The Development of Clinical Nursing Practice Guideline for Prevention of Ventilator-Associated Pneumonia, Medical Nursing Department, Rajavithi Hospital

Chutima Saenthaveedamrongkun¹ R.N., M.P.P.M. (Master of Public and Private Management), Varinthon Jantaramanee¹ R.N, M.N.S. (Adult Nursing), Thanida Homjeen¹ R.N, M.N.S. (Adult Nursing)

Rajavithi Hospital, Bangkok, Thailand

Purpose
This action research aimed to 1) improve the clinical nursing practice guideline (CNPG) for prevention of ventilator-associated pneumonia (VAP) in patient with mechanical ventilator and 2) study the effects of CNPG after implementation.

Methods
The study was conducted in medical wards, Rajavithi Hospital, during January 2013 to February 2014, using PDCA process of Deming cycle and the Iowa model of evidence-based practice. The purposive sampling method was used to select samples of 52 registered nurses and 788 patients with mechanical ventilator. Research instruments composed of 1) CNPG for prevention of VAP 2) assessment tool for nurses conform to CNPG 3) questionnaire of nurses’ opinion on CNPG and 4) VAP incidence report form. The data were analyzed using descriptive statistics and chi-square test.

Results
The results show that CNPG for prevention of VAP consisted of 7 categories as follows; 1) hand hygiene 2) mouth care procedure 3) position turning 4) Nasogastric tube feeding 5) airway clearance and suctioning 6) cuff pressure measurement and 7) ventilator weaning. Nurses conformed to CNPG overall 81.97%, the opinion on CNPG among nurses revealed that 96.20% agree with the beneficial of CNPG. In addition, the incidences of VAP after 3 months of implementation decreased from 10.75 to 7.01 per 1,000 ventilator days (p = 0.306).

Conclusions
This CNPG could help patients with respiratory care to decrease the incidence of VAP. Nevertheless, PDCA process for nursing practice of this CNPG should be monitor for continuing compliance guidelines to cover all categories and all issues.