Pharmacist-Nurse Collaboration to Reduce Polypharmacy and Problems Related to High-alert Medications in Geriatric Patients

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Introduction
The Institution for Safe Medication Practices (ISMP) defined “high-alert medications” as drugs that bear a heightened risk of causing significant patient harm when they are used in error. Both the ISMP and the Hospital Authority (HA) issued drug lists on high-alert/high-risk medications for general patients. Moreover, more specifically, the American Geriatrics Society (AGS) updated the “Beers Criteria for potentially inappropriate medication use in older adults” in 2015, which identified high-alert medications on geriatric patients. As polypharmacy is a common problem in older adults, they are more prone to suffering from adverse drug reactions (ADRs) caused by high-alert medications.

Objectives

Methodology
In the MECU, a pharmacist round was conducted every Tuesday as a pre-round and then a joint pharmacist-nurse round was conducted every Wednesday to screen for polypharmacy and high-alert medications. The team includes clinical pharmacists, Nurse Consultant (Gerontology), Geriatric Specialty Nurse and ward nurses. After interviewing patients and reaching consensus, the team would document their recommendations on standardized intervention forms and attach the forms to the drug charts of corresponding patients. The attending doctors would then decide to accept or decline the recommendations by completing the intervention forms.

Result
From March 2014 to December 2015, a total of 1,088 patients and 8,082 drug items were reviewed. The mean age of patients was 77.51±11.71 years old. The number of interventions documented was 778 in 620 patients. The top three categories of interventions were polypharmacy (51.29%), drug regimen (25.06%) and drug selection (19.54%). Physicians’ acceptance rate to interventions was 89.72%. Among all the 698 accepted interventions, the prevalence rate of high-alert medications was 24.07%. The number of drug discontinued was 418, and number of cases with
dosage reduction was 96. Besides, physicians changed to a better drug alternative in 124 cases. The net decrease in number of drug administration frequency was 995. In conclusion, this model should be promoted to other similar settings to improve patient safety.