



Service Priorities and Programmes
Electronic Presentations

Convention ID: 339

Submitting author: Mr H Y LEUNG

Post title: Registered Nurse, PMH, KWC

Extended Quality Improvement Programme on Tracheal Cuff Pressure Monitoring in Hospital-Wide Perspective

Leung HY(1), Tang NC(1), Wan TK(1)

(1)Intensive Care Unit, Princess Margaret Hospital.

Keywords:

Tracheal cuff pressure monitoring

Quality improvement

Nursing standard

Hospital-wide training

Introduction

Tracheal cuff pressure monitoring is required for ICU patient with Endotracheal tube (ET) and Tracheostomy tube(TT). The practice was regularly reviewed in ICU and sought for new practice change. Optimal cuff pressure monitoring in intensive care unit Princess Margaret Hospital (PMH) adult ICU came into routine practice for years. In view of no structural guideline of the practice in general ward, our department was committed to uphold the nursing standard of our practice and promulgate it to general ward. ICU PMH collaborated with Q&S department PMH to conduct a series of educational program in PMH and facilitated quality improvement in the hospital- wide of PMH.

Objectives

1. To facilitate the training “train-the-trainer” basis on tracheal cuff pressure monitoring in hospital. 2. To enhance ward nurse’s knowledge and skill on tracheal cuff pressure monitoring. 3. To promulgate the routine practice to wards of the hospital.

Methodology

1. Educational program in form of train-the-trainer workshop. Pre-reading material and lecture was provided.
2. Psychomotor skill session was provided to demonstrate the cuff pressure monitoring skill.
3. Evaluation of staff competence by direct observation, competence checklist and return demonstration in the workshop.
4. Clinical Audit review conducted by ICU to evaluate the general ward staff compliance and optimal cuff pressure achieved on newly admitted ICU patient with ET or TT.

Result

1. 8 sessions of the workshop were conducted on June, 2017 and 110 trainers from different departments were recruited.
2. Skill training focused on use of device for monitoring cuff pressure and its technique were rectified.
3. Hospital-wide tracheal cuff pressure monitoring started from 1st July, 2017.
4. Clinical audit upon ICU admission from June, 2017. 263 out of 324 intubated patients were captured and revealed improving trend on keeping normal cuff pressure achieved from 48.7% (July) to 70.0% (December) and decreasing trend of over-inflation from 35.9% (July) to 10.3% (December).
5. Staff compliance and competence on optimal cuff pressure monitoring was enhanced.
6. Mastery of the device for cuff pressure monitoring was greatly achieved.
7. The result indicated the practice became more applicable and widely used in general ward of PMH.