



Service Priorities and Programmes
Electronic Presentations

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Oxygen Therapy Program in Department of Medicine Tseung Kwan O Hospital

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Introduction

Oxygen therapy is essential for the management of a variety of clinical conditions. However, failure to administer oxygen appropriately can lead to serious harm to the patients, especially for those with conditions vulnerable to hypercapnic respiratory failure. British Thoracic Society (BTS) had published guideline for emergency oxygen use in adult patients in 2008. The guideline recommends that oxygen should be prescribed according to target oxygen saturation range instead of a fixed dose because patient's oxygen requirement may vary over time. Health care professional who administer oxygen therapy should monitor the patient and keep oxygen saturation within the target range.

Objectives

To enhance the safe, appropriate and correct use of emergency oxygen therapy

Methodology

An audit on emergency oxygen use was performed in four medical wards of Tseung Kwan O Hospital in January 2012. After the audit, Oxygen Therapy Working Group, consisting of doctors, nurses and pharmacists, had been set up. The mission of the working group is to ensure the right patient receive the right dosage of oxygen at right time. Promulgation of guideline, education and training were performed. A second audit was done again in six medical wards in February 2013.

Result

42.3% (47 out of 111) patients in the first audit in 2012 and 40.6% (80 out of 197) patients in the second audit in 2013 had oxygen prescription during the hospitalization. 11.7% and 13.7% patients were on oxygen therapy at the time of audit in 2012 and 2013 respectively. Among those patients with oxygen prescription, 14.9% and 22.5% had risk factors for hypercapnia in the first and second audits respectively. Oxygen prescription with target saturation specified increased from 53.2% in the first audit to 75% in the second audit. Oxygen administration accuracy improved from 15.4% to 92.6%. The proportion of patients with oxygen saturation within the BTS

recommended range improved from 69.2% to 88.9%. Conclusion The Oxygen Therapy Program improved the quality of care of patients requiring emergency oxygen therapy.