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**Master's Dissertation of
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A Feasibility Study on Basic Resuscitation Program for Health Providers in
Indonesia: A Controlled Before-After Study

「インドネシアにおける新生児心肺蘇生法研修プログラムの開発および
実行可能性検証のための比較介入研究」

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Abstract

Objective: The objectives of this study were to implement a basic simulation-based neonatal resuscitation training program for nurses and midwives in North Sulawesi, Indonesia, and to assess the feasibility and effects of this training program on the knowledge, skills, and self-confidence of these health providers in Puskesmas in this area.

Methods: A controlled before-after intervention study involving a neonatal resuscitation training program was conducted using two groups (i.e., intervention and control groups). The study was conducted in two arms and included 68 nurses and midwives as participants (35, intervention; 33, control). Pre- and post-intervention data and three-month post-intervention data were analyzed. Specific changes in the following key outcomes were clarified: competencies in knowledge, skills, and self-confidence for neonatal resuscitation; acceptability and feasibility of the neonatal resuscitation training program.

Results: Of the 35 participants in the intervention group, 33 participants completed the before-after intervention, but only 12 participants remained three months after the intervention. Of the 33 participants in the control group, all started and completed the intervention, and 32 remained three months after the intervention. The scores for the knowledge and skills of the nurses and midwives were increased by the neonatal resuscitation training program, but these scores decreased over a three-month period. The average scores in the intervention group were 11.9 points (SD = 1.9, n = 35), 13.6 (SD = 1.9, n = 33) and 12.8 points (SD = 2.1, n = 12) after three months. The same trend was observed for self-confidence. The average ranks were as follows: pre 3.18; post 3.77; three months 3.88. Qualitative data were analyzed independently and narratively to evaluate the program. The participants reported that they felt a sense of empowerment from the program. They also indicated that the program increased their knowledge for immediate practical use.

Discussion: This study demonstrated that the basic simulation-based neonatal resuscitation training program was acceptable to the nurses and midwives and was associated with improvements in their knowledge, skills, and self-confidence. To our knowledge, this is the first evidence-based and hands-on training intervention program for Indonesian nurses and midwives that was feasible, acceptable, and beneficial for their continuous learning at the in-service level. Further trials are needed to address the limitations of this study and confirm the benefits of the resuscitation training program.