INTI SARI

Pasien geriatrik berisiko tinggi mengalami *Drug-Related Problems* (DRPs) yang disebabkan multimorbiditas serta perubahan fisiologik dan farmakologik oleh karena proses penuaan. Apoteker berperan mengoptimalkan efektivitas dan keamanan terapi obat pasien. Penelitian ini bertujuan mengetahui pengaruh intervensi apoteker dalam menurunkan tingkat bahaya DRPs dan mengetahui faktor yang berhubungan dengan penurunan tingkat bahaya DRPs pada pasien geriatrik rawat inap.

Penelitian ini merupakan penelitian *quasi experimental* dengan rancangan *one-group pretest and posttest*. Penelitian dilakukan di Rumah Sakit Panti Rapih periode Maret - April 2021. Kriteria inklusi pasien usia ≥ 60 tahun, merupakan kasus penyakit dalam, dan teridentifikasi DRPs. Kriteria eksklusi pasien dirawat di ruang perawatan Covid-19 dan ruang intensif. Apoteker melakukan pengkajian terapi obat, mengidentifikasi dan memberikan intervensi atas DRPs yang ditemukan. Tingkat bahaya DRPs dibandingkan sebelum dan sesudah intervensi. Penentuan tingkat bahaya dilakukan melalui *professional adjustment* berdasarkan *The Harm Associated with Medication Error Classification tools* yang dimodifikasi, dimana tingkat bahaya DRPs dibagi menjadi *no error*, *no harm*, *minor*, *moderate*, *serious*, *severe*, kemudian dianalisis menggunakan uji *Wilcoxon*.

Subjek penelitian dalam penelitian ini adalah 30 orang, dengan total 42 DRPs yang teridentifikasi. Intervensi Apoteker mampu menurunkan secara signifikan tingkat bahaya DRPs, baik potensial bahaya (p = 0,000) maupun aktual bahaya (p = 0,002). Faktor jumlah obat yang digunakan dan penerimaan intervensi Apoteker memiliki hubungan yang signifikan dengan penurunan tingkat bahaya DRPs (p < 0,05). Dari penelitian ini ditunjukkan bahwa kolaborasi multidisiplin sangat penting dalam pelayanan pasien geriatrik.

Kata kunci: tingkat bahaya *drug-related problems*, intervensi Apoteker, geriatrik

ABSTRACT

Geriatric patients are at high risk of Drug-Related Problems (DRPs) associated with multimorbidity, physiologic changes, and pharmacologic alterations, that caused by aging process. Pharmacist plays an important role in optimizing effectiveness and safety of the patient's drug therapies. This study aims to know the effect of pharmacist intervention in reducing the harm levels of DRPs and to know the factors that associated with reduction of DRPs harm level in hospitalized geriatric patients.

This research uses quasi experimental study with one-group pretest and posttest design. This research was conducted toward hospitalized geriatric patients in Panti Rapih Hospital between March-April 2021, with patients' inclusion criteria of ≥ 60 years old, with internal diseases cases, and identified DRPs in the therapy. The exclusion patient criteria are hospitalized in Covid-19 ward dan intensive unit. Pharmacist reviewed patient drug therapy, identified DRPs, and provided interventions of DRPs. The harm level of DRPs was compared before and after interventions. The harm level of DRPs was determined through professional adjustment according to modification of The Harm Associated with Medication Error Classification tools, which is divided into no error, no harm, minor, moderate, serious, severe, then analyzed using Wilcoxon test. Factors of age, multiple drugs, comorbidities, and acceptance of the intervention were investigated for their effect on reducing the harm level of DRPs using a multinomial logistic regression test.

A total of the subject was 28 patients, with 47 DRPs identified. The pharmacist intervention resulted in a significant reduction in the harm level of both potential harm (p = 0,000) and actual harm (p = 0,002). Factors of number of multiple drugs and acceptance of pharmacist intervention was associated with the reduction of the harm level of DRPs (p < 0,05). From this study, it is shown that multidisciplinary collaboration is very important in improving patient therapy outcomes.

Keywords: the harm level of drug-related problems, pharmacist interventions, geriatric