

Critical Review: The Effects of Oral Stimulation on Feeding Behaviours in Preterm Infants

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This critical review examines the impact of oral stimulation interventions on the feeding behaviours of premature infants who have not yet transitioned to oral feeding. A literature search was completed, and yielded the following article types: four randomized control trials, one review, and one meta-analysis. Overall, the literature provides optimistic support for clinicians who wish to implement oral stimulation intervention for preterm infants. However, such interventions merit further research involving larger sample sizes, multi-site trials, standardized outcome measures, and analysis of optimal intervention schedules.

Introduction

The development of behaviours necessary for safe and efficient feeding begins long before birth. In utero, fetal jaw movements are typically first seen at 11 weeks gestation, with sucking and swallowing behaviours emerging at 13 weeks (Hafstrom & Kjellmer, 2001). From this time onward, infants develop increasingly regular sucking patterns, and move toward coordinated sucking, swallowing and breathing around 34 weeks gestation (Bu'lock, Woolridge, & Baum, 1990; Dailey Hall, 2001). Therefore, neonates with higher gestational ages typically show more advanced and more consistent feeding skills (Bu'lock, Woolridge, & Baum, 1990).

Premature infants are defined as neonates born before 37 weeks gestational age (GA; Dailey Hall, 2001). While the average full-term infant is born at 38 to 41 weeks and weighs 3000 grams, premature infants are typically classified as low birth weight (LBW, <1500 g), very low birth weight (VLBW, <1000 g) or extremely low birth weight (ELBW, <800 g; Dailey Hall, 2001). Feeding disorders are extremely common in this population, and may arise due to hypotonia, disorganized or weak oral movements, lack of arousal, irritability,

preterm infants was completed by Daley and Kennedy (2000). They assembled relevant literature on the effects of various interventions on the volu

