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Sørensen, Ann Lykkegaard; Nielsen, Lars Peter; Poulsen, Birgitte Klindt; Lisby, Marianne; Mainz, Jan

*Published in:*  
Value in Health

*Publication date:*  
2014

*Document Version*  
Tidlig version også kaldet pre-print

[Link to publication from Aalborg University](#)

*Citation for published version (APA):*  
Sørensen, A. L., Nielsen, L. P., Poulsen, B. K., Lisby, M., & Mainz, J. (2014). The Quality of Prescribing for Psychiatric Patients. *Value in Health*, 17(7).

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# The Quality of Prescribing for Psychiatric Patients

Soerensen AL<sup>1,2</sup>, Nielsen LP<sup>3,4</sup>, Poulsen BK<sup>3</sup>, Lisby M<sup>3,5</sup>, Mainz J<sup>6,7</sup>

<sup>1</sup>Danish Center for Healthcare Improvements, Faculty of Social Sciences and Faculty of Health Sciences, Aalborg University, Denmark; <sup>2</sup>University College of Northern Denmark; <sup>3</sup>Department of Clinical Pharmacology, Aarhus University Hospital, Aarhus, Denmark; <sup>4</sup>Institute of Biomedicine, Aarhus University, Aarhus; <sup>5</sup>Centre of Emergency Medicine Research, Aarhus University Hospital & Aarhus University, Aarhus, Denmark; <sup>6</sup>Aalborg University Hospital, Psychiatry and <sup>7</sup>Aalborg University, Aalborg; Denmark

**OBJECTIVES:** Prescribing for adult psychiatric patients is often highly complex due to the nature of psychiatric conditions, but also due to somatic comorbidity. Therefore, the aim of this study was to identify prevalence and types of potential inappropriate prescribing (PIP), assess the severity of potential clinical consequences and identify possible predictive factors of PIP.

**METHODS:** The study was designed as a prospective study of PIP using medication reviews. Patients who were admitted during a 4 month period (August 2013 - November 2013) to a psychiatric university hospital were included (n=219). The medication reviews, including an assessment of potential severity, were carried out by clinical pharmacologists after admission and after the attending physician had seen the patient. Frequencies and categories of PIP were analyzed in absolute numbers and as percentages. Severity of PIP was assessed using four categories. Logistic regression analysis was used to identify possible predictive factors of PIP.

**RESULTS:** The proportion of patients with one or more PIPs was 123/219(56%). “Interaction between drugs” was the most common category for potentially serious and potentially fatal PIPs with 49/123(40%) and 32/45(71%), respectively. Of 32 identified potentially fatal drug-drug interactions, 15/32(47%) involved two or more antipsychotic drugs and 12/32(37%) involved antipsychotic drugs in combination with antidepressants. The remaining 5/32(16%) potentially fatal drug-drug interactions involved propranolol, erythromycin, simvastatin and promethazine. After adjusting for age, gender, alcohol/substance abuse, number of prescriptions, number of somatic diagnoses and level of kidney function, only polypharmacy (>5 prescriptions) increased the odds for a PIP significantly; OR=4,82(95% CI:2.33-9.98), p<0.0001.

**CONCLUSIONS:** PIP is frequent and might have serious or fatal consequences. Special attention should be given to drug-drug interactions involving antipsychotics and antidepressants but also somatic medications and polypharmacy threatens medication safety. There is a pressing need to improve the quality in prescribing for psychiatric patients.