

An Interdisciplinary Journal Honoring the Voices, Perspectives and Knowledges

of First Peoples through Research, Critical Analyses, Stories, Standpoints and Media Reviews

Intergenerational Trauma and Aboriginal Women: Implications for Mental Health during Pregnancy

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Abstract

Intergenerational trauma (IGT) explains why populations subjected to long-term, mass trauma show a higher prevalence of disease even several generations after the original events. Residential schools and other legacies of colonization continue to impact Aboriginal populations, who have higher rates of mental health concerns. Poor maternal mental health during pregnancy can have serious health consequences for the mother, the baby, and the whole family; these include impacting the cognitive, emotional and behavioural development of children and youth. This paper has the following objectives: 1) To define intergenerational trauma and contextualize it in understanding the mental health of pregnant and parenting Aboriginal women; 2) To summarize individual-level and population-level approaches to promoting mental health, and examine their congruence with the needs of Aboriginal populations; 3) To discuss the importance of targeting IGT in both individual-level and population-level interventions for pregnant Aboriginal women. Various scholars have suggested that healing from IGT is best achieved through a combination of mainstream psychotherapies and culturally-entrenched healing practices, conducted in culturally safe settings. Pregnancy has been argued to be a particularly meaningful intervention point to break the cycle of IGT transmission. Given the importance of pregnant women's mental health to both maternal and child health outcomes, including mental health trajectories for children and youth, it is clear that interventions, programs and services for pregnant Aboriginal women need to be designed to explicitly facilitate healing from IGT. In this regard, further empirical research on IGT and on healing are warranted, to permit an evidence-based approach.

Key words: intergenerational trauma; historical trauma; colonization; Indian Residential Schools; Sixties Scoop; pregnancy; maternal-child health; Aboriginal; women; children and youth; mental health; depression; health promotion.

Introduction

The mental health of children and youth is closely linked to parental mental health – particularly maternal mental health. Maternal mental health during pregnancy is particularly pertinent in this regard. Mental health concerns during pregnancy are a serious public health issue. Prenatal depression, for example, is estimated to impact around 10% of pregnant women in Canada (PHAC, 2005); this number is believed to be higher in groups such as Aboriginal women (Bowen & Muhajarine, 2006a), though research is limited.

Prenatal depression and other mental health issues during pregnancy are recognized to have potentially serious maternal, foetal and child health consequences. These include neurological, cognitive and immune impacts on the mother; elevated risk of adverse pregnancy outcomes such as preterm birth and low birthweight; increased risk of postpartum depression and other postpartum mental health problems in the mother, which can negatively impact child behavioural and cognitive development, as well as general family wellbeing; and increased risk of mental health problems in the child later in life (Bowen & Muhajarine, 2006b; Swaab, Bao, & Lucassen, 2005). The latter may be due to various reasons. Firstly, there are possible foetal programming pathways that may physiologically predispose the unborn baby to future mental health concerns (Swaab, Bao & Lucassen, 2005). Moreover, poor maternal mental health can severely impact mother-child interactions, which in turn can greatly impact the mental wellbeing of children (Letourneau et al., 2012).

The symptoms and risk factors for prenatal depression are believed to be similar to those of depression at any other time of life (Bowen & Muhajarine 2006b). Diverse theories have been proposed on the aetiology of depression and other mental health disorders; these inform both individual-level and population-level interventions. Relative to non-Aboriginal populations, Aboriginal populations appear to experience a higher prevalence of various mental health disorders (Kirmayer et al., 2000; First Nations Centre, 2005; Bennett, 2005). Present-day social disparities, such as higher rates of poverty, likely play a role in explaining the above; however, there is increasing recognition that the mental health issues facing Aboriginal populations are rooted in intergenerational trauma from the legacy of colonization. In combining with intersecting racism and sexism, the impact of intergenerational trauma on Aboriginal women is particularly severe.

The objectives of this paper are as follows: 1) To define intergenerational trauma and contextualize it in understanding the mental health of pregnant and parenting Aboriginal women; 2) To summarize individual-level and population-level approaches to promoting mental health, and examine their congruence with the needs of Aboriginal populations; 3) To discuss the importance of targeting intergenerational trauma in both individual-level and population-level approaches to promoting mental health in pregnant Aboriginal women.

Intergenerational Trauma (IGT)

Various terms have been used in the literature to describe the phenomenon of the intergenerational transmission of historical trauma and unresolved grief. This paper will use "intergenerational trauma", abbreviated as IGT. IGT theory is based on the observation that populations subjected to long-term, mass trauma (i.e., historical occurrences such as colonization, slavery, war, genocide) show a higher prevalence

of disease even several generations after the occurrence of the original events (Sotero, 2006). The symptoms of IGT "as a disease are the maladaptive social and behavioural patterns that were created in response to the trauma experience, absorbed into the culture and transmitted as learned behaviour from generation to generation" (Sotero, 2006, p.96). In particular, psychological problems and destructive behaviour associated with maladaptive coping, such as addictions, suicide and violence, are noted to be elevated (Sotero, 2006; Brave Heart & DeBruyn, 1998).

Post-traumatic stress disorder (PTSD) is recognized by the Diagnostic and Statistical Manual (DSM-5) (APA, 2013) as a psychological disorder. PTSD, however, is at the individual level, and is in reference to traumatic incidents within the individual's own past. By contrast, IGT involves collective historical trauma. IGT theory sprung largely from work studying World War II Holocaust survivors and their children, and has since been applied to other populations subjected to long-term, mass trauma (relevant literature reviewed by Brave Heart & Debruyn, 1998 and Sotero, 2006). The term "American Indian Holocaust" has been used to describe the atrocities committed over the course of colonization against Aboriginal peoples in North America and elsewhere, resulting in "massive losses of lives, land, and culture" (Brave Heart & Debruyn, 1998, p.60). The historical events of colonization include: seizures of land and forced relocation to reserves (termed "reservations" in the United States) and settlements; widespread mortality through colonization-driven disease epidemics, starvation and mass murder; the horrors of residential schools (termed "boarding schools" in the United States); disruption of traditional ways of life; tearing apart of communities and families; and, assimilatory policies that meet the United Nation's definition of cultural genocide (Brave Heart & DeBruyn, 1998; Kirmayer et al., 2000; Sotero, 2006; Menzies, 2008). The experiences of these events put Aboriginal populations in a constant state of grief and despair; however, since traditional Aboriginal customs of mourning were prohibited throughout much of history, the grief could not be properly resolved (Brave Heart & DeBruyn, 1998). Thus, there is the transmission of unresolved historical grief from generation to generation. In IGT, historical grief mingles with grief, anger and trauma from present-day experiences, such as loss of family members and friends to addictions, suicide and violence; personal experiences of violence; poverty and other social disparities; and personal experiences of oppression (including racism and sexism), which reinforce the stories of ancestral oppression (Sotero, 2006).

Social, environmental and even biological methods of transmission are proposed to explain how the psychological and emotional consequences of mass trauma and unresolved grief are passed on from generation to generation (Sotero, 2006). Among the transmission pathways proposed include impaired capacity to parent (Brave Heart & DeBruyn, 1998; Sotero, 2006; Menzies, 2008). In this regard, the legacies of residential schools and the "Sixties Scoop" era of assimilatory child welfare policies offer particularly illustrative examples. The explicit purpose of residential schools was to assimilate Aboriginal children into mainstream Canadian society. Children in residential schools were seized by force from their families and communities, mistreated, overworked, denied basic needs like food, water and appropriate medical care, and both witnessed and personally experienced brutal physical, sexual and psychological abuse at the hands of school staff. Children in residential schools were taught that Aboriginal cultural and spiritual traditions. Students left schools dissociated from their traditional culture yet still not accepted by mainstream society, lacking a sense of identity, lacking basic life skills, and highly traumatized from the chronic mistreatment and abuse they had endured. The experience impaired

survivors' ability to form meaningful interpersonal relationships involving trust or intimacy. Isolation from family and community further resulted in a lack of preparedness for marriage, family life and parenting. The trauma of their experiences led many survivors to substance abuse, criminal activity, self-harm, as well as domestic violence against partners and children. Children of survivors thus faced abuse, neglect and the consequences of their parents' self-destructive behaviour, such as substance abuse. As a result, survivors' children in turn were more likely to become involved in abuse or domestic violence and to engage in substance abuse and other self-destructive behaviour. What has ensued is a vicious intergenerational cycle of violence, addictions, self-harm and trauma (ANAC & Planned Parenthood Federation of Canada, 2002; Chansonneuve, 2005; NWAC, 2007).

Although the last residential school closed in the 1990s, "by the 1960s child welfare agencies successfully replaced residential schools as the preferred system of care for First Nations children" (Bennett et al., 2005, p.18). What ensued over the next two decades is referred to as the infamous "Sixties Scoop" (Johnston, 1983): the mass removal of Aboriginal children, for adoption and foster care in non-Aboriginal homes far away from their communities. Like residential school survivors, these children were dissociated from their traditional culture, yet still faced racism and exclusion by mainstream culture (Bennett et al., 2005; Johnston, 1983; Mandell et al., 2007; Sinclair, 2007). Some were abused by their foster or adoptive parents, including the high-profile cases of Cameron Kerley (a First Nation teenager who killed his adoptive father in 1983 after years of sexual abuse at his hands) and Richard Cardinal (a Métis teenager who committed suicide in 1984 after years of abuse and neglect in foster care) (Mandell et al., 2007). The lack of senses of identity, stability and belonging became especially acute at adolescence, during which time many of these children turned to maladaptive and destructive behavior, such as substance abuse, rebelliousness, aggression and suicide. A disproportionate number of these children ended up in the criminal justice system (Bennett et al., 2005; Johnston, 1983; Mandell et al., 2007; Sinclair, 2007). It has been noted that Aboriginal peoples were underrepresented in the criminal justice system at the turn of the twentieth century, and were represented at about the same proportion as in the population prior to World War II. By the early 1990s, however, the proportion had skyrocketed; in Manitoban jails, for example, nearly 70% of men, 90% of women, 70% of boys and 80% of girls were Aboriginal (Aboriginal Justice Inquiry - Child Welfare Initiative, as cited in Mandell et al., 2007). Various studies show a compelling association between involvement in the criminal justice system and experience in the child welfare system (Mandell et al., 2007; Sinclair, 2007).

Although there now is greater Aboriginal control of child welfare services for Aboriginal children, the consequences of the "Sixties Scoop" continue to play out as the now-grown survivors of the "Sixties Scoop" become parents themselves. The legacy of the "Sixties Scoop" thus converges with the legacy of residential schools, and other events of colonization, via the ongoing transmission of trauma and dysfunction across generations.

IGT and Aboriginal women

IGT is gendered; while colonization and the ensuing trauma has impacted all segments of Aboriginal populations, the impact has been especially heavy on Aboriginal women. The explicit patriarchy embedded into Aboriginal societies by missionaries, residential schools, and the Indian Act have yielded inequities and oppression based on gender (LaRocque, 1994). Internalized racism and sexism, in concert

with the normalization of violence and abuse in residential schools, have contributed to disproportionately high rates of gender-based violence against women within Aboriginal communities (LaRocque, 1994). At the intersections of both racism and sexism, Aboriginal women's mental health is shaped both by present-day traumatic experiences as well as by historical trauma. Domestic violence has been suggested to be a key reason for the much higher proportion of lone-parent, female-headed households among Aboriginal populations; such families, in turn, are at greater likelihood of facing poverty (LaRocque, 1994), which further intersects with present-day and historical trauma in women's lives.

IGT and mental health during pregnancy

In the context of IGT, the stresses of pregnancy and parenting may further exacerbate Aboriginal women's mental health concerns. As such, pregnancy can be argued to be an especially important time to offer healing-oriented interventions around IGT. Additionally, given the key role that parenting has in transmitting trauma to the next generation (Sotero, 2006), pregnancy also offers a meaningful point of intervention for breaking the vicious cycle of IGT. Accordingly, both clinical and population-level interventions for pregnant Aboriginal women's mental health should address IGT and incorporate appropriate healing processes.

Individual-level Approaches to Mental Health

A wide range of theories, spread across biological and psychosocial camps, have been proposed to explain mental illness at the individual level. The biomedical model for mental illness advances biological mechanisms as explanations for mental illness. Biological systems proposed to be involved include the monoaminergic systems of neurotransmission (Elhwuegi, 2004), structures of the brain (notably in the limbic system, which is implicated in emotional and cognitive functioning) (Joca, Ferreira, & Guimaraes, 2007), proinflammatory immune function (Schiepers, Wichers, & Maes, 2005), and the hypothalamicpituitary-adrenal (HPA) axis, which is the body's key stress response system (Swaab, Bao, & Lucassen, 2005). Disruptions in one or more of these systems are believed to be at the root of mental illness (Sadock & Sadock, 2007). Psychosocial theories of mental illness offer explanations based on factors such as emotional and cognitive disposition, nature of relationships with others, and the mental impact of life experiences. Traditional perspectives in psychology include the psychoanalytic perspective, the behavioural perspective, the cognitive perspective, the humanist perspective, and the sociocultural perspective, which each offer various theories to account for the aetiology of mental illness (Sdorow & Rickabaugh, 2002). Contemporary conceptualizations of mental health generally embrace a biopsychosocial approach; such an approach recognizes that the complexity of mental health requires a broader view than can be offered with any single traditional theory (Engel, 1977). A biopsychosocial approach to understanding depression, for example, would explain the aetiology of depressive disorders in terms of the interaction between biopsychological vulnerabilities (stemming from biological, cognitive, emotive, environmental and social factors, which either predispose or protect against distress) and stressors, such as stressful life events (Garcia-Toro & Aguirre, 2007; Roy & Campbell, 2013; Schotte, Van Den, De, Claes & Cosyns, 2006). The biopsychosocial approach to understanding health is similar to Urie Bronfenbrenner's bioecological model for understanding child development; there is a focus on understanding the entire system in which health occurs (Bronfenbrenner, 1994; Engel, 1977).

In mainstream medicine, clinical diagnoses of mental disorders are based on criteria laid out in the Diagnostic and Statistical Manual (DSM-5) (APA, 2013), which are assessed during a clinical interview. Depending on the type and severity of the disorder, treatment may involve pharmaceutical approaches, or psychotherapeutic approaches, or a combination of both (Sadock & Sadock, 2007). Pharmaceutical treatments may bring about prompt relief of symptoms in some (though not all) patients; however, side effects and risks do exist, notably in the context of pregnancy and breastfeeding (Belik, 2008). Furthermore, pharmaceutical approaches do not address the underlying psychosocial roots of distress; therefore symptom relief may be difficult to sustain in the longer term. In this regard, psychotherapeutic strategies can help individuals recognize issues in their lives contributing to poor mental health, and develop coping skills and strategies in the face of those issues (Sadock & Sadock, 2007). However, many mainstream psychotherapists are not familiar with IGT and the colonial context of Aboriginal peoples' health, or with Aboriginal values and worldviews. As discussed by McCormick (2008), mainstream counselling services have had only limited success with Aboriginal clients due to "cultural misconceptions of what is normal; an emphasis on individualism; fragmentation of the mental, physical, emotional, and spiritual dimensions of the person; neglect of Aboriginal history; and neglect of the client's social support system" (p.342). Furthermore, a lack of cultural safety in mainstream mental health services, as discussed later in this paper, can reinforce IGT by subjecting Aboriginal clients to further oppression (NAHO, 2008; ANAC, 2009). Most importantly, both pharmaceutical and psychotherapeutic approaches promote the internalization of solutions (i.e., therapies are aimed at creating biological, cognitive or behavioural changes within the individual); as such, these approaches to do not address the broader social, economic and political factors that determine health at the population level. Given the collective nature of IGT and its colonial and neo-colonial roots, population-level interventions are also required to bring about meaningful transformation of individuals and communities.

Population-level Approaches to Mental Health

The Government of Canada has defined a population-health approach as one that "uses both short- and long-term strategies to improve the underlying and interrelated conditions in the environment that enable all Canadians to be healthy, and [to] reduce inequities in the underlying conditions that put some Canadians at a disadvantage for attaining and maintaining optimal health" (ACPH, 1999, p.xv). Over the last few decades, there has been considerable discussion and debate as to the best way to execute a population-health approach.

The 1974 Lalonde Report speaks of "populations at risk" - i.e., those people exposed to risk factors of interest. Lalonde suggests that prevention strategies should target these groups of people, notably to help them make better lifestyle "choices" (Health and Welfare Canada, 1974). This approach to prevention is countered by Rose (1985), who suggests that the causes of incidence are not the same as the causes of individual cases of illness; in simpler terms, Rose explains that understanding the reasons why individuals get sick will not necessarily explain differences in rates of illness between populations. Rose suggests that prevention strategies aimed at the entire population, that target environmental and policy factors, may lower disease incidences by shifting the population distribution of the health characteristic of interest in a more favourable direction (Rose, 1985).

Frohlic and Potvin (2008) commend Rose for highlighting the importance of structural factors on health, while pointing out the victim-blaming implications of Lalonde's considerable emphasis on the notion of

individual lifestyle "choices". However, Frohlic and Potvin criticize Rose's population approach on the basis that non-targeted interventions may not have uniform impacts on all segments of the population. They argue that advantaged segments of the population are likely to benefit substantially more from the population approach to prevention; therefore, such an approach runs the risk of increasing population inequities. They speak of "vulnerable populations" (under which they include Aboriginal populations) who are at "higher risk of risks" (p.218) due to various structural barriers, and argue the importance of targeted interventions for such groups (Frohlic & Potvin, 2008). McLaren and colleagues (2010), however, have critiqued the interpretation of Rose offered by Frohlic and Potvin. McLaren and colleagues have argued that whether or not a population approach to prevention is focused on structure or agency. McLaren and colleagues further caution that the concept of "vulnerable populations" (those at greater risk of risks) is open to being conflated with Lalonde's concept of "populations at risk"; such a conflation leads back to an emphasis on risk exposure rather than on the structural factors driving health (McLaren, McIntyre & Kirkpatrick, 2010).

From the above discussions and debates, it is apparent that the conundrum of prevention at the population level lies in adequately addressing both downstream factors surrounding risk exposure, as well as upstream structural issues that impact health and wellbeing through the social determinants of health. Through an exploration of recent population-level interventions aimed at promoting maternal-perinatal health, it is apparent that there has been a greater emphasis on downstream factors than on upstream factors. Risk factors for maternal mental health issues, such as prenatal depression, include factors such as low socioeconomic status, unmarried status, experiences of domestic violence, high psychosocial stress, poor diet and low social support (Bowen & Muhajarine, 2006b). Social support has been targeted as a potentially modifiable factor in a number of recent perinatal health interventions. For example, a randomized-control trial of a prenatal intervention involving in-home nurse visits showed different patterns of success among pregnant women in Calgary, based on whether they were high-risk or low-risk for poor maternal and perinatal health outcomes. Not surprisingly, the needs of high-risk women were not being fully met with a conventional prenatal intervention (Tough et al., 2006). Other interventions have targeted women defined as "high-risk" based on depressive symptoms screening (Dennis, 2010; Jesse et al., 2010; Smith et al., 2011). These interventions have met with little (Smith et al., 2011) to only moderate success (Dennis, 2010; Jesse et al., 2010). The lack of dramatic success is likely because these interventions do essentially nothing to change the broader, structural factors impacting women's mental health. It is clear that more needs to be done to address upstream factors. This is particularly true in the context of Aboriginal women, whose health is impacted by the structural factors driven by the legacy of colonization. Furthermore, given the unique social, cultural and historical context of Aboriginal populations, tailoring prenatal and mental health interventions to meet the needs of pregnant Aboriginal women is also important to ensure both effectiveness and cultural safety.

The health promotion function of public health suggests that a multi-pronged, multi-sectoral approach is required in the process of "enabling people [and populations] to increase control over, and to improve, their health" (WHO, 1986, p.1). Health promotion interventions use strategies of building healthy public policy, creating supportive environments, strengthening community action, developing personal skills, and reorienting health services (WHO, 1986). Health promotion interventions have been suggested to be especially effective in mental health, given the complexity of the determinants involved (Herrman,

Saxena, & Moodie, 2005). Because health promotion "focuses on achieving equity in health" (WHO, 1986, p.1), a health promotion approach to mental health among pregnant Aboriginal women would advocate tailoring interventions for the specific needs of pregnant Aboriginal women. Furthermore, a health promotion approach focuses on action on the broader determinants of health beyond simply behavioural and biological factors - such as political, economic, social, cultural and environmental factors (WHO, 1986).

The Government of Canada's document "Toward a Healthy Future: Second Report on the Health of Canadians" discusses the health disparities facing Aboriginal populations, and links these health disparities to the social disparities faced by Aboriginal populations along social determinants of health such income, education, employment and housing (ACPH, 1999). What is conspicuous by its complete absence in this report, however, is identification of colonization as the broader driver behind present-day social and health inequities. Similarly, colonization and IGT are also not explicitly discussed in the program descriptions for First Nations and Inuit Health Branch (FNIHB) community-based health promotion programs on maternal and child health (Health Canada, 2011). Reference is made in the program descriptions to the social determinants of health, health promotion, community capacitybuilding, and the incorporation of traditional culture (Health Canada, 2011); however, concretely-defined components to explicitly address IGT in the mental health of pregnant Aboriginal women are not mentioned. Of the mental health promotion programs offered by FNIHB, the Indian Residential Schools Resolution Health Support Program description refers explicitly to IGT, in the context of residential school abuses. Otherwise, explicit reference to colonization and IGT are similarly limited in the program descriptions (Health Canada, 2011). In the last few years, largely through the work of the Truth and Reconciliation Commission of Canada, there has been increasing awareness of the traumatic experiences of students who attended residential schools, culminating in a formal apology from the Government of Canada on June 11, 2008 (Truth and Reconciliation Commission of Canada, 2011). However, the impact of the history of residential schools on subsequent generations of Aboriginal peoples has not received as much media or political attention. This may in part be due to the limited empirical research on the issue, as discussed below.

Addressing IGT in Mental Health Interventions for Pregnant Aboriginal Women

As discussed earlier, historical trauma and unresolved grief are reinforced and augmented with the trauma and despair stemming from present-day circumstances, including experiences of racism and sexism. In the context of health and social services, a lack of cultural safety contributes to oppression of Aboriginal peoples, and therefore to IGT. Cultural safety expands the notion of cultural sensitivity by focusing on structural inequities based on various sociocultural factors, and the resulting power differentials in relationships - notably in the relationship between service providers and patients or clients. In order to provide a culturally safe environment in which patients or clients can feel respected and empowered, service providers must be self-reflexive. This is particularly important in the context of Aboriginal patients and clients; Aboriginal peoples' historical relationship with health and social services is entrenched in colonization, making lack of trust a major concern (NAHO, 2008; ANAC, 2009). The literature has suggested a number of best practices for health and social services for Aboriginal patients and clients, to ensure both safety and responsiveness. The Society of Obstetricians and Gynaecologists of

Canada, for example, offers a list of recommendations for health services in the area of Aboriginal women's health. These include: ensuring that professionals have an adequate understanding of the sociocultural, historical and population health context of Aboriginal peoples, notably the legacy of colonization; embracing a holistic view of health and wellbeing, in line with Aboriginal worldviews; supporting community-directed services, programs and initiatives; and supporting health promotion and prevention (Smylie, 2000). In the context of pregnant and parenting Aboriginal persons, Smith and colleagues (2006) found that participants of their study seek health care that is respectful, strengths-based, client-directed, holistic, that permits healing and trust, that is culturally appropriate, that addresses the "mind, body and soul" (p. E39), and that includes fathers and other family members.

Various scholars have suggested that healing from IGT is best achieved through a combination of mainstream psychotherapies and culturally-entrenched healing practices (Brave Heart & DeBruyn, 1998; Brave Heart, 2003; McCormick, 2008; Menzies, 2008). McCormick (2008) comments that, when facilitated by therapists with "adequate understanding and respect for Aboriginal cultural values [such that] the therapist [does not] mistakenly try to change core cultural values of their Aboriginal clients" (p.342), there are certain mainstream psychotherapeutic approaches that have proven to be helpful for Aboriginal clients. In addition to individual psychotherapies, group and family therapies have proven to work well, given the congruence with the emphasis of family and community in Aboriginal worldviews (McCormick, 2008). However, it is important that mainstream therapies be complemented with traditional healing practices that allow connection with one's Aboriginal identity, and promote healing through balance; interconnectedness; relationships with family, community and nature; spirituality; and the use of Aboriginal rituals and traditions (McCormick, 2008). Traditional Aboriginal healing practices vary between communities, and include smudging, sweat lodges, sun dances, pipe ceremonies, potlachs and healing circles (University of Ottawa, 2009); healing circles, for example, can be incorporated into group therapy (Heilbron & Guttman, 2000). The focus on holism is reflected in traditional approaches such as the Medicine Wheel, and the four sacred medicines of sage, sweet grass, tobacco and cedar (Little Brown Bear, 2012; University of Ottawa, 2009). Drawing on traditional healing practices is especially important in the context of IGT, given that part of the assault of colonization that led to unresolved grief was the banning of traditional cultural practices (Brave Heart & DeBruyn, 1998). Brave Heart, DeBruyn and colleagues at the Takini Network in the United States have developed the Historical Trauma and Unresolved Grief (HTUG) Intervention, which has shown success. This group trauma and psychoeducation intervention combines processes for acknowledging and confronting historical trauma, with traditional Aboriginal rituals for grief resolution and healing. The intervention is congruent with mainstream group psychotherapies done for PTSD, and allows reconnection with Aboriginal identity and cultures as a powerful means of healing (Brave Heart & DeBruyn, 1998; Brave Heart, 2003).

In addition to individual-level interventions, population health promotion interventions are also important, that address structural and community-level factors that influence healing from the legacy of colonization. Chandler and Lalonde (1998) suggest that "cultural continuity" in a community can impact mental health. Their markers for cultural continuity include community involvement in land claims, evidence of self-government, existence of health and social services, and existence of cultural facilities. Although termed "cultural continuity", various scholars (e.g., Kirmayer et al., 2000) point out that these markers speak to broader issues of community participation and capacity, in addition to engagement with traditional culture and Aboriginal identity. Community capacity and local control are powerful counters to

the historical and present-day oppression associated with colonization, and in which IGT is largely rooted. As stated by Kirmayer:

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Community development and local control of health care systems are needed, not only to make services responsive to local needs but also to promote the sense of individual and collective efficacy and pride that contribute to mental health. Ultimately, political efforts to restore Aboriginal rights, settle land claims and redistribute power through various forms of self-government hold the keys to healthy communities. (Kirmayer et al., 2000, p.614).

While various conceptual models have been proposed to explain IGT (Brave Heart & Debruyn, 1998; Sotero, 2006; Menzies, 2008), they are largely rooted in qualitative research and theoretical discussion. The inductive approach of qualitative research allows for considerable depth in insight; given the complexities of IGT, qualitative research is certainly integral to fully understanding the intricate issues at hand. However, qualitative research cannot address questions of generalizability of results to a target population of interest (Morse & Niehaus, 2009; Roy, 2014; Sandelowski, 2000). Accordingly, quantitative and mixed-methods research approaches are also required, to ensure that IGT is considered in evidencebased decision-making around services and policies (Blackstock, 2009; Roy, 2014). There has been some quantitative work done in recent years. Whitbeck and colleagues (2004), for example, have developed historical loss scales. Recent studies have also attempted to assess IGT through indicator variables about life experiences associated with IGT in Aboriginal populations (e.g., sexual abuse, child abuse, family violence, alcoholism, being taken away from birth parents), or by inquiring about family members' attendance at residential schools (Balsam, et al., 2004; Cedar Project Partnership et al., 2008). However, as argued by Sotero (2006), discussion of IGT in the literature is largely theoretical and qualitative in nature. Similarly, although there is considerable discussion of the concept of healing in the context of Aboriginal mental health, "the major part of the literature that examines healing for Aboriginal people tends to be based on opinion and conjecture, not on research. ... [The] literature does not provide empirical evidence [as] support" (McCormick, 2008, p 341). Given the increasing focus on evidence-based decision making in the design of both clinical and population interventions, more empirical studies are needed on both IGT and Aboriginal healing, drawing on both quantitative and qualitative approaches. In particular, further research of these issues in pregnant Aboriginal women can help to provide contextspecific evidence to address the overall lack of explicit consideration of IGT, discussed earlier in this paper, in both individual-level and population-level interventions aimed at Aboriginal maternal mental health.

Given the link between experiences of interpersonal violence and an array of health and social problems, Elliott and colleagues (2005) have suggested that all health and social services for women should be "trauma-informed"; in other words, "service delivery [should be] influenced by an understanding of the impact of interpersonal violence and victimization on an individual's life and development" (p 462). Elliott and colleagues' paper is concerning personal trauma from interpersonal violence; however, extrapolations of their points can be made to the issue of IGT and Aboriginal peoples. Given the link between IGT and social, behavioural and health problems in Aboriginal populations, an argument can be made that health and social services for Aboriginal peoples in general should be influenced by the recognition of the legacy of colonization and the need to heal from this legacy; in other words, they should be IGT-"informed". While the above should apply to services for all Aboriginal peoples, it is particularly pertinent for pregnant Aboriginal women. Qualitative research conducted by Smith and colleagues (2006)

suggests that Aboriginal parents see pregnancy as a time for reflection on the intergenerational legacy of colonization, driven by the strong desire to give their children a better future. As such, pregnancy is "a powerful opportunity to support and facilitate people to choose a healing path" (pp E34-E35), to heal themselves and break the vicious cycle of IGT for the sake of their children. As discussed earlier, IGT has a large role in Aboriginal women's overall mental health. Given the importance of pregnant women's mental health to both maternal and child health outcomes, including mental health trajectories for children and youth, it is clear that interventions, programs and services for pregnant Aboriginal women need to be designed to explicitly facilitate healing from IGT.

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