

# Service Priorities and Programmes Electronic Presentations

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# An ehealth antenatal exercise intervention to improve pregnancy-related lumbopelvic pain

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#### Introduction

About 45-70% of women suffer from pregnancy- related lumbopelvic pain (LPP) at some points during their pregnancy. This may lead to both physical and psychological impacts, such as affecting the daily functioning and sleep, increased risk of prolonged labor and deliveries, and it can even persist for years after the delivery of babies, becoming an associated risk of perinatal depression. The exact mechanism causing LPP is not well known, though many women and even health care providers have considered LPP as a normal physiological process which may have led to insufficient advice on its prevention. Evidence has reported that antenatal exercise can improve and prevent LPP and mobile phone application will be a convenient tool to provide such updated information to our clients. As midwives play an essential role in promoting health for childbearing women, an ehealth antenatal exercise intervention to educate women on LPP is studied for its effectiveness.

## **Objectives**

This study evaluates the effectiveness of an ehealth antenatal exercise intervention in improving LPP in pregnant women of the second to the third trimesters of pregnancy.

#### <u>Methodology</u>

The study is a single-blinded randomized controlled trial targeting low risk pregnant women at 12-24 weeks of gestation in an O&G specialized clinic without contraindication to exercise. In total, 134 women participated, and they were randomized into the control group who received routine antenatal care, and an intervention group to receive individual education on LPP- related issues, including its impacts and they were given ergonomic advice and instruction to comply to the safety precautions and to perform simple back-strengthening and pelvic floor exercises at home for 30 minutes at least 5 times a week for 12 weeks. Phone boosters will be given at 4th and 8th week of recruitment for reinforcement and to find out if there were any concerns.

# **Result**

The main study is in progress. A pilot study had been carried out in 9 participants. Mean age of participants was 32 (SD=6.02) years old, majority of them were married and had attained secondary education. Mean pain score on a numerical rating scale was 2.4 (SD=1.8), yet pain relief methods had been used such as massage (N=5) and maternity belt (N=1). Three most commonly reported daily adaptations due to LPP which reflected functional disabilities included a frequent need to change positions, a slower walk than usual and a need for support to rise from a chair.

The results of the pilot study allow testing of the feasibility and acceptability of the recruitment logistics, data collection, and tools that are used, and some modifications had been made accordingly. The main study evaluates the effectiveness of an ehealth antenatal exercise intervention in relieving LPP, and such results will inform health providers more on the clinical needs of our clients, and if the intervention can serve to address their needs as an evidence-based, pragmatic practice.