A Midwife-led antenatal breastfeeding education intervention for primiparous women to increase predominant breastfeeding rates at one, three and six months after birth in Thailand:
A pilot randomised controlled trial

by
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Declaration

I declare that this thesis, which I submit to The University of Newcastle for examination in consideration of the award of a higher degree, PhD (Midwifery) is my own personal effort. The thesis contains no material, which has been accepted for the award of any other degree or diploma in any university or other tertiary institution and, to the best of my knowledge and belief. The thesis contains no material previously published or written by another person, except where due reference has been made in the text.

I give consent to the final version of my thesis being made available worldwide when deposited in the University’s Digital Repository.

Signed

Student Number 3097593

Date 31 August 2014
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Synopsis

This thesis reports a study that was conducted to determine whether a midwife-led antenatal breastfeeding education program (an intervention) could improve breastfeeding rates for primiparous women compared with breastfeeding rates for women who received standard antenatal care.

A pilot randomised controlled trial (pilot RCT) was conducted in two hospitals in Chiang Mai Province, Northern Thailand: 1) A tertiary care hospital, Maharaj Nakorn Chiang Mai; and 2) A secondary care hospital, Nakornping hospital.

Sixty-three primiparous women between 24 and 29 weeks gestation were recruited to participate in this study. The intervention consisted of a midwife-led antenatal breastfeeding educational program. The program design and components were based on current knowledge about the importance of breastfeeding and evidence based literature about successful midwife-led antenatal breastfeeding education programs. Participants were randomly allocated to the intervention and control groups. Participants in the intervention group were invited to attend three antenatal classes about breastfeeding (the intervention) provided by the researcher. Participants in the control group received standard antenatal care at the study sites.

The primary outcome measured in this study was predominant breastfeeding at one, three, and six months after birth. In addition, the following secondary outcomes were also measured: 1) Breastfeeding initiation, 2) Perceived breastfeeding self-efficacy, 3) Perceived breastfeeding support, 4) Breastfeeding intention and 5) Evaluation of the breastfeeding program (the intervention).

All women who attended the breastfeeding educational program were satisfied with it, and considered that it was beneficial. Women in the intervention group had a very high breastfeeding initiation rate (95%), and sustained a higher rate at three months than the initial breastfeeding rate in the control group (77%); however, this diminished rapidly between three (81%) and six months (41%). In contrast, women in the control group had a lower breastfeeding initiation rate that diminished rapidly in the first three months, and then more slowly between three (54%) and six months (46%). The difference between the intervention and control groups was significant at three months ($p = 0.0204$).
In this pilot study, the study aim was achieved and the null hypothesis was rejected. Strengths of the study included use of a randomised controlled trial study design, high follow-up rate, and a skilled midwife who conducted the antenatal breastfeeding intervention. Although it proved difficult to recruit women to participate in this study due to time limitations and cultural factors, the results indicate that such a study is useful in this context, and there is potential to use these results to inform the design of a major trial. However in designing subsequent studies, cultural factors would require further consideration.

**Key words:** Antenatal, education, breastfeeding, midwife-led.