Early Postpartum Home Visits to Promote Exclusive Breastfeeding in the Rural Areas of Taiwan: Collaboration of the Trained Physician and Health Educator

Jhong-Chuan Wang¹, Chia-Chen Lu², Ru-Huei Yang³, Mei-Yu Kang³, Shu-Yi Wu⁴, Chih-Ling Huang⁵

**Purposes:** The aim of the this study was to determine whether home visit from a trained physician and a health educator within 5 to 7 days after delivery would increase the exclusive breastfeeding rate at 8 weeks postpartum in a rural region of central Taiwan.

**Methods:** The study was a prospective, nonrandomized, two-group trial. Participants were recruited at a regional teaching hospital. A total of 960 mothers who had delivered a healthy singleton infant were recruited on the day of discharge and purposively assigned, by the agreement of eligible mothers, to the intervention (n = 551) or control (n = 409) group. The mothers in the intervention group received an individual, early postpartum home visit from a physician and a health educator within 5 to 7 days after delivery. The mothers in the intervention and control groups received telephone counselling provided by a health educator at 4 weeks and 8 weeks postpartum.

**Results:** Mothers in the intervention group were more likely to report exclusive breastfeeding at 8 weeks (61.0% vs. 47.9%; p<0.001) and longer breastfeeding duration (mean 6 weeks vs. 5.1 weeks). In the Cox hazards regression model, the adjusted hazard ratios (AHR) of exclusive breastfeeding discontinuation in the intervention group were .8 times less than in the control group (95% CI 0.65-0.98; p = 0.03).

**Conclusion:** This study provides preliminary evidence of the efficacy of exclusive breastfeeding support provided by a trained physician and a health educator in rural areas of Taiwan. We recommend that policy aiming to develop
INTRODUCTION

Exclusive breastfeeding has substantial health benefits for both children and their mothers\(^1,2\). Successful long-term exclusive breastfeeding is associated with early initiation and a successful start\(^3,4\). The largest decrease in breastfeeding rate occur during the first 4 postpartum weeks\(^5\). Reasons for early breastfeeding discontinuation include a lack of confidence in mothers’ ability to breastfeed, problems with the infant latching or sucking, breast pain or soreness, and perceptions of insufficient milk supply\(^6\). The Baby-Friendly Hospital Initiative (BFHI), combined with a program of home visits, is likely to offer an effective strategy for promoting early initiation and dealing with breastfeeding problems\(^7\).

A prenatal breastfeeding education program including education booklets, videos and telephone interview on breastfeeding prior to a caesarean delivery may contribute to exclusive breastfeeding rates at 4 weeks postpartum\(^8\). Previous studies have shown that early postpartum home visits delivered by trained doctors, nurses or community health workers can improve breastfeeding\(^9\)-\(^11\). However, the number of breastfeeding mothers is less in some rural than in urban area of Taiwan\(^12\).

The reason may be limited access to supportive services\(^13\).

The BFHI was established in Taiwan by the Department of Health, Executive Yuan in 1998. Although the exclusive breastfeeding rate at 4 weeks postpartum increased from 5.0% in 1996 to 33.2% in 2004, the rate in rural and remote regions of Taiwan was lower than in urban areas in general\(^12\). A previous study suggested that support with breastfeeding problems and promotion of breastfeeding provided by physicians was associated with higher rates of exclusive breastfeeding\(^5\). Moreover, meta-analysis for home visit trials showed a significant improvement in early breastfeeding\(^14\). Studies of breastfeeding promotion to date have been primarily hospital based and the national breastfeeding program in Taiwan has also concentrated its activities more on nurses and peer counselling\(^15\)-\(^17\). Individualized encouragement from clinicians for improved breastfeeding practice in the early post-discharge period is still uncommon in Taiwan.

The Taiwan health care system differs to some extent from the US health system. In 2008, the length of stay after normal vaginal delivery and caesarean section was 3 days and 6 days respectively\(^18\). Eight weeks of paid maternity leave before...
台灣鄉村地區產後早期家庭訪視對提昇純母乳哺餵率之成效探討：醫師與衛教師的合作計畫

王中川¹ 吕佳蔓² 楊茹惠³ 康美玉³ 吴淑儀⁴ 黄芷苓⁵

目的：探討於台灣鄉村地區，針對產後出生5-7天新生兒之母親，透過醫師與衛教師合作進行家庭訪視，是否提高產後第八周之純母乳哺餵率。

方法：本研究為前瞻性的非隨機之雙組試驗研究，研究對象來自某區域教學醫院，共有960位參與者。以產後出院當日，產婦願意接受家庭訪視為實驗組（551人），其他人為控制組（409人）。實驗組產婦接受醫師與衛教師的家庭訪視與衛教，控制組單獨接受一般照護，兩組產婦皆接受衛教師於產後一及二個月的電話諮詢服務。

結果：實驗組於第八周的純母乳哺餵率高於控制組 (61.0% vs. 47.9%; p < 0.001)，且哺餵母乳的平均週數大於控制組 (mean 6 weeks vs. 5 weeks)。以Cox回歸模型調整其他影響因素後，實驗組產婦中止純餵母乳的相對危險比值低於控制組產婦 (AHR: 0.8; 95% CI: 0.65-0.98; p = 0.03)。

結論：本研究提供了初步結果，在台灣鄉村地區實施醫師和衛教師合作提供純母乳哺餵的支持計畫是有效的。我們建議未來的政策，在純母乳哺餵率較低的農村和偏遠地區可發展醫師與衛教師共同合作的多面向措施。

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