ORIGINAL RESEARCH PAPER

Pediatrics

KANGAROO MOTHER CARE EFFECT ON VITAL PARAMETERS OF THE BABIES BORN IN A RURAL TERITIARY CARE CENTER

KEY WORDS:

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ABSTRACT

Introduction: Kangaroo mother care (KMC) is a safe and effective alternative comprehensive method for the care of LBW infants. The beneficial effects of KMC on babies such as stabilization of vital parameters, better weight gain, improved survival and adequate thermoregulation has been documented world over. **Aims And Objectives:** To study the effect of Kangaroo mother care (KMC) on vital parameters of low birth weight infants born in a rural tertiary care center. **Materials & Methods:** A prospective observational study of total 130 babies who received minimum of 4 hours of KMC/day (at least 1 hour continuously in each sitting) were analyzed. Means and standard deviations were calculated for birth weight, gestation and changes in vital parameters before and during KMC. p value < 0.05 was considered significant. **Results:** 48% babies started KMC within first week of age. Mean duration of KMC was 7 days (3 -48) days. The O2 saturation improved by 2-3%, temperature (oC) rose from 36.75 ± 0.19 to 37.23 ± 0.25, respiration stabilized and the heart rate dropped by 3-5 beats. **Conclusion:** KMC was found to be safe, effective and feasible method of care of LBW infants.

INTRODUCTION :

Kangaroo mother care (KMC) is a safe and effective alternative comprehensive method for the care of Low Birth Weight (LBW) infants. The beneficial effects of KMC on babies such as stabilization of vital parameters, better weight gain, improved survival and adequate thermoregulation has been documented world over.

Aims & Objectives:

To study the effect of Kangaroo mother care (KMC) on vital parameters of low birth weight infants born in a rural tertiary care center

MATERIALS & METHODS :

Study population : All neonates once out of critical illness (may still be on intravenous fluids and oxygen) with a birth weight of less than 2500 gm were subjected to KMC.

Exclusion Criteria: Birth weight > 2500 gm and Preterm babies with critical illness.

Study design : Prospective observational study .

Sample Size: 130

Period of study: 12 months (May 2022 to April 2023).

Place of Study: DR.PSIMS and RF , Gannavaram, Vijayawada.

Statistical Analysis: Means and standard deviations were calculated for changes in physiological parameters i.e. heart rate, respiration, temperature and oxygen saturation before and during KMC. p value < 0.05 was considered significant.

RESULTS :

- Out of the 130 babies there were 70 boys and 60 girls.
- Age at commencement of KMC was ≤ 3 days in 21%, from 4 to 7th day in 26%, 8th to 15th in 31% and beyond 2 weeks in 22%.
- The mean duration of KMC was 7 (range 3-48) days.
- During KMC, the oxygen saturation improved by 2-3% (95±0.96 to 97±1.50; p<0.05), respiratory rate decreased from 62±5.3 to 52±4.8 (p<0.05) and the body temperature (oC) rose from 36.75± 0.19 to 37.23±0.25; (p<0.05) and was sustained during the period of KMC.
- None of the babies developed any degree of hypothermia or apnea during KMC.
- The heart rate dropped by 3-5 beats per minute (150 ±8.5 to 147±7.50, p>0.05) but remained within the physiological limits.

DISCUSSION :

- KMC provides effective and stable thermal control, improvement in oxygen saturation, stabilized heart rate and respiratory rate.
- Absence of hypothermia and apnea in our babies during KMC is in agreement with lesser or no episodes of hypothermia or apnea reported.
- Improvement in lactation, better behavior of babies and improved confidence of mothers were also observed.

Limitations :

- Irregularities in total duration of KMC.

CONCLUSION :

- Kangaroo Mother Care was found to be acceptable, effective and safe method of care for very low birth weight infants.
- It was found to be safe and feasible even in the neonatal intensive care setting.

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