Improving safety and efficiency in dispensing and administration of Oral Dangerous Drug

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Introduction
Medication safety is one of the most important clinical practice in hospital especially for the dangerous drug (DD) dispensing and administration. During drug administration round in oncology wards, a large volume of oral DD (e.g. Morphine, Lorazepam, Methadone, Alprazolam) will be dispensing and administration by nurses, a “Mobile Trolley” was trial used for drug dispensing and administration directly to patients on bedside.

Objectives
(1) To reduce the risk of wrong oral dangerous drug dispensing and administration during drug administration round. (2) To enhance job efficiency by streamline the drug dispensing and administration process.

Methodology
(1) To prepare “DD Mobile Trolley”: - To design and tailor made a new “DD Mobile Trolley” for trial used. (2) To define the “Workflow for using DD Mobile Trolley”: - To classify the role and responsibilities of ward in-charge, team and runner nurses during drug administration round. - Ward in-charge should takes the oral DD from DD cupboard in nurse station with another DD key- holder, and then put inside the DD Mobile Trolley; - Ward in-charge should custody the DD Mobile Trolley during drug administration round. - Ward in-charge should countercheck again the DD stock with another DD key- holder before put back the DD cupboard (3) To evaluate the safety and efficiency of trial use “DD Mobile Trolley”: - Trial run at 07:30, 12:00, 16:00 and 19:30 on April and November 2013

Result
(1) For the first trial run period on April 2013, time saving at 07:30, 12:00, 16:00 and 19:30 as 16.75%, 4.79%, 31.86% and 7.16% respectively. (2) For the second trial run period on November 2013, time saving at 07:30, 12:00, 16:00 and 19:30 as 23.35%, 45.78%, 19.69% and 36.05% respectively. (3) Program consolidated on January 2014. (4) Zero DD medication incident is achieved. Conclusions: DD drug administration is carried out directly by patient bedside, the risk of wrong administration is minimized. All nurses' feedback and agreed that the "DD Mobile Trolley" is useful and the job efficiency is enhanced in view of significant of time saving.