

# The Effects of Kangaroo Care on Parental-Infant Bonding

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**Overview:** Are parents that practice kangaroo care likely to have a better bond and be less intrusive to the care of their infants?

**Purpose of the study:** To view families as group, seeing how kangaroo care (KC) for preterm infants can contribute to family processes, touch, attachment and bonding.

**Design:** Randomized Control Study

The participants were randomly assigned to into two groups, a control group and a group receiving the intervention. The families in the variable group provided kangaroo care to their infants for 1 hour/day for 14 days. Then all infants were exposed to several different stimuli with their parents and their reactions were studied.

**Sample:** This study was conducted on 146 premature infants and their families to study the correlation between kangaroo care and the family processes, bonding and attachment. Of the 146 couplets, 73 participants were placed in the control group and 73 participants received the intervention.

**Results:** The results from this study showed that parent-infant bonding and attachment was increased with the families that participated in kangaroo care compared to the ones that did not. This study gave results that were significant 80% of the time.

Mother Sensitivity- Kangaroo Care SD 0.59, Control 0.80  
Father Sensitivity- Kangaroo Care 0.58, Control 0.78  
Mother Intrusiveness- Kangaroo Care 1.00, Control 0.91  
Father Intrusiveness- Kangaroo Care 0.98, Control 0.88  
-These results all show significant differences, the lower the standard deviation the more those interactions were observed.

**Strength of Study**

**Level of Study: Level IV**

**Quality of the Study: High**

**Clinical Significance:** In this study the researchers found that their hypothesis of a stronger parent-infant bond using kangaroo care was accurate. This will help nurses and doctors in the OBGYN community understand the significance that KC can have, with hopes of them encouraging it once their child is born. Along with the higher rate of bonding, this is also a good practice for many other health related concerns in premature infants, as it has been shown in other studies to help with temperature regulation, acute pain control and increased milk production in mothers.

## PICO Question:

In newborns, what is the effect of kangaroo care (skin-to-skin contact) to no skin-to-skin contact on parental bonding in infants from birth to six months of age.

Kangaroo care is defined as skin to skin contact in which the baby is placed on a parent's bare chest and is swaddled in warm blankets similar to how a mother kangaroo would carry her own baby. This intervention has been proven to stabilize temperature, aid in breastfeeding, and control respirations. Also, the research that was completed showed that kangaroo care had several other positive outcomes. These outcomes included increases in maternal and paternal attachment, as well as decreased stress levels in mom, dad, and the infant, allowing for bonding to occur.



References

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**Overview:** Is physical touch better than visual contact in relation to creating a maternal bond following delivery?

**Purpose of the study:** To determine whether or not there was a correlation between performing sixty minutes of skin to skin during the 'early sensitive period' and a better parental bond at six months of age.

**Design:** Randomized clinical trial

The mothers were randomly assigned to either sixty minutes of skin to skin contact or five minutes of virtual contact following delivery. The infants cortisol levels were then tested in order to evaluate the bond created.

**Sample:** The study consisted of eighty eight preterm infants. The infants were delivered by a primavera mother who delivered at a German level III NICU.

**Results:** Delivery room skin to skin care in preterm infants improves quality of maternal-infant bond at six months of gestational age and reduces the risk of postpartum depression and impaired bonding.

Delivery room skin-to-skin contact dyads showed a higher quantity of maternal motoric (18 vs 15,  $P = .030$ ), infant's vocal (7 vs 5,  $P = .044$ ) and motoric (20 vs 15,  $P = .032$ ) responses. Moreover, the combined score of maternal and infant responsive behaviour was higher (86 vs 71,  $P = .041$ ) in DR-SSC dyads. DR-SSC mothers had lower risk of both, early postpartum depression (15% vs 45%,  $P = .003$ ) and impaired bonding (Score 3 vs 5,  $P = .031$ ).

**Strength of Study**

**Level of Study: Level IV**

**Quality of the Study: High**

## Clinical Significance

The clinical significance of this study is that it shows how the workflow of a delivery unit may require change in order to make kangaroo care more of a priority within the first hour following delivery. With the exception of high risk deliveries, performing skin to skin includes minimal risks and a plethora of benefits.