Potential drug interactions at a University Hospital (Florianopolis, Brazil) and the “Swiss cheese” approach to the role of pharmacists.

Patrícia BACKES ¹, Kaedlyn WACHHOLZ ² & Miriam de Barcellos FALKENBERG ¹*  

¹ Postgraduate Program in Pharmacy, Centre of Health Sciences, Federal University of Santa Catarina, Campus Trindade, 88040-970, Florianópolis, SC, Brazil.  
² College of Pharmacy, Federal University of Santa Catarina, Campus Trindade, 88040-970, Florianópolis, SC, Brazil.

SUMMARY. The scenario concerning potential drug interactions (PDI) at the University Hospital of the Federal University of Santa Catarina (Florianopolis, Brazil) was assessed. Prescriptions from three inpatient departments were analyzed (n = 1075); PDI were identified, and their severity, onset and documentation were evaluated using Micromedex® 2.0. Around 65% of the prescriptions had at least one potential DI. About one third of them were classified as major (24%) or contraindicated (8%). Documentation was classified as “good” or “excellent” and onset was classified as “delayed” for most PDI. The prescriptions included nine drugs, on average; 35% of prescribed drugs were administered by the parenteral route. There are several barriers that prevent the occurrence of PDI in practice, and according to the systemic approach of the “Swiss Cheese” model, pharmacists can play a decisive role in promoting patient safety.

KEY WORDS: Drug interactions, Micromedex, Polipharmacy, “Swiss cheese” model, Teaching hospital.

* Author to whom correspondence should be addressed. E-mail: miriam.falkenberg@gmail.com