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PROCEDURE

**EUANGDOI TANTAPONG: THE EFFECTS OF SWADDLING
ON PAIN RESPONSE RELATED TO HEELSTICK IN PREMATURE
INFANTS. THESIS ADVISORS: RUTJA PHUPHAIBUL, D. N. S.,
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The purposes of this quasi-experimental research were: a) to compare the difference of heart rate in swaddled and unswaddled premature infants who received heelstick; b) to compare the difference of oxygen saturation in swaddled and unswaddled premature infants who received heelstick; c) to compare the difference of pain scores in swaddled and unswaddled premature infants who received heelstick. Purposive sampling was used to select 30 premature infants who had been admitted in the Inpatient Unit at the Neonatal Unit for newborn infants, who were between 32 and 35 completed weeks of postconceptual age at the Queen Sirikit Institute of Child Health, Department of Medical Service, Ministry of Public Health. The 30 premature infants acted as their own controls in a repeated-measure, random-sequencing design. All subjects were observed twice, and sixty experiment times were selected by purposive sampling. For the purpose of this experiment, swaddled and unswaddled premature infants received heelstick procedures for 2 consecutive days. Heelsticks were given according to infants' treatment plans. Physiologic measurement (heart rate and oxygen saturation) was assessed by using a pulse oximeter and pain measurement was assessed by using the Modified Premature Infant Pain Profile (PIPP; Stevens, et al., 1996). Pain assessment was measured using blind technique video recordings, which were assessed by a research assistant. The results of this study are as follows:

1. There were significant differences of mean heart rate in swaddled premature infants at 5 and 6 minutes who had a lower mean heart rate in response to the painful stimulus of a heelstick, than in unswaddled premature infants.
2. There were no significant differences of mean oxygen saturation in swaddled and unswaddled premature infants who received heelstick.
3. There were significant differences of mean pain scores in swaddled premature infants at 4, 5, 6, and 7 minutes who had lower mean pain scores in response to the painful stimulus of a heelstick, than in unswaddled premature infants.

In conclusion, premature infants benefit from swaddling by reducing the stress of pain.