

Nicole Tegg - University of Alberta

Project: What About the Vessels? Secondary Amenorrhea and Adverse Pregnancy Outcomes: A Mixed Methods Study

Background:



Regular exercise has numerous well-known health and social benefits for women. However, women who exercise regularly may encounter specific health issues like secondary amenorrhea, which is when a woman misses her period for three consecutive cycles or more. This condition can lead to a decrease in estrogen, a hormone that plays a crucial

role in maintaining cardiovascular health. Secondary amenorrhea is prevalent among female athletes but can also occur in the broader population. Emerging research indicates that a lack of estrogen could adversely affect heart health in women. The connection between low estrogen levels and the development of cardiovascular-related pregnancy complications remains unclear. There is a known link between pregnancy complications like hypertension and an increased likelihood of heart disease later in life. Therefore, it's vital to explore if secondary amenorrhea contributes to pregnancy complications, especially considering that the condition is reversible.

My project was borne from the personal stories and experiences shared by patient partners and a consideration of the patient-identified action items in the Canadian Women's Heart Health Alliance ATLAS Chapter 3. This project will be guided by

patient-oriented research principles, which involve engaging patients, focusing on patient-relevant priorities, and seeking to improve healthcare practices or policies to improve patient outcomes.

My proposed study aims to investigate if secondary amenorrhea is associated with cardiovascular-related pregnancy complications and to understand women's perceptions of secondary amenorrhea better. Specifically, my project will measure quantitative variables, including menstrual and reproductive histories, sex and gender factors, collect clinical measurements of endothelial function and arterial stiffness, and seek to understand women's perceptions through qualitative interviews. These findings may have important implications for public health and clinical practice. As heart disease remains the leading cause of premature death in Canadian women, it is essential to identify the impact of modifiable risk factors like secondary amenorrhea.

Bio

Nicole Tegg (she/her) is a Registered Nurse with a clinical background in maternal health. She earned her Bachelor of Science in Nursing and Master of Nursing from the University of Alberta. She is a doctoral student in the Faculty of Nursing at the University of Alberta. Her doctoral work examines an underexplored area: reproductive-age women's cardiovascular health. Her research interests include maternal health, women's cardiovascular health, and sex and gender research. Nicole is interested in mixed methods research and patient-oriented research.