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Beyond the label: Real-world evidence of antipsychotic utilization in Australia (2000–2021) using two medication datasets.

Investigators: [Ramya Padmavathy Radha Krishnan](#)¹, Christopher Harrison², Jacques Raubenheimer¹, Nicholas Buckley^{1,3}

Author Affiliations:

¹ Biomedical Informatics and Digital Health, The University of Sydney, Sydney, New South Wales, Australia

² Menzies Centre for Health Policy and Economics, Sydney School of Public Health, The University of Sydney, Sydney, New South Wales, Australia

³ NSW Poisons Information Centre, The Children’s Hospital at Westmead, Sydney, New South Wales, Australia

Presenter’s Email Address: ramya.radhakrishnan@sydney.edu.au

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Abstract

Background and Aims: Antipsychotic utilization is increasing globally, with significant off-label prescribing. The objective of this study is to determine antipsychotic utilization patterns in Australian adults, with a focus on on-label and off-label prescriptions.

Design and Methods: This pharmacoepidemiologic analysis used PBS 10% sample dataset containing patient-level information on medicines dispensed throughout Australia between 2005–2021, to summarize trends in antipsychotic usage. BEACH (Bettering the Evaluation And Care of Health), a cross-sectional national survey from 2000–2016 consisting of data from general practitioner-patient encounters, was used to analyze diagnostic information for antipsychotic prescriptions.

Results: There were 5.6 million dispensings for nearly 165,000 patients in PBS, of whom 69% had >1 dispensing. There were steady increases in both incidence and prevalence of antipsychotics, with an annual growth rate of 6.6%. This was mainly attributed to oral second-generation antipsychotics, with quetiapine, olanzapine and risperidone being the most commonly prescribed. Among the patients receiving quetiapine, 35% were given the 25mg dose without titration, with a median treatment duration of 85 days. Among clozapine-treated patients, 17% did not have previous antipsychotic exposure, while 71% were receiving antipsychotic polytherapy. Analysis of diagnostic indications from BEACH indicated that 27% of antipsychotic prescriptions were off-label for indications such as depression, dementia, anxiety and insomnia, at much lower prescribed daily dosages.

Conclusions: Each dataset adds a unique perspective to the concerning trend of increased antipsychotic utilization in Australia, with a significant proportion of off-label use. This could have a cascading effect on the development of adverse effects; more studies are required to understand the risks.

Impact: Combined analysis of medication dispensings and the diagnostic indications for which they are prescribed is a novel approach and generates new evidence on quality use of antipsychotics in Australia, while throwing a spotlight on the need for additional monitoring of antipsychotics.