

Service Priorities and Programmes Electronic Presentations

Convention ID: 213

Submitting author: Mr Sik Ngai LEE

Post title: Advanced Practice Nurse, Pok Oi Hospital, NTWC

Implementation of "Visual Alert Drug Trolley" to enhance medication safety in the Emergency Medicine Ward (EMW) of Pok Oi Hospital (POH) Helen Leung YY, Simon Tang YH, Ong KL, Billy Wong WM, Yu KM Accident & Emergency Department of Pok Oi Hospital

Keywords:

Visual Alert Alert cards Drug trolley

Introduction

Medication administration is a complex multi-step process and administration errors account for 26% to 32% of total medication errors whereas nurses administer most medications (Anderson et al 2010). Medication errors can be led by many factors and pose the great risks on patients. Medication error defined as "any preventable event that may cause or lead to inappropriate medication use or patient harm while the medication is in the control of health professional, patient or consumer" (Athanasakis 2012). Taking into account all precautions for medication errors, an innovative measure was developed to safeguard our practice from medication errors. Preventive strategies of medication errors were employed on drug storage and preparation.

Objectives

To enhance the medication safety by "Visual Alert Drug Trolley" design through visual emphasis on vital drugs information.

<u>Methodology</u>

The Root Cause Analysis had been implemented to explore the leading factors of each medication incidents from Jan-June 2013 by the Medication Safety Subcommittee of Accident and Emergency Department (AED) of POH. Moreover, in collaboration with the Quality and Safety (Q&S) Division and the Pharmacy Department, a quality improvement project had been initiated to enhance medication safety. Since July 2013, a "Visual Alert Drug Trolley" had been installed in EMW of POH. 1) The high risk group of EMW drugs stock had been contained separately into 5 designated drawers of the drug trolley with different color-coding. These drug groups include: Blood pressure control drugs Psychiatric drugs Antibiotic

Oral anti-hyperglycemic drugs Non-steroid Anti-inflammatory drugs 2) Alert cards at each of the designated drawers: the information on the alert card contains message to remind staff of the special procedures or precautions to be taken when administering the specific drugs. 3) Alert poster showing drug allergy group (including Chinese and English version) and cross-sensitivity group at drug trolley for staff as quick reference during drug preparation.

Result
After the program of "Visual Alert Drug Trolley" had been implemented, the medication incidents related to drug administration had been reduced from 5 (Jan-June 2013) to 2 (July-Dec 2013) with significant of 60% decreased. Certainly, this quality improvement project is ongoing and review periodically