

with psychosis based on only a single diagnostic evaluation early in a patient's course. More broadly, the study raised questions about *DSM-IV* criteria for this diagnosis.

In his letter, Dr Swartz suggests that the diagnostic shifts to schizophrenia spectrum disorders may have been artifacts of treatment. He argues that antipsychotic drugs may "suppress mood symptoms but only mitigate psychosis in a psychotic mood disorder," creating an appearance of a schizophrenia diagnosis, or that they may elicit new symptoms that resemble those of schizophrenia. In either case, he proposes that the true illness was masked by treatment and that schizophrenia spectrum disorder diagnoses should not have been made.

Putting aside for the moment that we attempted to closely follow *DSM-IV* criteria, including the need to exclude symptoms that were due to medications, we note that Dr Swartz raises a concern that we can address empirically since we have information on medication use in our sample. Dr Swartz's argument is consistent with the hypothesis that antipsychotic medication use precedes shifts to schizophrenia. To test this, we ran logistic regressions to determine if antipsychotic medication use at a prior wave predicted shifts to a schizophrenia spectrum disorder at the next wave. Since we had 3 follow-up assessments (ie, 6-month, 24-month, and 10-year), we conducted 3 separate analyses. There was no evidence in our data to support Dr Swartz's hypothesis (6-month OR = 0.55, $P = .63$; 24-month OR = 3.13, $P = .16$; 10-year OR = 2.01, $P = .23$). Analyses from the larger parent sample ($N = 470$) that looked at all diagnostic shifts, not just those from MDD with psychosis, similarly found that antipsychotic medication use did not predict new diagnoses of schizophrenia spectrum disorders (see Table 4 of the article by Bromet et al²).

Our original article showed that worsening psychotic and negative symptoms, as well as declining functioning, were associated with shifts to schizophrenia spectrum disorders (see Figure 1 of our original article¹). Taken together, results from the original article,¹ the current analyses, and analyses from the larger cohort² argue in favor of schizophrenia spectrum diagnoses' being preceded by a deteriorating course as opposed to antipsychotic medication use. Thus, while our study cannot speak to the neurotoxicity of antipsychotic medications, it suggests that diagnostic shifts resulted primarily from changes in illness course. Although there may have been instances in which antipsychotic use was associated with diagnostic shifts, as Dr Swartz argues and a point worth making, these shifts were too rare to be detectable in our data.

REFERENCES

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2. Bromet EJ, Kotov R, Fochtmann LJ, et al. Diagnostic shifts during the decade following first admission for psychosis. *Am J Psychiatry*. 2011;168(11):1186-1194.

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Dr Ruggiero and Colleagues Reply

To the Editor: Our original article¹ found that the diagnosis of major depressive disorder (MDD) with psychosis had low consistency across 10 years. One reason for this finding was that some patients who started the study with MDD shifted to a schizophrenia spectrum disorder at follow-up assessments. In fact, this happened twice as often as shifts from MDD to bipolar disorder. We concluded that many patients with schizophrenia spectrum disorders require extended observation before their underlying condition can be recognized and that clinicians should be cautious of an MDD diagnosis

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