

32nd EURO NURSING AND MEDICARE SUMMIT

October 26-28, 2017 | Paris, France

Comparison of the influence of oral and physical simulation on the coordination of sucking, swallowing, and respiration in Premature Infants, A randomized controlled trial

Mitra Edraki^{1*}, Arezoo Chaeichi², Nooshin Beheshtipour³, Reza Bahrami⁴, Saeedeh pourahmad⁵ and Sima Farpour⁶
Shiraz University of Medical Sciences, Iran

Introduction: Survival of preterm infants, who require specialized critical care and support, has been made possible by advances in technology. Safe and effective nutrition not only requires the ability to suck, but also coordination among respiration, sucking, and swallowing. Therefore, this study aimed to evaluate the influence of oral and physical stimulation on coordination of sucking, swallowing, and respiration in premature infants.

Methods: In this clinical trial, 60 premature infants (26-34 weeks) hospitalized in neonatal intensive care unit were divided into oral, oral-physical, and control groups using permuted block randomization. The oral group received oral stimulation for 10 days. The oral-physical group received physical stimulation in addition to oral stimulation for 10 days. Finally, the control group received non-nutritive sucking stimulation using a pacifier. The data were collected using demographic form and early feeding skills assessment checklist and were analyzed by ANOVA, chi-square, and Mann-Whitney U tests.

Results: The results showed no significant difference between oral and oral-physical groups as well as between oral and control groups regarding the coordination among sucking, swallowing, and breathing on the seventh day ($P > 0.001$). However, a significant difference was found between oral-physical and control groups in this respect on the seventh day ($P < 0.001$). Besides, a significant difference was observed among the three groups on the fourteenth day ($P < 0.001$).

Conclusion: The intervention was effective in coordination among sucking, swallowing, and respiration in the intervention groups compared to the control group, leading to safe swallowing and independent feeding. Moreover, physical and oral stimulations had synergic effects.

Keywords: Premature infants, Coordination among sucking, swallowing, and respiration, Oral and physical stimulation

mitraedraki@yahoo.com

Notes: