

(e) Examine the effectiveness of current measures to promote breastfeeding



An extra hand to rock the cradle

By Adele Horin – summarised from *Sydney Morning Herald*, 24/06/06, p 13

A trial that provides nurturing nurses to disadvantaged families is thriving, writes Adele Horin. The aim is to foster parenting skills, coping skills and bonding, and to provide information on activities to promote development. The program is built on the pessimistic assumption that schools and childcare will not compensate a child for early years of neglect, abuse, or careless and indifferent parenting. Many children are resilient and surmount all kinds of difficulties. But their progress is surer if built on foundations of attachment, love and learning in the first three years.

The **Miller Early Childhood Sustained Home Visiting Program** takes its inspiration from the Elmira program that began 28 years ago in an area of New York State with the highest rates of child abuse and neglect. The obsession of a developmental psychologist, David Olds, now at the University of Colorado, it is producing results from a 15-year follow-up that shows the children who had been home visited by nurses in the first two years are still demonstrably better off than the control group. As well, the approach is cost-effective, because the children have required fewer expensive social services such as hospital treatment and foster care.

Preliminary results from the Miller follow-up at 15 months show the visited children have "significantly better mental development". One month after the birth, the visited mothers had better sudden infant death syndrome prevention knowledge; at six months, more visited mothers were **breastfeeding**, at 12 months fewer visited children had respiratory illnesses, and the mothers had better health.

Australia is rich, and rich with opportunity for those smart enough to grab it. But when children are born into disadvantage, what is the country doing to help them break the cycle?

When nurse Lisa McIntyre parks her small sedan in front of a modest sky-blue fibro house there is a big truck in the driveway, the lawn is worn away, and on the front veranda are a folded pram, a stack of shoes, and a cement dog.

Into this world on the fringe of Sydney's prosperity, Kodi Ma was born 10 days before, and his brother Kai almost two years before that. Their father is 19-year-old Morhamath Ma, an unemployed, tattooed, gentle son of Cambodian refugees, and their mother is 20-year-old Hailey Booth, daughter of a concreter and a factory worker.

McIntyre represents perhaps the best hope, at least in NSW, of giving children a fighting chance. She is a professional nurturer, one of three nurse home-visitors taking part in the country's first trial to determine whether regular home visits by nurses over the first two years of a baby's life can improve the prospects of the most vulnerable.

As the trial enters its last weeks with the 204 children (about half in a control group) - approaching their second birthday, the early results are exciting.

In the face of obstacles, the nurse home-visitors appear to be successfully addressing the unique problems of economic and educational disadvantage, and the universal problems of early motherhood.

From breastfeeding rates, to sudden infant death syndrome prevention, maternal health and toddlers' IQs, the nurse-visited mothers and children are doing significantly better than a control group of vulnerable families. These have received the typical services offered to the state's new mothers - in most cases a single nurse home visit. The lucky others received at least 20.

"The results are so impressive - even the worst case in the [visited] group is doing significantly better than the worst case in the control group," says Lynn Kemp, the trial's manager, based at the University of NSW.

Nurse visitors aim to facilitate better parenting through support, encouragement and education. The starting point is a mother's strengths, or in the language of social science, the program aims to "empower" the mother.

A strength of the nurse visitor trial - which is funded by the state departments of Health and Community Services, and an Australian Research Council grant - is that it links families to a social worker and other specialists, and can pick up physical and developmental problems early.

McIntyre, herself a mother of two young children, says if there is anything that bewilders her about the women she visits it is the **chaos of their lives, their lack of future orientation**. Booth, however, has plenty of strengths that McIntyre could nurture - the main one being a solid attachment to both her infants, and a keenness to learn. Her partner is kind and loving with the children, and her parents, with whom she lives, are happy enough to be grandparents.

When she first visited Booth after Kai's birth, she found her severely depressed, isolated and teary. Wretched and fighting with all around her, she resented Ma's freedom to come and go, and her parents' expectations that she pull her weight in the house while they went to work. The depression echoed earlier periods of psychological problems when Booth would not leave the house for months.

McIntyre arranged for Booth to see a psychiatrist, a move that saved her. "Without Lisa I don't think I would have gotten through the bad stage," Booth says. "I don't like to think what would have happened."

While Booth believes some aspects of mothering come naturally, McIntyre treats mothering as applied science. She refrains from imposing an agenda yet subtly has shown Booth how to read to, talk with, and play with her babies, and has discussed immunisation, nutrition and safety. Before Kai's birth Booth was visited every second week, then after the birth weekly for six weeks, dropping gradually to monthly when Kai was six months.

From the other side of a two-way mirror at Liverpool Hospital, Dr Kemp has observed mother/child interactions at various points during the trial, and "it's bleeding obvious", she says.

Kemp says 20 per cent of new mothers in the state would benefit from the program - and in disadvantaged areas 40 per cent. The pregnant women would meet at least one risk criterion - suffer depression, mental health problems, or domestic violence; be under 19, a substance abuser, have serious stresses in their lives, lack support, or first seek ante-natal care after 20 weeks.

The 5 per cent of very high-risk mothers, such as those notified to the Department of Community Services for suspected abuse, might require a different approach, for nurse home visiting is essentially about prevention.

But nurses are expensive, and only South Australia has implemented sustained nurse home visits in six disadvantaged areas, to be extended over the next four years to every teenage, Aboriginal and socially isolated mother in the state. In NSW a lot hinges on the Miller trial.

After July, there will be no more visits from McIntyre. She tries to see in the couple's plans a spark of initiative, an orientation to the future - that might mean their children have a real chance.

A breastfeeding study in a rural population in South Australia

Stamp GE, Casanova HT, *Rural and Remote Health* 6 (online), 2006: 495

ABSTRACT

Introduction: The benefits of breastfeeding for mothers and babies are well recognised; however, challenges to its establishment and maintenance exist in rural locations.

Method: This study in a rural community aimed to: (1) collect rates of any breastfeeding at 6 weeks, 3 months and 6 months postpartum; and (2) seek women's postnatal breastfeeding needs and discern how they were met. Fifty-eight women, most of whom had planned to birth at one of two rural hospitals with fewer than 50 births a year were interviewed face-to-face or by telephone. Questions included whether they were still breastfeeding, reasons for stopping, and their breastfeeding support needs in hospital and after discharge on eight domains: establishment; attachment; engorgement; sore nipples; cracked nipples; ongoing support; supply and mastitis.

Results: The number breastfeeding at 3 months (55%) compared poorly with South Australia (62%) or nationally (63%). Midwives met most of the needs of the women in hospital while, at home, midwives and GPs remained the main sources of support. At home, small numbers contacted the Australian Breastfeeding Association, child and youth health service nurse; a midwife employed by a pharmacist and family members such as mothers and mothers-in-law for support. Overall, 25% of women who had an identified need did not seek help. Of those who did, 36% had the need met well and 28% poorly. After discharge, 52 (90%) would have welcomed a visit from a community midwife had it been available. In the regional town, facilities to breastfeed and change babies' nappies were rated poor or non-existent.

Conclusion: Since this study, a part-time community midwife has been employed and a new project initiated that educates and assists older women volunteers to support and promote breastfeeding for isolated new mothers.



Efficacy of breastfeeding support provided by trained clinicians during an early, routine, preventive visit: a prospective, randomized, open trial of 226 mother-infant pairs

Pediatrics. 2005 Feb; 115(2):e139-46, Labarere J, Gelbert-Baudino N, Ayrat AS, Duc C, Berchotteau M, Bouchon N, Schelstraete C, Vittoz JP, Francois P, Pons JC, Grenoble University Hospital, Grenoble, France

BACKGROUND: Despite growing evidence of the benefits of prolonged breastfeeding for mother and infant health, the rate of breastfeeding at infant age of 6 months remains below the Healthy People 2010 goal. The greatest decrease in the breastfeeding rate occurs during the first 4 postpartum weeks. Mothers who discontinue breastfeeding early are more likely to report lack of confidence in their ability to breastfeed, problems with the infant latching or suckling, and lack of individualized encouragement from their clinicians in the early post-discharge period. Observational studies suggest that primary care physicians can increase breastfeeding rates through specific advice and practices during routine preventive visits. However, robust scientific evidence based on randomized, controlled trials is currently lacking.

OBJECTIVE: The purpose of this study was to determine whether attending an early, routine, preventive, outpatient visit delivered in a primary care physician's office would improve breastfeeding outcomes.

DESIGN: The study was a prospective, randomized, parallel-group, open trial.

SETTING: Participants were recruited at a level 3 maternity facility, with an average of 2000 births per year, in France.

PARTICIPANTS: A total of 231 mothers who had delivered a healthy singleton infant (gestational age: > or =37 completed weeks) and were breastfeeding on the day of discharge were recruited and randomized (116 were assigned to the intervention group and 115 to the control group) between October 1, 2001, and May 31, 2002; 226 mother-infant pairs (112 in the intervention group and 114 in the control group) contributed data on outcomes.

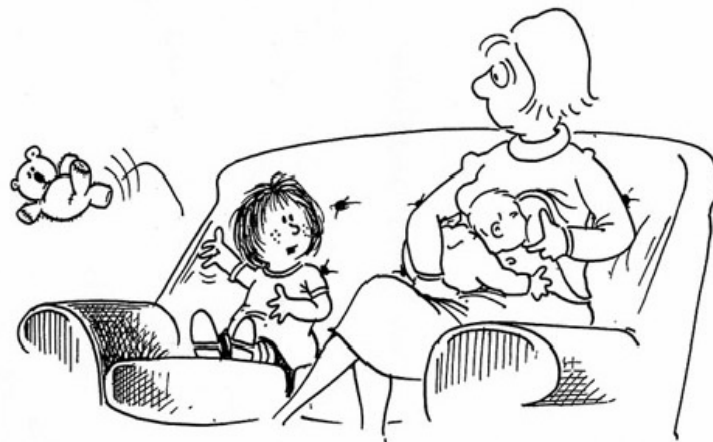
INTERVENTION: Support for breastfeeding in the control group included the usual verbal encouragement provided by the maternity ward staff members, a general health assessment and an evaluation for evidence of successful breastfeeding behaviour by the pediatrician working in the obstetrics department on the day of discharge, provision of the telephone number of a peer support group, mandatory routine, preventive, outpatient visits at 1, 2, 3, 4, 5, and 6 months of infant age, and 10 weeks of paid maternity leave (extended to 18 weeks after the birth of the third child). In addition to the usual pre-discharge and post-discharge support, the mothers in the intervention group were invited to attend an individual, routine, preventive, outpatient visit in the office of 1 of the 17 participating primary care physicians (pediatricians or family physicians) within 2 weeks after the birth. The participating physicians received a 5-hour training program on breastfeeding, delivered in 2 parts in 1 month, before the beginning of the study.

OUTCOME MEASURES: The primary outcome was the prevalence of exclusive breastfeeding reported at 4 weeks (defined as giving maternal milk as the only food source, with no other foods or liquids, other than vitamins or medications, being given). The secondary outcomes included any breastfeeding reported at 4 weeks, breastfeeding duration, breastfeeding difficulties, and satisfaction with breastfeeding experiences. Classification into breastfeeding categories reported at 4 weeks was based on 24-hour dietary recall.

RESULTS: Ninety-two mothers (79.3%) assigned to the intervention group and 8 mothers (7.0%) assigned to the control group reported that they had attended the routine, preventive, outpatient visit in the office of 1 of the 17 primary care physicians participating in the study. Mothers in the intervention group were more likely to report exclusive breastfeeding at 4 weeks (83.9% vs 71.9%; hazard ratio: 1.17; 95% confidence interval [CI]: 1.01-1.34) and longer breastfeeding duration (median: 18 weeks vs 13 weeks; hazard ratio: 1.40; 95% CI: 1.03-1.92).

They were less likely to report any breastfeeding difficulties (55.3% vs 72.8%; hazard ratio: 0.76; 95% CI: 0.62-0.93). There was no significant difference between the 2 groups with respect to the rate of any breastfeeding at 4 weeks (89.3% vs 81.6%; hazard ratio: 1.09; 95% CI: 0.98-1.22) and the rate of mothers fairly or very satisfied with their breastfeeding experiences (91.1% vs 87.7%; hazard ratio: 1.04; 95% CI: 0.95-1.14).

CONCLUSIONS: Although we cannot exclude the possibility that findings might differ in other health care systems, this study provides preliminary evidence of the efficacy of breastfeeding support through an early, routine, preventive visit in the offices of trained primary care physicians. Our findings also suggest that a short training program for practicing physicians might contribute to improving breastfeeding outcomes. Multifaceted interventions aiming to support breastfeeding should involve primary care physicians.



I'VE JUST WEANED TEDDY!

An investigation of the field trip model as a method for teaching breastfeeding to paediatric residents

Source: International Society for Research in Human Milk and Lactation
www.isrhml.org.umu.se/

J Hum Lact. 2006 May;22(2):195-202. Bunik M, Gao D, Moore L, The Children's Hospital University of Colorado, USA

Pediatricians in training are underexposed to breastfeeding issues and as a result are not fully prepared to promote breastfeeding and support the breastfeeding mother.

This study is a pre-post evaluation of the effectiveness of a pilot breastfeeding curriculum. Using the "field trip model," pediatric residents participated in 4 half-day teaching sessions at community sites, including a visit to a La Leche League home meeting, a Kaiser lactation consultant clinic, hospital-based lactation rounds, and a children's hospital-based referral clinic.

The objective of this study was to evaluate the effectiveness of this curriculum using a modified version of a previously published questionnaire that assesses knowledge about (70 items), attitude toward (6 items), and experience with breastfeeding (11 items). Residents enrolled in the field trip model of breastfeeding instruction exhibited significant increases in attitude and experience scores and self-reported high levels of satisfaction compared to controls.

Integration of a Lactation Consultant in an Outpatient Clinic Environment

Journal of Human Lactation, Vol. 22, No. 1, 99-103 (2006)
© 2006 International Lactation Consultant Association

Marta Lukac, **IBCLC**, Myers Park Outpatient Clinics at Carolinas HealthCare System in Charlotte, North Carolina, Joann K. Riley, RN, MSN, Carolinas HealthCare System
Angela D. Humphrey, MS, R. Stuart Dickson Institute for Health Studies at Carolinas HealthCare System

Successful efforts in improving breastfeeding initiation rates at an urban teaching hospital prompted the hospital to create a lactation consultant (LC) position in the outpatient setting to focus on breastfeeding duration.

This article reviews the complexity of the clinic setting, with the challenges and benefits of the consultant's first year in one of the hospital's outpatient clinics. Preliminary data collected by the consultant suggest that patients counselled by the LC in the outpatient clinic setting have longer breastfeeding duration rates.



Randomized controlled trial of a prenatal and postnatal lactation consultant intervention on duration and intensity of breastfeeding up to 12 months

Source: International Society for Research in Human Milk and Lactation
www.isrhml.org.umu.se/

Pediatrics. 2005 Dec: 116(6):1413-26, Bonuck KA, Trombley M, Freeman K, McKee D.
Epidemiology and Population Health, Montefiore Medical Center/Albert Einstein
College of Medicine, Bronx, NY

OBJECTIVE: To determine whether an individualized, prenatal and postnatal, lactation consultant intervention resulted in increased cumulative intensity of breastfeeding up to 52 weeks.

DESIGN: The randomized, nonblinded, controlled trial recruited women from prenatal care. Baseline prenatal interviews covered demographic data and breastfeeding experience, intention, and knowledge. Interviews at 1, 2, 3, 4, 6, 8, 10, and 12 months after birth collected data on weekly feeding patterns, infant illness, and infant health care use.

SETTING: Two community health centers serving low-income, primarily Hispanic and/or black women.

PARTICIPANTS: The analytic sample included 304 women (intervention: n = 145; control: n = 159) with > or = 1 postnatal interview.

INTERVENTION: Lactation consultants attempted 2 prenatal meetings, a postpartum hospital visit, and/or home visits and telephone calls. Control subjects received the standard of care.

OUTCOME MEASURES: Cumulative breastfeeding intensity at 13 and 52 weeks, based on self-reports of weekly feeding, on a 7-level scale.

RESULTS: The intervention group was more likely to breastfeed through week 20 (53.0% vs 39.3%).

Exclusive breastfeeding rates were low and did not differ according to group.

In multivariate analyses, control subjects had lower breastfeeding intensity at 13 weeks and 52 weeks. US-born control subjects had lowest breastfeeding intensity at 13 weeks and 52 weeks.

There were no significant differences in breastfeeding intensity among the US-born intervention, foreign-born intervention, and foreign-born control groups.

CONCLUSIONS: This "best-practices" intervention was effective in increasing breastfeeding duration and intensity. Breastfeeding promotion should focus on US-born women and exclusive breastfeeding.



Evaluation of a Lactation Support Service in a Children's Hospital Neonatal Intensive Care Unit

Journal of Human Lactation, Vol. 19, No. 3, 286-292 (2003)

© 2003 International Lactation Consultant Association

Kristine A. Gonzalez, MPH, University of North Carolina, **Jareen Meizen-Derr, MPH**, Cincinnati Children's Hospital Medical Center, Ohio, **Bonnie L. Burke, MS**, Children's Hospital of the King's Daughters, Norfolk, Virginia, **Arlene J. Hibler, BSN, MSHSA, IBCLC**, Dare County Health Department in Manteo, North Carolina, **Beth Kavinsky, RNC, MNSc**, Eastern Virginia Perinatal Council in Norfolk, Virginia, **Sandy Hess, BSN, ICCE, IBCLC**, Maryview Hospital in Portsmouth, Virginia, **Larry K. Pickering, MD**, Centers for Disease Control and Prevention in Atlanta, Georgia, **Ardythe L. Morrow, PhD**, Center for Epidemiology and Biostatistics at Cincinnati Children's Hospital Medical Center, Ohio

Hospitalized breastfeeding infants can be difficult. The authors assessed the effectiveness of an International Board Certified Lactation Consultants (IBCLC) service to increase the proportion of infants given their own mother's milk (OMM) in a children's hospital neonatal intensive care unit (NICU).

The charts of 350 randomly selected patients admitted the year before and after implementation of the service in July 1997 were abstracted.

Factors significantly associated with infants being given OMM included infant sex, ethnicity, length of NICU stay, and 5-minute Apgar score.

After comparison of the periods before and after pro-program implementation, the proportion of NICU infants ever given their OMM was found to have increased from 31% to 47% ($P = .002$). This increase differed significantly in relation to infants' clinical status and/or management (5-minute Apgar score, length of NICU stay, and age at NICU admission) but not in relation to maternal factors. Mothers with infants in the NICU should have access to lactation counselling.

