The Development of Clinical Nursing Practice Guidelines for Preventing of Infection during Intubation in Patients with Suspected or Confirmed COVID-19

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Abstract: The purposes of this research and development was to develop and evaluation of the clinical nursing practice guideline (CNPG) for the prevention infection during intubation in patient with suspected or confirmed COVID-19 patient. This study was developed by using the evidence-based practice model of Soukup (2000) as a conceptual framework. The study consisted of 4 steps: 1) situational analysis of intubation service in patients with confirmed COVID-19; 2) development of the CNPG; 3) apply the NPG to trial; and 4) evaluation of the CNPG. The sample consisted of 52 nurse anesthetists and 25 infected or suspected COVID-19 patients. The research instrument consisted of 1) the CNPG, which was developed by the researchers; 2) the nurses anesthetist opinion questionnaire to the guideline; 3) the evaluation practice form; and 4) the nurse anesthetist knowledge test on nursing care of patients infected with COVID-19. Data were analyzed by using descriptive statistics, and Wilcoxon matched-pairs signed rank test. The results revealed this developed CNPG consists of 4 sections: 1) the CNPG for airborne precautions; 2) the preparation of anesthetic and intubation equipments; 3) the roles and duties of the intubation team, 4) the guidelines for intubation in suspected or confirmed COVID-19 patients. The results of CNPG use found that 1) the provider: using NPG in providers revealed that nurse anesthetist had a higher mean of knowledge scores than before using CNPG statistically significant at the 0.05 level (p<0.01) and able to follow the NPG 100% in all activities. The anesthetic team was not infected with COVID-19 from intubation outside the operating room. 2) the client: the patient was safe, with no complications from intubation. Summary CNPG to prevent infection during reintubation of suspected or confirmed COVID-19 patient was appropriate and applicable to practice.

Keywords: clinical nursing practice guideline, prevention of infection, endotracheal intubation, COVID-19

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