Determinants of Perinatal Food Choices among African-Caribbean Immigrant Women in Canada: A Photovoice Study

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Background

• Numerous reports highlight inequities in perinatal health care access and outcomes for immigrants, especially after increased lengths of stay.

• Immigrant women are reported to underutilize formal health care and other community services, largely because of:
  • language barriers,
  • difficulties understanding health care information,
  • experiences of discrimination, and
  • challenges in navigating the Canadian health care system.

• Facilitating the accessibility and provision of *culturally appropriate* health care for immigrant populations in Canada is critical for their health and well-being.
Significance of study

- Understanding food choices during the perinatal period, is important as this is a sensitive period of interaction with the Canadian health care system and a vulnerable life stage for immigrant women, and their children.

- Negative maternal characteristics and birth outcomes of immigrants include:
  - significantly higher rates of gestational diabetes;
  - dieting with low maternal weight gain;
  - genetic anomalies such as neural tube defects due to lack of folic acid intake; and
  - maternal anaemia.

- These outcomes relate to food choices and practices.

- Research suggests women may desire to adopt Western ways as a marker of acculturation, despite that their original ethno culturally defined traditional diets and patterns of food consumption may be more desirable and healthy.

- Little research into ethnocultural food choices and practices during maternity.
Study purpose

• To explore and understand ethnocultural food choices and practices of immigrant women during the perinatal period.

• To provide targeted knowledge transfer, which includes the creation and evaluation of tailored nutrition education materials to improve cultural competence and cultural safety of health care providers for ultimate improvements in the health of immigrant mothers and their infants.
Research questions

• **RQ 1:** How do health beliefs and practices of immigrant women affect their food choices and practices during the perinatal period and what commonalities and differences exist between the selected ethnocultural groups?

• **RQ 2:** How can current perinatal nutrition recommendations be tailored and delivered as pictorial educational resources to enhance culturally competent perinatal care?
Theoretical Framework

• The study was guided by postcolonial approach to research, underline the Intersectionality of ethnicity, gender, and class, and how contemporary migrations reflect a historical legacy of power and colonialism.

• Postcolonial feminism - the research process was viewed through a political lens, a lens that attends to the micro politics and macro dynamics of power.

• The diversities of experiences are paramount, and therefore a critical lens was applied to the categories used in our analyses and representations.
Design and Methodology

• A focused-ethnography (FE) design and Photo-voice.

• FE is characterized by:
  – A focus on a discrete community or organization or social phenomena, *e.g.*, *perinatal experiences of immigrant women*;
  – Being problem focused and context specific, *e.g.*, *perinatal food choices and perinatal care*;
  – A limited number of participants;
  – Participants that usually hold specific knowledge, *e.g.*, *ethno-culturally defined perinatal food choices*;
  – Episodic or no participant observation; and,
  – Their purpose often being for development in health services, *e.g.*, *enhancements to the provision of culturally safe maternity care*. 
Photovoice

• Photovoice Technique is the process by which people identify, represent, and enhance their community through a specific photographic technique.
  
  – It is useful for individuals who speak English as an additional language and it removes incorrect recall of food eaten as occurs when using food diaries
  
  – It is a medium to capture the visual data of experience just as audio taping records the verbal descriptions of experience
  
  – It often leads to uncovering misconceptions and arriving at more reality-based understandings of a given phenomena

• However, the use of photography as the sole medium in qualitative research is insufficient, because photographs can be interpreted in many ways. Thus, a combination of photographs and accompanying narratives adds richness to the data in qualitative studies
Sampling & Recruitment

- **Individual interviews** – used to understand multiple meanings and issues surrounding perinatal food choices.
- **Purposive sampling** and **snowballing** technique to recruit a total of 40 African immigrant women.
- **Study setting**: Ottawa, ON, Canada
- **Inclusion and exclusion criteria**:
  - African immigrant women who have relocated to Canada within the last 10 years will be chosen.
  - To achieve maximum variation in terms of length of adjustment and acculturation by using various terms of residency in Canada.
  - 0–3, 3–5, and 5–10 years.
  - Social class trajectory post-migration.
  - Both primiparous and multiparous women will be recruited.
  - Language ability will not be an inclusion criterion, as interpreters will be used for consent procedures and interviews.

- Thematic analysis guided by Braun & Clarke (2006) six steps process
  - Atlas ti facilitated data analysis; data storage and management.
The Research Process

**PHASE 1**
Initial semi-structured interviews
Photo-voice
RQ 1 & 2

**PHASE 2**
Photo-assisted Interviews
Data analysis
RQ 1 & 2

**PHASE 3**
Production of a culturally appropriate tool for 6 groups
RQ 2

**PHASE 4**
Evaluation of a pilot implementation of the tool
RQ 1 & 2

**KNOWLEDGE TRANSFER & EXCHANGE**
Integrated and end-of-grant collaboration and partnership to achieve community, social, and health benefits for immigrant and newcomer women in the perinatal period.
Findings

• **Personal determinants of food choices and practices:**
  – General health beliefs and practices
  – Knowledge and beliefs about foods
  – Cravings and aversions

• **Other determinants of food choices and health practices:**
  – Role of Others in Supporting and Enforcing Health Beliefs and Practices
  – Socio-economic Factors
  – Temperature
1. General health beliefs and practices

• Study participants explained health as being dependent on a range of factors, including
  – diet,
  – physical activity,
  – rest
  – social environment.

• Women were aware that the food choices they made would affect not only their bodies, but the development and well-being of their child.

• It is also worth noting that body size and body image was also included in some women’s health narratives.
General health beliefs and practices...

The following quotes illustrate women’s general health beliefs:

A healthy person interacts more with people, they laugh more, they spend time with others. When someone is healthy they are better off in terms of happiness, they do more exercise, and they’re physically and mentally in a better position. (O06, Interview 1, Somali)

Being in the right state of mind, exercising, eating right. It’s quite a lot of things. Healthy doesn’t just mean eating right, you know? You have to, you know, exercise, being happy, you know? (O14, Interview 2, Nigeria)
General health beliefs and practices...

- Many women discussed a cultural norm of mixing many foods together when having a meal.
- This way of eating was viewed by some as being healthier because it “boosts” the nutrition of a meal.
- This traditional eating practice may become problematic for women following migration once they become exposed to Canadian eating practices.
  - For instance, one woman indicated confusion regarding whether or not the practice of mixing foods was in fact healthier and thought that it may actually result in less nutrition.
2. Knowledge and beliefs about foods

• **Healthy foods** during consumed pregnancy, include those promote appetite, ease constipation and nausea, are easy to consume and digest, and give the body strength.

• Unhealthy foods include those high in sugar, salt or fat and should be avoided
  – Also foods that are hard to digest and would heartburn should be avoided.
Knowledge and beliefs about foods

• After birth, women focused on light, nutritious foods as well as foods that would ‘clean’ the system, ease constipation, and produce breast milk.

• They avoided heavy foods and those that would produce negative effects on the baby, such as gassy vegetables.

• Women’s cravings and aversions also had an impact on their food choices, as they would consume foods deemed unhealthy, or be unable to consume those considered healthy.
Knowledge and beliefs about foods ...

1. **Food Eaten and Avoided During Pregnancy:**

   - Foods eaten during pregnancy included:
     - Milk and milk products
     - Vegetables: spinach, beans and broccoli
     - Fruit: apples, plantains and green bananas
     - Porridge or oatmeal
     - Rice and pasta
     - Acidic foods: Lemons and vinegar
     - Spicy food: For some women it helped with nausea, for others they preferred the taste of spiced food
     - Meat and fish
Knowledge and beliefs about foods

• Foods avoided during pregnancy included:
  • Ugali, a maize flour dish, was also avoided due to its perceived difficulty in digestion.
  • Oily, fried foods
  • Salty foods
  • Fatty foods
  • Sugary, sweet foods
  • Spicy food: Some women avoided spicy food as they thought it caused heartburn and could result in the baby being born without hair
Knowledge and beliefs about foods...

2. **Foods Eaten And Avoided Postnatally:**

- Following birth, women focused on consuming healthy foods that contain important nutrients, are easy to digest, and ease constipation.
- Women also emphasized the importance of foods and beverages that would ‘clean’ their blood and system as well as foods that help in breast milk production.
- Hot water was consumed by women in order to clean the system, as well as help the body re-adjust.
- Similarly, soup was an important food for many participants as it cleans the blood and can help to avoid constipation.
- Soups often included meat such as chicken or beef as well as vegetables such as onions, peppers, okra, tomato, and carrots.
Knowledge and beliefs about foods...

- **Foods used to increase milk production include:**
  - Cassava leaves
  - Porridge (‘sasoma’ for Rwandese): Made from oat, millet, corn, or sorghum.
  - Milk: Was added to further enhance breast milk production
  - Peanuts
  - Ogi (a drink produced from corn)
Knowledge and beliefs about foods...

- After birth women avoided certain foods that they believed would produce gas, cause constipation, and would harm the baby. Cabbage was mentioned as a food that would cause gas for the baby:

- Heavy foods, such as carbohydrates, were avoided by some women as they can cause constipation and other negative effects on the body.

- Oily, fried foods were also avoided by some as they were perceived to be especially unhealthy.

- Okra was avoided as it was thought to cause diarrhea for the baby.

- Finally, nuts were avoided by some women as they may upset the stomach of the baby and mother.

- This contrasts with the beliefs of other Rwandese women who explained that nuts were beneficial to consume for lactation.
3. Cravings and aversions:

- The majority of women in this study experienced food cravings and aversions that influenced their food choices and ability to consume what they wanted and adhere to their health beliefs.

- Women’s food aversions appeared to be less problematic than cravings in terms of health, as most women were able to continue consuming foods that they considered healthy.

Actually in my first trimester the only thing that I was thinking of eating were - mangoes, raw mangoes with lemon, and I would mix it with cucumber. (O05, Interview 2, Rwandese)
Cravings and aversions ...

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<thead>
<tr>
<th>Food Cravings included:</th>
<th>Food Aversions Included:</th>
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<tbody>
<tr>
<td>• Vegetables and fruits</td>
<td>• Maize</td>
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<tr>
<td>• Fufu</td>
<td>• Green Peas</td>
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<tr>
<td>• Ugali</td>
<td>• Mandazi</td>
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<tr>
<td>• Spicy food</td>
<td>• Meat such as fish and chicken</td>
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<td>• Sour food</td>
<td>• Fragrant spices such as garlic</td>
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<td>• Acidic food</td>
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<td>• Fast food</td>
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<td>• Rice</td>
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<td>• Meat</td>
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<td>• Alcohol.</td>
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4. Role of Others in Supporting and Enforcing Health Beliefs and Practices

1. **Health care workers:**

   • Many women mentioned the advice provided to them by Canadian health care workers in discussing their food choices, and this advice had a large impact on their health beliefs.

   • However, not all women had the same experience and some were disappointed in the information that they received.

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I try to find out more about what is good for my health according to doctor. I talked to the doctor; I do what he tells me to. (O02, Interview 1, Somali)
Role of Others in Supporting and Enforcing Health Beliefs and Practices...

2. Family:

- Women received advice from their partners, parents, in-laws, siblings, and aunts regarding the types of foods that they should eat and avoid during the perinatal period.
- In some cases, their food choices were enforced and regulated by family members.
- However, generational differences were also noted as some women rejected the advice given to them.
- The food choices and preferences of others can have an impact on what women themselves consume, especially when they are the primary cook.
  - For instance, one Rwandese woman explained that she does not always cook what she wants to because she must cater to her children.
Role of Others in Supporting and Enforcing Health Beliefs and Practices...

3. Friends and Community:

- Support from friends was also an important part of food choices and practices.

- Although women received a significant amount of advice and information from their family members, friends and community members, they were cautious of contradictions in advice from their informal networks and information provided by their health care workers.

- When faced with contradictory information, many women indicated that they would follow the advice given to them by their doctor over their cultural traditions, personal beliefs, and information provided to them by friends or family members.
Role of Others in Supporting and Enforcing Health Beliefs and Practices ...

4. **Media:**

• The final source of information that was found to influence women’s health beliefs and practices was the media.

• Media forms such as the internet, television programs, books, and were often utilized by women in order to learn about or supplement their knowledge on perinatal food choices.

... I read stuff online, and I discovered maybe the baby is not doing okay because of the foods I’m eating. (O05, Interview 2, Rwandese)
5. Socio-Economic Factors...

• **Cost and Income**

• **Social support**
  - Traditionally, women receive support for a forty day period following birth, although some mentioned that this support may extend up to several months.

• **Time and convenience**

• **Temperature food**
  - During pregnancy, cold foods are avoided as it is believed that they will result in a large baby and difficult labour while hot and/or warm foods may be encouraged postnatal due to the belief that this will aid in lactation and cleansing of the body.

• **Religion**
  - Although none of the women indicated specific food restrictions during pregnancy due to religious beliefs, however, Muslim women consumed halal products and avoided pork and pork products.
Women’s voices on “Cost and Income”

From my country, there is a store we can find everything from Rwanda, Uganda, Africa, Asia. But the problem is they are expensive. (O09, Interview 2, Rwandese)

...when I don’t have beef, I cook chicken, because beef is more expensive. (O09, Interview 2, Rwandese)
Outputs-In progress

- Ethno-culturally appropriate tool to assist communicating healthy food choices during maternity
- Fact sheets with study findings in clear language
- Regional workshops for various audiences
- Conference presentations
- Strategically delivered messages to policy makers, administrators in health care and education, and professional bodies.
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