

Title of dissertation			
Potentially Inappropriate Medications of Elderly in Community Hospital in Eastern of Thailand			
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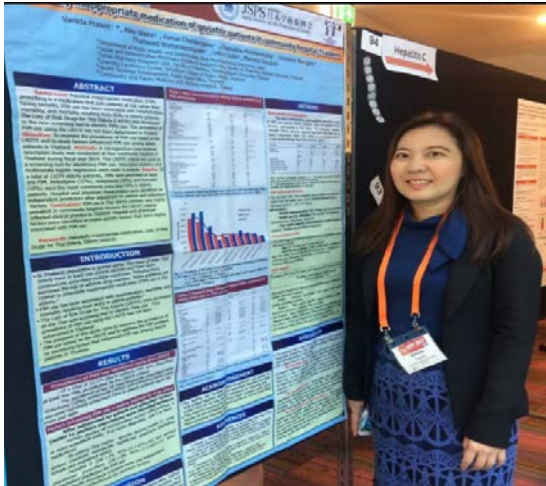
Summary

Potential inappropriate medication (PIM) is a major problem in Thai elderly patients and associated with increased adverse drug reaction (ADRs). Almost of PIM and ADRs problems related to the prescribing process by physician. In 2011, the Rational Drug Use (RDU) policy was launched for improving drug safety in patients especially PIM use. The Lists of Risk Drugs for Thai Elderly (LRDTE) as the Thai explicit for identifying PIM and Computerized decision support system (CDSS) for PIM as a novel alert system were established and associated with RDU policy. Therefore, this study aimed to examine the prevalence of PIM use among elderly patients, to address the PIM problem by identifying factors that influenced PIM use, and to evaluate the effect of a CDSS on PIM prescriptions for elderly patients in Thai community hospitals.

The study comprised with two phases, the first phase was conducted using the computerized database at four community hospitals in Thailand during fiscal year 2014. The LRDTE criteria were used as a screening tool for identifying the medicine items of PIM use in elderly patients aged 60 years and older. The second phase, the CDSS for PIM detection was incorporated with LRDTE criteria into electronic prescribing at four hospitals. The study design comprised two phases with a duration of 12 months each: pre-CDSS implementation (October 2015 to March 2016) and post-CDSS implementation (October 2016 to March 2017). CDSS was started October 2016.

The results revealed that PIM use in Thai elderly patients was highly prevalent in community hospitals, 79% were prescribed at least one PIM as indicated by the LRDTE criteria. Amlodipine, omeprazole, and tramadol were the top three most commonly prescribed PIMs. Hospital and physician factors as Thai region-specific factors that were highly associated with PIM use. Specific CDSS for PIM can reduce PIM and can change physician's prescription behavior to avoid PIM. Even though, PIM prevalence was reduced post CDSS implementation, PIM prescription was still high proportion. Therefore, the effort to revise hospital formulary is very important to avoid PIM.

Photos



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