Weighing Expectations: A Postcolonial Feminist Critique of Exercise Recommendations during Pregnancy

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Abstract

In this paper we use postcolonial feminist theory to examine current physical activity guidelines for pregnant women in Canada. We argue that these guidelines marginalize pregnant First Nations women in a number of ways: a lack of cultural consideration or representation of First Nations women; recommendations and interventions that rely on Eurocentric epistemologies and biomedical discourses; the use of dominant neoliberal notions of personal responsibility for health; and physical and financial barriers to the guidelines. As physical activity is an important contributor to positive maternal health outcomes, and as First Nations women are at particular risk of excess weight gain during pregnancy, we argue that existing guidelines need to be reflective of First Nations women's needs. Further, the creation of culturally safe physical activity resources for pregnant First Nations women may enable them to avoid excess weight gain during pregnancy and thus improve maternal health.

In this paper, we offer a postcolonial feminist critique of existing physical activity guidelines for pregnant women in Canada. Using a postcolonial feminist approach, we elucidate the ways in which First Nations women are marginalized through a lack of cultural consideration or representation of First Nations women; recommendations and interventions that rely on Euro-centric epistemologies and biomedical discourses; the use of dominant neoliberal notions of personal responsibility for health; and physical and financial barriers to the guidelines. Postcolonial feminist theory is a productive approach to the issues of physical activity promotion and obesity prevention among pregnant First Nations women: it addresses historical positioning, class, race, gender, and the overall impact these forces have on women. In an article entitled "Don't just tell us we're fat," Lavalee (2011) calls for the use of theoretical frameworks that are more holistic and inclusive of Aboriginal ways of knowing and account for cultural differences. Postcolonial feminist theory provides such a lens and is thus a productive way to examine various effects of colonial discourses on women's ways of knowing and power differentials (Ashcroft et al., 2007; Williams and Chrisman, 1994; Young, 2001), which are of particular importance in examining First Nations women's health (Browne and Smye, 2002).

Physical activity guidelines for pregnant women have been developed and refined over the past three decades. These guidelines, written in response to baby-boomers' demands for information on the safety of exercise during pregnancy, were first published

in 1982 (Wolfe and Davies, 2003). The first publication produced by Fitness Canada (1982) on this topic was called *Fitness and Pregnancy*; it addressed a number of ways to improve pregnant women's lifestyle habits and had a focus on physical activity of light intensity. The specific aerobic exercise guidelines recommended that women exercise three to five days per week for a minimum of 15 minutes per session and that they should stay in the lower end of conventional pulse rate target zones (Wolfe and Davies, 2003). These guidelines, which have only been revised twice in the past 29 years, were based on limited scientific data and therefore conservative with recommendations of duration and intensity. Their current iteration can be found in a booklet entitled *Active Living During Pregnancy: Physical Activity Guidelines for Mother and Baby* (Kochan-Vintinner et al., 2004). This booklet, a companion to the "Physical Activity Readiness Medical Examination" (PARmed-X for Pregnancy, Wolfe and Mottola, 2002), is a questionnaire created in 1996 and revised in 2002, which is used by physicians and midwives to provide medical clearance for women to participate in prenatal exercise programs (Wolfe and Davies, 2003). Both of these documents were copublished by Health Canada and the Canadian Society for Exercise Physiology (CSEP). In this paper, we will focus on these two documents (Kochan-Vintinner et al., 2004; Wolfe and Mottola, 2002) because they have been published and promoted with the support of the Canadian government and are thus framed as "the" guidelines for all women in Canada. Through the use of postcolonial feminist theory, we will demonstrate the ways in which First Nations women are marginalized in these health publications, specifically through an examination of three postcolonial concepts: positional superiority, othering, and stereotyping.

Colonialism and First Nations

Colonialism is defined as

> the control or governing influence of a nation over a dependent country, territory, or people or the system or policy by which a nation maintains or advocates such control or influence. (Czyzewski, 2011, p. 1)

The Indian Act (1876) had detrimental effects on all First Nations peoples, but it has uniquely disadvantaged First Nations women through colonial discourses and exercises of power (Forsyth, 2005; Government of Canada, 1996; Horn-Miller, 2005). First Nations women experienced systematic marginalization from the federal government as the legal classification of Status Indian was (until the mid-1980s) applied directly only to males; women could only obtain status through a Status Indian father or husband (MacIntosh, 2008). Indeed, as Musa Dube, a postcolonial theorist, states, "Women in colonized spaces not only suffer the yoke of colonial oppression, but also endure the burden of two patriarchal systems imposed on them" (Chilisa, 2012, p. 259).

Colonialism has been identified as a driver of First Nations peoples' poor health (Loppie-Reading and Wien, 2009). The legacy of colonialism is apparent in First Nations peoples' poor health in almost every health measure — so much so that several scholars have argued that colonialism itself is a social determinant of health (Czyzewski, 2011; Loppie-Reading and Wien, 2009). The double burden of patriarchal and colonial systems that First Nations women endure has led to a myriad of challenges for this population, including physical inactivity, obesity, and other negative health outcomes (Loppie-Reading and Wien, 2009). Through a critical examination of existing health guidelines and recommendations, we can identify the current manifestation of colonialism and the continued marginalization of First Nations populations.

Despite recent efforts in Canada to create a more culturally sensitive health care system, First Nations peoples continue to experience health disparities and barriers to accessing care (Canadian Institute for Health Information, 2004). Accessibility to health care is one way in which First Nations women are disadvantaged (Loppie-Reading and Wien, 2009); those who can access care are still disadvantaged because health documents often neglect First Nations women's needs.

Obesity and Physical Inactivity in Pregnancy

The benefits of physical activity include increased physical, mental, and social well-being (Warbuton

et al., 2006); thus, physical activity is an important component of overall health throughout pregnancy and postpartum. Katzmarzyk (2008) concludes that Aboriginal[1] rates of physical activity are lower than those of non-Aboriginal peoples and notes physical inactivity as an important cause of obesity for Aboriginal peoples. Research has revealed that pregnant Aboriginal women often exceed recommended weight-gain guidelines (Lowell and Miller, 2010) and exercise less than non-Aboriginal peoples during pregnancy. The fact that First Nations women have among the highest birth rates in Canada (Statistics Canada, 2005) further compounds the need to critically examine this topic. Indeed, First Nations ancestry alone is an independent risk factor for gestational diabetes (Dyck et al., 2002). Excessive weight gain during pregnancy increases the risk of negative maternal/fetal health outcomes, including gestational hypertension, diabetes, preeclampsia, cesarean delivery, macrosomia, and long-term obesity in the child (Phelan et al., 2011). Exercise is recommended as an essential primary prevention strategy in populations that are at high risk for diabetes, such as First Nations women (Klomp et al., 2003).

Obesity affects women's reproductive health and poses health risks to both mother and fetus. Not only does obesity affect biomedical health, it can cause psychological stress for the pregnant woman (Kumar, 2003). The psychological impacts of obesity are seldom explored; however, issues have been raised about patient dignity, embarrassment, and feelings of victimization when health care practitioners address the issue with pregnant women (Heslehurst et al., 2007). Culturally safe obesity prevention strategies must be implemented to meet the unique needs of pregnant, First Nations women. Cultural safety includes components of cultural awareness, sensitivity, and competence, to transform both understanding and relationships in the health setting (Aboriginal Nurses Association of Canada, 2009). To create culturally safe interventions, it is essential to understand the complex nexus of factors that influence First Nations women's health.

1 We draw on data pertaining to Aboriginal peoples in general when First Nation specific data is unavailable.

Aboriginal Determinants of Health

In response to the unique experiences and disproportionate burden of poor health outcomes for Aboriginal peoples, researchers, governments, non-governmental organizations, and communities have invested resources in identifying determinants of health specific to Aboriginal peoples. Loppie-Reading and Wien (2009), reporting for the National Collaborating Centre for Aboriginal Health, identify the determinants of Aboriginal health that inform its efforts: sociopolitical factors, holistic perspective of health, life course, health behaviours, physical environments, employment and income, education, food insecurity, health care systems, educational systems, community infrastructure, environmental stewardship, cultural continuity, colonialism, racism and social exclusion, self-determination.

The Aboriginal social determinants of health, which address the concerns of both rural and urban Aboriginal residents, differ from the World Health Organization's articulations of the social determinants of health because they further consider Indigenous cultures and world views, such as connection to, and dependency on, the land (Loppie-Reading and Wien, 2009), as influencing health outcomes. Another notable difference between the two articulations of the social determinants of health is focus on the effects of colonialism and work to re-establish self-determination in the Aboriginal determinants of health. Theoretical frameworks that account for specific determinants of Aboriginal peoples' health are thus essential to understanding, analyzing, and creating appropriate interventions.

Postcolonial Feminist Theory

Postcolonial feminist theorists seek to "expose, describe, and change ideological and social structures that maintain inequities between Aboriginal and non-Aboriginal populations" (Smith et al., 2006, p. 31). It addresses historical positioning, class, race, gender, and the overall impact these forces have on women. In addressing the complex nexus of power generated through these forces, we can better understand their effects on First Nations women's health

outcomes. The examination of unequal relations of power is central to postcolonial feminist analysis; such differentials in power can affect First Nations women at both micro and macro levels. In terms of micro (individual level) and macro (societal level) influences in health and physical activity, the framing of the problem occurs mainly at the micro level. Individualizing the problem and thus blaming individuals for poor health ignores greater systemic issues and neglects the need to address the problems in current physical activity recommendations in health care.

A key component of postcolonial feminism is an examination and exposure of existing systemic issues. Said's (2001) notion of "positional superiority" is helpful in understanding the ways in which First Nations peoples are marginalized by those in positions of power. A blatant example of positional superiority in Canada was residential schooling, where Euro-Canadian knowledge and culture were forced on Indigenous peoples (Smith, 1999). Although a less obvious example, positional superiority can be seen in the writing of "expert" documents (such as physical activity guidelines for pregnancy) that fail to recognize that non-Euro-Canadians' beliefs and practices often differ from biomedical understandings of physical activity and health. Failing to recognize non-Euro-Canadian ways of knowing not only indicates positional superiority, but also creates cultural "Others."

Spivak (1990) calls for a theory of "agency and strategy" that ultimately recognizes the agency of the Other and strategizes change. The concept of Othering is defined as constructing non-Western peoples as Other or, as Spivak (1990) calls them, "cultural others." In order to decentre Western ways of knowing, there is a need to understand the experiences of Others. First Nations women in Canada experienced and continue to endure Othering at the hands of the colonizer. There is evidence to suggest that inequitable health conditions are based in the Othering of First Nations peoples that began with colonization (Smith et al., 2006). The systematic destruction of First Nations peoples through constructed inferiority not only marginalized First Nations, but destroyed entire cultures, the effects of which are still evident across the globe. Spivak (1990, pp. 62–63) states, "to refuse to represent a cultural Other is salving your conscience and allowing you not to do any homework," which is a clear call for academics to expose the complex nexus of factors that contribute to the marginalization of colonized women.

Building on the concept of Othering, stereotyping is a term that is helpful to understand the process of Othering. A stereotype "is an oversimplified and usually value-laden view of the attitudes, behaviours and expectations of a group or individual" (Edgar and Sedgwick, 2004, p. 380). Stereotypes may be "deeply embedded in sexist, racist or otherwise prejudiced cultures, [and] are typically highly resistant to change" (Edgar and Sedgwick, 2004, p. 381). For purposes of this paper, stereotypes are the generalized views of the colonized by the colonizer. In many cases, First Nations women are reduced to stereotypes, which causes misrepresentation and further marginalization. Browne et al. (2005) warn of stereotyping's far reaching and marginalizing effects, explaining that negative stereotypes towards Aboriginal peoples exist in Canadian society today.

> [I]t is not uncommon for non-Aboriginal Canadians to equate the culture of Aboriginal peoples with the culture of poverty, substance abuse, and dependency. (Browne et al., 2005)

We would add physical inactivity and obesity to the list.

The reversal of colonial policies and practices and the elimination of stereotyping is a relevant area of investigation in health promotion. Decolonization is the process of exposing and disassembling colonialist power, including all the institutional and cultural influences that have remained since colonialism (Ashcroft et al., 2007). In order for decolonization to occur, the effects of colonialism have to be examined and exposed, which we do in the following analysis.

A Postcolonial Feminist Critique of Exercise Recommendations during Pregnancy

First Nations women in Canada are disproportionately represented in statistics of poor health out-

comes, including pregnancy (Loppie-Reading and Wien, 2009). Given that First Nations women are consistently among the highest risk populations for poor pregnancy outcomes, we believe it is crucial to have them represented in the *Active Living During Pregnancy: Physical Activity Guidelines for Mother and Baby* (Kochan-Vintinner et al., 2004). The purpose of this examination is not to discredit the significant work the authors have done or to question the scientific data that the physical activity guidelines are based on, but rather to point out the sociocultural factors that are neglected when producing health promotion documents for Canadian women. The current physical activity guidelines for women in Canada neglect First Nations women through a lack of cultural consideration or representation of First Nations women, a reliance on Euro-centric epistemologies and biomedical discourses, and through limited access to the guidelines.

Lack of Cultural Consideration or Representation of First Nations Women

Obesity researchers are aware that social and cultural connections with obesity are seldom considered in literature (Burns et al., 2009). In a systematic review, Bernier and Hanson (2012, p. 14) acknowledge that there is no

> discussion on the relationship between social factors, overweight and obesity, and maternal health outcomes, leaving us with very little information about adverse health outcomes among pregnant women from diverse racial and ethnic, socio-economic, and educational backgrounds.

Certainly, current understandings of obesity and pregnancy are dominated by Eurocentric perspectives and biases that can further marginalize First Nations women. The recommendations and interventions for prevention of excessive weight gain during pregnancy also reflect a Eurocentric bias. As noted by Kirkham et al. (2007, p. 31), postcolonial feminists are not critical of current science

> rather we raise questions about *how* science is practiced by those who conduct and fund research to perpetuate racialized, classed, and gendered approaches to study design.

The authors further caution against the separation of science "from the humanities and social sciences in our knowledge generation and application" (Kirkham et al., 2007, p. 31). Kochan-Vintinner et al. (2004) and Wolfe and Mottola (2002) would thus benefit from input from scholars in the humanities and social sciences to help to make these resources socially and culturally safe for First Nations women.

In addition to examining what *is* included in pregnancy exercise guidelines, it is crucial to examine what *is not* printed or represented in them. Kochan-Vintinner et al. (2004) is a 34-page document with 37 photos of the same white woman throughout the publication. The cover of this resource has a silhouette of a thin, healthy white woman with a pregnant belly and three additional photos of the same white woman stretching. The absence of all things nonwhite and non-thin in this publication ignores the diversity of women. If women cannot recognize themselves in resources, they may be less likely to adopt the recommended practices.

Reliance on Eurocentric Epistemologies and Biomedical Discourses

Discussions of pregnancy are rooted in medical models constructed from Eurocentric, biomedical discourses (Smith-Morris, 2005). Biomedical discourses discount the importance of social and cultural factors that affect women's experiences of pregnancy. Dominant biomedical understandings of both pregnancy and obesity draw heavily on medicalized discourses; however, they are also influenced by external social and political forces. The written guidelines are a prescription for health that ignore the broader social and economic conditions that affect some First Nations women's physical activity during pregnancy. First Nations women have a deeply rooted understanding of pregnancy as a natural process, in sharp contrast to Eurocentric medicalized and technology-focused practices (Lawford, 2011). An example of this is the strict focus of Kochan-Vintinner et al. (2004) on Eurocentric definitions of health that do not consider First Nations' notions of health. Health care professionals rely on various tools and technologies throughout pregnancy. These tools and

technologies are not neutral; in fact, the Body Mass Index, the tool most commonly used to determine overweight and obesity, itself is a Eurocentric determinant of obesity and neglects ethnic variances in body types (Humphreys, 2010). Additionally, the use of ultrasound, and the measuring (weighing mother and fetus), defining (terminology such as high/low risk pregnancy), categorizing (percentiles of baby growth) of the mother and baby, separate the woman from the process of pregnancy.

The exclusion of the woman from the medical interpretations of pregnancy leads to the marginalization of women and takes away the sense of agency some women feel during pregnancy (Kukla and Wayne, 2011). Childbirth itself has become a procedure controlled by medical professionals. The National Aboriginal Health Organization (2006, p. 48) explains that "culture and traditions evoke a more spiritual experience than the Western medical model of maternity care." This contrasts with Eurocentric, patriarchal practices that are engrained in health institutions and guidelines; unfortunately, these practices are so dominant that we often fail to recognize them. The production of "Western" knowledge has positional superiority; as a result, the West is portrayed as superior to the "Other" (Shahjahan, 2005). This positional superiority may frame information in a way that is either unacceptable or incomprehensible to First Nations women, who often subscribe to non-Eurocentric epistemologies.

Use of Dominant Neoliberal Notions of Personal Responsibility for Health

Positional superiority is evident in the absence of First Nations' ways of knowing in Kochan-Vintinner et al. (2004). Physical inactivity is often understood through neoliberal, Eurocentric discourses of personal responsibility for health (Herrick, 2009). Personal responsibility for health can be interpreted in numerous ways; typically it assigns blame to the individual for poor health rather than considering larger societal factors that contribute and influence poor health (Minkler, 1999). The Institute of Medicine (IOM, 2009) published updated weight gain in pregnancy guidelines that have been adopted in Canada. The IOM guidelines recommend specific weight gain per trimester based on weight status (underweight, normal weight, overweight, or obese), which necessitates further personal responsibility of weight control in pregnancy. Postcolonial perspectives on physical activity are essential to understand and challenge concepts of health expressed through this discourse of personal responsibility, instead of stigmatizing the individual and ignoring the ways in which individuals are affected by a variety of external determinants of health.

Such neoliberal approaches to the recommendations and current weight gain in pregnancy interventions frame exercise as a responsible choice, laying personal blame on First Nations women who fail to adopt Euro-Canadian interventions. Blaming women, rather than addressing the social determinants of First Nations' health, reinforces the dominant culture's expectations of compliance to a physical activity regime. This is further demonstrated in the following statement from Wolfe and Mottola (2002, p. 1):

> In addition to prudent medical care, participation in appropriate types, intensities and amounts of exercise is recommended to increase the likelihood of a beneficial pregnancy outcome.

The focus on personal responsibility, by indirectly blaming the individual for poor health, fails to account for the ways in which colonization has contributed to First Nations women's poor health (Alfred, 2009; McCaslin and Boyer, 2009). Lupton (1999) argues that pregnant women are burdened not only with the responsibility of maintaining their own health, but also the health of the fetus.

Physical activity promotion typically implies that women always have the choice to exercise. The introductory chapter in Kochan-Vintinner et al. (2004, p. 1), states:

> Many women decide that pregnancy is a perfect time to make positive lifestyle changes which include regular physical activity, healthy eating, managing stress, and avoiding drugs, tobacco and alcohol. The decision to improve your lifestyle during pregnancy may be the initial step toward a permanent healthier way of life for you and for your baby.

This statement assumes that women are in a position to choose a healthier lifestyle without accounting for the plethora of factors that can prevent women from having any choice at all. First Nations women often experience challenges of poverty, food insecurity, depression, and overall lower health status at greater rates than non-First Nations peoples (Health Council of Canada, 2005). Such challenges can affect a woman's ability to exercise and avoid excessive weight gain during pregnancy.

Wolfe and Mottola (2002, p. 1) state that should

> exercise contraindications exist, the health evaluation form should be completed, signed by the health care provider, and given by the patient to her prenatal fitness professional.

It is problematic to assume that women have prenatal fitness professionals to support them through a pregnancy. Many First Nations women have minimal professional support throughout pregnancy, particularly those that live on rural and remote reserves (Lawford, 2011). Indeed, social and cultural considerations of First Nations women are completely ignored in this publication. For example, the inclusion of family and community members in prenatal activities is important to many First Nations women, who may view individualized activity as selfish. Additionally, pregnancy within First Nations communities is often viewed as a time to honour a woman's transition into motherhood with specific ceremonies to ensure the collective community responsibility for the wellbeing of the new spirit (Anderson, 2011). The inclusion of family and community members has the added benefit of producing a more culturally safe environment, which may encourage physical activity; however, this notion is not considered in these publications. First Nations women's abilities to engage in physical activity and avoid excessive weight gain during pregnancy are arguably constrained by macro issues addressed in the Aboriginal determinants of health such as poverty and community infrastructure (Loppie-Reading and Wien, 2009).

Said (2001) raised a number of questions in his work. Who writes? For whom is the writing being done? In what circumstance? These are extremely relevant questions that need to be considered in the physical activity guidelines for pregnant women in Canada. *Active Living During Pregnancy: Physical Activity Guidelines for Mother and Baby* (Kochan-Vintinner et al., 2004) was a joint effort of the CSEP board of directors and the Society of Obstetricians and Gynecologists of Canada. These guidelines have been informed only by medical professionals and academics: 11 medical doctors, 12 PhDs, and one nurse. The recommendations entail a medicalized screening process that culminates in "practical prescriptions" and a "tear-away medical clearance form" that can be completed by the obstetric provider and presented for participation in organized prenatal fitness activities (Davies et al., 2003). Using Said's (1982) questions, one can see that these guidelines are written by highly educated medical and academic professionals for other professionals and pregnant women who hold Eurocentric medicalized beliefs about pregnancy. This is evidenced in the language throughout Kochan-Vintinner et al. (2004) and further by the focus of the questions in Wolfe and Mottola (2002).

Knowledge as an exercise of power is a central theme within postcolonial feminist theory and there is a call to challenge dominant discourses that are created and perpetuated through speaking and writing (McEwan, 2001). Those responsible for the writing of guidelines have an implied knowledge and the ability to exercise power on those who read the guidelines, in this case, First Nations women. This power differential can have implications for the women who are meant to utilize such guidelines during their pregnancy. For example, if a woman is unable to engage in any level of physical activity, she may feel like a failure or it may intensify her perceived need for bodily surveillance. Recommendations from Kochan-Vintinner et al. (2004) and Wolfe and Mottola (2002) can also imply that fitness leads to better mothering, which further marginalizes those who do not or cannot exercise.

Postcolonial feminist theory provides tools to question the assumption that scientists have the right and ability to "intellectually know, interpret, and represent others" (Cannella and Manuelito, 2008, p. 49). Through this lens, one can begin to recognize the dominant narratives that are so wide-

spread, they are almost invisible. In this case, medical professionals construct bodies through a medical discourse and, in turn, teach women what they should know about their bodies in pregnancy. The relationship can be authoritative and often lacks a dialectical approach that recognizes a women's knowledge of her own body. For First Nations women, this marginalization furthers colonial and patriarchal efforts to control their bodies.

Limited Access to the Guidelines

Beyond the cultural and sociopolitical issues, simple accessibility to these guidelines can be difficult. The *PARmed-X for Pregnancy* (Wolfe and Mottola, 2002) is accessible online; however, *Active Living During Pregnancy: Physical Activity Guidelines for Mother and Baby* (Kochan-Vintinner et al., 2004) is only available for purchase online or alternatively, by ordering it over the phone. After paying for the publication and shipping, the total cost to the authors was $18.77. We find this particularly perplexing since the cost automatically excludes women who cannot afford it. Health Canada supported the production of these guidelines, yet many populations that might benefit from an educational resource on physical activity are excluded immediately. The costs of these resources may be particularly prohibitive to First Nations women. The Health Council of Canada (2005) reported that Aboriginal peoples are the poorest minority group in Canada and that First Nations, Metis, and Inuit women suffer greater economic disadvantage than their male counterparts. Therefore, improving accessibility to physical activity resources for more marginalized populations is crucial.

Conclusions

Our analysis has demonstrated the overt and covert ways in which Canadian guidelines for physical activity in pregnancy marginalize First Nations women. *Active Living During Pregnancy: Physical Activity Guidelines for Mother and Baby* (Kochan-Vintinner et al., 2004) demonstrates the subjugation of First Nations women in health promotion. The recommendations and guidelines lack understanding of the context in which many First Nations women live, both practically and relationally. The reality for many First Nations women is communities unsafe for walking (Black et al., 2008), primary responsibility of their households and finances, or primary caregivers with limited opportunities for physical activity (Poudrier and Kennedy, 2008). We propose that pregnancy and exercise guidelines should be more representative of the specific determinants of First Nations health. Useful revisions to these guidelines will require input from First Nations women and First Nations health care providers. We suggest a revised version of the guidelines include a diverse representation of images throughout the document. Certainly, there is a strong need for culturally safe health resources for First Nations women. Furthermore, the distribution of resources for physical activity and pregnancy should be addressed. Free, widespread distribution of this resource may improve the efficacy in the uptake or continuation of physical activity in pregnancy. As the World Health Organization (2005, p. 48) states, "The question should not be why do women not accept the services that we offer? But why do we not offer a service that women will accept." First Nations women deserve resources tailored to both their cultural and situational needs. Physical activity guidelines for pregnancy that are culturally sensitive, competent, safe, and thus more likely to be effective, can be created.

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