

In-press, *Australian and New Zealand Journal of Psychiatry*

April 5<sup>th</sup>, 2014

## Antipsychotic Polypharmacy at Admission Predicts Extended Length of Stay Among State Hospital Inpatients

To the Editor:

Antipsychotic polypharmacy (APP) is prevalent (Gallego et al., 2012) but undesirable (e.g., Waddington et al., 1998) in the treatment of psychotic disorders. With institutional review board approval, I utilized administrative and clinical records to examine APP among 246 consecutively admitted inpatients at a state hospital in the Southeastern United States.

Using a definition of  $\geq 2$  antipsychotics prescribed  $\geq 60$  days continuously, 35.8% (n=88) received APP. Male gender was associated with an increased risk of APP (OR=2.9, 95% CI=1.6-5.4), as was length-of-stay in years (OR=1.5, 95% CI=1.3-1.9). An association between male gender and APP has been previously documented (Gallego et al., 2012). In the present dataset, there were only minor differences in clinical history and severity level across gender. However, some patients in this sample had originally been committed for forensic reasons, then transferred to civil commitment. This raises the question of whether APP was being prescribed to men more frequently for real or perceived dangerousness - or whether APP was being used because these men were substantially more chronic and symptomatic, although it is difficult to find evidence for this in the data.

In attempting to explain the association between APP and length-of-stay, it could be posited that in extended hospitalizations, clinicians reluctantly resort to APP in an effort to get the patient discharged. Supporting this hypothesis, there were 21 patients (23.9%) prescribed APP after a length-of-stay of >1 year. However, most patients who received APP were either admitted to the unit already on multiple antipsychotics or had APP initiated at admission (n=52, 59.1%), with an additional 15 patients (17.0%) placed on APP within six months. Those prescribed APP at admission had a mean proportion of 76.6% (SD=31.0) of inpatient days on APP. Thus while APP in a minority of these cases could be interpreted as a response to a lengthy hospitalization, in the majority of cases APP was prescribed early and often continuously.

In this sample, APP was often prescribed early in treatment but was associated with longer hospitalizations. Some patients were admitted on a regimen of APP, but continuing this rather than shifting to monotherapy may represent a missed clinical opportunity, as inpatient hospitalization is an ideal setting for major medication changes. The possibility that APP results in high dosing (Gallego et al., 2012) thus impairing functional recovery (Wunderlink et al., 2013) and potentially extending hospitalization should be considered in future research.

Sincerely,

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Waddington, JL, Youssef, HA, Kinsella, A (1998). Mortality in schizophrenia: Antipsychotic polypharmacy and absence of adjunctive anticholinergics over the course of a 10-year prospective study. *British Journal of Psychiatry*, 173, 325-9.

Wunderlink, L., Nieboer, RM, Wiersma, D., Sytema, S, Nienhuis, FJ (2013). Recovery in remitted first-episode psychosis at 7 years of follow-up of an early dose reduction/discontinuation or maintenance treatment strategy: Long-term follow-up of a 2-year randomized clinical trial. *JAMA Psychiatry*, 70(9), 913-920.

Keywords: antipsychotic, polypharmacy, evidence-based medicine, naturalistic study