

Implementation and Evaluation of Dried Blood Spot Testing in Métis Community of Red Deer Alberta

Introduction: This proposed research project will be conducted within the DRUM & SASH Implementation Science Study, which has partnered with five First Nations communities and the Métis Nation of Alberta to improve the prevention, treatment and care of First Nations and Métis individuals living with HIV, HCV and STBBIs. The DRUM & SASH project is focusing on the scale-up and evaluation of shared care models to bring holistic, culturally-relevant, high-quality treatment and care closer to home for community members.

Research Rationale: While research has investigated the barriers for health care and health promotion in rural communities, there is a paucity of research on effective rural HIV prevention, especially within Indigenous contexts (OHTN, 2013; Worthington et al., in press). Rural residing FN and Métis people experience service barriers distinct from those living in urban centres; they typically have fewer opportunities for sexual health services, including testing. Other research has shown that successful Indigenous interventions need to be community-based and not clinic-based, tailored to each community's needs and service barriers, and grounded in culture (Monchalin et al., 2016; Orchard et al., 2010). Anecdotally, community-based research associates and health staff within the DRUM & SASH project have expressed concern over the lack of testing and awareness within their communities.

Dried blood spot testing (DBS) is not a new technology, as it has been used in clinical settings to screen for metabolic disorders in newborns for several decades. However, its application for testing HIV, HCV and STBBIs, particularly in rural contexts, is new and innovative in Canada. DBS offers a private, community-based method for HIV, HCV and STBBI testing, making it a well-suited component of any Indigenous community-based sexual health intervention, especially shared care models. The shipping of DBS test strips is much easier than that of blood drawn samples. Many DBS test strips can be shipped together, which significantly reduces the cost when compared to the cost of shipping blood samples as a biohazardous material. Any individual can be trained to take DBS test samples, and those with some knowledge of sexual health can be trained to provide pre- and post- test counselling for community members, reducing the workload on community nurses.

As a Métis public health student, I have chosen to focus on the implementation and evaluation of DBS in the Métis community in Red Deer because there is a stark lack of Métis-specific HIV interventions as well as research. Often, programs designed for First Nations communities are implemented in Métis communities by well meaning individuals – often these interventions fail. Documenting and evaluating the process of implementing DBS testing in a Métis-specific way is a unique opportunity to support the scale-up of Métis culturally-responsive HIV interventions in the future.

Research Question(s): What are the aspects of a Métis culturally-specific response to HIV, and how does DBS testing fit in with this response?

Methodology/Methods: This research is being conducted at the request of the DRUM and SASH communities, and as a Métis student, I will adhere to Indigenous and community-based research approaches to ensure that the research is relevant, meaningful, and respectful. A strengths-based perspective will be used, focusing on the resilience of Indigenous communities, and a “Two-Eyed Seeing” approach will allow the strengths of both Indigenous and Western research paradigms and ways of knowing to influence the research process¹⁵, in recognition of the need to integrate “wise-practices” from both traditions to create sustainable and appropriate interventions for the Métis community. The evaluation process will draw upon formative evaluation techniques which will be used throughout the implementation process. Meetings with Métis community members and stakeholders will be audio recorded and thematic analysis will be conducted to identify emerging

challenges, concerns, and wise-practices throughout the process. Extensive notes will be taken about the process and stumbling blocks encountered. A brief and concise data collection tool will be developed to coincide with the actual DBS testing process, which will allow for the collection of anonymous basic demographic data. Recipients of DBS testing will be invited to share their experiences with the process in an interview. Those involved with the provision of DBS testing will be invited to share their experiences with the process of administering the test (e.g. how easy it was, how they found it compared to other methods, challenges encountered, etc.).

Anticipated Results: Due to widespread stigma I anticipate there will be some challenges in the implementation of DBS testing. Significant time and energy will likely need to be placed on awareness and stigma. Several members of the Métis community are strong advocates for HIV and HCV and are eager to see DBS testing at major Métis community events. The presence of strong community-based advocates will help significantly.

Knowledge Translation: KT goals for this project include: community-friendly reports for the Métis Nation of Alberta and Shining Mountains Living Community Services, community-friendly tools to be made publicly available on the DRUM & SASH website for future use by other communities, a minimum of one peer-reviewed publication, and an oral abstract/poster presentation at a conference, and my thesis.