

Evaluation of the effect of methodological assumptions on estimates of adherence to antipsychotics: a real-world data study

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Abstract

Introduction: This study aimed to assess the frequency of dosing inconsistencies in prescription data and the effect of four dosing assumption strategies on adherence estimates for antipsychotic treatment. **Methods:** A retrospective cohort, which linked prescription and dispensing data of adult patients with [?] 1 antipsychotic prescription between 2015-2016 and followed up until 2019, in Catalonia (Spain). Four strategies were proposed for selecting the recommended dosing in overlapping prescription periods for the same patient and antipsychotic drug: 1) the minimum dosing prescribed; 2) the dose corresponding to the latest prescription issued, 3) the highest dosing prescribed, and 4) all doses included in the overlapped period. For each strategy, one treatment episode per patient was selected and the Continuous Medication Availability measure was used to assess adherence. Descriptive statistics were used to describe results by strategy. **Results:** Of 277,324 prescriptions included, 76% overlapped with other prescriptions (40% with different recommended dosing instructions). The number and characteristics of patients and treatment episodes (18,292, 18,303, 18,339, and 18,536, respectively per strategy) were similar across strategies. Mean adherence was similar between strategies, ranging from 57-60%. However, the proportion of patients with adherence [?] 90% was lower when selecting all doses (28%) compared to the other strategies (35%). **Conclusions:** Despite the high prevalence of overlapping prescriptions, the strategies proposed did not show a major effect on the adherence estimates for antipsychotic treatment. Taking into consideration the particularities of antipsychotic prescription practices, selecting the highest dose in the overlapped period provided a more accurate adherence estimate.

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