

## Effect of Prone Position on FiO<sub>2</sub> Level in Premature Baby Receiving Ventilator

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### ABSTRACT

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<b>Introduction</b>	A review of literature on the position of infant who has respiratory problem indicates that Prone Position (PP) is more beneficial compared to Supine Position (PS). One monitoring action done by nurses while baby is receiving mechanical ventilator is baby's need of FiO <sub>2</sub> . The purpose of this study is to identify the effect of Prone Position to oxygenation status (FiO <sub>2</sub> ) of baby who received mechanical ventilation at NICU RSUPN Dr. Cipto Mangunkusumo.
<b>Methods</b>	The research design used in the study was pre - experimental one-group pretest-posttest. The sample comprised 18 babies aged 44.78±25.06 (mean, ±SD) days; birth weight 2008.33±977.84; mode of ventilator, pressure support; used synchronized intermittent mandatory ventilation and assist control; and length of ventilator use 36.67±19.57 days. FiO <sub>2</sub> in this research was measured before PP, 30 minutes PP, 1 hour PP, and 2 hours PP.
<b>Results</b>	The result shows that there were no significant differences of FiO <sub>2</sub> in babies who received mechanical ventilation before and after prone positioning. However, there was correlation between cardiovascular illness and FiO <sub>2</sub> in babies.
<b>Conclusions</b>	From this study, the recommendation of nursing implication is to improve PP intervention to infants who are in stable condition and the weaning process. Further research is required with bigger sample size. Future research should consider using quasi-experimental study design or experimental study design and more analysis on the correct PP time.
<b>Keywords</b>	Prone position - premature baby- FiO <sub>2</sub> - ventilator