
ARTICLE

The Experiences of Pregnant Women Accessing Food in Remote Aboriginal Communities on Haida Gwaii

by Shannon Greenwood, RM, and Jude Kornelsen, PhD

ABSTRACT

Context: Despite strong evidence supporting the importance of good nutrition in pregnancy for optimal perinatal outcomes, little research exists regarding the experiences of women's access to food in pregnancy. This is particularly true of research on remote Aboriginal women, who may be constrained by local availability and costs of local food.

Methods: This research was carried out in a case study design and in a semi-structured qualitative interview format. Twelve women in the postpartum period on Haida Gwaii, British Columbia, were interviewed. Ethics approval was granted. Results were extracted, using a thematic analysis based on nine research questions.

Results: Three main themes emerged through the interviews with the participants: (1) access to traditional foods, (2) enablers to access, and (3) financial limitations.

Conclusion: Aboriginal women in remote communities experience challenges accessing food during pregnancy. However, the integration of traditional foods into their diet was viewed as a strong contributor to improving nutrition in pregnancy. For participants in this study, accessing traditional foods embodied cultural values, provided opportunities for autonomy, and directly contributed to the health and well-being of pregnant mothers.

KEYWORDS

Rural maternity care, nutrition in pregnancy, midwifery, qualitative research

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ARTICLE

Expériences des femmes enceintes pour ce qui est de l'accès aux aliments au sein de communautés autochtones éloignées de l'archipel Haida Gwaii

par Shannon Greenwood, RM, and Jude Kornelsen, PhD

RÉSUMÉ :

Contexte : Malgré la présence de données robustes soutenant l'importance d'une bonne alimentation pendant la grossesse pour l'obtention de résultats périnataux optimaux, peu de recherches ont été menées au sujet des expériences des femmes pour ce qui est de l'accès aux aliments pendant la grossesse. Cette absence de recherches s'avère particulièrement criante en ce qui concerne les femmes autochtones habitant des régions éloignées, lesquelles pourraient faire face à des contraintes attribuables à la disponibilité et aux coûts locaux des aliments.

Méthodes : Cette recherche a été menée selon un devis d'étude de cas et un format d'entrevue qualitative semi-structurée. Douze femmes se trouvant en période postpartum au sein de l'archipel Haida Gwaii, en Colombie-Britannique, ont été interviewées. Une approbation a été accordée en matière d'éthique. Les résultats ont été extraits au moyen d'une analyse thématique fondée sur neuf questions de recherche.

Résultats : Trois thèmes principaux se sont dégagés au cours des entrevues avec les participantes : (1) Accès aux aliments traditionnels; (2) catalyseurs de l'accès; et (3) limites financières.

Conclusion : Les femmes autochtones habitant des régions éloignées ont des obstacles à surmonter pour obtenir accès à des aliments au cours de la grossesse. Toutefois, l'intégration d'aliments traditionnels à leur régime alimentaire a été considérée comme étant un important facteur contributif pour ce qui est de l'amélioration de la nutrition pendant la grossesse. Pour les participantes à cette étude, la capacité d'obtenir accès à des aliments traditionnels reflétait leurs valeurs culturelles, leur offrait des occasions de faire preuve d'autonomie et contribuait directement à la santé et au bien-être des femmes enceintes.

MOTS CLÉS :

Soins de maternité en milieu rural, nutrition pendant la grossesse, pratique sage-femme, recherche qualitative

Cet article a été évalué par des pairs.

CONTEXT

Maternal and child health status are heavily influenced by nutrition. A wealth of literature shows that poor maternal nutritional status, both before and during pregnancy, is related to adverse birth outcomes.¹⁻³ Undernourished mothers are at higher risk of having low-birth-weight babies and preterm births. Their children are at an increased risk for adult diabetes and cardiovascular disease, among other conditions.^{3,4} However, the relationship between maternal nutrition and birth outcomes is not simple; many socioeconomic and demographic factors are at play, and these vary between populations. Prenatal care providers using interventions to improve maternal nutritional status (and, therefore, birth outcomes) must first understand the factors that influence this relationship within each specific target population.

Geography is one of these influencing factors. Rural and remote communities have lower access to health services than their urban and suburban counterparts, and this can lead to poorer health outcomes.⁵ Remote Aboriginal communities experience further health disparities due to social inequalities resulting from colonization and residential schooling, the intergenerational effects of which have had lasting implications for these communities.⁶ In addition, Aboriginal people, particularly those living off-reserve, are more vulnerable to food insecurity than non-Aboriginal people.⁷ With their heightened nutritional needs during pregnancy, First Nations women living in remote communities are among the most insecure in regard to food, and their difficulties in maintaining their nutritional status during pregnancy lead to negative perinatal outcomes.^{8,9} Several researchers have attempted to understand Aboriginal women's difficulties in obtaining proper nutrition during pregnancy. Mottola et al. found that pregnant and postpartum women cited feelings of isolation, a lack of motivation, and an unwillingness of family members to partake in healthy lifestyles as preventive factors.¹⁰ Darnton-Hill and Cogill cite the global rise of food prices as adversely affecting maternal and childhood nutrition.¹¹ Other studies discuss lack of education about healthy lifestyles as being an impediment to nutrition and also discuss the unavailability of local foods for some isolated Aboriginal populations.^{10,12} Additionally, it has been suggested that the "westernization" of Aboriginal diets (i.e., the shift to diets high in saturated fats, processed sugars, and salt) has had a detrimental effect on prenatal nutritional status.¹³ In Canada, Aboriginal women have a moderately higher caloric intake than non-Aboriginal women, consume

fewer servings of vegetables, have a significantly higher consumption of soft drinks, and consume less vitamins and minerals.¹³

Alongside this, however, is research that demonstrates that the inclusion of traditional foods in Aboriginal diets can have positive implications for food security.¹⁴ "Traditional foods" are wild-harvested foods such as wild meat, wild berries, and other wild plants.¹⁴ These foods provide optimal nutrition, especially for pregnant women, and have the added benefit of positively affecting mental health because they comply with social and cultural values. Traditional foods allow populations to be self-sustaining, and the expression of cultural identity that comes from their physical preparation and the gathering of people for meals has been found to have positive health implications.¹⁵ Therefore, an understanding of the importance, social context, and benefits of traditional foods in pregnancy for Aboriginal women is crucial for midwives and other prenatal maternity care providers to effectively address and achieve improved maternal nutritional status in pregnancy. The current study aims to better understand the barriers to accessing nutritious foods for pregnant women in remote First Nations communities in order to inform future interventions aimed at optimizing the health and well-being of rural mothers and infants in midwifery care through perinatal support and counselling. We set out to identify the following themes: (1) current knowledge of nutrition in pregnancy, (2) the influence of current local food procurement and distribution systems on food choices and eating habits during pregnancy, (3) the role of traditional foods in pregnancy, (4) factors that inhibit and promote access to nutritional foods, and (5) the role of midwives in supporting perinatal nutritional needs.

The focus of this case study is Haida Gwaii, a remote archipelago situated off the north coast of British Columbia (Figure 1). The islands have a population of 5,000 people, over 40% of whom are of the Haida Nation.¹⁶ The islands are accessible by airplane or ferry over the Hecate Strait; the average crossing time by ferry is eight hours, although weather can be a limiting factor, especially in the winter.¹⁷ Maternity services on Haida Gwaii include midwifery care but do not include cesarean sections; thus, many women, particularly those with high-risk pregnancies, travel off-island to give birth.^{18,19}

METHODS

This interview-based qualitative study used a case study approach to understand the experiences of rural



Figure 1. *Geographical location of Haida Gwaii.*

Aboriginal women accessing adequate nutrition during pregnancy. We chose case study methodology in order to understand the nuances of one particular location, expecting that “meta-themes” (themes not dependent on a specific geography) would also be revealed. However, the individual attributes of all First Nations communities and the concomitant lack of ability to generalize give rise to the need to systematically document individual circumstances. Likewise, the use of semi-structured interviews with room for additional comments by participants is a respectful approach that parallels the oral history that marks many First Nations.²⁰ Haida Gwaii was chosen in particular because of the relationship between one of the authors (S. G., a long-time resident and prenatal care provider) and the community. The relationships between the community and the investigator that developed over time led to recognition of the need to consider the role of nutrition and traditional foods in the overall health of mothers and children in the community. Ethics approval for the research was granted by the University of British Columbia Behavioural Research Ethics Board and the local band council.

Participants had to be residents of Haida Gwaii, had to have given birth in the previous year, and had to be of Haida ethnicity. Twelve participants were recruited through posters at the health centres and through perinatal support programs in the two largest island communities, Old Massett and Skidegate. Interviews were conducted in both the villages of Old Massett and Skidegate at their respective health centres. Each interview lasted between 30 and 60 minutes and consisted of nine questions focused on the participant’s experiences in accessing food during pregnancy, with room for participants to add additional information as necessary.

To lessen the anxiety of participants, the interviews were not audio recorded. However, detailed notes were taken by the interviewer and were later transcribed. Each participant was given a fifteen-dollar co-op food voucher for her time. A thematic analysis of notes was completed through the following steps: (1) notes were read and reread until the researchers had a clear understanding of the content, (2) all identifying information was removed, (3) transcripts were coded into emerging themes, and (4) themes were integrated into an explanatory narrative.

RESULTS

Three main themes emerged from the analysis of the interviews: (1) issues of access to traditional foods, (2) factors (including community resources, community feasts, and family) that promote adequate nutrition, and (3) financial constraints to adequate nutrition.

Access to Traditional Foods

The primary theme expressed through all of the interviews was the importance of access to traditional foods. Traditional foods from both land and sea were gathered by the participants of this study themselves and traded among family and community or were provided at local gatherings and by community programs. Seven women indicated that access to traditional foods had a positive effect on them during pregnancy and that these foods are a significant component of their diets. For example, one participant commented, “My husband and my brothers fish and hunt together, fill our freezer.” Five women acknowledged traditional foods to be a smaller part of their diets; of these five, four expressed a desire to improve their access

to and knowledge about local food sources in subsequent pregnancies. Respondents also spoke of the sociocultural importance of traditional foods and the positive impacts that the enhanced physical activity (due to gathering food) and nutrition had on their pregnancies. Two participants, who reported that they did not experience any financial limitations regarding their access to food in pregnancy, also stated that traditional foods made up the bulk of their diets, implying that financial concerns were not motivators for consuming traditional foods. This underscores the more general recognition of the value of traditional foods in this remote community: "Eating traditional foods doesn't mean you are poor ... You just have to go out and get it. It's all there for us. In the city, people pay so much for seafood."

Factors That Promote Adequate Nutrition

Enablers of good nutrition also emerged as a focal point from the women's reports and included people and services that helped pregnant women access food, such as family members, community services, and community feasts. Ten of the twelve women noted the importance of community feasts during pregnancy. In Old Massett, all nine women who were interviewed reported accessing the local Pregnancy Outreach Program, designed to support local families throughout the perinatal period through community-based collaborative care. Eleven of the twelve participants mentioned the important role of family in securing traditional foods, whether through field trips gathering berries or digging clams or through donations of fish and Sunday dinners. As one participant said, "We all go out to the spit to pick berries as a family ... We have always done it this way."

Financial Constraints to Adequate Nutrition

The women in this study expressed a range of financial challenges juxtaposed with their desire for nutritious foods. As one participant commented, "[I] always craved fresh food in pregnancy ... It costs so much money and it goes bad so fast!" Six of the twelve participants noted that financial challenges had an impact on their ability to access nutritious food in pregnancy, whereas two did not experience any financial constraints. Those who did experience such constraints felt torn between their own nutritional needs and those of their family members.

Cost of nutritious food is high ... money was a big issue. Getting to eat enough in general with other children ... feeding the other kids first ...

[it] can be expensive to eat healthy.

Overall, financial challenges led to the de-prioritization of fresh foods (which were more expensive) along with a constrained ability to purchase nutritious foods in winter (when fresh food is most expensive). For some participants, this pragmatic reality played into the harvesting and eating of traditional foods.

Accessing fruits and veggies and trying to eat healthy when on a limited budget is hard. I am always trying to find ways to supplement with locally gathered food.

Additionally, some participants found that transportation to places where both traditional and other foods could be obtained was affected by a lack of funds. Ten of the twelve women stated that they would have bought more fresh food if money had not been an issue.

Geographic limitations and seasonal variation were also identified as challenges to access. Eight women reported that they found that the food spoiled quickly in the winter. Six women stated that they found it difficult to access foods they craved in pregnancy during months when transport was difficult and prices were elevated.

DISCUSSION

Traditional Foods and Access to Nutrition during Pregnancy

The views of the participants in this study were congruent with the literature on the value of traditional foods in Aboriginal diets.^{14,15} Participants spoke about the sociocultural significance of gathering, preparing, and consuming food as a group. Facilitating factors to access (such as community donations and family members) were viewed as "the way it should be," as the traditions of previous generations are integrated with current lifestyles. Additionally, participants reported accessing traditional food strategically (something most important to food security in remote communities), which minimized food costs while still allowing mothers, particularly those with large families, to maintain a nutritious diet. However, as participants noted, accessing traditional foods does not imply financial challenges, counter to the contemporary perception that traditional foods are eaten when other groceries are unaffordable. This finding suggests a need for intergeneration mentorship on traditional and historically relevant ways of maintaining maternal nutrition in Aboriginal communities.

Haida Gwaii, the site of this case study, has experienced a dramatic plunge in economic opportunities over the

past 10 years, with the loss of resource-based industries and a rise in the cost of living.^{21,22} This has threatened the financial sustainability of many families, particularly when food is such a substantive expense. When asked to report on their general experience regarding access to food during pregnancy, over half of the women interviewed reported that financial limitations affected their ability to access nutritious foods. Even those who were employed or who felt financially secure during their pregnancy expressed concern over the costs of fresh food, especially during the winter months. Those who did access traditional foods mentioned having unique economic stressors, including problems having a working vehicle, gas to run the vehicle, family access to a boat, and money to build a smokehouse or buy fishing gear, all of which are needed for harvesting traditional foods. Of interest, the two women who reported no financial challenges to accessing food during pregnancy also reported that traditional foods made up the bulk of their diets.

Participants in this study noted other promoters of adequate nutrition in pregnancy besides access to traditional foods; these included the good will of family members, as well as services, programs, and events sponsored by local community groups. Some of these programs, such as the Haida language programs in both Skidegate and Old Massett, which provide access to fish, seafood and berries, were culture based, emphasizing again the lived infusion of food sources into culture. Others, such as the Canadian Nutrition Program, which provided lunches and food vouchers for participants, also recognized the importance of context by bringing women together in the spirit of peer mentorship.

Participants' discussion of the role of family emphasized the embedded nature of nutrition through social acts such as gathering, preparing, cooking, and eating food together as a unit. Participants spoke of the embrace of seasonal rhythms and the passing down of knowledge of food gathering and preparation traditions. These ideas are embodied in community feasts or potlatches, which participants described as regular occurrences throughout the year on Haida Gwaii. Such events act as a traditional form of governance and celebrate on a community level the language, art, and food of the Haida Nation. Attendance at a potlatch ranges from 200 to 500 people, and the food served is largely from local sources and is generally donated and gathered by the host clan. Huge pots of seafood chowder and delicacies such as k'aaw (herring eggs on kelp), k'aad (deer), chiin (salmon), Xagw (halibut),

Gaan (berries), and seaweed are served along with venison stew while guests watch and partake in the traditional drumming and dancing. This integrated experience most strongly ties nutrition to culture and, in turn, culture to nurturance on both a physical and spiritual level.

Implications for Midwifery Practice

Many issues experienced by First Nations women stem from the intergenerational effects of colonialism.³ An awareness of the impact on a pregnant woman's lifestyle, choices, and the challenges of food accessibility can inform midwives' approaches to perinatal complications related to nutrition. However, rural care providers must also be engaged with local culture and tradition to fully understand the multifaceted value of traditional foods and

Participants spoke of the embrace of seasonal rhythms and the passing down of knowledge of food gathering and preparation traditions.

to encourage their continued availability within an overall context of prenatal health. This includes collaborating with existing community programs, as well as learning from leaders and elders about traditionally appropriate choices and the non-nutritional benefits of some foods.

Additionally, in resource-challenged communities, midwives can contribute to good nutrition in the prenatal period by facilitating the positive processes that women have identified. As one participant said, "It would be great to have a place where we could all bring food and cook together."

CONCLUSION

This study documents the nutritional challenges faced by Aboriginal women in remote communities, including financial barriers and access to fresh foods. The participants stated that access to traditional foods during pregnancy had a positive impact on their experience, and the majority of women believe that traditional foods are an essential part of their nutrition in pregnancy. This provides a clear mandate for midwives practicing in rural and remote communities to encourage and facilitate traditional diets,

recognizing both the physiological and spiritual benefits of culturally integrated foods. An understanding of the importance of fostering autonomy around access to food, in addition to providing information and resources about healthy choices, can lead to the best outcomes for pregnant women during the perinatal period.

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