



University
of Victoria

Graduate Studies

Notice of the Final Oral Examination
for the Degree of Master of Arts

of

THEA MONIQUE LAMOUREUX

BA (University of Victoria, 2013)

**“Difficult and Deadly Deliveries?: Investigating the presence of an
‘obstetrical dilemma’ in Medieval England through examining health
and its effects on the bony human pelvis”**

Department of Anthropology

Thursday, April 18, 2019

9:30 A.M.

Clearihue Building

Room B019

Supervisory Committee:

Dr. Helen Kurki, Department of Anthropology, University of Victoria (Co-Supervisor)

Dr. Erin McGuire, Department of Anthropology, UVic (Co-Supervisor)

External Examiner:

Dr. Amy Scott, Department of Anthropology, University of New Brunswick

Chair of Oral Examination:

Dr. Michelle Wiebe, Department of Curriculum and Instruction, UVic

Abstract

Difficult human childbirth is often explained to be the outcome of long-term evolutionary changes in the genus *Homo* resulting in an 'obstetrical dilemma,' defined as the compromise between the need for a large pelvis in birthing large-brained babies and a narrow pelvis for the mechanics of bipedal locomotion, resulting in the risk of cephalopelvic disproportion and injury (Washburn, 1960). Current research challenges the premise of the obstetrical dilemma by considering the effects ecological factors have on the growth of the bony human pelvis (Wells et al., 2012; Wells, 2015, Stone, 2016; Wells, 2017). This thesis tests Wells et al.'s (2012) assertion that environmental factors, such as agricultural diets, compromise pelvic size and morphology and potentially affect human childbirth. The populations examined in this study are medieval English populations with long-established agricultural diets. Bony pelvic metrics analyzed are from the St. Mary Spital assemblage, and demographic and pathological data from St. Mary Spital were compared to the East Smithfield Black Death cemetery assemblage. The results show that there is some evidence for a relationship between chronic health stress and compromised pelvic shape and size in both men and women, however the evidence is not conclusive that younger women with compromised pelvic dimensions were at an increased risk of obstructed labour and maternal mortality during childbirth. This suggests that childbirth was not likely a significantly elevated cause of death among younger women in medieval London as a result of cephalopelvic disproportion. The concept of a single obstetrical dilemma is flawed, as multiple obstetrical dilemmas other than cephalopelvic disproportion through pelvic capacity constrains are present, including ecological and nutritional stressors, childbirth practices and technologies, sanitation practices, and social and gender inequality.