



## Nesting Innovation is Effective for Improving Sleep Duration in Low Birth Weight Babies (LBWB)

Anafrin Yugistiyowati<sup>1</sup>, Wahyuningsih, Purwo Atmanto<sup>2</sup>

<sup>1</sup>Department of Nursing, Faculty of Health Science, Universitas Alma Ata  
Jalan Brawijaya No.99 Tamantirto Kasihan Bantul Yogyakarta

<sup>2</sup>RSUP Dr. Sardjito Yogyakarta  
Jalan Kesehatan No.1, Senolowo, Sinduadi, Kec. Mlati, Kabupaten Sleman Yogyakarta  
Email: anafrin.yugistiyowati@almaata.ac.id

### Abstract

*LBWB in Indonesia is still high so proper care efforts are required to reduce any negative impact on growing a baby. One that can be implemented of nursing intervention namely the use of nesting. Nesting provides many benefits in the care of LBWB by optimizing growth and development during treatment at the hospital. One of the benefits of nesting is that it reduces stress caused by exposure to the outside environment so that the baby's sleep duration is more optimal. Many hospitals in the area have not implemented this intervention, so it is important to conduct research on the use of nesting in LBWB. This study is to determine the effectiveness of using nesting on the sleep duration of LBWB. This research is a quantitative research with pre-experimental design one group pretest posttest. The research place was carried out in the Sleman Regional Hospital with a total of 15 respondents using total sampling technique. The inclusion criteria for respondents were: babies with birth weight between 1500 grams - <2500 grams; LBWB who is in the incubator; and parents or guardians of infants are willing to become respondents by agreeing to the informed consent. The research instrument used a sleep duration observation sheet, a nesting tool and a timer in the form of a stopwatch. The data normality test used the Shapiro Wilk test and data analysis used the Paired t-Test. The results showed that the average length of sleep prior to the nesting intervention was 82.33 minutes with a maximum value of 100 minutes and a minimum value of 60 minutes; whereas the average sleep duration after the nesting intervention was 91.87 minutes with a maximum value of 105 minutes and a minimum value of 80 minutes. Paired t-test with p-value = 0.00 and a difference in mean value of -9.53 minutes from the average sleep duration before and after the nesting intervention was given. The use of nesting is effective to improve sleep duration in LBWB. This nesting innovation is expected to be applied to the care of LBWB or premature babies in all hospitals in Indonesia, and the importance of the role of nurses in providing nesting education in LBWB care after hospital treatment.*

**Keywords:** low birth weight babies; nesting innovation; sleep duration

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