A longitudinal evaluation of Kangaroo Care for preterm infants in Thailand

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Summary

The percentage of premature births is increasing worldwide (Hoyert, Mathews, Menacker, Strobino & Guyer 2006). In terms of statistics for preterm births in Government hospitals in Thailand between 1999–2004, the first and second largest numbers of live preterm births were at Nakhon-Si-Thammarat (the study site) and Songkla respectively (Health Information Unit, Bureau of Health Policy and Strategy 2004). The number of preterm births in Thai Government hospitals increased from 89,569 in 2003 to 91,722 in 2004 (Health Information Unit, Bureau of Health Policy and Strategy 2004), which may have been due partly to the fact that in developing countries, financial and human resources for neonatal care are limited and hospital wards for Low Birth Weight (LBW) infants are often overcrowded (Conde-Agudelo, Diaz-Rossello & Belizan 2003). The most recently reported rate of neonatal abandonment in Thailand ranges from 20–25 infants per day (Thai Government 2010). This occurs mainly in the hospital situation. At the study site, the Maharat Hospital, there were 5–10 preterm abandonments per month in 2008 and 2009 (Kongsuk and Committee on the Information Centre, Maharat Hospital 2010). Researchers have suggested that preterm infants are at increased risk of abandonment, abuse, and neglect related partially to maternal separation in the early stages after birth (Dodd 2005), which is known to affect children's growth and development (Kennell & Klaus 1998).

This thesis reports research involving mothers and preterm infants from Thailand and Kangaroo Care (KC), an experimental intervention aimed at increasing mothers' bonding with their infants. The research aimed to discover whether Kangaroo Care

could increase mothers' bonding with, and their responsibility towards their preterm infants. The research is long-term and based in Thailand for Thai people. Data was collected in Thailand in Thai language.

The objective of this research was to evaluate the 18-item Kangaroo Care protocol used in this study, and to show that Kangaroo Care can promote breastfeeding in preterm infants (and therefore increase mother-infant bonding) and should be introduced as part of the Baby Friendly Hospital Initiative policy for preterm infants in all hospitals in Thailand. Despite the Thai Government implementing a Baby Friendly Hospital Initiative for birthing, part of which is the aim to increase breastfeeding as part of overall improved Child Health Care in this developing country, there is still much neglect for preterm infants from their mothers in Thai hospitals.

The participants in this study comprised 36 mothers and preterm infants admitted to Maharat Hospital, in Nakhon-Si-Thammarat, a southern province in Thailand. Participants were randomly allocated to either an intervention (Kangaroo Care) or non-intervention group—there were 18 participants in each group. All mothers gave their standard care to their preterm infant but mothers in the Kangaroo Care group followed the additional Kangaroo Care protocol. All mothers in the study were given a total of four questionnaires at Day 1: one described their socio-demographic details; one described their preterm infant's demographic details; and two assessed bonding between mother and preterm infant (Mother Infant Bonding Questionnaire [MIBQ], self-administered by the mothers and Bonding Observation Check List [BOCL], administered by the researcher). The researcher then visited the mothers in their homes at Weeks 4, 12, and 24 in order to observe them with their infants, at

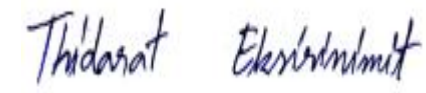
which time the mothers again completed the MIBQ and the researcher completed the BOCL to assess mother-infant bonding behaviour. Statistical analysis was used to analyse this data.

The mothers were similar demographically but the infants' demographic data showed a statistically significant difference for both the Apgar score at one and five minutes, and the hours per day spent by mothers with their infant in Nursery 2. In terms of bonding scores, there was a statistically significant difference between the two groups in six subscales of the MIBQ. Comparative analysis showed significantly higher mean scores for mothers in Kangaroo Care group compared to mothers in the non-intervention group for the MIBQ and the BOCL from Day 1 to Week 24.

Taking external influences and limitations of the study into account, the results support the hypothesis that Kangaroo Care does improve infant-mother interaction and subsequent bonding. The results provide evidence to support the introduction of Kangaroo Care as a method of caring for preterm infants at Maharat Hospital, Nakhon-Si-Thammarat, Thailand. Consequent to this, a recommendation will be made to the Health Department and appropriate Ministries of Health in Thailand for the Kangaroo Care 18-item protocol to become part of the hospital policy.

Declaration

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed: 

(Miss. Thidarat Eksirinimit)

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