Effect of Lateral Versus Supine Position on Oxygen Saturation Among Preterm Babies with Respiratory Distress Syndrome

By

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Abstract

Positioning of preterm infants plays an important role to improve oxygenation and reduce the need for supplemental oxygen and mechanical ventilation. Suitable positioning to maintain normal oxygen saturation is a priority in the nursing care. The aim of the current study was to evaluate the effect of lateral versus supine position on breathing pattern and oxygen saturation in preterm babies with respiratory distress syndrome. A quasi experimental design was utilized. A sample convenience of 100 preterm babies was recruited for this study from the Maternal and Newborn Hospital in El Kaser El Aini Hospital. Data were collected by using four tools: Position sheet designed by Hennessy (2006), and modified by the investigator, demographic data sheet of maternal and their preterm, Down score sheet, oxygen therapy and oxygen saturation sheet. The results of this study revealed highly statistically significant differences regarding lateral position and oxygen saturation and a highly statistically significant difference in the three day readings between right and left positions regarding the respiratory rate among the study group. However, there were no statistically significant differences regarding lateral position and respiratory rate. As well, no statistically significant differences were detected in the first three days readings between right and left positions in relation to oxygen saturation among the study group. It can be concluded that side-lying is better than supine positioning in the neonatal intensive care unit, which improves oxygen saturation, as babies on right side had better respiration than those of left side. This study recommended lateral position should be applied to improve oxygen saturation in preterm baby with respiratory distress syndrome in neonatal intensive care units. Right lateral position should be applied to improve respiratory rate in preterm baby versus left lateral with respiratory distress syndrome in neonatal intensive care units.

Key words: Lateral Position, Oxygen Saturation, Preterm babies, Respiratory Distress Syndrome