

School of Public Health PHD Student Project

Title: Hysterectomy, Oophorectomy and Long-term chronic Disease - the HOLD study

Supervisor: Associate Professor Susan Jordan

This project will be based on a newly funded NHMRC Ideas grant that aims to investigate the long term health outcomes following hysterectomy. The study is broad so the student would select parts of the work, or methodological issues around the work, to focus on. Below is a brief description of the study background, aims and methods:

Each year >27,000 Australian women have a hysterectomy for a benign condition, often with removal of one or both ovaries (oophorectomy). This surgery can profoundly affect women's reproductive hormones and may influence risk of chronic conditions such as ischaemic heart disease (IHD) and cancer. Despite this, the long-term health effects of these procedures are unclear because few high quality studies have been undertaken and important potential effect modifiers such as menopausal hormone therapy (MHT) or surgery indication have been infrequently addressed. As a result, existing clinical guidelines are conflicting meaning treatment decisions are based only on short-term rather than long-term outcomes.

AIMS: 1) To assess the association between hysterectomy with & without oophorectomy and risk of a) cancer (overall & by type); b) other chronic disease including IHD, stroke & hip fracture; & c) all cause & cause-specific mortality. 2) To determine whether associations vary by age at procedure or MHT use.

METHODS: We will address the evidence gap by conducting a whole-of-population, cross-jurisdictional data linkage study including hospital morbidity, cancer, medicines, and death data.

SIGNIFICANCE: Our study is timely and clinically relevant given the availability of less invasive treatments for benign gynaecological conditions and the substantial decrease in MHT use in Australia since 2002. Unique in its size, scope, data quality and approach, our study will provide new high-quality evidence to inform clinical guidelines and enable informed decisions about whether hysterectomy is the best treatment for a woman's short and long-term health.