



Service Priorities and Programmes
Electronic Presentations

Convention ID: 402

Submitting author: Miss Chui Man KWOK

Post title: Advanced Practice Nurse, Shatin Hospital, NTEC

To explore the effective and proper methods on crushing drugs during drug administration in wards.

Kwok CM(1), Lee P(1), Lo WC(1), Thang PK(1), Mak SH(1), Kung CC(1), Woo LC(1) & Ng WP (1)

(1) Medical & Geriatric ward, Shatin Hospital

Keywords:

crushing drugs

mortar & pestle

drug administration

cross contamination

Introduction

An incident was reported that a patient was found unexplained hypoglycemia in Geriatric ward. Metformin was detected in her urine analysis. However, the patient had neither history of diabetes nor prescribed with Metformin. Drug administration error was then suspected. After investigation, cross contamination of mortar leading drug residue remained in the mortar and taken by the patient could be the possible cause of this incident. Elderly's swallowing problem is common in Geriatric wards. In current practice, mortar and pestle is used to crush and grind tablets into powdered tablets.

Objectives

To explore an alternative method to improve the process of crushing drugs during drug administration.

Methodology

Value stream mapping approach was employed to analyze every steps of crushing drugs. The other 5 workshops for nursing staff were held to discuss various methods of crushing drug with the principles of avoiding cross contamination and administration of full dose drugs to patients. The content included video showing of different methods on crushing drugs, demonstration, sharing, discussion and voting. The workshops aimed to find out the most appropriate method to achieve the goals.

Result

48 participants including EN, RN, NO, APN & WM joined the workshops. 72% participants agreed that individual mortar for individual patient is the most effective way in crushing drugs without violated the principles. Full implementation in all M&G wards since June 2012 with preliminary feedback from one ward that it was shortened by 20 minutes in the morning of drugs administration. Surprise check had been performed in August 2012 & January 2013 respectively. The compliance rate was then 100%. Conclusion When patient with swallowing problem was prescribed with

tablets simultaneously, the tablets were then required to crush for easy swallowing. Nurses need to crush the drugs during drug administration daily. The effective and proper methods on crushing drugs during drug administration are recommended to review regularly. Specific drugs formulary instructions should be provided to guide the nurse regarding appropriate administration for clinical use. Nowadays, patient safety and high quality of cares have been promoted. Frontline nurses wish to have effective and proper methods to prepare the drugs for patient. Close communication between Doctors, Nurses, Speech Therapist and pharmacist regarding the drug formulation should be strengthened.