19TH ANNUAL CHILD HEALTH RESEARCH DAYS

Outcomes in Child Health

Underlying disease mechanisms interacting with structural and social determinants

The Children's Hospital Research Institute of Manitoba
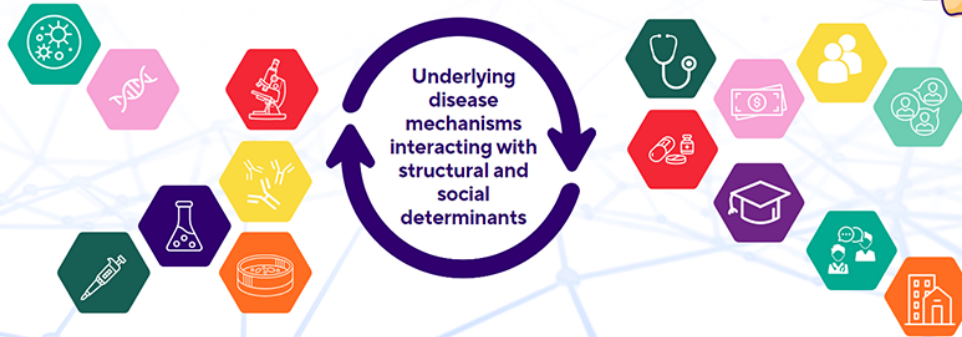
October 25 + 26, 2023 | RBC Convention Centre, Winnipeg, Manitoba

Abstract Submission Form

CHRD 2023: Abstract Submission Form

Submitter Name
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Presenter Name
M Florencia Ricci

Presenter Status
Non-Trainee

Research Category
Clinical

Role in the project
Design
Perform Experiments
Analyze Data
Write Abstract

Title
Exploring a possible association between autism spectrum disorder and Immigration at a national level.

Background
We recently found an overrepresentation of immigrant families among children ≤6 years of age diagnosed with autism spectrum disorder (ASD) in Manitoba. We now worked with epidemiologists in the Public Health Agency of Canada to further examine a possible association between ASD and immigration at a national level.

Objective
1.To determine the prevalence of ASD by immigration status among children living in Canada in 2019,
2.To compare the prevalence of ASD by immigration status among those with and without a comorbid chronic condition.

Methods
We utilized data from the 2019 Canadian Health Survey on Children and Youth, a nationally representative cross-sectional survey of children aged 1 to 17 years living in Canada's 10 provinces and three territories in 2019. Comparisons of ASD prevalence by immigrant status, defined as having at least one parent/guardian born outside of Canada, was further stratified by age, sex, geographic region, and presence of a comorbid chronic condition.

Results
Overall prevalence of ASD among children aged 1-17 years did not differ between immigrant and non-

immigrant families (1.88% [95% CI: 1.58, 2.18] vs. 2.05% [1.81, 2.29]). A significantly higher prevalence of ASD was found among 1-4-year-old children of immigrant families, compared to non-immigrant families (1.59% [1.11, 2.06] vs. 0.86% [0.60, 1.12]). When examining those with ASD without a comorbid chronic condition, prevalence of ASD was higher among children of immigrant families, ages 1-4 (1.17% [0.76, 1.58] vs. 0.61% [0.40, 0.83]) and 5-11 years (0.87% [0.58, 1.17] vs. 0.54% [0.37, 0.72]). This age trend was specific to ASD as there was a lower prevalence of other chronic conditions across all ages in children from immigrant families (16.12% [15.26, 16.97] vs. 26.95% [26.12, 27.77]).

Conclusion
This study identified an increased prevalence of ASD among young children of immigrant families. Given Canada's increasing rates of immigration further studies are needed.

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