Title: Supporting Self-Management in Pregnancies Complicated by Pre-Existing Diabetes: A Mixed Methods Sequential Comparative Case Study

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Introduction: Diabetes affect approximately 1.5% of pregnancies; a prevalence that has risen due to increased type 2 diabetes (T2D) and obesity. Diabetes is associated with significant perinatal morbidity and mortality. Good glycemic control during is associated with lower rates of complications. Recent attention has focused on optimizing diabetes self-management education and support (DSMES) for expectant mothers.

Literature Review and Problem: As DSMES improves diabetes outcomes among non-pregnant adults with diabetes, a scoping review was conducted to characterize the literature on prenatal DSMES for women with type 1 diabetes (T1D) and T2D. A notable finding was that the existing research focuses on gestational diabetes and only 10% of the review's pooled sample size had T2D. Yet, currently, one in three Canadians have diabetes and 90% have T2D. Women with T1D and T2D face unique self-management challenges. Those with T2D may have only had diabetes for a few years, must begin insulin therapy for the first time, and do not receive preconception care. Patients with T1D are also challenged with increased insulin requirements in pregnancy. There is a gap in the literature regarding DSMES for expectant mothers with pre-existing diabetes.

Research Questions: How do prenatal DSMES experiences explain glycemic control? What are the predictors of glycemic control during pregnancy? What are the experiences and needs of women regarding prenatal DSMES?

Methods: A mixed methods sequential comparative case study with three phases will be conducted: (1) a prospective cohort study; (2) an interpretive description study; and (3) mixing of the quantitative and qualitative data with the goal of case construction.

Discussion: This thesis will contribute to understanding the prevalence and correlates of DSMES and glycemic control, self-management experiences, and how DSMES influences glycemic control in T1D and T2D in pregnancy. It may also inform DSMES interventions and prenatal care for this high-risk group.