Have we forgotten the children?
A study of health & nutrition issues in immigrant & refugee newcomer children

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Outline

• Introduction
  – Background
  – Purpose
  – Methodology

• Results
  – Food Security
  – Education
  – Income

• Discussion

• Future Work
Immigration Status

• Immigrant
  – Comes to a new country to take up permanent residence

• Refugee
  – Persecuted for reasons of race, religion, nationality, member of a social group or political opinion”, unable or unwilling to return to country of birth due to fear for safety

Merriam-Webster, 2009; UNHCR, 1951
Importance-Immigrants & Refugees

• The number of immigrants & refugees migrating to Canada continues to rise
  – In 2008, Canada welcomed 21,860 refugees & 22,583 immigrants
  – In 2008, SK welcomed: 4,836 immigrants/refugees
    • 63% provincial nominees (SINP)
    • 28% are in the 0-14 age group

Health Canada, 2010
Importance - Immigrants & Refugees

• Health declines most in first 5yrs post-migration related to chronic diseases in adults, primarily due to decreased physical activity & poor nutrition.

• Recent immigrants & refugees are at greater risk of poor health due to:
  – Language barrier
  – Lack of knowledge, unfamiliar foods & lifestyle changes
  – Deskilling

• Refugees also experience
  – Pre-migration trauma
  – Lower/No income & education

Gray et al., 2005; Kaushal, 2009
Importance-Children

- Children are a vulnerable population & most studies regarding health issues in immigrants & refugees focus on adults.

- Chronic diseases including obesity, DM & HTN are beginning to develop in childhood & adolescence

- Diet & exercise habits are formed in early childhood & can be maintained through adolescence & adulthood

- To our knowledge, no recent Canadian study has a comprehensive approach to the nutrition & health status of immigrant & refugee children

  Shields, 2005; Teegarden et al., 1999
Food Security

“Food security [is] a situation that exists when all people, at all times, have physical, social & economic access to sufficient, safe & nutritious food that meets their dietary needs & food preferences for an active & healthy life.”

FAO, 2003
Food Insecurity in Canadians

Food Insecurity in Saskatchewan in 2008 was 6.3%.

Health Canada, 2008
Food Insecurity in Immigrant Children (includes refugee children)

- Recent immigrants (<5 yrs in Canada): 12.4%
- Non-recent immigrants: 5.6 %
- Canadian-born: 4.9%

CCHS, 2004
• According to CCHS 2008, food insecurity is greater in households where:

  – The main source of income is social assistance or worker’s compensation

  – Neither parent has a post-secondary graduation

  – There are young children (<6yrs)

  – There are larger numbers of children (≥3)

CCHS, 2008
Purpose

To characterize health & nutrition issues that affect immigrant & refugee newcomer children.
Participants

Individuals
• 72 children age 7-11yrs
• In Canada no more than 5yrs
• 40.3% immigrants
• 59.7% refugees
• 66.7% male
• 33.3% female

Households
• 61 households
• 39.3% immigrants
• 60.7% refugees
Measures

• Socio-Demographic Status
• Dietary Assessment
• Physical Activity Status
• Food Security Status

• Biomarkers
  – Vitamin D
  – Blood Lipid Profile
  – Blood Glucose

• Physical Measures
  – Height
  – Weight
  – Body Mass Index
  – Waist Circumference
  – Blood Pressure
  – Bone (BMC) & Body Composition (DXA)
Specific Objective

• Objective
  – To evaluate income-related household food insecurity of children’s families & its impact on children’s health & nutritional status compared to Canadian children.

• Hypothesis
  – The nutritional status of newcomer children with household food insecurity will be poor compared to Canadian children.
The prevalence of food insecurity is significantly higher in refugee families compared to immigrant families.

There is a difference between our data & that of CCHS15.
**Results-Child Food Security**

Prevalence of food security in children according to immigration status

Immigrant children were more likely to be food insecure if their household was in the ‘lowest’ income category, mainly from social assistance & had more children.
Results-Education

• There is a significant difference in parent education status between immigrants & refugees

• 87.5% of immigrants & 29.7% of refugees had at least one parent who graduated from secondary school.

• Parent education is not significantly associated with food security status

Statistics Canada, 2008
## Income Categories

<table>
<thead>
<tr>
<th># ppl in hh</th>
<th>Lowest Income</th>
<th>Lower-Middle Income</th>
<th>Upper-Middle Income</th>
<th>Highest Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>&lt;$15,000</td>
<td>$15,000-$29,999</td>
<td>$30,000-$59,999</td>
<td>≥$60,000</td>
</tr>
<tr>
<td>3-4</td>
<td>&lt;$20,000</td>
<td>$20,000-$39,999</td>
<td>$40,000-$79,999</td>
<td>≥$80,000</td>
</tr>
<tr>
<td>5+</td>
<td>&lt;$30,000</td>
<td>$30,000-$59,999</td>
<td>$60,000-$79,999</td>
<td>≥$80,000</td>
</tr>
</tbody>
</table>

Statistics Canada, 2008
Results-Income

Income categories according to immigration status

Food security status was greater in immigrant households with a higher level of income
Results-Income

Main source of income according to immigration status

<table>
<thead>
<tr>
<th></th>
<th>Wages &amp; Salaries</th>
<th>Social Assistance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Both</td>
<td>66%</td>
<td>34%</td>
</tr>
<tr>
<td>Immigrants</td>
<td>88%</td>
<td>13%</td>
</tr>
<tr>
<td>Refugees</td>
<td>51%</td>
<td>49%</td>
</tr>
</tbody>
</table>

There is a significant difference between main source of income for immigrants compared to refugees.
Conclusions

• The prevalence of food insecurity is higher among refugee newcomer families compared to immigrants.

• Although education plays a significant role in the food security status of Canadians as a whole, for immigrants & refugees, it does not
Conclusions

• Food secure immigrant households have higher income, mainly from wages/salaries, & few children

• The prevalence of food insecurity among refugees does not vary with income, education, number or age of children in the household; they are always at risk.
Recommendations

Policy
• Strategies for recognition of international credentials
• Education for refugee families
• Nutrition education programs
• Reassess current programs for those at risk

Research
• Distinguish between refugees & immigrants
  – Quantitative & qualitative research
Future Work

• Continue data analysis

• Present at Conferences
  – “Promoting Health Equity” Feb 11-12, Toronto, ON
  – Congress on Pediatric Global Health Feb 17-20, Paris, FR
  – Canadian Nutrition Society June 2-4, Guelph, ON

• Expansion of study has already begun
  – 250 children age 3-13yrs in Canada no more than 5yrs

http://www.usask.ca/healthyimmigrantchildren/index.php
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Questions?