

Topical Application of Human Milk versus Alcohol and Povidine-Iodine on Clinical Outcomes of Umbilical Cord in Healthy Newborn: Impact of an Educational Program of Mothers' Knowledge and Practice Regarding Umbilical Cord Care

Aim: This quasi-experimental study was conducted to evaluate the effect of an educational program of mothers' knowledge and practice about umbilical cord care; compare cord-cleansing using human milk versus alcohol 70% and povidine-iodine 10% on clinical outcomes of umbilical cord in healthy newborn. **Subjects:** A total of 150 mothers who had just delivered with their newborn infants at the postnatal units at El-Fayoum University Hospital, Egypt, were recruited for this study. **Tool:** data was collected through a structured interview questionnaire; newborn follow-up sheet and an observation checklist. **Results** indicated that, before the intervention of the educational program, lack of satisfactory knowledge and practice among mothers in all groups related to cord care. The total mean scores for the immediate post/follow up tests of intervention educational program were statistically significantly higher ($p < 0.001$), compared to their pre-intervention of the educational program scores. Concerning newborn follow-up, there were highly statistically significant differences in umbilical cord base separation time, the sign of cord infection, bleeding continuation in mother milk group as compared with alcohol 70% and povidine-iodine 10% group. **Conclusion:** Educational program had a positive effect on mothers' knowledge and competency of their practice regarding umbilical cord cleansing. Topical application of mother milk on umbilical cord care leads to rapid cord separation time; diminish the umbilical cord infection as it can be used as an easy, cheap and non-invasive way for cord care. **Recommendation:** educational programs intervention regarding neonatal care is required during the period of antenatal visit. Researches to study the effect of newborn cord care practices on the incidence of newborn morbidity/mortality are required.

Keywords: newborn, educational program, umbilical cord care, clinical outcomes, mothers' knowledge and practice