



An Exploration of Childhood Obesity, Ecological Contributing Factors, and the New Sociology of Indigenous Children in Canada

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Introduction

“The World Health Organization identifies obesity as the leading modifiable risk factor for cardiovascular and non-communicable diseases worldwide” and rates of childhood obesity around the world have been steadily climbing over the last twenty years (Wahi et. al, 2021, p. 1). Childhood obesity has many serious consequences within physical (high blood pressure, disordered sleeping, and hyperglycemia), and psychosocial realms (bullying, stigma, poor mental health) (Gurnani as cited in Wahi et. al, 2021, p. 1). Childhood obesity is also linked to “an increased risk for premature death in adulthood” and a decreased quality of life (Franks et. al as cited in Wahi, 2021, p. 1; Bhawra et. al, 2017, p. 77). Indigenous people living on-reserve in Canada are particularly at risk for obesity and Indigenous children (particularly those living on-reserve) have poorer health than their non-Indigenous counterparts (Schweinitz & Wojcicki, 2017, p. 2; Eni as cited in Albanese, 2020, p. 161). The rate of youth-onset type 2 diabetes is much higher in Indigenous children than non-Indigenous children in Canada, with Indigenous children experiencing a younger age of onset (Willows, Hanley & Delormier, 2012, p. 2). The high rates of chronic disease in Indigenous communities signals a call for action: there is an “urgent need for effective, culturally appropriate obesity prevention strategies” (Willows, Hanley & Delormier, 2012, p. 3). The Indigenous population in Canada is “younger than the general population because of a higher birth rate and lower life expectancy” and while it is recognized that obesity is an issue that plagues individuals at all ages, it has been argued that the most effective strategies in mitigating risk factors for obesity and its related health issues should be aimed at Indigenous children (Willows et. al, 2012, p. 4). In this paper, literature on the colonial history of Indigenous people in Canada as well as their social determinants of health will be examined, followed by an exploration of food insecurity and how it relates to childhood obesity in Indigenous children. Next, western approaches to treatment and prevention of childhood obesity in Canada will be compared and contrasted with findings related to Indigenous worldviews and childhood obesity interventions. This paper will conclude with my thoughts on the *new sociology of childhood* and how it may be applied to producing meaningful change in rates of obesity in Indigenous children of Canada.

Literature Review

The quality of health experienced by Indigenous people in Canada is markedly different than the rest of Canada's population (Willows, Hanley & Delormier, 2012, p. 2). The violent history of the settlement of Canada including the colonization of Indigenous people by European settlers as well as the subsequent "dispossession of lands, and assimilation policies, including the *Indian Act* and residential schools" are historical puzzle pieces that contribute to the overall health of Indigenous communities in Canada today (Willows, Hanley & Delormier, 2012, p. 3). Indigenous children in Canada "experience higher rates of infant mortality, sudden infant death syndrome, tuberculosis, asthma, bronchitis, childhood obesity, and diabetes" and are far more likely to be hospitalized for respiratory issues than non-Indigenous children (Guevremont as cited in Albanese, 2020, pp. 160-161). Indigenous children are also "twice as likely to be classified as obese" with approximately 33% of Indigenous children in Canada currently falling into said category (Bhawra et. al, 2017, p. 77; Wahi, 2021, p. 2).

A socioecological perspective must be applied to examining childhood obesity in Indigenous children: health and weight cannot simply be reduced to calories consumed versus calories expended; the "larger ecology of individual lives" must be recognized (Willows, Hanley & Delormier, 2012, p. 2). "Most research has provided evidence that the prevalence of obesity among Aboriginal persons is the result of physical inactivity and (or) consuming excess calories" but has been limited by a restricted view of contextual factors (Willows et. al, 2012, p. 3). However, to understand the disparities between rates of obesity in Indigenous versus non-Indigenous communities, the complex interaction between "genetic and non-medical determinants" must be acknowledged, as should the concept of individual behaviours and habits regarding diet and physical activity being influenced by factors on "community, and societal levels" (Willows, Hanley & Delormier, 2012, p. 3). When examining childhood obesity, the unique "sociopolitical, historical, and geographical contexts" of Indigenous children in Canada are crucial to consider (Albanese, 2020, p. 162). Indigenous children, families, and communities often experience negative correlations with social determinants of health that include higher rates of "poverty, substandard housing, household overcrowding, food insecurity, and lone parent households" as well as a lack of access to healthcare and/or culturally appropriate treatment by healthcare providers, and geographic isolation in remote areas (Willows, Hanley & Delormier, 2012, p. 3). Though rates of childhood obesity vary across regions within Canada, low socioeconomic status (low family income) is consistently linked to childhood obesity across the country (Silver & Cronin, 2019, p. 582). "Indigenous children are born into a colonial legacy that results in low economic status, intergenerational trauma associated with residential schooling, loss of language and culture" and "these colonial legacies are considered to be social determinants of health" (Albanese, 2020, p. 162). Low family household income may directly and negatively affect the health of Indigenous children by limiting a family's access to safe recreational and physical activities as well as influence a household's level of food security (Bhawra et. al, 2017, p. 83). It should also be noted that "high levels of chronic and cumulative stress stemming from loss of culture, identity or lack of social support" are factors that contribute to individuals becoming overweight or obese (Whettam et. al, 2022, p. 4).

“The related issues of food security and obesity among North American Indigenous children are serious public health concerns” (Genuis, Willows & Jardine, 2015, p. 600). Food security is defined as having dependable “physical, social and economic access to sufficient, safe and nutritious foods that meet their dietary needs and food preferences for an active and healthy life” (Committee on World Food Security as cited in Genuis, Willows & Jardine, 2015, p. 601). Access to culturally significant food is also a component of food security for Indigenous people in Canada (Genuis, Willows & Jardine, 2015, p. 601). Indigenous children in Canada, regardless of whether they live on or off reserve, experience “high rates of food *insecurity*”, which is defined as a situation in which availability or access to nutritionally adequate and culturally acceptable food is limited or uncertain” (Albanese, 2020, p. 161; Bhawra et. al, 2017, p. 78). Indigenous families in Canada are three times more likely to experience food insecurity than non-Indigenous families and research has demonstrated that approximately 20% of Indigenous households experience food insecurity (Albanese, 2020, p. 161). Several factors contribute to the experience of food insecurity by Indigenous families in Canada including “colonialism, dispossession from traditional lands, environmental degradation, transitions from a subsistence to market economy and poverty” (Council of Canadian Academics as cited in Genuis, Willows & Jardine, 2015, p. 601). Research exploring the perceptions of off-reserve Metis and First Nations parents regarding food insecurity and obesity has indicated that low income coupled with the high price of food, transportation issues, and loss of knowledge of traditional food and its preparation are all important factors contributing to the issue of childhood obesity in their communities (Bhawra et. al, 2017, p. 78).

“There is no one-size-fits-all solution to address childhood obesity and the disparities experienced by First Peoples” (Whettam et. al, 2022, p. 3). Around the world, it is becoming clear that policies and programs must be designed collaboratively with marginalized groups that “*both* recognize *and* address racism and racism-related stressors” as socioecological factors contributing to poor health and obesity (Whettam et. al, 2022, p. 5). Research suggests that children from socioeconomically disadvantaged and/or those with “underrepresented ethnocultural backgrounds not only have higher rates of childhood obesity, but also experience more difficulty in “adhering to childhood obesity interventions” (Silver & Cronin, 2019, p. 582). Although lifestyle-based behavioural modification programs aimed to curb childhood obesity typically yield positive short-term (weight loss) results at an individual level, research indicates that children belonging to families with low economic status experience poor long-term adherence to these programs (Silver & Cronin, 2019, p. 583). It is understood by health care providers on a micro level that parents who hold multiple jobs and/or do not have regularly scheduled hours of work, and those who have limited finances are more likely to face challenges when participating in weight-loss programming for their obese child(ren) (Silver & Cronin, 2019, p. 587). “Improved understanding of health care provider perspectives contributes to the development of strategies and program modifications that can enhance the success of participating families” (Silver & Cronin, 2019, p. 583). However, as researchers seek to examine the perspectives of the healthcare providers serving obese Indigenous children and their families, it is also pertinent to consider the perspective of those being served. As western approaches to health and weight management are largely insensitive or indifferent to Indigenous cultures and values, a biomedical approach focusing on diet and exercise that places emphasis on *personal responsibility* may unintentionally deter Indigenous people from adopting

healthier lifestyle choices and may further perpetuate racism and stigma (Whettam et. al, 2022, p. 5). “Policies and actions to address childhood obesity need to recognize racism and related stressors, as adverse childhood experiences and social determinants of obesity, and need to understand the lived experienced [*sic*] of those who have been impacted by racism and intergenerational experiences of trauma” (Whettam et. al, 2022, p. 3).

As Indigenous children have specific determinants of health, it is important that their culture be taken into consideration when examining factors that may contribute to obesity. Efforts to understand and prevent disproportionate rates of obesity in Indigenous children must be expanded past diet and exercise to include “culture, family, and community” (Pigford et. al, 2012, p. 987). The literature suggests that improving the connection between Indigenous children and their culture is vital to improving and maintaining their health and wellbeing (Willows, Fehderau & Raine, 2016, p. 567). In the Yukon territory of Canada, hospitals demonstrate respect of Indigenous ways of knowing and being by offering Indigenous patients daily access to traditional foods, access to a traditional healing unit complete with traditional herbs and medicines, and culturally appropriate spaces in which to perform ceremonies and rituals as well as to grieve over loved ones who have passed away (Schweinitz & Wojcicki, 2017, p. 3). Information regarding other culturally-focused healthcare systems in Canada is not readily available. Although some studies indicated that the consumption of traditional foods may be a mitigating factor for the risk of childhood obesity in Indigenous people, more research is needed to determine the extent of this impact (Schweinitz & Wojcicki, 2017, p. 2).

The literature reveals the self-identified significance of the association of family members with experiences of food by Indigenous children (Genuis, Willows & Jardine, 2015, pp. 604-605). Research exploring perceptions of health in Indigenous children has consistently produced themes of cultural pride, the importance of family, and a holistic idea of the meaning of health (Pigford et. al, 2012, pp. 988-990; Willows, Fehderau & Raine, 2016, p. 571). Children studied by Genuis, Willows & Jardine (2015) all agreed that “a traditional diet was healthier” than the foods they normally ate in their rural community (p. 605). The participants’ knowledge of nutritious versus unhealthy foods and their “preference for fruits and vegetables suggests receptivity for initiatives that improve availability of healthy food” (Genuis, Willows & Jardine, 2015, p. 606). Children studied by Pigford et. al (2012) associated knowledge of healthy foods and (physical) activities with trusted family members such as parents or grandparents, while knowledge of non-traditional and/or unhealthy food involves family members and the outside world (school, media, friends) (p. 989). The children in this study “discussed health issues in a holistic manner” in that their definition of health itself was intertwined with cultural practices and their beliefs about healthy foods and activities were largely influenced by close family members. The attitudes of these children regarding their health confirms the importance of “an ecological approach that considers multiple contexts and factors including a traditional worldview” (Pigford et. al, 2012, p. 991). As the guidance and knowledge passed from elders is extremely important to the healthy development of Indigenous children, it is paramount that older generations adopt an active role in promoting healthy lifestyle choices to prevent childhood obesity in Indigenous children (Pigford et. al, 2012, p. 993; Genuis, Willows & Jardine, 2015, p. 606). However, incorporating a broader, more contextual approach to preventing obesity is vital for Indigenous communities. Ecological factors must also be considered such as number of fast-food restaurants and convenience stores versus

stores selling healthy produce/perishables in the community; household income and structure; school environments; environmental health; early life events (including adverse childhood events); government policies regarding infrastructure, recreation, and environmental protection (Willows, Hanley & Delormier, 2012, p. 5). Additionally, “efforts to alleviate household poverty are considered important to ensure Indigenous people in Canada have equitable access to healthy foods (Willows as cited in Willows, Fehderau & Raine, 2016, p. 572).

Conclusion

Throughout history, the thoughts and perspectives on the health of children themselves have been largely ignored in favour of accounts of parents or other adults. However, researchers are beginning to recognize that “children possess the capacity to create permanent, sustainable changes and contribute substantially to the programs and policies that affect their generation” (Hill as cited in Pigford et. al, 2012, p. 986). This new approach to research and the sociology of children itself “seeks to highlight both the agency of children and their social, political, and economic status in contemporary societies (James et. al as cited in Albanese, 2020, p. 33). As a result of this shift, children are now more often viewed as “experts on their lives and community” rather than passive bystanders when examining the issue of childhood obesity (Foster-Fisherman et. al as cited in Genuis, Willows & Jardine, 2015, p. 601). “The inclusion of children’s viewpoints of healthy food can facilitate the creation of more effective programmes to alleviate food insecurity and prevent obesity in Indigenous communities” (Genuis, Willows & Jardine, 2015, p. 601). Furthermore, the active participation in such research has been found to contribute to “increased self-esteem, empathy, responsibility and community participation, as well as improving quality of response to the issue at hand” (Genuis, Willows & Jardine, 2015, p. 601). As research uncovers deeper meaning and causes behind disproportionate rates of childhood obesity in Indigenous communities, the *new sociology of childhood* may ensure that children themselves are “understood to be able to appropriate and reinterpret their situations and environments and so themselves contribute to cultural reproduction and change (Corsaro as cited in Albanese, 2020, p. 33).

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