# Gambling-Related Problems Are Chronic and Persist for the Majority of Individuals With a Lifetime Diagnosis of Pathological Gambling

To THE EDITOR: Using two epidemiological surveys, Wendy S. Slutske, PH.D. (1) conducted important investigations on the persistence and chronicity of pathological gambling. Dr. Slutske found that one-third of the pathological gamblers made a "natural recovery" (p. 300), as indicated by the absence of symptoms in the previous year without treatment-seeking for their gambling problems. Dr. Slutske concluded that pathological gambling may not be as chronic and persistent as commonly believed, and results from epidemiological surveys "may eventually overturn the established wisdom about pathological gambling disorder" (p. 301). Further discussion of the findings is necessary.

Using the National Epidemiologic Survey on Alcohol and Related Conditions data, the same data used by Dr. Slutske, a separate study by Petry and colleagues found that pathological gambling was highly comorbid with other mental disorders, including alcohol use and mood disorders (2). It is therefore likely that individuals with pathological gambling disorder may seek help for alcohol use or mood disorders and not seek help specifically for their gambling problems. In addition, it is highly plausible that seeking services for alcohol use or mood disorders may improve gambling problems.

We conducted an additional analysis using the National Epidemiologic Survey on Alcohol and Related Conditions data to investigate treatment-seeking for alcohol and mood problems among pathological gamblers. Individuals were asked if they had ever sought help 1) for alcohol problems or 2) to improve mood. When considering treatment-seeking for conditions found to be highly comorbid with pathological gambling, a "natural recovery" among pathological gamblers was reduced by approximately one-half, from 34% in the study by Dr. Slutske, to 18% in the current National Epidemiologic Survey on Alcohol and Related Conditionsbased analysis.

Although some pathological gamblers are able to overcome their gambling problems, it is important to emphasize that the majority of individuals with a lifetime diagnosis of pathological gambling continue to experience some level of gambling-related problems in the past year. Interestingly, the prognosis of pathological gambling as indicated by Dr. Slutske's investigation is almost identical to the natural course of other mental disorders such as major depression, with approximately 40% continuing to meet DSM criteria for a diagnosis, 20% meeting subthreshold criteria, and 40% experiencing no symptoms (3). Dr. Slutske's analytical approach found that 40% of pathological gamblers continued to meet criteria, 22% had subdiagnostic symptoms, and 38% had no symptoms. Therefore, using this criterion to conclude that pathological gambling may not be a chronic disorder would have the same implications for major depression, which is well recognized as being a chronic disorder.

Finally, it must be mentioned that Dr. Slutske's study relied on retrospective data to assess the onset and offset of pathological gambling. Firm conclusions regarding chronicity and persistence will ultimately require the use of longitudinal prospective data.

We hope that our commentary and additional analysis contribute to the important ongoing discussion of pathological gambling initiated by Dr. Slutske.

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# On the Limits of Cross-Sectional Retrospective Data for Characterizing the Course of Pathological Gambling and its Relation With Comorbid Psychopathology: A Reply to Afifi, Cox, and Sareen

TO THE EDITOR: Dr. Afifi and colleagues refer to an analysis of the National Epidemiologic Survey on Alcohol and Related Conditions data in which treatment specifically for alcohol use disorder or to improve mood disorder was included in the definition of treatment-seeking for pathological gambling. In doing this, it is important to realize that one is also studying a different subgroup of individualsthose with lifetime pathological gambling who also have a lifetime history of alcohol use disorder or major depression. Identifying subgroups of individuals (e.g., those with comorbid psychopathology) who are more or less likely to seek treatment and recover from pathological gambling was not fully explored in my article but certainly warrants further investigation. In my article, I noted that there was a strong association in the National Epidemiologic Survey on Alcohol and Related Conditions between the number of lifetime pathological gambling symptoms endorsed and the probability of seeking treatment for gambling problems, with treatment rates ranging from 5% to 76% for those endorsing five to 10 pathological gambling symptoms. Individuals with pathological gambling in the National Epidemiologic Survey on Alcohol and Related Conditions who also had a lifetime history of major depression were also 1.6 times more likely to seek treatment specifically for problems with gambling (12%) compared with those without a history of major depression (8%). Unfortunately, there is no way to identify contemporaneous disorders in the National Epidemiologic Survey on Alcohol and Related Conditions (other than disorders that co-occurred in the past year that are uninformative regarding recovery). Thus, it is not possible to determine when to include treat-

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ment specifically for alcohol problems or major depression as relevant for an episode of pathological gambling because these may have occurred at different points in the participant's lifetime.

Afifi and colleagues conclude, on the basis of my finding that approximately 40% of individuals with a lifetime history of pathological gambling no longer had any pathological gambling symptoms in the past year (1), that the remainder and majority (60%) must have had a chronic, persistent course. Although comparing past-year to lifetime (or to "prior to past year clustered" [1, p. 299]) diagnoses allows one to *rule-out* a chronic/persistent course, it does not allow one to rule-in such a course. Those individuals who did not meet the criteria for "recovery" in my study could have had a variety of courses of gambling problems, including but not limited to a chronic/persistent course. In the article, I also present results of supplementary analyses from the National Epidemiologic Survey on Alcohol and Related Conditions that 62% of participants with "prior to past year clustered" pathological gambling reported experiencing only one episode of pathological gambling in their lifetime, that the mean number of episodes was 2.8, that the longest mean episode duration was 2.4 years, and that the most common course of pathological gambling was a single episode lasting 1 year or less. Thus, the conclusion stated in the title of the letter by Afifi and colleagues is incorrect.

I wholeheartedly agree with Afifi and colleagues that "firm conclusions regarding chronicity and persistence will ultimately require the use of longitudinal prospective data." I am pleased to have this opportunity to highlight some of the limits of cross-sectional retrospective data for characterizing the course of pathological gambling and its relation to comorbid psychopathology and to clear up any possible misunderstanding of my study.

### Reference

 Slutske WS: Natural recovery and treatment-seeking in pathological gambling: results of two US national surveys. Am J Psychiatry 2006; 163:297–302

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# Reversible Neutropenia With Olanzapine Following Clozapine-Induced Neutropenia

To THE EDITOR: A major limitation with clozapine is the risk of agranulocytosis, which is observed in 1% of patients taking clozapine. In addition, olanzapine has been found to produce reversible neutropenia (1, 2). There are reports of both safe usage and the prolongation of granulocytopenia when olanzapine is used after clozapine-induced agranulocytosis (3, 4). We report a case in which a patient who had no adverse hematological responses to olanzapine developed neutropenia when he was re-exposed to olanzapine following clozapineinduced neutropenia.

A 31-year-old Asian man with schizophrenia remained well for two years. He had been taking 20 mg of olanzapine, with no positive symptoms and minimal negative symptoms. Six months after the dose was gradually reduced, he developed a relapse of psychotic symptoms. He received sequential trials of risperidone (8 mg), olanzapine (30 mg), and a course of electroconvulsive therapy (because of severe agitation and suicidal and homicidal risks). During this period, his total white blood cell count ranged from 8,300/mm<sup>3</sup> to 10,200/mm<sup>3</sup>. As he remained symptomatic, a trial of clozapine was considered. A preclozapine laboratory test was unremarkable. While there was a significant reduction in psychotic symptoms, the patient's total white blood cell count dropped to 2,100/ mm<sup>3</sup>, and he developed a chest infection in the fifth week of treatment. Clozapine was discontinued, and oral cephalosporins and quinolones were started. The patient's physical condition improved, and his white blood cell count normalized to 7,900/mm<sup>3</sup> within 10 days. He was restarted on a regimen of olanzapine and remained hematologically stable during the subsequent 2 weeks, with white blood cell counts of 7,600/mm<sup>3</sup> and 7,900/mm<sup>3</sup>. However, during the third week after normal white blood cell counts, his cell count decreased again to 3,600/mm<sup>3</sup> and later to 3,200/mm<sup>3</sup>. Olanzapine was discontinued, and within a week the total white blood cell count rose to 10,100/mm<sup>3</sup>. Clinical history, physical examination, and laboratory tests did not show evidence of any other medical disorder.

To date, there are no reports of neutropenia in patients who have been previously hematologically stable on olanzapine when re-exposed to it following clozapine-induced neutropenia or agranulocytosis. In addition, there is no literature on the mechanism of olanzapine-induced neutropenia, but in view of its structural similarity to clozapine, similar mechanisms may be responsible.

Previous reports have suggested that olanzapine can be safely administered to patients who develop agranulocytosis while taking clozapine (3). Our report cautions against such use and raises the possibility that exposure to clozapine could sensitize the immune system, making it susceptible to olanzapine-induced neutropenia. Our experience suggests that patients who develop clozapine-induced neutropenia should have their neutrophil count monitored regularly during treatment with olanzapine, even if they have not had any hematological adverse effects with olanzapine in the past.

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