

# DRAM Vol. 5(11) - Which comes first - the drink or the distress?

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Previous studies have demonstrated a higher prevalence of psychiatric disorders among individuals with alcohol use disorder (AUD) than among the general population (Grant et al., 2004; Kessler et al., 1996). However, there is limited literature that examines both the co-occurrence and the temporal ordering (i.e., which disorder occurs first) of AUD and other psychiatric disorders. This week's DRAM reviews a study that aims to fill this gap in the literature (Flensborg-Madsen et al., 2009).

## **Method**

- Investigators analyzed 25 years of follow up data for 18,146 individuals from Copenhagen, Denmark.
- The data reflected all admissions to Danish hospitals since 1976 and the data from the Danish Psychiatric Central Register since 1969.
- The investigators classified individuals by diagnostic record for mood disorders, psychotic disorders, anxiety disorders, personality disorders, drug use disorder, and alcohol use disorder (AUD).
- The researchers analyzed the data by means of Cox regression analysis, which is a type of [survival analysis](#).

## **Results**

- o Among individuals with AUD (N = 1,756), 50% had a lifetime comorbid psychiatric disorder.

- Personality disorders were the most common comorbid disorders (24%, N = 421), followed by mood disorders (16.8%, N = 295) and drug abuse (16.6%, N = 291).

- As Table 1 shows, the risk of developing a psychiatric disorder among AUD individuals (N = 1,200) was larger than the risk of developing an AUD among individuals who were already registered with another psychiatric disorder (N = 2812).

**Table 1. Risk of AUD for individuals with psychiatric disorders and risk of psychiatric disorders for individuals with AUD adjusted for sex, smoking, cohabitation status and educational level.**

<b>Initial disorder</b>	<b>AUD</b>	<b>Mood disorder</b>	<b>Psychotic disorder</b>	<b>Anxiety disorder</b>	<b>Personality disorder</b>	<b>Drug abuse</b>
<b>Future disorder</b>						
AUD		4.5	3.2	3.4	4.3	5.1
Mood disorder	4.8					
Psychotic disorder	4.5					
Anxiety disorder	6.4					
Personality disorder	8.1					

<b>Initial disorder</b>	AUD	Mood disorder	Psychotic disorder	Anxiety disorder	Personality disorder	Drug abuse
<b>Future disorder</b>						
Drug abuse	18.3					

Note: Data are presented in the form of [odd-ratios](#).

### **Limitations**

- The time of disorder onset is based on a diagnostic record and not a report of onset; consequently, the timing of AUD and other psychiatric disorders might reflect the order of treatment seeking or clinician recognition of a problem, not the actual onset.
- The sample contains only individuals who were diagnosed with a psychiatric disorder.
- Even if alcohol orders tend to precede other psychiatric disorders, this study does not provide evidence for a causal link between the two.

### **Conclusion**

Comorbidity of AUD with other psychiatric disorders is the rule rather than the exception. These findings show that, for individuals who have been diagnosed with AUD, the risk of subsequently receiving a diagnosis for other psychiatric disorders is higher than the risk for individuals who have been diagnosed with other psychiatric disorders to receive a subsequent diagnosis of AUD. However, previous findings have shown that among people with both a psychiatric and an addictive disorder, psychiatric disorders typically occur first (Kessler et al., 2008; Kessler et al., 1996). This contradiction might be explained by the fact that the researchers in the

current study used the onset of treatment as the definition of disorder onset. It might be that individuals with both AUD and psychiatric disorder register to the hospital to receive treatment for the AUD first. It also might be that individuals with comorbid AUD register at the hospital more frequently than individuals without comorbid AUD. Overall, these findings imply the need to develop improved and integrated treatment for individuals meeting criteria of AUD and other psychiatric disorders.

-Julia Braverman

What do you think? Please use the comment link below to provide feedback on this article.

## **References**

- Flensburg-Madsen, T., Mortensen, E. L., Knop, J., Becker, U., Sher, L., & Grønnevik, M. (2009). Comorbidity and temporal ordering of alcohol use disorders and other psychiatric disorders: Results from a Danish register-based study. *Comprehensive Psychiatry, 50*(4), 307-314.
- Grant, B. F., Stinson, F. S., Dawson, D. A., Chou, S. P., Dufour, M. C., Compton, W., et al. (2004). Prevalence and co-occurrence of substance use disorders and independent mood and anxiety disorders. *Archives of General Psychiatry, 61*, 807-816.
- Kessler, R. C., Hwang, I., LaBrie, R. A., Petukhova, M., Sampson, N. A., Winters, K. C., et al. (2008). DSM-IV pathological gambling in the National Comorbidity Survey Replication. *Psychological Medicine 38*(9), 1351-1360.

Kessler, R. C.,

Nelson, C. B., McGonagle, K. A., Edlund, M. J., Frank, R. G., & Leaf, P. J.

(1996). The epidemiology of co-occurring addictive and mental disorders:

Implications for prevention and service utilization. *American Journal of Orthopsychiatry*, 66(1), 17-31.