Title: Clinical Relevance of the Distinction Between Alcohol Dependence With and Without a Physiological Component

Authors: Marc A. Schuckit, M.D., Tom L. Smith, Ph.D., Jean-Bernard Daeppen, M.D., Mimy Eng, B.A., T.-K. Li, M.D., Victor M. Hesselbrock, Ph.D., John I. Nurnberger, Jr., M.D., Ph.D., and Kathleen K. Bucholz, Ph.D.


Background: In many typologies and subgroupings for alcohol and drug problems, there was a significant change in the criteria between the DSM III-R and the DSM-IV in regard to alcohol dependence. Specifically, the DSM-IV required that there be some physiological aspect of dependence. The patient needed to demonstrate signs of tolerance or withdrawal from the substance. Schuckit and colleagues proposed that the new classification though viable is limited because it does not include a significant number of patients who do not have physiological symptoms of dependence, but demonstrate other psychological components of dependence as outlined in the DSM-III-R.

Objective: To compare patients who meet the DSM-III-R defined alcohol dependence and the DSM-IV definition. Specifically to classify patients in regard to whether they have physiological components of dependence.

Type of Article: Study
**Design:** Part of a collaborative study of the genetics of alcoholism with specifically structured interviews carried out to assess a psychiatric condition as well as family history and medical history.

**Patients:** 3,395 patients. These patients were collected from 6 clinical sites. They were identified by having a proband that was identified for treatment. The study also included the probands’ families.

**Intervention:** Structured interview

**Outcomes Measured:** Included evidence of dependence, characterized by withdrawal, tolerance, and psychological dependence as defined in the DSM-III-R. They were divided into two groups: Group I had evidence of tolerance and/or withdrawal and Group II was without physiological evidence.

**Main results:** Showed that 31.1% of patients who met the DSM-III-R diagnostic criteria for alcohol dependence did not have evidence of withdrawal or tolerance. Also, 86.9% of the patients or 2,949 subjects met the DSM-III-R criteria for alcohol dependence and the DSM-IV for alcohol dependence (i.e., evidence of tolerance and/or withdrawal). 48.7% of subjects in Group I had tolerance alone. Only 3.8% reported evidence of withdrawal and the absence of tolerance. Another 47.5% noted tolerance in at least one of the aspects of withdrawal. Statistically significant differences showed up in the two groups as follows:

Group I was more likely to work less in the preceding past year and was more likely to be male.
Group II was more likely to be married.

**Conclusion:** The results support the clinical relevance of distinguishing between alcohol dependent patients with and without the physiological component.
Commentary: (Impact on Internal Medicine). Though the discussion of the definition of alcohol dependence may seem like a guild argument, it has relevance to the practicing internist. First, it stresses the importance of determining whether symptoms of withdrawal are present because these patients have a more severe disorder and are in need of acute detoxification at the initiation of their treatment. Second, the study points out that there is a significant minority of patients (13.1% of patients) who have no evidence of withdrawal or tolerance, but still ve significant symptomatology that many believe should meet criteria for alcohol dependence and would benefit from more intensive treatments. This begins to create for a clinician a spectrum of illness, which is common in many other medical diagnoses as well.