Care of Patients Receiving Invasive Mechanical Ventilation in Acute Medical Wards

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Introduction
Patients receiving invasive mechanical ventilation (IMV) are critically ill and require high-level nursing care. However, some patients on IMV are managed in general medical wards. An IMV program was commenced in designated beds of Medical Departments of five acute hospitals (Kwong Wah Hospital, North District Hospital, Pamela Youde Nethersole Eastern Hospital, Queen Elizabeth Hospital and United Christian Hospital) since September 2014.

Objectives
1. Evaluate nursing compliance to the endotracheal tube standard of care
2. Assess variance in compliance between general and designated IMV beds

Methodology
An audit was conducted in five hospitals from 1 November 2014 to 14 December 2014 on patients receiving IMV in general and IMV beds. A modified standard audit form was used to evaluate compliance to the 20 criteria under the standard on “Care of Patient with Endotracheal Tube”.

Result
Nursing care for 33 patients in IMV beds and 20 in general beds was audited. While majority of the criteria were met, variance was wide in four criteria. Only 50% general patients had their cuff pressure regularly checked versus 100% in IMV patients. Fifty-five percent general patients were propped up at 30 to 45 degrees during feeding and transportation versus 91.2% IMV patients. Eighty percent general patients had their oral hygiene maintained compared with 100% IMV patients. Finally, readiness of
weaning was continuously assessed for 100% IMV patients compared with 55.6% general patients. Conclusion This audit reveals that measures in preventing ventilator-associated pneumonia could be reinforced. These include propping patients up and oral hygiene maintenance. To prevent tracheal complications, regular cuff pressure monitoring is vital. The low compliance might be related to availability of equipment. Early weaning helps to prevent ventilator-associated complications. However, assessment requires the expertise of trained and experienced staff. Acknowledgement We would like to thank the IMV working group members, Dr. Yu CW(1), Dr. Yee W(2), Dr. So L(4), Dr. Lo HY(4), Dr. Chan J(5), Dr. Ng CK(5), Dr. Cheng SL(6), Dr. Chu CM(6) for their support of this program.