



## **The effect of Kangaroo Mother Care (KMC) on Postpartum Depression in mothers of preterm infants**

*By Ansu Smit (OT)*  
South Africa

In this article the effect of Kangaroo Mother Care (KMC) on mothers of preterm babies that develop postpartum depression, will be discussed. This article focuses on guidelines based on research to assist parents to use KMC not only to benefit the preterm baby, but also the mother with postpartum depression.

Preterm babies are more likely to develop health problems and therefore require immediate intensive care<sup>1</sup>. The conventional method in a neonatal intensive care unit (NICU) is to always keep the baby in an incubator, separated from her mother. KMC can be used to make the mother-child separation less traumatic<sup>2</sup>.

KMC is a name given to the practice of parents carrying their preterm baby beneath their clothing, in skin-to-skin contact. During KMC, the mother can allow the baby self-regulatory access to breast-feeding, although this may include non-nutritive sucking for a younger preterm baby<sup>3</sup>. KMC is widely considered to be the most feasible, readily available and preferred intervention for decreasing neonatal morbidity and mortality in developing countries<sup>4</sup>. Kangaroo Care supports active family involvement, satisfaction and attachment. Benefits to the baby include more stable heart and breathing rates, reduced apnea and a stable body temperature. It also leads to decreased agitation and random motor activity, improved state control, less distress from environmental disturbances and medical interventions and easier transition to breast-feeding. Benefits to parents include facilitation of maternal milk production and longer duration of breastfeeding, increased awareness of their infant's stress cues, increased paternal attachment and feelings of closeness to their baby and decreased focus on the technical care. It also increases the level of



confidence in parents in their own care giving capabilities and decrease maternal stress<sup>3</sup>.

Giving birth to a preterm baby can lead to mood changes in mothers and feelings of loss. They may experience reactions that are associated with the grieving process. The grieving process includes: denial, anger, bargaining, depression and acceptance<sup>5</sup>. During the post partum period (the 4-week period immediately after childbirth), early recognition of a possible depression can be identified. One in eight of all women giving birth, meet the criteria for an episode of major depression<sup>1</sup>. Depression can be brought on by anxiety, fear, confusion, concerns as well as the uncertainty of your baby's prognosis<sup>5</sup>.

In Brazil a study was done to determine the mood variation between mothers of preterm infants in KMC and conventional incubator care. The participants were divided into three groups: mothers with term newborns (A); mothers with preterm newborns included in the KMC program (B); and mothers with preterm newborns with incubator placement (C). The Brazilian version of the Visual Analogue Mood Scale (VAMS) was used for the assessment of mothers before and after visiting their infants. The results showed that group A reported fewer occurrences of depressive states than groups B and C. A significant mood variation was observed for groups B and C after visiting their babies. Mothers in group B reported feeling calmer, stronger, more content, relaxed, happy, friendly and clear-headed. The only variation showed by mothers in group C was an increase in feeling clumsy. This study shows the positive effect of the KMC on the mood variation of preterm mothers and highlights the need of more humane experiences during the incubator care period<sup>2</sup>. A conclusion can be made that KMC improve or uplifts the mood of a mother with a preterm baby.

Another study was also done in Brazil was to determine the effect of KMC on post partum depression. The Portuguese version of the Postpartum Screening Scale for



the assessment of maternal depression was used. The mothers were evaluated twice, at the (NICU) admission and at KMC discharge. They found that 37.3% of the mothers suffered from depression and it decreased to 16.9%. No mothers developed postpartum depression during the KMC stay<sup>4</sup>. A conclusion can be made that KMC can reduce the prevalence of postpartum depression.

In this article the benefits of Kangaroo Mother Care for both the preterm baby as well as for the mother with postpartum depression, were discussed. Specific reference was made to the positive effect of KMC on a mother's emotional well-being. The article further highlighted the improvement of post partum depression that KMC can bring.

---

## **References**

1. Barlow, D & Durand, V. 2005, *Abnormal Psychology: An Integrative Approach*, 4<sup>th</sup> ed, Thomson Wadsworth. P 216.
2. De Macedo, C., Luasova, D. October 2007. The mood variation in mothers of preterm infants in Kangaroo mother care and conventional incubator care. *Journal of Tropical Pediatrics*. 53 (5), pp 344 – 6.
3. Case-Smith, 2001, *Occupational Therapy for Children*, Mosby, St.Louis, Missouri.
4. De Alencar, A., de Albuquerque, A. February 2009, Effect of Kangaroo mother care on post partum depression. *Journal of Tropical Pediatrics*. 55 (1), pp 36 -8.
5. Lubbe, W. 2008. *Prematurity, Adjusting your dream*. Little Steps, Pretoria, South Africa.