

RISK FACTORS FOR DRUG-DRUG INTERACTIONS IN PATIENTS WITH PSYCHIATRIC DISORDERS

Anica Rankovic^{1*}, Iva Milentijević¹, Slobodan Janković²

¹Clinic for Mental Disorders "Dr. Laza Lazarevic", Belgrade, Serbia

²University of Kragujevac – Faculty of Medical Sciences, Department of Pharmacology and Toxicology, Kragujevac, Serbia

*anica1304@yahoo.com

Other chronic diseases are often present in patients with mental illness. For this reason, many patients with psychiatric disorders use multiple medications. As the number of patients' medications increases, so does the possibility of adverse drug reactions, especially those caused by drug interactions. The aim of this study was to investigate the prevalence of potential drug-drug interactions (pDDIs) in hospitalized patients with psychiatric disorders and to identify factors associated with their occurrence. The research was designed as an observational, retrospective, cohort study conducted at the Clinic for Mental Disorders "Dr Laza Lazarevic", Belgrade. Medscape®, Epocrates® and Lexicomp® bases were used to detect potential drug interactions among inpatients. The study included 511 patients, 44.63 ± 11.81 years old. The average number of pDDIs per patient ranged from 5.9 ± 4.7 (Medscape), and 8.2 ± 5.4 (Epocrates) to 8.5 ± 5.1 (Lexicomp). The following risk factors were identified by all three interaction checkers used: CRP, number of pharmacological subgroups, number of prescribed drugs, the total number of diagnoses recorded during the hospitalization, antiepileptics, antibiotics, antacids, vitamins, number of comorbidities, route, form and dose of the drug. Numerous other studies have demonstrated a positive correlation between pDDIs and an increased number of drugs, length of hospitalization and more comorbidities in patients (1,2). The identified risk factors will serve to define the subpopulation of patients at high risk for interactions, as well as to plan the introduction of monitoring for early detection of interactions.

References

1. Borges TL, Vedana KGG, Castilho ECD et al. Factors Associated with Potential Drug-Drug Interactions in Patients Attended in Primary Health Care: A Focus on Mental Health. *Issues Ment Health Nurs* 2017;38(9):769-74.
2. Wolff J, Hefner G, Normann C, et al. Predicting the risk of drug-drug interactions in psychiatric hospitals: a retrospective longitudinal pharmacovigilance study. *BMJ Open* 2021;11(4).

FAKTORI RIZIKA ZA NASTANAK LEK-LEK INTERAKCIJA KOD PACIJENATA SA PSIHIJATRIJSKIM POREMEĆAJIMA

Anica Ranković^{1*}, Iva Milentijević¹, Slobodan Janković²

¹Klinika za psihijatrijske bolesti „Dr Laza Lazarević“, Beograd, Srbija

²Univerzitet u Kragujevcu – Fakultet medicinskih nauka, Katedra za farmakologiju i toksikologiju, Kragujevac, Srbija

*anica1304@yahoo.com

Kod pacijenata sa mentalnim bolestima često su prisutna i druga hronična oboljenja. Iz tog razloga, mnogi pacijenti sa psihijatrijskim poremećajima koriste veći broj lekova. Sa povećanjem broja lekova, povećava se mogućnost nastanka lek-lek interakcija i pojave posledičnih neželjenih efekata. Cilj ove studije bio je da se identifikuju najčešće potencijalne interakcije lekova kod pacijenata sa psihijatrijskim poremećajima uz determinisanje faktora od uticaja. Istraživanje je dizajnirano kao retrospektivna opservaciona i prospektivna kohortna studija, sprovedena na Klinici za psihijatrijske bolesti „Dr Laza Lazarević“ u Beogradu. Baze Medscape®, Epocrates® i Lexicomp® su korišćene za otkrivanje potencijalnih interakcija između lekova. U studiji je učestvovalo 511 pacijenata, starosti $44,63 \pm 11,81$ godina. Prosečan broj potencijalnih lek-lek interakcija po pacijentu iznosio je $5,9 \pm 4,7$ pretragom Medscape baze, zatim $8,2 \pm 5,4$ pretragom Epocrates baze i $8,5 \pm 5,1$ primenom Lexicomp baze. Sva tri korišćena pretraživača identifikovala su sledeće faktore rizika za nastanak lek-lek interakcija: CRP, broj farmakoloških podgrupa, broj propisanih lekova, ukupan broj dijagnoza evidentiranih u toku hospitalizacije, prisustvo antiepileptika, antibiotika, antacida, vitamina u terapiji, broj prisutnih komorbiditeta, kao i farmaceutski oblik, dozu i način primene leka. Brojne druge studije su dokazale pozitivnu korelaciju između potencijalnih interakcija lekova, primene većeg broja lekova, dužine hospitalizacije i većeg broja pridruženih oboljenja kod pacijenata (1,2). Otkriveni faktori rizika će poslužiti za definisanje subpopulacije pacijenata sa visokim rizikom za nastanak lek-lek interakcija i uvođenje monitoringa za rano otkrivanje interakcija.

Literatura

1. Borges TL, Vedana KGG, Castilho ECD et al. Factors Associated with Potential Drug-Drug Interactions in Patients Attended in Primary Health Care: A Focus on Mental Health. *Issues Ment Health Nurs* 2017;38(9):769-74.
2. Wolff J, Hefner G, Normann C, et al. Predicting the risk of drug-drug interactions in psychiatric hospitals: a retrospective longitudinal pharmacovigilance study. *BMJ Open* 2021;11(4).