

A Study to Assess the Effectiveness of Nesting on Bio-Physiological Parameters

Urmila Chaudhari

Professor

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Introduction

*“Children are a gift from the Lord; they are a reward from him”
- Psalm 127 : 3*

Human Birth is the most miraculous, transformational and mysterious event of life. It is also an experience that is shared by every single member of the human race. The birth experience indelibly imprints itself in the lives of both the mother who is giving birth and the baby who is being born (**Barbara Harper, 2005**).

Newborns are the most vulnerable group in getting adjusted to the new environment. Following the birth, the first few months will act as a transition period during which the baby adjusts from the aquatic to the aerial environment. Hence care method that facilitates better adaptation of neonates with early post –natal environment has an important role in the growth of newborns. As a result, the way in which baby has been positioned throughout this time is very important (**Oyen N, Markestaad T 2011**).

Birth weight is one of the significant predictors of child's mental development, future physical growth and survival. It is an important risk factor for child's morbidity and mortality. According to the WHO, low birth weight is defined as an infant birth weight of less than 2,500 grams. This group of children is considered to have higher risk of neonatal, post-neonatal death and morbidity (**Daynia EB, Tobias FC, Peter AC, 2010**).

Low Birth Weight babies have higher morbidity and mortality. A baby's LBW is due to Preterm birth or due to IUGR or both. IUGR may present in both term and preterm infants. They have loose skin folds, absence of subcutaneous fat and peeling of skin. LBW is a global and alarming problem and their major problem is inability to control body temperature (**OP Ghai, 2012**).LBW can affect nearly every organ in the body. Some LBW babies need special care in the hospital after birth. They may need help with breathing, staying warm, protection against infection and getting enough nutrition. They may have problems with their lungs, intestinal tract, vision and hearing and also developmental delays in future (**Carlo WA, Nelson 2011**)

Positioning and handling techniques promote comfort and minimize stress, while creating a balance between nurturing care and necessary interventions. Using the developmental model of supportive care, the nurse closely monitors physiologic and behavioral signs to promote organization

and well-being of high risk infants during handling. Gently holding the infant's arms and legs in a tucked, flexed position close to the body can be accomplished with hands or blanket swaddling. Facilitated tucking, blanket swaddling and **Nesting** were shown to decrease physiologic and behavioral distress during routine care (**Hockenberry Wilson, 2015**).

“**Nesting**” is a comfortable measure that stimulates in-utero feeling of lack of space and makes the baby less prone to startle. The infant can be positioned prone or on the side with flexed extremities by providing a ‘nest’ with a rolled blanket. The upper part of the baby's body is slightly raised, resembling a position as he is “cradled in the arm”(Gibbons S, 2003).

Objectives

- To assess the bio–physiological parameters and sucking response among the low birth weight babies.
- To assess the effectiveness of Nesting on the bio–physiological parameters and sucking response among the low birth weight babies in the experimental group.
- To compare the bio–physiological parameters and sucking response among the low birth weight babies between experimental and control group.
- To associate the findings with the selected demographic variables.

Research Methodology:

In the present study, the researcher had adopted Quantitative research approach. Pretest posttest control group design was adopted in this study.

The data were organized, analyzed and interpreted using descriptive and inferential statistics. The demographic variables of mother and baby and the distribution of sucking response among low birth weight babies were tabulated by using frequency distribution. The effectiveness of nesting and comparison between pretest, posttest I and posttest II scores on bio-physiological parameters and sucking response were analyzed by using ANOVA and Z test. It was found that the values were statistically significant at 5% level.

By using Chi – square analysis, association between the pretest scores of sucking response and selected demographic variables of mothers and low birth weight babies such as height of mother, parity, risk during pregnancy, mode of delivery, birth spacing, age of baby, gender, birth weight of baby, gestational age, birth order and mode of sucking was done respectively. The result shows that there is an association between birth weight and gestational age with sucking response among the low birth weight babies.

The result of the study revealed that the nesting is an effective intervention to stabilize the bio – physiological parameters and to improve the sucking response for the low birth weight babies.

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