with the Indigenous ways of knowing as it centres the knowledge, beliefs, and practices used, or in this case, not used, in Indigenous and Inuit communities (The Evidence

Commission Report, 2024). The Inuit worldview sees the individual as part of an interconnected space bringing together people, land, and spirit and thus, looking at the factors related to this interconnected space, will give a better framework for understanding what factors are at play in accessing mental health care.

Using IQ principles

Inuit societal values, known as Inuit Qaujimajatuqangit (IQ) provide 8 guiding principles on how people should live and collaborate with one another and their environments (Inuuqatigiit, Centre for Inuit Children, Youth and Families, 2024). These traditional values provide insight on Inuit values and will be used to structure the factors related to accessing mental health care among pregnant teenagers. The values are; 1) *Piliriqatigiinniq;* which emphasizes the value of working together towards a common cause, 2) *Qanuqtuurniq;* which values being innovative and resourceful, 3) *Pijitsirniq;* which emphasizes providing for family and community, 4) *Inuuqatigiitsiarniq*; which emphasizes the need for respect and care of other people and relationships, 5) *Tunnganarniq;* which emphasizes the role that being open, inclusive and welcoming plays in fostering a positive relationship, 6) *Aajiiqatigiinniq;* which values decision making through discussion and consensus, 7) *Pilimmaksarniq; which* emphasizes learning and mastering new skills, and 8) *Avatittinnik;* which is about respecting and caring for the land, animals and environment (ITK, 2007). Using the IQ guiding principles, will provide a more holistic method to review articles that look at interventions for pregnant adolescents with mental health and wellness needs.

Figure 4: The Tunngasugit Inuit Resource Centre, 8 Guiding Principles of IQ

Inuuqatigiitsiarniq
(respecting others, relationships and caring for people)

Inuuqatigiitsiarniq guides us to respect and care for other people and our relationships so that we can all live together in harmony. We are committed to addressing issues facing urban Inuit in a way that respects all those we work with.

Tunnganarniq
(fostering good spirit by being open, welcoming and inclusive)

Tunnganarniq emphasizes the role being open, welcoming and inclusive plays in fostering positive relationships. We are dedicated to taking the time for people, making ourselves available and creating an environment where all urban Inuit are comfortable seeking support. Our centre also seeks to be inclusive through ongoing and open communication with stakeholders and the public.

Pijitsirniq
(serving and providing for family or community, or both)

This value is about serving and providing for family and community. It's about leading through doing for other people. It's about serving others for the greater good. We are here to serve urban Inuit. We do this in a way that cultivates service excellence.

Aajiiqatigiinniq
(decision making through discussion and consensus)

This value means decision making through discussion and consensus. Urban Inuit help guide our decision making. Our centre ensures Inuit are involved in our work.

Pilimmaksarniq or Pijariuqsarniq
(development of skills through practice, effort and action)

Pilimmaksarniq is about learning and mastering new skills through observation, mentoring, practice and effort. We are committed to looking for opportunities to encourage urban Inuit to acquire new skills.

Source: Adapted from the Tunngasugit Inuit Resource Centre (2024)

How did we get here: Looking at the history of three interconnected themes

In order to understand current issues faced among pregnant teenagers in Nunavut, it is important to understand the historical context. Looking at the historical context can reveal cultural, social, political, and economic factors that have shaped current day health care structures, systems, and general understandings of mental health and teenager pregnancy. Researching the historical context of colonialism is critical in order to understand current-day issues faced in the Circumpolar North. This section will provide a short overview of the events that act as context, however, it is recommended that readers take it upon themselves to continue to learn about these contexts, to truly understand current day issues from a decolonial theoretical framework.

History of Colonization

The history of regions in the Circumpolar North are marked by exploration, trade, colonization, and de-colonization (Young, 2012). Looking specifically at Northern Canada, the first people began exploring what is today known as Nunavut, 5000 years ago, small groups from the pre-Dorset culture moved across the Arctic coastline (Kikkert, 2007). Mississippian culture was recorded as emerging and flourishing before the 10th century, with the earliest proposed date of the Haudenoshaunee Confederacy formation likely being between 1450 – 1600. (Young, 2012). For thousands of years, Inuit communities inhabited the Circumpolar North, practicing nomadic land-based lifestyles, practicing survival techniques to hunt, eat, and live in harsh climates (Corosky & Blystad, 2016). During the 18th century, many different factors worked together to create a fundamental change in Indigenous life in the North; European exploration continued and brought with it, fur trade, whalers and missionaries and The Seven Years' war led to Britain gaining control of current day Canada, working together to force change among Inuit communities, who were used to their long history of autonomy and self-reliance (Young, 2012; Corosoky, 2016; Kikkert, 2007). Although Indigenous hunting practices continued on after European contact, the 1800s came with a turn of traumatic forces disrupting Indigenous ways of living (Young, 2012). Whalers and fur traders set up year-round stations in the North, bringing trade to the north, but also diseases, namely measles, tuberculosis, and influenza, killing many Inuit (Kikkert, 2007). Extensive whale hunting from these groups led to the depletion of wild animals, which were essential to Inuit subsistence practices and hunting animals for trade led to a change in cultural practices (Kikkert, 2007).

In the 1900s, the Canadian government grew more involved in the north, expanding administrative activities, and adding military posts following the two world wars (Kikkert,

2007). This Canadian federal interventionism led to communities becoming largely dependent on the government for the first time (Corosky & Blystad, 2016). The Canadian government forced relocations among many Inuit from the 1940s to the 1960s, forcibly moving many Inuit from their prior dispersed nomadic locations into permanent, centralized settlements (Corosky & Blystad, 2016). Furthermore, the government initiated so-called social welfare programs for housing, education, health care and economic development (Kikkert, 2007). In 1950, the government forced many Inuit youth to attend residential schools far from their communities, where they experienced physical and emotional abuse and sexual violence, while being dissimilated from their own languages, cultures, and spiritual beliefs (Corosky & Blystad, 2016; Kikkert, 2007).

By 1964, over 75% of Inuit youth, attended residential schools, where children were forbidden to speak their language or continue practicing any aspects of their own culture (Corosky & Blystad, 2016). Furthermore, residential schools exposed children to physical, sexual, and emotional abuse, (Corosky & Blystad, 2016). A plethora of unfair and multi-dimensional losses of cultural beliefs and parenting styles and changes occurred to Inuit and Indigenous communities from the residential school system. In line with teenage pregnancy, known disruptions included the loss of traditional teachings which used to be passed down generation by generation for how to become good mothers and fathers, how to be in healthy relationships, how to have health pregnancies, how to provide for your family, and how to support and care for a family (Anderson & Angnahiak 2010).

Furthermore, forced relocations continued to occur during the 1940s to the 1960s during the tuberculosis (TB) outbreak (Harvey, 2023). Around 1200 Inuit children with TB were forcibly taken from their communities and brought to a Hamilton sanatorium, while many other

Inuit across northern Canada were forced to other regions in Quebec (Harvey, 2023; Watts, 2024). Prior to the discovery of Streptomycin in 1944, TB treatment at the time was limited to isolation, whereby individuals were taken to a specialized location for fresh air, winter cold air at one point, bed rest, a nutritious diet, education, and rehabilitation (Grzybowski & Allan, 1999). Important to note that the nutritious diet was set out by volunteers and staff and did not include country food, which is highly valued food in Inuit culture. Furthermore, education and rehabilitation occurred in English or French, forcibly changing language practices among youth, and creating barriers to care for Inuit adults who did not speak those languages (Harvey, 2023). Sanatoria forced many Inuit out of their communities, and many did not return home, of those who did return home, their communities likely had been affected by other impacts of colonialism such as qimmiliriniq (dog slaughter).

In this same period, during the 1950s to the 1970s, the Canadian Government had issued laws surrounding Qimmiit (sled dogs) in Nunavut, placing strict provisions on what Qimmiit were allowed to do (Qikiqtani Inuit Association, 2014). At the time, in Nunavut, Qimmiit played a fundamental role in transportation and hunting as well as being a source of food during times of famine (Qikiqtani Inuit Association, 2014). With strict provisions on number of Qimmiit allowed and the growing concerns of the government that the Qimmitt were dangerous, the Royal Canadian Mounted Police (RCMP) and federal police murdered Qimmitt, directly impacting transportation, hunting and food in the North (Qikiqtani Inuit Association, 2014).

The Canadian colonial history has left a legacy of intergenerational trauma on Inuit communities, which has had lasting negative impacts of the over wellbeing of this community including psychological distress among youth and disparities in health outcomes (Corosky & Blystad, 2016; Limmena, 2021). These can now be liked back to TB sanatoria, Residential

Schools, and the deaths, dangers, and detrimental living conditions that many indigenous students and youth faced. This history has been demonstrated to have led to disproportionate structural barriers that stack on top of one another and work together against the health and wellbeing of Inuit communities (Corosky & Blystad, 2016; Limmena, 2021).

History of Teenage Pregnancy in the North

Little literature outlines the prevalence and risk factors of teenage pregnancy earlier than the mid-19th century in Canada. Low rates of teenage pregnancies in the early 1900's could be linked to lack of reporting, lack of infrastructure to maintain records and likely lingering effects of the great depression, which impacted the country's overall birthrate, dropping it as low as 20.1 births per 1000 inhabitants in 1930 (Foot & Cooper, 2013). Social norms influenced by religious and moral values, made pregnancies out of wedlock socially more concerning rather than young age pregnancy (Belshaw, 2016). Factors such as lack of contraception, the illegality of condoms, and fewer birth control options likely played a role in the young average age of marriage and young average age of carrying one's first child (Foot & Cooper, 2013; Pamco, 2021; Long, 2006; Wadhera & Millar, 1997).

Birth trends following the Second World War spiked in Canada, similar to neighboring countries (Boonstra, 2002; Belshaw, 2016). As the average age for marriage dropped, so did the average age for an individual to carry their first child. In 1965, the median age for a woman's first marriage in Canada was 21.1, with pregnancy following shortly after (Foot & Cooper, 2013). Simultaneously in Canada, the 1960s marked the beginning of what some term the "sexual revolution", a women's liberation movement, to reclaim women's bodies, and biology in a way that addressed sexuality and sexual morality (Belshaw, 2016). With the momentum of this movement, feminists critiqued normal culture and advanced the case for free love, outside of the

traditional institution of marriage, leading to a more pressing need to control fertility (Belshaw, 2016).

While the values of religion, morality, and social status impacted teenage pregnancy in the southern regions of Canada, values of family, pregnancy, and childbirth were grounded in Inuit beliefs and were thus maintained in the Circumpolar North. Values among Nunavummiut include being family-oriented, children being viewed as blessings, and pregnancy and motherhood being viewed as honourable (Moisen, et al., 2022). Childbirth among Inuit in the North has always been seen as a blessing, and was a part of everyday life, supported by traditional knowledge, families, and communities (Archibald, 2004; Healey, et al., 2019). With most births taking place on the land, many family members were present during childbirth, including, husbands, and parents-in-law who played a supportive role in giving birth, celebrating it and younger daughters and siblings who learned from these experiences (Archibald, 2004). These values demonstrate how neither age nor marriage were determinants of whether an individual was ready or if it was socially accepted to give birth, instead Inuit values place validity on maturity, one's ability to make a home and one's ability to care for themselves and others, as well as their survival skills in determining if they are ready to give birth (Archibald, 2004).

Other traditional Inuit approaches to families in Nunavut include Kinship adoption, whereby babies were often adopted out to different family or community members to love as their own, to maintain kinship bonds and vibrant communities (Noah, 2015). This tradition is grounded in giving the gift of life to a loved one, and demonstrates customs of Inuit culture of sacrificial gifts, love, and admiration (Noah, 2015). These customs demonstrate how the age of which someone gave birth, was not a determining factor in societal responses to birth,

comparatively to how it would be in the southern regions of Canada, where unwed or young mothers could be outcasted for giving birth (Belshaw, 2016). These values of being resourceful or having the ability to think deeply are known as *Isumaksaqsiuttiarniq* (National Collaborating Centre for Aboriginal Health, 2010). Today, kinship adoption continues to be a normal practice among Inuit (Noah, 2015).

Inuit culture and traditions with respect to families, marriage, and kinship adoption play a role in pregnancy. Traditional rearing practices follow values of IQ, where babies are raised in a holistic manner, through Inunnguiniq, a shared responsibility within the community to ensure strength in attitude, skill development, thinking and behavior among children (National Collaborating Centre for Aboriginal Health, 2010). After forced settlement relocation between the 1950s and 1960s the way Inuit women gave birth in Northern Canada dramatically changed (Archibald, 2004). Relocation led to stationary housing, and shortly after, overcrowding in housing. Multi-generations live within the same house, often times sharing beds and couches to sleep on (ITK, 2007). Childbirth shifted to being done in birthing centres or hospitals by southern (western) health care professionals, taking individuals giving birth away from their families, isolating the individual giving birth as well as removing the community element of birth for their family (Archibald, 2004).

While the pregnancy trends across Canada have wavered in the last 50 years, with the overall trend being downwards, Nunavut has seen an increase in teenage births (Foot & Cooper, 2013; Corosky & Blystad, 2016: Moisan, 2016). Pregnancy, while it is celebrated and honoured in Inuit culture, can act as both a factor that positively impacts an individual's mental wellbeing and a factor that negatively impacts their mental wellbeing. Emerging mental health issues are

impacted by western (colonial) values that interplay with teenage pregnancy and the history of mental health and illness needs to be analyzed in order to understand how they work together.

History of Mental Health

Mental health care in Canada has undergone many transformations over the years, based on public and societal beliefs of a given time period and medical understandings of the day. Prior to the 20th century, people with mental illness were seen as morally unfit and were often placed in jails, poorhouses, or asylums (Goodman, 2006). Likely due to the lack of understanding on mental health, it was highly stigmatized in this context. Looking past the 19th century, the Canadian National Committee for Mental Hygiene was created, later to become the Canadian Mental Health Association (Goodman, 2006; Canadian Mental Health Association, 2024). This organization was pivotal in promoting mental health issues in Canada, reducing stigma, and providing better community-based care for those experiencing mental illness.

Following World War II, the way society viewed mental health fundamentally changed, given the commonality of Post-Traumatic Stress Disorder (PTSD), then known better as “Shell Shock”, from soldiers who returned home demonstrating mental difficulties (Goodman, 2006). This high prevalence of mental illness created the demand for treatment services and public interest in mental health was stimulated (Canadian Mental Health Association, 2024). From 1960 and onward, psychiatric theory and new medical breakthroughs led the way for community based mental health rehabilitation services (Canadian Mental Health Association, 2024). For the remainder of the century, mental health was a field of interest with the Canadian government focusing on planning and organizations of services in a coordinated system for Canadians (Canadian Mental Health Association, 2024).

Today, mental illness is one of the most strenuous health concerns in Canada. While mental health care continues to evolve, current day health concerns, specifically, COVID-19, have highlighted the importance of mental health care and access to mental health care. Issues in Canada to access mental health care persist with long wait times, limited-service availability and disparities in accessing care. Furthermore, despite the progress made in the last century, there is still stigma surrounding mental health, and furthermore stigma increases with intersectionality.

On the other hand, Inuit conceptualizations of mental health are rooted in cultural, spiritual, environmental, and social traditions that differ from the western approach of defining and responding to mental illness (Zamparo & Spraggon, 2005). Inuit view mental health problems as behaviours and states of mind instead of a fixed trait of an individual (Kirmayer et al., 1997; Zamparo & Spraggon, 2005). Demonstrating the importance placed on community and Inuit taking care of their own. This is in line with Inuit holistic beliefs of mental wellbeing and One Health, that look at physical, social, spiritual, and environmental health together (Hueffer, et al., 2019). Defining the cause of mental health problems as psychological or physical, physical and environmental, demon or spirit possession, Inuit shift responsibility from an individual to the community (Zamparo & Spraggon, 2005).

Furthermore, understanding the social environment as more than just a physical place, can attribute a sense of connectedness towards land, animals, and social support, which contributes significantly to an individual's mental wellbeing (Zamparo & Spraggon, 2005). Using Inuit understandings of mental health, it is clear that the impact of colonization, relocation, and forced settlement in the 1900s, have had an immense detriment to the overall wellbeing of Inuit communities.

Among many aspects of Inuit life, colonization has also impacted how Inuit respond to mental health, forcing changes in daily life, and generational changes in how traditions were passed down. This has segmented the way information has been shared since colonization and highlights the importance and need for "honouring the historical context" of Inuit, an idea that was shared in the idea of blending Indigenous and Western healing methods in order to treat mental illness (Marsh, et al., 2015). When looking at the history of mental health in Canada, and specifically Mental Health in Nunavut, one can understand how colonialism, intergenerational trauma and western conceptualizations of teenage pregnancy play a role in the mental health and wellbeing of pregnant teenagers in Nunavut.

Bringing it all together

These three distinct yet interconnected histories play a crucial role in understanding the mental health ecosystem among pregnant teenagers in the North today. One cannot address a mental health concern without first understanding the historical contexts that contribute to the social determinants, societal understandings, and life circumstances in which one lives. Specific factors that should be considered for the sake of this thesis include the role of colonial structures and lasting infrastructures that still exist in mental health care in the Circumpolar North, the role of social values and community values surrounding teenage pregnancy, and current day understandings of mental illness, risks, causes and treatments. Furthermore, it cannot be understated that the residential schools in Canada and the relocation of communities in the north have led to long lasting negative health outcomes among Inuit communities, creating disparities that work against the mental wellbeing of pregnant teenagers.

In framing the question of research for this thesis, it is important to note that teenage pregnancy in and of itself, is not a negative event. Looking back at recent history in Canada, it

can be argued that societal values surrounding childbearing out of wedlock, stigma surrounding birth control, and sex in general have led the discourse surrounding pregnancy in the greater public of Canada, framing teenage pregnancy as a 'risk' or 'concern'. Yet, the literature in this area does not depict teenage pregnancy as a concern or risk until the 20th century, demonstrating the possible role that western social values and the need for medicalizing life events has played on teenage pregnancy. Further, cultural beliefs among Inuit cultures demonstrate the celebration of life, that pregnancy is, and see birth as a gift. Leaning on Indigenous beliefs of pregnancy being a celebration of life can help frame this as a point of intersectionality as opposed to a negative event. This enables us to assess how social determinants of health, colonial and historical legacy systems, and mental health care all play a role in determining the health outcomes of pregnant teenagers in Nunavut.

Methods

This systematic review was conducted following *The Five Steps to Conducting a Systematic Review* by Khan et al, the following schematic plan was developed and followed to conduct this systematic review (Khan, et al., 2003).

Step 1: Framing questions for a review

The initial research question was created; What factors exist that act as barriers and/or enablers for accessing mental health services among pregnant teenagers in Nunavut? The populations included pregnant individuals under the age of 20 years old, living in Nunavut, Canada. To look at these factors, we included articles that included this population. The exposure included accessing mental health services, which includes in-person psychiatric care as well as virtual and remote psychiatric care. The outcomes included any mental health conditions

reported on, including depression, anxiety, bi-polar disorder, low self-esteem, low mood, among other mental health conditions.

In order to define the scope of this study, I used the following inclusion criteria for articles; 1) articles could include all research methods (qualitative, quantitative, mixed methods, reports), 2) literature must have included Canadian or Northern Canadian samples, 3) participants or samples must have included pregnant individuals under the age of 20 who lived in Nunavut, 4) articles must have been in English, or had an English version available, 5) articles must have been published after 2000. The research team selected 2000 as the cut-off date for two reasons; the first is that prior to 1999, Nunavut was not yet entered into Confederation (Government of Canada, 2024). Given Nunavut was a part of the North-West Territories, distinguishing between the two Northern regions would have posed a significant challenge. Secondly, following the turn of the 21st century, teenage pregnancy began to grow at the forefront of health concerns, thus research pre-dating 2000 may not have captured the depth of risks and concerns of teenage pregnancy.

Step 2: Identifying relevant work

To capture as many citations as possible, multiple databases were identified by the research team and with the support of university librarians a search strategy was created. The following databases were used; Ovid MEDLINE, PubMed, Web of Science (WOS), Google Scholar, and CINAHL (EBSCO). Only English articles were included. Grey literature was found through different avenues: Pauktuutit, Qaujigiartiit Health Research Centre (QHRC), and Google Scholar were included.

Key terms included: youth, adolescent, teenagers, pregnancy, mental health, and Nunavut. Key terms that fell under the same primary MeSH term were searched with "OR", while each primary search line was searched with "AND". A comprehensive list of the key terms used are below.

Table 2

Comprehensive list of Key Terms Used for Search

Key terms	**Search Terms**
Teenage	Teenage, Teen, Teens, Teenagers, Adolescent, Adolescents, Adolescence, Youths, Youth, Truncated terms: Teen*, Youth*, Adolesc*
Pregnant	Pregnant, Pregnancy, Pregnant, Gestational, Prenatal, Antenatal, Perinatal, Pregnant Women, Pregnant Adolescent, Prenatal Care, Pregnant Teen Truncated terms: Pregnan*,
Mental Health	Mental Health, Mental Disorders, Mental Health Services, Mental Illness, Psychiatry, Health Services Accessibility

Canada	Canada, Northern Canada, Arctic Region, Arctic, Circumpolar North, Circumpolar, Arctic Canada
Nunavut	Nunavut, Nunavik, Nunatsuak, Nunatsiaq
Inuit	Inuit, Inuit Communities, Inuit Populations

Initial search results yielded a total of 5989 articles from which a refined search was conducted to ensure the population setting was Nunavut, yielding a total of 1369 articles. The research team conducted a title and abstract analysis to determine which articles fit within the pre-determined research inclusion criteria (n=59). These articles were uploaded to Covidence, a reference management platform, where the research team (S.B. and A.D) assessed the quality and relevance of each article. Of the 59 articles, we removed 46 for various reasons; duplicates (n=11), wrong population, wrong age or wrong location (n=35).

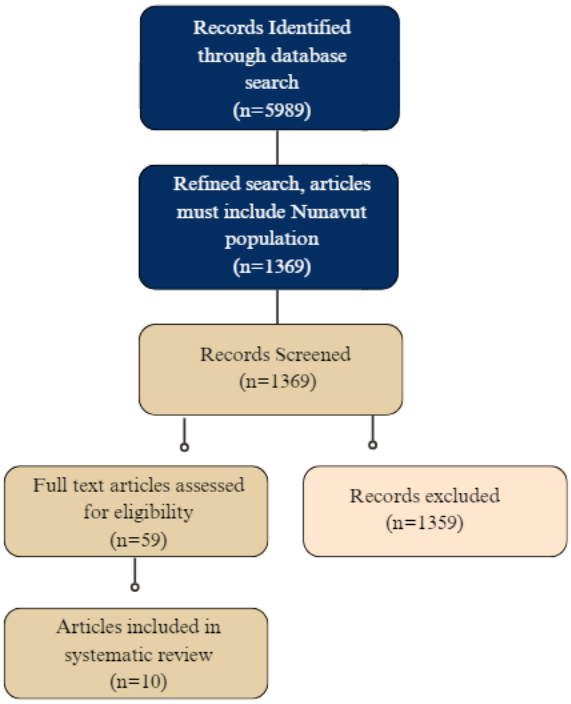
Step 3: Assessing the quality of the work

Using Covidence, all relevant articles were uploaded to the citation reviewer. The research team (S.B. and A.D.) reviewed the relevant articles and screened 15 articles to the second round for review. Of the remaining 15 articles, the research team read each article and removed a further 7 due to sample size not including the appropriate age or not including pregnant teenagers, or the article not containing mental health as a factor. Grey literature (n=10) was added to a word document list, where the research team screened each article to a second round for review. 4 articles were brought to the second round of review, of which 3 were included in the final review.

The second round of reviews were conducted following a more in-depth process, using the Critical Appraisal Skills Program (CASP) checklist (Critical Appraisal Skills Programme, 2023). Each article that was included in the second round was read to ensure that it met all of the required criteria and met the CASP checklist (10 questions). Inclusion criteria for articles were that it must include pregnant teenagers from Canada or Nunavut, and specifically address mental health outcomes for this population. Samples that included both pregnant teenagers and pregnant young adults, up to twenty-four years of age were included. Exclusion criteria were sample sizes that were over the age of 20 years old, outside of Canada, lacking key discussion on mental health outcomes. Given the articles selected included all forms of research (quantitative, qualitative, mixed methods), a statistical validity and statistical reliability test was not performed on articles. Content validity was measured to compare the content of each article within the field. The authors note that one limitation of this study is the validity testing of all articles, given expertise in various forms of research was limited due to the small research team size.

The systematic database resulted in a total of 5989 records: OVID MEDLINE (n=6), PubMed (n=677), Web of Science (n=2), Google Scholar (n=5260), and CINAHL (n=44), QHRC (n=4), Pauktuutit (n=1). The research team (S.B. & A.D.) screened articles based on if Nunavut was included in the sample size and then further title and abstract analysis occurred, removing a total of 5982 articles, based on inclusion and exclusion criteria, see above. Articles that met the criteria were then added to Covidence for a full text review. Figure 5 outlines the included articles that were analyzed for this systematic review.

Figure 5: PRISMA Flow Diagram of Article Screening



Step 4: Summarizing the evidence

Once the final list of articles was selected, reviewed, and approved for inclusion in this review, data was extracted using Microsoft Excel Spreadsheets. Each article was read, and dominant themes were coded as ‘domains’, each domain created its own column in the spreadsheet. Commonalities across different literature were noted under a column titled ‘analytical memo’, and factors that acted as both barriers and enablers to accessing mental health among pregnant teenagers was noted. Following the creation of this spreadsheet, each domain was reviewed individually, creating a summary to synthesize the findings across the different articles. Key findings were organized based on indigenous social determinates of health, the Medicare Pillars of Health in Canada, and specific barriers or enablers in accessing mental health care.

Step 5: Interpreting the findings

The findings were interpreted in an iterative approach that compared results from different articles to one another. Where articles lacked data for certain SDH or barriers or enablers for accessing mental health services they were not included in the synthesis for that domain. Themes and patterns were noted in the extraction table. Given the minimal literature surrounding the explicit barriers and enablers to access mental health, the research team included findings even if that domain was not saturated across all of the articles included in the analysis.

Consistencies were analyzed and differences were noted through a process of coding the data. Given articles included for analysis didn't specifically ask the same research question, the research team interpreted themes based on general ideas shared in each article.

Findings

The primary objective of this study was to determine known factors that acted as either barriers or enablers to accessing mental health care among pregnant teenagers in Nunavut. It is important to note that across the 10 selected articles, each study had its own limitations. Some limitations included small sample size, lack of representation across Nunavut, and the study sample predominantly being young adults living in a shelter. Given these limitations, results should not be interpreted to be generalized across all pregnant teenagers of Nunavut. Instead results from this paper should be interpreted as findings across 10 specific articles with the intention of determining known factors that act as barriers or enablers to accessing mental health care.

Life Course Factors

This review looked at pregnant adolescent individuals under the age of 20. It is important to note that across articles, there was variability in the ages considered to be adolescent. Among the literature, four articles included individuals up to the age of 24 as part of the teenage sample, furthermore, some articles compared instances of adult pregnancy compared to adolescent pregnancy. In these cases, data were only included from the adolescent sample size. Table 4 outlines the primary factors that impact access to mental health care among pregnant teenagers in Nunavut.

Included Articles

Table 3

Articles Included in the Systematic Review

Article Title	Authors Name	Year Published	Study Design/Type	Sample size and recruitment	Author's positionality*
A decade of research in Inuit children, youth, and maternal health in Canada: areas of concentrations and scarcities	Amanda J. Sheppard and Ross Hetherington	2012	Systematic literature review and employed peer-reviewed research literature.	Seventy-two papers met the inclusion criteria.	Not indicated

A collaborative outreach clinic for pregnant youth and adolescent mothers: Description of a pilot clinic and its patients	Megan E Harrison, Hannah Weinstangel,Nancy Dalziel, Katherine A Moreau	2014	Retrospective chart review.	Thirty-six charts were reviewed and analyzed.	Not indicated
Some Aspects of Adolescent Motherhood in Nunavut	Melissa Bexte	2019	Statistical Analysis: Model Variables: Bayesian statistical framework to examine the effect of adolescent motherhood on welfare use and on measures of self-reported health at midlife.	413 women living in Arviat, Nunavut between January and April 2017.	Not indicated

Teen pregnancy in Inuit communities – gaps still needed to be filled	Caroline Moisan, Chloé Baril, Gina Muckle, and Richard E. Belanger	2016	Narrative review.	The studies were selected based on the main inclusion criteria: assessing teenage pregnancy among Inuit or American Indian/Alaska Native (AI/AN).	Not indicated
Staying healthy "under the sheets": Inuit youth experiences of access to sexual and reproductive health and rights in Arviat, Nunavut, Canada	Gregory J Corosky & Astrid Blystad	2016	Piliriqatigiinniq Partnership Community Health Research Model (PRM).	9 male youth (ages 17–22 years), 10 female youth (ages 16–22 years) and 6 community leaders (aged 25+).	Authors are non-Inuit
Teenage pregnancy and long-term mental health outcomes	Chloé G Xavier, Hilary K Brown,	2017	Secondary analysis of the 2012 Aboriginal Peoples Survey.	Women aged 25 to 49 years who had given birth to at least one child. Teenage mothers	Not indicated

among Indigenous women in Canada	Anita C Benoit			(age at first birth 13 to 19 years; n = 1330) were compared to adult mothers (age at first birth 20 years or older; n = 2630).	
Adolescent Pregnancy in Canada: Multicultural Considerations, Regional Differences, and the Legacy of Liberalization	Anne Nordberg, Jorge Delva & Pilar Horner	2014	Chapter: Historical recount & analysis.	Date pulled from the Toronto Teens Survey and excerpts are based on interviews conducted by Macleans magazine.	Not indicated
Our Minds Matter: A Youth-Informed Review of Mental Health Services for Young Nunavummiut.	Representative for Children and Youth's Office	2019	Grey Literature: systemic advocacy report	Nunavut Youth	Not indicated

Child and Youth Mental Health Intervention, Research and Community Advocacy Project in Nunavut	Teri Lindsay & Gwen Healey	2019	Report document review, sub-selection of service provider interviews, and a search of the grey literature.	10 interviews with front line mental health providers, & A review of related policy documents, strategic plans, and scholarly and grey literature.	Not indicated
Teenage Pregnancy in Inuit Communities: Issues and Perspectives – Report	Linda Archibald	2004	Grey literature: report qualitative study	50 Inuit adults and youth in interviews and focus groups and asked for their views on everything from the reasons for teenage pregnancy to strategies to address the issue.	Not indicated

*Note**: Table 3 includes a 6th column indicating the positionality of each author(s). This is included as a commitment to positionality and recognition that an author's positionality impacts analysis of both quantitative and qualitative research (Naidu, Gingell, & Zaidi, 2024). Possibly because this practice has only emerged recently within the global health sciences, only one paper

indicated identity of its authors, and that was a short mention that the authors were non-Inuit. Thus, all but one column is listed as 'not identified', as author(s) did not specify within their article.

Identified Themes

Across the included literature, there were many identified factors that could act as a barrier or enabler to accessing mental health care among pregnant teenagers in Nunavut. Using an Inuit SDH lens, the following themes were common within the literature; accessibility, support systems, SES and education, and living indicators. Table 4 outlines the main themes of the identified factors across the included literature.

Table 4

Factors (Enablers/Barriers) to Access Mental Health Care Among Literature

Thematic Findings Across the Literature
LIFE COURSE FACTORS - Pregnant Teenagers (under the age of 20), living in Nunavut - Adolescent age and development stage
ACCESSABILITY - Availability or lack of appropriate health care
SUPPORT SYSTEMS - Support from family, friends, health care providers - Judgement from health care providers - Family conflicts

- Social support
SOCIOECONOMIC STATUS & EDUCATION - Unemployment - Poverty - Education
LIVING INDICATORS - Food security - Housing situations

<u>Accessibility</u>; lack of appropriate health care

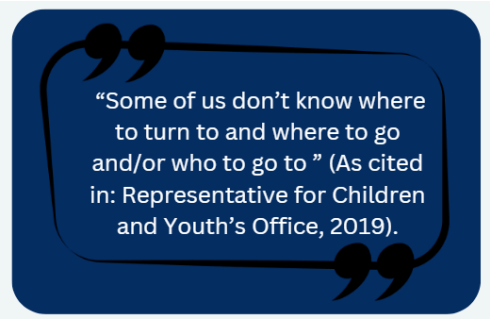
Consistent across the data from all the included articles, access to health care was a key area of importance. Lack of, and lack of access to, health care centres, lack of health care providers in general, and lack of awareness of what health care options existed had an impact on whether or not pregnant teenagers accessed mental health care (Archibald, 2004; Nordberg, 2014; Harrison et al., 2014, Representative for Children and Youth's Office, 2019). Three articles expressed the main concerns of lack of health care centres, listing the absence of mental health facilities for youth in Nunavut as a major issue (Archibald, 2004; Representative for Children and Youth's Office, 2019; Harrison et al., 2014). This limited availability of care requires youth to be referred out-of-territory to receive appropriate care, where they often face barriers such as language barriers, financial challenges, and difficulty getting there (Representative for Children and Youth's Office, 2019). Stand out themes within the literature included the concern for young mothers of who will deliver the baby, and the worry of having to leave home to give birth (Archibald, 2004). One article highlighted the absence of private

abortion clinics in Nunavut, possibly leading to barriers of cost, transportation, and accommodation for abortion (Nordberg, 2014). Out-of-territory referrals have been shown to cause language barriers that leave young mothers feeling misunderstood, marginalized, and mistreated (Representative for Children and Youth's Office, 2019).

Some interventions studied displayed positive outcomes related to accessing mental health care services. Harrison et al., found that a one-stop shop style of care was beneficial for teenage mothers experiencing depression as they were able to access all of their needs in one location (Harrison et al., 2014). A second article that was analyzed mentioned the potential role of schools in providing care for young mothers (Representative for Children and Youth, 2019). There were three articles that highlighted how leaving school to have a baby was less stigmatized in Nunavut compared to its southern counterpart, as being pregnant is celebrated within Inuit culture (Moisan, et al., 2016; Bexte, 2019; Archibald, 2004). A third article within the analysis mentioned the importance of incorporating Inuit practices in health care, specifically use of Inuit language and involvement in cultural activities (Xavier et al., 2017). These examples demonstrate how a one-stop shop style of care, school as a location to access care, and the use of Inuit practices in health care all act as enablers for accessing mental health care among pregnant teenagers.

On the other hand, specific barriers related to lack of access, availability, or trust towards providers included; lack of access to specialized psychiatry, lack of trust towards physicians and health care providers, lack of physicians, lack of continuity of care, lack of permanency (resources/stability/permanency planning, high turnover of staff), and lack of awareness of services. One article highlighted the concerns of a participant, in reference to mental health care, "some of us don't know where to turn to and where to go and/or who to go to" (As cited in:

Representative for Children and Youth's Office, 2019). The report highlights the major gaps in lack of knowledge surrounding services available in Nunavut.



Lack of local in-person mental health care services, mental health care centres, along with the economic burden of remote air transportation are among the barriers listed in the literature related to location-related barriers. These barriers create an added stress for pregnant teenagers navigating the mental health care system in Canada. Accessing mental health care relates to many of the Inuit SDH, namely availability of health services, mental wellbeing, and environment, which all play a role in the overall wellbeing of an individual. Considerations of culture and language also play a role in accessing health care. Language barriers are common among pregnant teenagers accessing mental health care and can impede the quality of care.

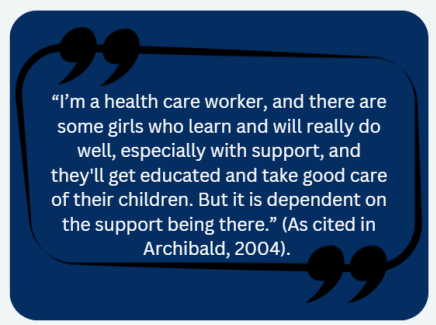
<u>Support Systems</u>; support from family and friends, social support

Factors that impacted access to mental health care across the studies included in the analysis included support from family, friends, and peers; support or judgement from health care providers; whether or not there were family conflicts; and social support. Corosky & Blystad's article "Staying Healthy Under the Sheets", highlighted the importance of personal relationships with health care providers for teenagers to feel comfortable to share questions and conversations surrounding sexual health with providers (Corosky & Blystad, 2016). This sentiment was echoed in other studies (Archibald, 2004; Harrison, et al., 2014), which highlighted the importance of nonjudgemental support, for young mothers to be met with grace and love when accessing mental health care (Archibald, 2004).

Across the literature, support was inclusive of many different services, programs, and relationships including; community support, strong family ties, support classes (parenting classes, prenatal classes, nutrition and cooking classes, mom's & tot's activities, classes for mother's outside of high school), health care supports (counselling, mental health services, Community Health Representatives (CHRs), midwives, public health services), population specific supports (parent relief, someone who works with young girls and their babies, daycare, young mothers support groups), and other supports such as birth control (Archibald, 2004; Lindsey & Healey, 2019; Xavier et al., 2017).

Support from Community Members, Friends, Peers, and Health Care Workers

Support from community members, friends, peers, and health care workers was cited multiple times within the articles as factors that could either act as an enabler to access mental health care or a barrier to access mental health care. Support from one's personal network of friends was consistently listed as an important factor for many aspects of health. Not only for accessing health care, but negative support was cited to lead to financial stress, negative experiences of pregnancy itself, negative mental health outcomes (depression and poor self-esteem were often cited) and lack of proper support following in-clinic care also resulted in poor outcomes (Archibald, 2004; Lindsey & Healey, 2019; Representative for Children and Youth's Office, 2019; Moisen et al., 2016) In one of the qualitative studies, one participant outlined how a negative experience of pregnancy can lead to severe mental illness, "Nine months is a long time to carry a baby, especially for a young person. I have seen young teens unhappy about pregnancy to the point that they wanted to give up their lives." (Archibald, 2004). Support from one's support systems can act as an enabler for pregnant teenagers, specifically in their motivation to seek mental health care and can impact how they access mental health care.



Specific examples cited across the literature included presence of community support, providing support for youth that are outside of the schooling system, and guidance offered in a nonjudgemental way (Archibald, 2004; Harrison et al, 2014). A participant in one of the articles mentioned how support, from family, friends, and health care are important not only for the health of the mother, but also for the upbringing of the child; “I’m a health care worker, and there are some girls who learn and will really do well, especially with support, and they’ll get educated and take good care of their children. But it is dependent on the support being there” (As cited in Archibald, 2004). This same article demonstrates how some young mothers had successful health outcomes despite the challenges they faced in regard to support, “Yes, I have seen some very good young mothers doing well despite not having been married, not having good support. They cope and do an excellent job despite the challenges” (as cited in Archibald, 2004).

On the other hand, lack of support or judgemental/negative experiences of support from these groups, can be a barrier for pregnant teenagers accessing mental health care. Specific examples cited across the literature included lack of trust towards physicians and health care providers, prior negative experiences with health care providers, specifically feeling laughed at, fears regarding confidentiality, anxieties and embarrassment about sharing issues, as well as shyness surrounding topics of sexual health, are additional identified barriers (Representative for Children and Youth’s Office, 2019; Archibald, 2004; Harrison et al., 2014). Previous experiences can be impacted by lack of culturally appropriate care and language barriers among Inuit in Nunavut. Specific outcomes for the lack of appropriate health care centres listed in the literature included language barriers and judgement which have been shown to leave patients

feeling misunderstood, marginalized, and mistreated (Representative for Children and Youth's Office, 2019).

Family Conflicts and Social Support

Family conflicts and lack of social support were cited in two articles, stating the role they play in worsening mental health outcomes, specifically depressive symptoms observed in teenage mothers (Harrison, et al., 2014). Support from one's family and social support, or lack of either, act as factors that can enable access to mental health care or be a barrier to accessing mental health care. The direct environment of pregnant teenagers, specifically of the families they live with, and the familial and social support individuals receive impacts their mental health outcomes and how they access the appropriate supports or specialized psychiatry, and psychology services needed. A family's values and views towards mental health can impact a pregnant teenager in 1) how they access mental health care support and services and 2) their overall mental health outcomes.

As an enabler, strong family ties can enable a pregnant teenager to have a larger support system and may instill deeper values of honour and pride while pregnant (Xavier et al., 2017). Barriers included intergenerational impacts from the trauma of colonialism. Colonialism's lasting impact on accessing mental health care was apparent in the literature. Specific examples given include impacts from the intergenerational trauma experienced by Indigenous peoples from residential schools, forced relocations, the impact of TB sanatoria, southern relocation for TB treatment, cultural prohibition, dog slaughter, and the Sixties Scoop, which have led to mistrust and fear towards certain health care services (Xavier, et al., 2018). All of these have created long lasting impacts on health care, which can be seen within this systematic review.

Support systems as a factor relates to many of the IQ pillars, including; *Piliriqatigiinniq* (value of working together towards a common cause), *Inuuqatigiitsiarniq* (need for respect and care of other people and relationships), and *Tunnganarniq* (role that being open, inclusive and welcoming plays in fostering a positive relationship) (ITK, 2007). These pillars demonstrate the importance of support systems as a factor and highlight how they encompass multi-dimensional aspects of care.

Unemployment, Education & SES; Unemployment, poverty

Common among the literature were Inuit SDH factors of unemployment, poverty, lack of appropriate health care (delivery and access). Perhaps related to the age of this population, twenty years and under, unemployment was a common factor in the articles. Given that many teenagers are still undergoing education during the start of their pregnancy, both unemployment and education will be analyzed.

Unemployment & Education

One article reported that 42% of teenage mothers, or those who were pregnant while being a teenager, were unemployed (Bexte, 2019). As aligned with other employment-aged Nunavummiut, mothers heavily relied on government financial support (Bexte, 2019; Government of Canada, 2024). Many pregnant teenagers had not completed their education following pregnancy, contributing to the challenges of finding employment (Bexte, 2019). A second study found that 8 out of 15 pregnant teenage participants, just over half, were not attending school by the time of their first visit to the health clinic (Harrison, et al., 2014). The Harrison et al, study found that the highest level of education that most pregnant patients had completed was grade 8, demonstrating their finding that most patients did not attend school once

they became pregnant, further decreasing potential future earnings (2014). This finding was consistent across some of the literature, with some researchers noting the increased and extended reliance on welfare and social support among this population, (Bexte 2019; Moisan et al., 2016). It is important to note that high school completion rates in Nunavut tend to be low regardless of pregnancy, therefore there are likely many confounding factors for the continuation of school beyond a certain age (Neary, 2023).

Lack of education and precarious or limited employment can act as a barrier to accessing mental health care. Given school is sometimes the location for care, or a point of access for mental health care, not going can reduce a teenager's knowledge of and access to school-based mental health care programs. On the other hand, two studies noted the enablers of education; such that teenage pregnancy guided teenagers to stay away from alcohol and drugs and that school, for those who were enrolled, acted as a location where pregnant teenagers could possibly receive health care, support, and mental health services (Moisan et al., 2016; Archibald, 2004). Education relates to the IQ pillar of Pilimmaksarniq, the value of learning and mastering new skills. Using this value to understand the role of lifelong learning can demonstrate that primary and secondary education systems are not the only way to learn.

Poverty and Low SES

Across Canada, teenager mothers were found to be more likely to have low SES (Nordberg, 2014). Poverty or low SES was cited in five articles, outlining the behaviors that are more common among those living in poverty. Specific behaviors that were cited as more likely among pregnant teenagers in poverty included smoking, drinking, substance use, maintenance of unhealthy diets, and sedentary lifestyles (Bexte, 2019; Nordberg, 2014). Teenage pregnancy itself is more common among those of lower SES, a confounding factor, that likely relates to the

health disparities among pregnant teenagers and their babies (Moisan et al., 2016; Nordberg, 2014). This correlates to the Inuit SDH of Income Distribution and marks the importance of understanding the ways in which financial barriers impact mental health inequities.

Poverty was listed as a barrier to accessing mental health care and notably shouldn't be analyzed just in the context of pregnant teenagers, as poverty is a factor for poor health outcomes in many populations (AAFP Foundation, 2015). Income is not a central focus of the IQ, and as such, there is no pillar or specific Inuit value that denotes income. As traditional Inuit society operated with shared resources among the community, collectively working towards survival, there are values of resourcefulness, survival, mastery, perseverance, and serving (Centre of Excellence for Children's Wellbeing, 2016).

Living Indicators: Food security, housing situations, illness, and disability

Food security was cited across the literature consistently as a concern in the Circumpolar North, highlighting insufficient nutritional knowledge leading to pregnant teenagers not eating well (Archibald, 2004). Another study found that food insecurity was associated with poor-long term mental health concerns among this population (Xavier et al., 2017). One study cited that 57% of Inuit children aged 6 to 14 experienced being hungry every few months or more. Although not directly correlated to pregnant teenagers, this demonstrates the prevalence of hunger and food insecurity in Nunavut (Sheppard, 2012).

Another factor cited in the literature was housing situations. Housing was cited as playing a key role in meeting basic needs of living, food, and clothing and was also linked to being in secure safe environments, having enough money, and violence in homes (Archibald, 2004; Sheppard & Hetherington, 2012). A notable finding from the literature was the possibility that housing, and the severity of housing issues in Nunavut, may play a role in the prevalence of

teenage pregnancies (Moisen et al., 2016; Sheppard & Hetherington, 2012). Moisen et al, outline how tenants on the waitlist for social housing need to meet certain criteria in order to qualify for housing (2016). One of the criteria is having children, which may have an unintended consequence on teenage pregnancies, among vulnerable populations in need of housing or in need of moving away from a dysfunctional household (Moisen, et al., 2016). Dysfunctional households and housing needs among this population are a common factor across the literature (Archibald, 2004; Moisen et al., 2016).

Illness and disability were mentioned across the literature to have a confounding effect among pregnant teenagers, as certain barriers to accessing mental health care can be exacerbated when added with certain illnesses and disabilities.

Across the literature, there were many factors identified that act as barriers for pregnant teenagers to access mental health care. As discussed above, the main factors included intergenerational impacts from the trauma of colonialism, lack of access, availability or trust towards providers, factors related to the geographical and climatic conditions of the Circumpolar North, prior negative experiences with health care providers, unemployment, illness, disability, and poverty. See Table 5, that outlines the barriers as discussed in this article.

Table 5

Barriers to Accessing Mental Health Care Among Pregnant Teenagers

Main Theme	**Barrier Category**	**Specific Barriers**
Accessibility	**Access to Specialized Care**	Lack of access to specialized psychiatry

	Geographical and Environmental Barriers	Geographical isolation, Climatic conditions hindering access, Limited transportation infrastructure (e.g., roads/railways) to healthcare centres
	Economic and Financial Barriers	Economic burden of remote air transportation, Costs associated with accessing services
	Availability of Healthcare Providers	Shortage of physicians, High turnover of staff and lack of permanency in care
Support Systems	**Trust and Relationship with Providers**	Distrust towards physicians and healthcare providers, Prior negative experiences with healthcare providers, Concerns about confidentiality, anxiety, and embarrassment when discussing issue
	Continuity and Stability of Care	Lack of continuity in care, Instability in resources and permanency planning
	Cultural and Historical Trauma	Intergenerational trauma from colonization, including impacts from residential schools, TB sanatoria, southern relocation, cultural prohibition, and the Sixties Scoop

SES, Unemployment, and Education	**Awareness and Education**	Lack of awareness of available services, Shyness surrounding topics of sexual health, Lack of education
	Employment and Socioeconomic Factors	Precarious or limited employment opportunities, Poverty
Living Indicators	**Health and Disability-Related Barriers**	Illness or disability impacting access to care

Discussion

Several issues emerged as important in the systematic review that provide deeper insight into the current mental health needs and experiences of pregnant teenagers living in Nunavut. Importantly, the author's interpretation of these issues has been impacted by their experience as a settler researcher who has come to learn about the need to ground these findings in a decolonial framework that recognizes the impact of colonialism on the lives of Inuit teenagers and that privileges Inuit ways of knowing. Discussions surrounding these factors must therefore consider the impact of colonialism and consider the long-lasting infrastructure that remains to this day as impacting access to mental health care. One cannot understand the barriers that Inuit pregnant teenagers face, without understanding the role of colonialism and lasting colonial infrastructure.

Of particular importance was the need to make visible the role that Inuit SDH and Inuit ways of knowing play in addressing the mental health of pregnant teenagers living in Nunavut. The enablers of accessing mental health care included the use of culturally appropriate resources having strong familial, friend, and social supports, and understandings of Inuit SDH and Inuit ways of knowing. Inuit SDH and Inuit ways of knowing play a fundamental role in addressing

teenage pregnancy. This systematic review found many confounding factors known to heighten the risks for both the mother and the baby of teenage pregnancies; notably, lower SES and poverty were two factors that had the consistently negative impact on the health outcomes of teenage pregnancy.

In turn, the known factors that impact pregnant teenagers' access to mental health care in Nunavut have a lot to teach us about the role that SDH, infrastructure, systems, and intergenerational trauma can play on an individual's wellbeing. The health of any person impacts the health of a community, and the findings surrounding access to mental health care in Nunavut among pregnant teenagers demonstrates a need for more culturally appropriate, culturally led initiatives, supports, and care facilities for this population.

Specific highlights from this review include the known strengths of community support and familial ties among pregnant teenagers, highlighting the importance and value of family among northern communities. Support systems in general, including social support, familial support, support from friends and peers, and support from health care workers play a vital role among pregnant teenagers accessing mental health care as it can either enhance care, when support is given with grace and love, or it can hinder care, when support is given with judgement. Welfare support and social support were noted as key factors among this population, however, it is important to note that welfare and social support are common across all of Nunavut. This factor is thus likely related to the intersectionality of pregnant teenagers in Nunavut and not solely due to one factor. The role of grace and being nonjudgemental among health care providers must be understood to provide holistic and approachable health care. Literature suggests that having a supportive and caring family can improve one's experience of pregnancy, values which align with Inuit values of interconnectedness.

Furthermore, the need for more psychiatric resources and psychology services has been consistent across the literature, highlighting the need for better resourcing and promotion of such resources in Nunavut. Specifically, the need for strategies that are initiated, developed, facilitated and evaluated by Inuit while actively involving young Inuit at all stages is essential (Archibald, 2004; Representative for Children and Youth's Office, 2019). This finding is consistent across the Circumpolar Northern context, and given the isolated communities in Nunavut, there are challenges to providing sufficient care for all community members. However, despite the challenges, the data suggests that there is a need for in-territory local psychiatric and prenatal care services for pregnant teenagers that is grounded in Inuit SDH and Inuit values. Integrating culturally appropriate mental health care is essential in order to reduce language barriers, to be aligned with Inuit ways of knowing, and in order to receive wider social acceptance and support from Nunavummiut. Literature suggests that future research and mental health care programming should involve and be led by Inuit (Representative for Children and Youth's Office, 2019). Another need highlighted in the literature is the need for more in-person community resources for pregnant teenagers.

Reducing the need to travel for care could in turn potentially reduce language barriers, reduce the fears of leaving home and the fears of being alone in an unknown location, which could increase the overall wellbeing and overall experience of being pregnant among pregnant teenagers. Given traditional Inuit values place spiritual significance on pregnancy and the gift of life, catering to pregnant individuals and providing appropriate access to care that adequately reflects this significance will likely lead to better mental health outcomes among this population.

In keeping with *Inunnguniq* beliefs, there is an understood shared responsibility within a group or community, to support raising a child, "it takes a village to raise a child" (Tagalik,

2010). This belief is in line with the role of familial, friend, and community support for teenage mothers. The impacts of colonial practices have led to the loss of generational beliefs, the way information is passed down from generations, and the way that communities teach their young to care for and be a parent (Tagalik, 2010; Lindsay, 2012). Leaning on the Pillars of IQ provides a holistic opportunity to address the needs of pregnant Inuit teenagers. Furthermore, understanding and incorporating the values of each of the pillars of IQ is one way to use a more holistic approach to analyze factors for accessing mental health care which can improve the quality of research and quality of policy implementation for Circumpolar Northern communities.

Significant shortfalls in the lack of access to appropriate mental health care in Nunavut exist for pregnant teenagers. Across the literature there are known gaps in access to mental health, namely, lack of access to specialized psychiatry, lack of trust towards physicians and health care providers, geographical and climactic conditions, and intergenerational impacts from the trauma of colonization experienced by Indigenous peoples. More Inuit and Indigenous led research is needed in order to understand possible solutions through an Indigenous lens.

It is important to note that across the literature many authors noted the role of widespread poverty or low SES, female disempowerment, and intergenerational trauma on negative experiences and negative mental health outcomes of teenage pregnancy (Representative for Children and Youth's Office, 2019; Archibald, 2004; Nordberg, 2014; Bexte, 2019; Harrison, et al., 2014). The literature also indicates that there are multi-dimensional factors that work together and stack with one another to create the outcomes discussed in this report. Women's health needs to be holistic, looking at SDH, as well as historical and culturally relevant factors. There is a need for more culturally appropriate health care for this population.

This research specifically highlights the known barriers that pregnant teenagers face in Nunavut and the known enablers that support their access to mental health care. It is important to do research with and for Inuit pregnant teenagers in Nunavut that recognizes how the long-term consequences of colonialism and intergenerational trauma is critical to addressing the mental health needs and experiences of this population. By conducting a systematic review of published literature and grey literature on this topic, the authors hope to create an analysis of current understandings of barriers and enablers which can act as a catalyst for future research on access to mental health care in Nunavut that take into consideration the long-standing consequences of colonialism and intergenerational trauma. This research advances the field as it demonstrates the large number of confounding factors that work together and stack on top of one another to create inequitable access to care for this vulnerable population highlighting the importance of culturally relevant care. Furthermore, this research demonstrates the gap that exists in addressing these barriers that pregnant teenagers face. Further research should look at Inuit led initiatives to address barriers to mental health and determine culturally appropriate interventions to better support this population.

Conclusion

After conducting this systematic review, there are many key learnings to take away from the literature. While literature on Inuit culture as it relates to pregnancy, including teenage pregnancy, is seen as a gift, colonialism and western approaches have interrupted that practice and created long-standing negative health indicators. Understanding pregnancy as a gift of life, marking one's readiness for entry into adulthood, can help health care providers understand the significance of pregnancy without stigmatizing pregnant teenagers who are accessing mental health care. Understandings of teenage pregnancy across Canada should not be generalized, as

different cultures hold different meanings and connections to pregnancy. Furthermore, understanding the barriers currently in place for pregnant teenagers accessing mental health care in Nunavut can provide reasoning for increased resources and future research. Additionally, understanding the enablers, can strengthen already existing programs and structures that are known to support pregnant teenagers accessing mental health care.

This systematic review answered the question of what factors act as either barriers or enablers for pregnant teenagers accessing mental health care in Nunavut. Major factors include colonial history and legacy systems, support systems in place, unemployment and poverty, availability and accessibility of care and housing situations. These factors can stack with one another making access to culturally appropriate mental health care among pregnant teenagers challenging to access. While some factors acted as enablers to mental health care, many identified factors provided challenges when accessing mental health services.

Mental health care in Nunavut still requires better resourcing, support, and the integration of holistic Inuit practices to ensure that it meets the needs of pregnant teenagers. Literature consistently recommends Inuit led initiatives that include culturally appropriate and culturally sensitive care plans and for this specific population, pregnant teenagers should be involved in the creation and implementation of culturally appropriate care. More Inuit and Indigenous led research should be conducted to provide evidence on what forms of mental health care work best for pregnant teenagers in Nunavut, recommendations on how to reduce known barriers, and implementation strategies. Furthermore, in conducting this research, following the values of IQ allowed the author to better understand holistic approaches to research. It is recommended that holistic approaches to psychiatric care should also reflect the eight pillars of IQ; emphasizing the need to work together, being innovative, providing for family and community, caring and

respecting each other, being open, inclusive, and welcoming, making decisions through consensus, learning and mastering new skills, and respecting and caring for the land, animals, and environment (Inuuqatigiit, Centre for Inuit Children, Youth and Families, 2024).

Given the high rates of teenage pregnancy and the overall mental health needs of pregnant teenagers living in Nunavut, this is an important topic area for the overall health of Canada. Barriers to accessing mental health care in Nunavut should be addressed and culturally appropriate support should be prioritized by decision makers.

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