

Effect of Two Different Cord Care Regimens on Umbilical Cord Stump Separation Time among Neonates at Cairo University Hospitals

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Abstract

Background, a major cause of death in developing countries is umbilical cord infections. **Aim** of this

research was to compare the effect of topical application of breast milk versus distilled water on umbilical cordstump separation time and occurrence of bacterial colonization among neonates. **Design**, quasi- experimental design.

Setting was postpartum unit at El Manial Maternity Hospital. **Sample**, a total of 100 neonates was randomly selected immediately after admission to the postpartum unit according to certain criteria. The sample was randomly assigned into two groups (50 neonates each) group A who received cord care with breast milk, and group B who received cord care with distilled water. **Tools**, three tools developed and filled by the researchers: - structured interview schedule; Cord swab bacteriological examination tool; and Follow up Schedule for signs of cord infection tool.

Results indicated that, no statistically significant differences between groups were found in relation to, maternal socio-demographic or neonatal characteristics. Gestational age mean was 38.60 ± 1.08 weeks gestation for neonates in breast milk group while, it was $38.92 + 1.15$ weeks gestation for neonates in distilled water group ($T= 1.42$, $P=0.15$). Neonatal weight mean was 2973.00 ± 218.96 gm for neonates in breast milk group and it was 2898.00 ± 315.08 gm for neonates in distilled water group ($T= 0.71$, $P=0.47$). Umbilical cord separation time occurred early for neonates in the breast milk group Vs neonates in the distilled water group (5.60 ± 1.04 & 7.92 ± 1.08 days, respectively). Moreover, low percentage of neonates in the breast milk group and Distilled water group had bacterial colonization (14% & 10%, respectively) with no statistical significance difference between groups was found ($X^2= 0.37$, $P= 0.76$). **In conclusion**, use of topical application of breast milk on umbilical cord care was associated with shorter cord stump separation time than in distilled water. Also, breast milk reduced incidence of omphalitis, and reduced bacterial colonization especially with pathogenic microorganisms as the same as distilled water. This **research recommends** that, breast milk can be used as easy, cheap and highly effective for umbilical cord care.

Key words: Distilled water, Breast milk, umbilical cord stump separation time, Bacterial Colonization

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