

Joint Commission Journal Literature Review Identifies Antipsychotic Polypharmacy as a Quality Target

The following is an extract of:

Goren JL, Parks JJ, Ghinassi FA, Milton CG, Oldham JM, Hernandez P, Chan J, Hermann RC. When is antipsychotic polypharmacy supported by research evidence? Implications for QI. *The Joint Commission Journal on Quality and Patient Safety*. 2008; 34(10): 571-582.

Corresponding author: Jessica Goren

Bottom Line:

- Literature review covering 1966 to December 2007 found no evidence to support antipsychotic polypharmacy in patients with schizophrenia, except for those on clozapine.
- Antipsychotic polypharmacy was associated with increased side effects.
- The Joint Commission recently added two measures about antipsychotic polypharmacy to its core set.
- The Joint Commission requires documentation of appropriate clinical rationale for antipsychotic polypharmacy: 1) three or more failed trials of monotherapy, 2) clozapine augmentation or 3) cross taper to monotherapy.

This article presents a literature review of studies comparing outcomes and side effects of antipsychotic polypharmacy to monotherapy for schizophrenia patients with and without documented treatment resistance to antipsychotic monotherapy. Results failed to show evidence in support of antipsychotic polypharmacy for subjects without documented history of treatment resistance. Antipsychotic polypharmacy was also associated with greater side effects in these subjects. Author Jessica L. Goren and colleagues conclude that the research base supports recommendations for avoiding antipsychotic polypharmacy when possible. These conclusions support current quality improvement (QI) efforts, including the Joint Commission's new core measure set for Hospital-Based Inpatient Psychiatric Services (HBIPS), which has two measures addressing antipsychotic polypharmacy.

Study Background

Concern over the safety, efficacy and high prevalence of antipsychotic polypharmacy has led to QI efforts aimed at improving this practice. The Joint Commission's HBIPS core measure set, implemented on October 1, 2008, includes two measures addressing antipsychotic polypharmacy: 1) assessing a hospital's overall rate of antipsychotic polypharmacy at discharge; and 2) measuring the number of cases with documentation at discharge of clinically appropriate justifications for the prescription of antipsychotic polypharmacy. Clinically appropriate justifications in the HBIPS measures include: 1) a history of a minimum of three failed multiple trials of monotherapy; 2) a plan to taper to monotherapy or a cross-taper in progress; 3) augmentation of clozapine; 4) documentation in the medical record of a justification for antipsychotic polypharmacy other than the prior three.¹ Guidelines recommend antipsychotic

¹ The Joint Commission: Specification Manual for National Quality Measures- Hospital Based Inpatient Psychiatric Services Core Measure Set (Version 2.1b) 2008. <http://www.jointcommission.org/PerformanceMeasurement/PerformanceMeasurement/Hospital+Based+Inpatient+Psychiatric+Services.htm> (accessed April 28, 2009).

polypharmacy only after adequate trials of monotherapy have failed^{2,3,4}. However, past research reviews have not often distinguished between patients who meet these criteria and those who do not. The current article sought to fill in this gap.

Study Details

In January, 2008, a Medline search was conducted for the years 1966 to December 2007. The search sought to identify studies comparing outcomes and side effects for patients treated with multiple antipsychotics versus those on monotherapy. Identified studies were separated into two groups and further compared based on whether or not subjects had documented treatment resistance to multiple trials of monotherapy. Reference sections and previous reviews were also searched. The search was confined to English-only articles. Studies were examined based on the rigor of their design: randomized controlled trials (RCTs), nonrandomized controlled studies and noncontrolled observational studies. Case reports and series without statistical analyses were excluded.

Results and Limitations

Studies with more rigorous designs (RCTs) were more likely to show a lack of clinical benefit from antipsychotic polypharmacy. For studies of patients with established treatment resistance to monotherapy, 6 RCTs and 9 noncontrolled observational trials were identified. These studies showed mixed results in clinical outcomes and greater side effects with antipsychotic polypharmacy. Positive clinical findings were limited to studies with clozapine or with SGAs not available in the US. Among studies of patients without documented treatment resistance to monotherapy, 3 RCTs, 6 nonrandomized controlled trials and 6 noncontrolled observational studies were identified. These studies did not support the use of multiple antipsychotics. Limited data on side effects showed that antipsychotic polypharmacy is associated with increased side effects.

Limitations of the identified trials included small sample sizes, narrow ranges of antipsychotics studied and lack of methods to confirm patient adherence to medication.

Clinical Implications

The authors conclude that the current evidence base “only supports use of antipsychotic polypharmacy in treatment-resistant patients, primarily when augmenting clozapine with a second generation antipsychotic”. There is a high prevalence of polypharmacy, and efforts should be made to reduce rates. Quality improvement efforts to decrease antipsychotic polypharmacy will likely prove more successful by taking a multifaceted approach, using dissemination of available treatment algorithms, periodic audits, group education, academic detailing and chart reminders.

No potential conflicts of interest were reported for this study.

² APA: Practice guidelines for the treatment of patients with schizophrenia. *American Journal of Psychiatry* 161 (suppl. 2):1-56, 2004.

³ Moore, et al: The TMAP Schizophrenia Algorithms, 2006 update. *J Clinical Psychiatry* 68:1751-1762, 2007.

⁴ National Institute for Health and Clinical Excellence: Schizophrenia: *Core Interventions in the Treatment and Management of Schizophrenia in Primary and Secondary Care*. 2002. <http://www.nice.org.uk/guidance/index.jsp?action=byID&r=true&o=11786> (last accessed April 29, 2009).