

# ABSTRACT SESSION 1

# TUESDAY 23 APRIL 13:45-15:00 ROOM 503

- Cultural considerations while using a wrap-around approach: Learning from the Maskwacis Early Years program successes to increase immunization uptake — *Charlene Rattlesnake*
- Improving immunization services and health outcomes for children and families in five Health Networks of the Saskatchewan Health Authority: A community-based participatory research project — Charlene Thompson
- Routine childhood immunization during the COVID-19 pandemic: Changes in vaccine confidence and barriers to access — Harry Mackay
- Co-designing an innovative skill-building learning solution for healthcare providers to enhance vaccination in pregnancy conversations — *Eliana Castillo*
- A health equity approach to improving childhood vaccination coverage in Ottawa, Ontario Sarah Wallingford

# Cultural Considerations while Using a Wrap Around Approach: Learning from the Maskwacis Early Years Program Successes to Increase Immunization Uptake - Charlene Rattlesnake

# Introduction/program need and objectives:

Routine vaccination programs in Canada have generally contributed to increased uptake of vaccines. However, certain populations remain underrepresented among children with up-to-date vaccinations, in particular, First Nations children living on-reserve have lower vaccination coverage compared to the general Canadian population.

# Program methods, activities and evaluation:

The Early Years (EY) program began in 2018 in partnership between the Martin Family Initiative, Maskwacis Health Services, Maskwacis Education Schools Commission and Ermineskin Cree Nation with funding from the Brain Canada Foundation. The EY is an innovative, evidence-informed prenatal to preschool program founded on the recognition that supporting strong Indigenous families and communities is integral to healthy child development, cultural identity and better health outcomes. The program uses a comprehensive curriculum that integrates health, early childhood education and culture to support Indigenous parents/caregivers throughout the first years of their children's lives. EY staff form trusting relationships with participants, provide information and referrals to immunization clinics and transportation to appointments.

## Program results or outcomes:

The immunization rate of children participating in the EY is higher than that of the rest of the community. Through the EY, research has focused on examining the program's impacts in terms of participant and community engagement; supporting healthy pregnancies; enhancing language development and school readiness; providing play-based learning opportunities; enriching children's pride in identity and culture; and strengthening family wellbeing. Unexpectedly, we have also found a six-fold increase in routine vaccination rates among children in the program compared to children in the wider community.

# Recommendations and implications for practice or additional research:

EY caregivers experience various benefits through their participation in the program, especially ones that are culturally focused. The unique nature of supports provided by the program supports improved

immunization access. The increased immunization rate illustrates the importance of holistic services for Indigenous families. Lessons from the EY suggests the wrap-around supports are essential to accessing services, including immunizations.

# Improving Immunization Services and Health Outcomes for Children and Families in Five Networks of the Saskatchewan Health Authority: A Community-Based Participatory Research (CBPR) Project - Charlene Thompson

## Introduction/background:

With the impact of the COVID-19 pandemic on client access and routine immunization service delivery in the Saskatchewan Health Authority (SHA) and return to routine services, it is essential to explore why childhood immunization rates have dropped. Previous literature on factors influencing immunization illustrates a knowledge gap in the Saskatchewan context. To address this gap, we determined the following research objectives: 1) Explore factors that support immunization or contribute to low immunization rates for families with children 0-6 years in Health Networks in and around Saskatoon, SK; 2) Explore how immunization services may be improved.

#### Methods:

We are applying a CBPR approach with family partners. For the initial phase of this study, we will complete a survey with families, public health nurses (PHNs), community program builders (CPBs), and office administrative assistants (OAAs) to explore factors that support immunization, create challenges, and improve services.

#### **Results and analysis:**

We will launch the survey in January 2024 with full results in March 2024. Descriptive statistics will be available for this presentation. The survey results will identify areas of enhancement and strengthen current immunization services to better meet the needs of families in Saskatoon and surrounding areas.

#### Conclusions and implications for policy, practice or additional research:

The survey results will inform the next, qualitative phase of this study with families, PHNs, CPBs, and OAAs to further explore factors that influence immunization and service improvement. Although the results of this study are context-specific to Saskatoon and surrounding areas, there may be useful elements from the findings to inform immunization programs across Saskatchewan and improve immunization rates.

# Routine Childhood Immunization during the COVID-19 Pandemic: Changes in Vaccine Confidence and Barriers to Access - Harry Mackay

#### Introduction/background:

Routine childhood immunization is crucial for preventing the spread of vaccine-preventable diseases. The COVID-19 pandemic disrupted clinic- and school-based vaccination programs, imposing new barriers to access. At the same time, vaccines gained prominence in the public discourse, potentially polarizing perceptions of vaccine safety, efficacy, and importance. This study aimed to understand pandemicrelated barriers to routine immunization and changes in vaccine confidence among Canadian parents.

#### Methods:

A survey was fielded in January 2023 to Canadian parents and caregivers of children under 18 (n = 2036). Parents were asked if they were behind on their child's routine immunizations due to the pandemic, followed by validated questions on knowledge, attitudes, and beliefs surrounding vaccines.

## **Results and analysis:**

Up to 25% of respondents reported having missed or delayed a routine immunization for their child(ren) at some point during the pandemic – with most (93%) intending to or having already caught up. A range of pandemic-related barriers influenced parents' decision to vaccinate and their access to vaccines, including concerns about interactions between routine vaccines and the COVID-19 vaccine, fear of contracting COVID-19, and school/clinic closures. Measures of confidence in vaccine efficacy, safety, and importance were on average 4-5 points lower compared to pre-pandemic data, particularly among subsets of parents favouring decision-making autonomy for vaccination. This subset also was more likely to endorse alternative medicine (e.g., naturopathy, homeopathy) as a replacement for vaccination.

# Conclusions and implications for policy, practice or additional research:

This study provides insight into the state of routine childhood immunization in Canada, and highlights a need for communications that address emerging misconceptions about vaccines and that demonstrate vaccination as a social norm. The results emphasize the importance of developing strategies that build confidence in and facilitate access to routine immunizations. Finally, our findings point to areas for future research and stakeholder engagement, including how attitudes and beliefs around alternative medicine intersect with those around vaccination.

# Co-designing an Innovative Skill-Building Learning Solution for Healthcare Providers to Enhance Vaccination in Pregnancy Conversations - Monica Surti

## Introduction/program need and objectives:

Vaccination in pregnancy (VIP) is a powerful yet underutilized public health tool. VIP prevents maternal and neonatal mortality and morbidity; it predicts subsequent infant vaccination and new vaccines are currently in development for use in pregnancy. However, VIP uptake is low, and there is a disconnect between the known factors that lead to low uptake of vaccines in pregnancy and the strategies to address them. There is a need to improve parent-provider vaccine communication, focusing on vaccine hesitancy and informed decision-making in pregnancy. Our objective is to co-create an evidence-based VIP communication tool that specifically targets the modifiable barriers and facilitators to VIP conversations using practice scenarios, simulations, interactive quizzes, and learner analytics.

# Program methods, activities and evaluation:

The tool has been developed in collaboration with adult learning specialists at the University of Calgary, ensuring a comprehensive and tailored learning experience for perinatal HCPs. Heuristic/functionality and usability testing is being completed with patients and HCPs, to gather feedback and refine content and mode of delivery.

#### Program results or outcomes:

The tool uses implementation science theory and methods of behavioural sciences and adheres to adult learning principles to create a unique learning experience. Patients and a multidisciplinary team of experts were integral to the co-design, ensuring the course meets the needs of both HCPs and patients and considers equity, diversity and inclusion throughout. The flexibility and adaptability of the materials, along with consideration of spread and scale, make this program an innovative resource for VIP education and training. During feasibility testing, outcomes will include course completion and retention rates 'time to complete' metrics, alongside provider surveys using the validated Communication Assessment Tool (CAT) to gauge comfort and skill in vaccine discussions with pregnant patients.

## Recommendations and implications for practice or additional research:

An implementation study using an experimental design will follow the feasibility testing of this innovative tool.

# A health equity approach to improving childhood vaccination coverage in Ottawa, Ontario – Sarah Wallingford

#### Introduction/program need and objectives:

In Ontario, routine childhood immunization is required under the Immunization of School Pupils Act (ISPA) for school attendance, unless there is a valid exemption. The COVID-19 pandemic decreased access to and reporting of routine immunizations, thereby lowering both coverage and ISPA compliance, respectively, and perpetuating socioeconomic inequities in vaccinations.

The objective was to improve access to and reporting of routine childhood immunizations in Ottawa using a health equity approach.

#### Program methods, activities and evaluation:

Between April and June 2023, Ottawa Public Health (OPH) hosted immunization clinics at 26 elementary schools based on ISPA compliance rates and neighbourhood health-equity indicators. A comprehensive communication strategy, was implemented to promote the clinics. Clinic attendees' barriers to accessing vaccines were assessed via survey.

ISPA compliance data before and after the clinics were extracted from Panorama, the provincial digital health immunization repository, and used to evaluate their impact on compliance rates.

#### Program results or outcomes:

Across the 26 clinics, 432 children were immunized; an additional 175 children had immunization records updated. Three quarters of clients immunized or reporting immunizations at the clinics were residents of the least socioeconomically advantaged neighbourhoods in Ottawa. In addition, 66% of clients surveyed reported the barrier of not having a regular health care provider.

Average ISPA compliance amongst schools receiving a targeted clinic significantly increased from 46% before to 50% after the clinics. Amongst clinic schools, compliance also improved in each birth cohort. No significant increase in compliance was observed amongst non-clinic schools.

#### Recommendations and implications for practice or additional research:

OPH's targeted approach was successful in improving ISPA compliance rates and reaching children living in less socioeconomically advantaged neighbourhoods and facing access barriers. These results demonstrate the value of meeting clients where they are. Other public health jurisdictions might use targeted school immunization clinics to support families with barriers to accessing or reporting vaccination.