

# The WAGER Vol. 10(12) - Disordered Gambling and Psychiatric Comorbidity

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SPECIAL SERIES: COMORBIDITY ACROSS THE COUNTRY

*The next five issues of the BASIS will feature the most recent research on comorbidity among psychiatric and addictive disorders. These issues will highlight national general population surveys that map comorbidity trends across the United States population.*

Disordered gambling (DG) is associated with a variety of problems that have the potential to disrupt the life of the gambler, as well as the lives of his or her friends and family members. DG is also associated with elevated rates of certain mental health disorders (Cunningham-Williams, Cottler, Compton, & Spitznagel, 1998), the presence of which can exacerbate the negative impacts of disordered gambling and make one or all of the disorders more difficult to treat. To reach a better understanding of this interaction among co-morbid disorders and how to treat them, it is important to first determine which disorders commonly co-occur with disordered gambling. This week The WAGER reviews a recent study by Petry, Stinson and Grant (2005) that determined national rates of disordered gambling and comorbid disorders.

NESARC Survey Summary	
Number of Subjects:	43,093
Age range of subjects:	18+
Year of study:	2001-2002
Response rate:	81%
Measure used:	AUDADIS-IV*
Timeframe for disorders:	Lifetime & 12 month
Disorders measured:	Axis I & Axis II

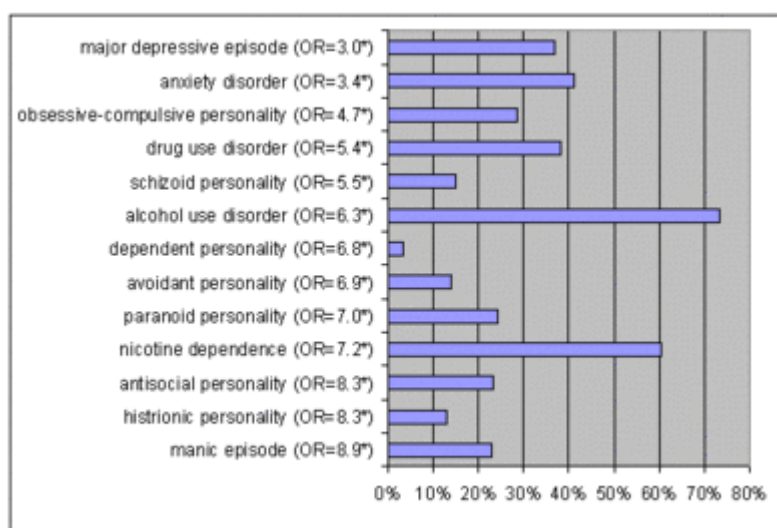
\*based on DSM-IV criteria

For this study, authors used data from the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC), a nationally representative study conducted by the National Institute on Alcohol Abuse and Alcoholism (NIAAA). Results were adjusted to be representative of national demographics of age, sex, race-ethnicity, marital status, urban or rural residence, region of the country, education and income. Interviewers for NESARC used the NIAAA Alcohol Use

Disorder and Associated Disabilities Interview Schedule-DSM-IV Version (AUDADIS-IV) (Grant, Dawson, & Hasin, 2001) diagnostic interview. The AUDADIS-IV assesses the presence of disordered gambling, nicotine dependence, alcohol abuse and dependence, abuse and dependence of 10 groups of drugs (1), as well as mood and anxiety disorders (2) and personality disorders (3), according to DSM-IV (American Psychiatric Association, 1994) criteria for these illnesses. Participants who admitted to ever experiencing five or more of the ten DSM-IV criteria for disordered gambling received a diagnosis of lifetime disordered gambling.

Lifetime prevalence of disordered gambling was 0.42% (i.e., 195 of the 43,093 participants). Overall, rates of psychiatric disorders among disordered gamblers (DGs) were higher than in the rest of the sample. The authors noted significant comorbidity between disordered gambling and alcohol use disorders (73.22% of DGs), nicotine dependence (60.37% of DGs), and drug use disorder (41.3% of DGs). Additionally, disordered gamblers had elevated rates of personality disorders—particularly antisocial and histrionic—as well as elevated rates of mood disorders—particularly mania—compared to the rest of the national sample (4). The authors suggest that these comorbidities might indicate the existence of certain shared environmental, social, and/or genetic risk factors among these disorders. Figure 1 presents the prevalence of other disorders among DGs ordered by the ratio (OR) of the prevalence among DGs to that of other people.

**Figure 1: Percentage of Disordered Gamblers with Comorbid Disorders (adapted from Petry et al., 2005)**



**Note:** PG = Disordered gambler. OR = odds ratio of prevalence of disorder in

DGs compared to non-DGs. \* $p < .05$ .

There are several limitations to this study. The prevalence of disordered gambling for this sample (0.42%) is low, but within the range of prevalence rates found in previous studies (0.4%-2.0%). It is important to note that due to the low prevalence rate of disordered gambling in this sample, the rates reported in Figure 1 are based on only 195 participants. Because all measures tested lifetime presence of disorders, it is unclear whether the comorbid disorders identified in this study are co-occurring, or whether one precedes another; other longitudinal studies might assess the sequence of onset of these disorders, and, as several of these disorders share similar symptoms, the degree to which the symptom patterns are overlapping. Nonetheless, this study indicates that people who have experienced several gambling problems in their lifetime are also more likely to have experienced substance abuse problems and are more likely to present with symptoms of psychiatric and personality disorders. These findings have important implications for the treatment of disordered gambling. The high comorbidity of problems suggests that assessment of disordered gambling should be comprehensive and include assessment of a variety of psychiatric and personality disorders. This necessitates the development of efficacious treatments that address comorbid diagnoses.

What do you think? Comments on this article can be addressed to Siri Odegaard.

## Notes

1. Sedatives, tranquilizers, opiates (other than heroin or methadone), stimulants, hallucinogens, cannabis, cocaine, inhalants/solvents, heroin, and other drugs.
2. Specifically major depressive episode, dysthymic disorder, manic episode, hypomanic episode, panic disorder (with agoraphobia), social phobia, specific phobia, and generalized anxiety disorder.
3. Specifically dependent, avoidant, histrionic, obsessive-compulsive, schizoid, paranoid, and antisocial personality disorders.
4. Identifying DG and mania as comorbid, however, is slightly problematic, though it does support the idea that there are common risk factors and roots for these disorders. According to DSM-IV criteria, concurrent mania precludes a diagnosis of DG. The NESARC survey did not obtain information that would identify cases in

which DG was an expression of mania. Thus, the comorbidity of DG and mania might be overstated.

## **References**

American Psychiatric Association. (1994). DSM-IV: Diagnostic and statistical manual of mental disorders (Fourth ed.). Washington, D.C.: American Psychiatric Association.

Cunningham-Williams, R. M., Cottler, L. B., Compton, W. M., & Spitznagel, E. L. (1998). Taking chances: Problem gamblers and mental health disorders—results from the St. Louis Epidemiologic Catchment Area Study. *American Journal of Public Health, 88*(7), 1093-1096.

Grant, B. F., Dawson, D. A., & Hasin, D. S. (2001). The Alcohol Use Disorder and Associated Disabilities Interview Schedule-DSM-IV Version, from <http://www.niaaa.nih.gov>

Petry, N. M., Stinson, F. S., & Grant, B. F. (2005). Comorbidity of DSM-IV Pathological Gambling and Other Psychiatric Disorders: Results From the National Epidemiologic Survey on Alcohol and Related Conditions. *Journal of Clinical Psychiatry, 66*(5), 564-574.