

KANGAROO CUDDLES

Does the implementation of skin to skin contact within a neonatal intensive care unit improve the neonatal health outcomes of pre-term infants?

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Introduction:

Preterm infants in a neonatal intensive care unit (NICU) are placed in an environment very different from a utero, this interrupts maternal-infant bonding which leads to a higher incidence of neonatal death and neurodevelopmental impairment (Hack, 2009). Skin to skin contact (also known as kangaroo care) has been shown to influence the brain and later development of preterm infants, due to the physical and emotional closeness it provides.

Discussion

Preterm birth is a physiologically traumatic event in which an infants health, neurological and emotional developmental outcomes are dependant on biological and environmental risk factors (Stefana & Lavelli, 2017). From the literature researched, I decided to focus on three main areas; physiological benefits, psychosocial benefits and how the practice effects parent-infant bonding.

Benefits from skin to skin contact to preterm infant and family

- It has been found to have remarkably positive benefits of psychosocial factors, such as parental stress, mother-infant bonding/attachment and the infants overall development (Jefferies, 2012).
- Several studies found that it can significantly lower behavioural pain responses and can often be used during a painful procedure such as an injection, to decrease stress and discomfort (Jefferies, 2012; Campbell-Yeo et al., 2015).
- It has been shown to encourage breastfeeding and the promotion of earlier hospital discharge (Vesel et al., 2015). It has been shown to benefit homeostasis (Campbell-Yeo et al., 2015) as well as stabilising the infants vital signs whilst receiving skin to skin contact.
- Infants receiving regular sessions have been shown to have fewer oxygen desaturation events when compared to infants being kept in standard incubator care (Mitchell et al., 2011).
- Infant-maternal relationships have been shown to be less positive in preterm infants and evidence suggests that poor attachment can contribute to more negative outcomes (Campbell-Yeo et al., 2015).
- Intimate contact right after birth is shown to evoke neuro-behaviours and ensures the fulfilment of basic biological needs (Moore et al., 2012).

Parents who provide skin to skin contact have shown to feel an increased confidence in understanding their infants, and provided them with feelings of being needed and an increased sense of their role as parents

Recommendations:

1. Implement the use of a skin to skin contact guideline among all NICU in New Zealand
2. Provide staff education and training to ensure the safety of the infant and success of the practice
3. Providing information to parents that outlines the potential benefits to their preterm infant and to themselves.

Conclusion:

The literature has shown that there is clear evidence that skin to skin contact is beneficial to the infant and to the parents involved in the Neonatal Intensive Care Unit. Despite these consistently positive outcomes, the adoption of skin to skin contact as a routine clinical practice remains variable across many neonatal intensive care units. Skin to skin contact should be utilised as a holistic nursing intervention in the healthcare of all infants, regardless of their age, geographical location or economic status. As a result of the findings, it has been proven that skin to skin contact does significantly improve neonatal health outcomes.



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Jefferies, A. (2012). Kangaroo care for the preterm infant and family. *Paediatric Child Health*, 17(3), 141-143.

Mitchell, A., Yates, C., & Hall, R. (2014). Effects of Daily Kangaroo Care on Cardiorespiratory Parameters in Preterm Infants. *Journal of Neonatal-Perinatal Medicine*, 6(3), 243-249.

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Vesel, L., Bergh, A.-M., Kerber, K.J., Valsangkar, B., Mazia, G., Moxon, S.G and on behalf of the KMC Research Acceleration Group. (2015). Kangaroo mother care: a multi-country analysis of health system bottlenecks and potential solutions. *BMC Pregnancy and Childbirth*, 15(2). 5. doi: 10.1186/1471-2393-15-S2-S5

Rationale:

Due to New Zealand being a western society, it is common for preterm infants to be placed in standard incubator care and for this to be considered best practice. However the holistic approach of skin to skin contact has been recommended as a feasible, natural and cost-effective intervention that should be widely utilised as a standard delivery of healthcare. I have focused on this health issue as we as nurses are there to ensure the infant is receiving optimal care, whilst providing education and support to the parents.

I have chosen to present my findings as a poster presentation, as I believe that this method will allow the key points to be clearly identified, while being simple and easy to read (Hess, Tosney & Liegel, 2009). I have identified my target audience to be nurses and families of preterm infants in a NICU environment, which reflects my choice of title and images as I believe this will draw attention and lead my target audience to read further into the contents of the poster (Rowe & Illic, 2009).

PECOT model:

| Category | Information relating to question | Explanation |
|------------|---|---|
| Population | Pre-term infants and mothers/fathers in a Neonatal Intensive Care Unit setting | Any infant born under 37 weeks gestation who is admitted to a Neonatal Intensive Care Unit, along with any parent involved in the infant's care. |
| Exposure | Pre-term infants who have had regular sessions of skin to skin contact with a parent | Using articles which encompass the benefits to the pre-term infant that can directly link back to the practice of skin to skin contact whilst in a Neonatal Intensive Care Unit. |
| Comparison | Comparing to pre-term infants who have not received regular skin to skin contact with a parent | By comparing this data across the globe, it will give a clearer picture as to any disparities between the two groups and to show any potential benefits that can be linked to this practice. |
| Outcome | Positive health outcomes and improvements in preterm infants development and future health outcomes | For nurses to recognise the benefits of skin to skin contact for preterm infants and understanding the implications that may surround this, so that they are able to implement this effectively in clinical practice. |
| Time | N/A | Time is irrelevant as pre-term infants have various lengths of stay whilst in the Neonatal Intensive Care Unit. Skin to skin contact sessions can range from being in constant contact to having shorter periods. |

(Whitehead, 2013).

Hess, G. R., Tosney, K. W., & Leigal, L. H. (2009). Creating effective poster presentation. *Medical Teacher*, 51(4), 319-321. doi: 10.1080/01421590902825131

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