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Submitting author: Mr CHI KA HUNG

Post title: Advanced Practice Nurse, Kwong Wah Hospital, KWC

Inauguration of Invasive Mechanical Ventilator (IMV) Program in Respiratory Ward of Kwong Wah Hospital

Hung CK(1), Wong SY(1), Yee KS(1), Tse HN(1), Lee YM(2), Ho TW(1), Li CM(1), Chan SM(1)

(1)Department of Medicine and Geriatrics, Kwong Wah Hospital (2)Department of Tuberculosis & Chest, Wong Tai Sin Hospital

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Introduction

The majorities of patient required invasive mechanical ventilator (IMV) support are cared under general ward due to the limited resources of special care unit in hospitals. This group of patient may not receive optimized care to obtain a satisfactory outcome. High mortality rate, prolonged ventilation, increased complication rate are in consequence of the suboptimal care. Through the provision of specialty care to IMV cases, the quality of care can be improved.

Objectives

Setup 2 designated IMV beds in respiratory ward to provide optimized care for patients in order to improve patient outcome.

Methodology

A nursing care checklist was developed to provide a structural guidance for nurses to prevent ventilator-associated complications for IMV case. Electric toothbrush and anti-septic mouthwash were introduced for oral care of IMV case. Nursing audit on care patient with endotracheal tube was conducted to identify common weakness on caring IMV case. A series of training sessions included introduction of IMV bed, prevention of ventilator-associated pneumonia (VAP) and weaning patients from mechanical ventilator were carried out within department and targeted for nurses directly caring IMV case.

Result

2 designated IMV beds were setup in respiratory ward of Kwong Wah Hospital since September of 2014. The nursing audit found that prop up patient, oral care and check cuff pressure regularly were usually neglected by frontline staff. The audit result was promulgated to the frontline nurses and reinforcement of the nursing

standard was provided. During the period of 1/9/2014 - 31/8/2015, 26 cases were admitted to the designated IMV beds. Compared with IMV bed and non-IMV bed cases, the ventilator weaning rate was 69.2% vs 34.4%, the re-intubation rate was 0% vs 1.8%, the death rate was 19% vs 71.9%, unplanned extubation rate was 3.8% vs 9%.