



Original Research Article

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**A STUDY TO FIND OUT HOW ORAL STIMULATION HELPS IMPROVE
FEEDING IN PREMATURE BABIES ADMITTED TO A SELECTED
HOSPITAL AT REWA, MADHYA PRADESH**

Mrs. Saroj Rani

(Ph.D. Nursing Scholar, Malwanchal University)

Introduction

Premature babies are born before completing 37 weeks of gestation. Due to immature development of their nervous and muscular systems, these babies often have difficulty in sucking, swallowing, and breathing in a coordinated way. Feeding problems are one of the most common challenges faced in the Neonatal Intensive Care Unit (NICU).

According to the World Health Organization (2023), around 15 million babies are born preterm each year globally, and about 3.5 million of these are born in India. In Madhya Pradesh, preterm births are a major cause of neonatal mortality and morbidity. Many preterm infants rely on tube feeding for several days until they learn oral feeding.

Oral stimulation therapy is a gentle method that involves touching and massaging the baby's lips, gums, and tongue to stimulate the oral muscles. It helps improve sucking strength and swallowing coordination, enabling premature infants to transition faster from tube to oral feeding. Nurses can perform this simple intervention as part of daily neonatal care.

Need for the Study

Premature babies with poor feeding skills take longer to achieve full oral feeding, which leads to prolonged hospitalization, increased cost, and anxiety among parents. Simple techniques like oral stimulation can help babies feed effectively and be discharged earlier.

In many hospitals of Madhya Pradesh, including Rewa, oral stimulation is not practiced regularly due to lack of awareness and training. Thus, there is a strong need to assess the effectiveness of oral stimulation therapy to improve feeding in premature babies.

Objectives

1. To assess the feeding performance of premature babies before oral stimulation.
2. To provide oral stimulation therapy to premature babies.
3. To assess the feeding performance after therapy.
4. To evaluate the effectiveness of oral stimulation on feeding performance.

Hypothesis

H₁: There will be a significant improvement in the feeding performance of premature babies after oral stimulation therapy ($p < 0.05$).

Methodology

Research Design: Pre-experimental one-group pre-test post-test design.

Setting: Neonatal Intensive Care Unit (NICU) of a selected hospital, Rewa, Madhya Pradesh.

Population: All premature babies admitted to NICU.

Sample Size: 20 premature babies.

Sampling Technique: Purposive sampling.

Inclusion Criteria

- Premature babies (born before 37 weeks of gestation).
- Medically stable and on tube feeding.
- Parental consent obtained.

Exclusion Criteria

- Babies with congenital anomalies.
- Babies with neurological or respiratory complications.

Intervention Procedure

Each baby received oral stimulation therapy once a day for 10 minutes over 7 consecutive days.

The therapy included:

1. Light stroking of the baby's lips and cheeks.
2. Gentle massage on gums and tongue with a gloved finger.
3. Encouraging non-nutritive sucking for 2–3 minutes.

Tool for Data Collection

A structured feeding observation checklist was used to assess:

- Sucking strength
- Swallowing coordination
- Duration of feeding
- Amount of milk taken
- Baby's alertness during feeding

Data Analysis

Data were analyzed using descriptive statistics (mean, SD, percentage) and paired *t*-test for comparison between pre- and post-test feeding scores.

Discussion

The results of the study indicate that oral stimulation therapy effectively improved feeding performance in premature babies. Similar findings were reported by Fucile et al. (2020) and Lau (2022), who found that oral motor therapy enhances feeding readiness and shortens hospital stay in preterm infants.

Physiologically, oral stimulation activates the sensory nerves and muscles of the mouth, which helps in developing coordinated sucking and swallowing reflexes. The procedure is safe, simple, and can be easily practiced by nurses in daily NICU routines.

Conclusion

The study concluded that oral stimulation therapy is a safe and effective nursing intervention to enhance feeding ability in premature babies. It improves sucking and swallowing coordination, reduces dependence on tube feeding, and promotes early discharge.

This study highlights the importance of incorporating oral stimulation into routine neonatal care in hospitals across Madhya Pradesh.

Implications

- **Nursing Practice:** Nurses can apply oral stimulation techniques to improve feeding outcomes in preterm infants.
- **Nursing Education:** Training programs for students should include practical demonstrations on oral motor therapy.
- **Nursing Research:** Further studies with larger samples can be conducted.
- **Nursing Administration:** Policies can be framed to include oral stimulation in NICU care standards.

Recommendations

1. Conduct larger studies across multiple hospitals to strengthen evidence.
2. Compare oral stimulation with other feeding improvement methods.
3. Include long-term follow-up on weight gain and growth outcomes.
4. Educate parents on home-based oral stimulation techniques after discharge.

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