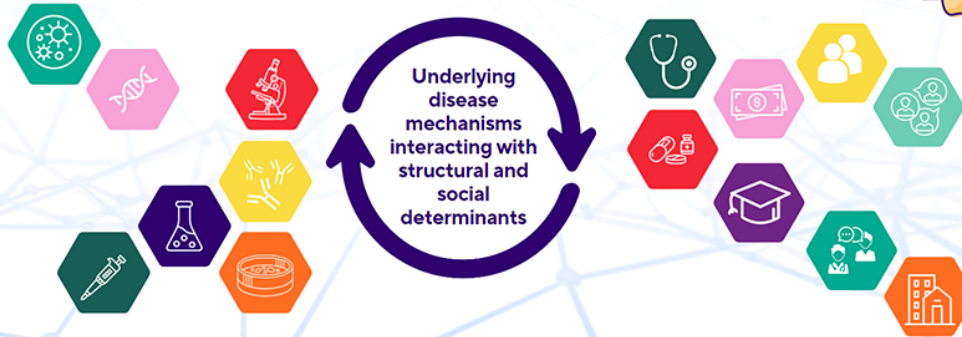




19TH ANNUAL CHILD HEALTH RESEARCH DAYS
Outcomes in Child Health



October 25 + 26, 2023 | RBC Convention Centre, Winnipeg, Manitoba

Abstract Submission Form

CHR D 2023: Abstract Submission Form

Submitter Name

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Presenter Name

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Presenter Status

PhD Student

Research Category

Community Health / Policy

Role in the project

Design
Analyze Data
Write Abstract

Title

Trends in gestational diabetes in Manitoba from 1981-2019: A descriptive study

Background

Incidence of gestational diabetes mellitus (GDM) is increasing globally. However, there is little information describing trends in GDM incidence over time within sub-groups of women that often experience health inequities.

Objective

Our objective was to describe rates of GDM in Manitoba.

Methods

We performed a registry-based administrative cohort study to describe trends in GDM incidence between 1981-2019, stratified by known risk factors. We compared population trends before and after screening changes (2000 – 2009 vs 2010 – 2019) and stratified by age, urbanicity, and household income using difference-in-differences analyses. Geospatial mapping was used to visualize changes by Winnipeg neighbourhood cluster. In sensitivity analyses, we examined trends in large for gestational age (LGA) births.

Results

GDM incidence increased in Manitoba from 1.3% in 1981 to 8.6% in 2019 with an inflection occurring around 2010 (n = 493,966). From 1981 – 2009 GDM increased by 1.4 percentage points compared to 5.6 between 2010 – 2019. This trend was also observed after stratifying by age, urbanicity, income, and socioeconomic status (SES). Between 2000 and 2019, GDM was consistently highest among women >35

years old and those in the lowest SES category. Difference-in-differences analyses revealed that GDM incidence increased by 1.68 (95%CI: 1.37, 1.99) percentage points more among urban vs rural residents and 3.83 percentage points (95%CI: 3.12, 4.53) among women 35+ years compared to women 18-24 years. Geospatial mapping revealed that GDM incidence increased more in neighbourhoods with the highest proportion of new immigrants. Sensitivity analysis revealed that the proportion of LGA deliveries among mothers with GDM dropped after 2010.

Conclusion

Incidence of GDM is increasing in Manitoba, particularly among those with low SES and higher maternal age. However, this may be partially due to a change in screening practices as evidenced by the upward inflection consistent across strata and concomitant downward trend in LGA infants.

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