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Abstract Title

Exploring Risk Factors and Determinants of Early Childhood Caries Among Young First Nations and Métis Children in Manitoba: An Ongoing Study

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Will they participate in the poster presentation at CHRD?

No

Background

Previous studies have shown that First Nation and Métis (FN and M) children are more susceptible to develop early childhood caries (ECC).

Objective

This ongoing study aims to investigate potential risk factors associated with ECC in FN and M children, with particular focus on barriers to accessing oral health care, socioeconomic conditions, food insecurity, fluoride exposure and oral microbiome composition.

Methods

Population of interest includes FN and M children under 72 months of age, and their parents/caregivers. Children over 72 months of age, and who did not self-identify as First Nation or Métis were excluded. Clinical data is being collected through dental examinations to assess children's oral health status, including the presence and severity of ECC, by a calibrated dentist or hygienist. Information regarding children's dietary habits, oral health practices, barriers to dental care, and fluoride exposure is also being collected from parents/caregivers through interview-led questionnaires. Collection of biological samples, including saliva and plaque, is continuing. Data are being currently stored in the Research Electronic Data Capture (REDCap). Microbiome sequencing and statistical analyses will be undertaken in subsequent phases of the study.

Results

To date, 285 participants are enrolled (215 FN; 70 M) in this study. Future analyses will characterize and compare the oral microbiota of children with ECC and caries-free children for the FN and M separately following a distinction-based approach, while examining social, environmental, dietary, and oral health determinants associated with caries risk, obtained from the questionnaires.

Conclusion

Based upon previously published work in the literature, we expect that these findings could potentially shed some light to guide future research in FN and M children's oral health in Manitoba. Engagement with community leaders is pivotal in developing culturally appropriate and community-informed strategies to prevent caries and reduce oral health inequities.