University of Toronto

Does Moderate Alcohol Use in Bipolar Disorder Predict Increased Symptom Severity and Poorer Functioning?

Benjamin I. Goldstein[1], Vytas P. Velyvis[2], Sagar V. Parikh[2], Ari Zaretsky[3], Irene Patelis-Siotis[4], Lakshmi Yatham[5], Serge Beaulieu[6] , Pablo Cervantes[6], Glenda MacQueen[4], David Streiner[3]

[1] Western Psychiatric Institute and Clinic, University of Pittsburgh, Pittsburgh, USA [2]Centre for Addiction and Mental Health, and University Health Network, Toronto, Canada, [3] University of Toronto, Toronto, Canada, [4]McMaster University, Hamilton, Canada, [5]University of British Columbia, Vancouver, Canada, [6]McGill University, Montreal, Canada.

Abstract

Objective: To examine the association of alcohol consumption with future symptoms, illness course, and healthcare utilization among non-alcoholic patients with bipolar disorder (BD).

Method: Subjects were 90 patients with BD I or II, 18-60 years old, in full or partial remission, non-heavy drinkers, and with no history of substance use disorders Measures included: SCID-IV, the Hamilton Depression Rating Scale, the Clinician-Administered Rating Scale for Mania, the Social Adjustment Scale, the Activity and Utilization Scale, and the Khavari Alcohol Test.

Results: Despite low volumes of consumption, alcohol was associated with manic (but not depressive) symptoms in BD among both males and females at 6 and 12 months. Moderate alcohol consumption also predicts worse future social and family adjustment as well as increases in health care use up to one year later as compared with patients who drink minimal amounts of alcohol.

Conclusions: The harmful association between alcohol and BD may occur over a range of consumption, rather than being confined to heavy drinkers.

Rationale

- Bipolar Disorder shares the strongest association with alcohol use disorders (AUD) of all Axis I diagnoses
- Comorbid AUD are associated with increased BD severity
- Lifetime prevalence of AUD in BD is approximately 50%
- Therefore, 50% of individuals with BD have no AUD history, and most of these individuals consume some amount of alcohol.
- To date, no study has examined effects of ***moderate*** alcohol use in predicting ***future*** mood symptoms, social adjustment and health care use in BD.
- ***Hypothesis*****:** Alcohol consumption in BD is associated with future illness severity, poorer functioning, increased health care use.

Methods

Measures: KAT; HDRS-17; CARS-M; SAS-II B; AUQ

Recruitment: From multi-center trial of CBT vs psycho-education for BD

Inclusion Criteria:
* BD I or II
* partial/full remission (HDRS<17,CARS-M<12)
* 18-60 years old
* consistent dose of mood stabilizer for >4 weeks
* minimum 2 mood episodes in past 3 years

Exclusion Criteria:
* ECT<1 month
* severe personality disorder
* current suicidality or homicidality
* active GMC
* Lifetime prevalence of any SUD or AUD
* Drink in excess of low-risk drinking guidelines (Max. weekly standard drinks: Males = 14; Females = 9)

Methods (cont'd)

Subjects: N=90 Mean age 43.6 (9.9)
67% Females 74% BD I

Primary analyses: MANOVA, Pearson Correlations, Chi-square

Results

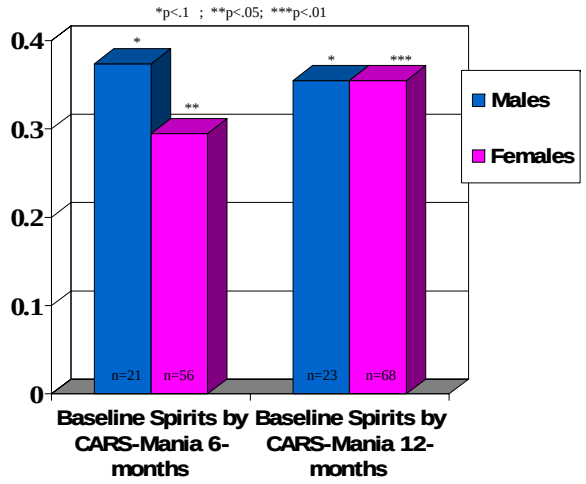
Drinking Characteristics:

63% consumed <1 drink per week ***"Minimal"***
32% consumed 1-6 drinks per week ***"Moderate"***
5% consumed 7+ drinks per week ***"Heavy"***

Mean drinks / wk: **T-test**
BD I = 1.1 (2.1) (N.S.)
BD II = 1.9 (3.0)
Male = 2.2 (3.6) t = 2.68, df(1,88), p = .009
Female = 0.8 (1.2)

Mood Relapse: Frequency /Chi-square
Minimum vs. Moderate (N.S.)

Table 1: Pearson Correlations - Baseline KAT Alcohol (Spirits) Volume by 6 & 12-month Manic Symptoms (CARS-M)



Results (cont'd)

- Moderate drinkers did not differ from minimal drinkers in their likelihood to experience either depressive or manic/hypomanic relapse, ER visits, or hospitalizations.

Table 2: Min vs. Mod ETOH differences in Health Service Use (AUQ) & Social Functioning (SAS-IIB)

Females	MIN	MOD	F	p(sig)
6m - AUQ doctor visits	0.35	1.33	11.55	0.00
6m - SAS social function	2.33	3.33	5.01	0.03
9m - SAS social function	2.36	3.11	5.35	0.03

Males	MIN	MOD	F	p(sig)
6m - AUQ psychiatric visits	1.10	3.18	5.23	0.03
12m - SAS social function	1.67	2.91	9.50	0.01
12m - SAS famiy function	1.51	2.18	12.08	0.00

Note: SAS Global Assessment of Functioning Scale: 1=excellent, 2=good, 3=mild maladjustment, 4= moderate maladjustment, 5=marked, 6=severe maladjustment, 7=very severe maladjustment

Conclusions

Findings

1. Even moderate alcohol use (1-6 drinks / week) in BD is linked with:
   - future manic symptoms
   - increased health care utilization poorer social and family functioning
2. Moderate alcohol consumption predicts poor 1-year clinical and functional outcomes.
3. Alcohol use is associated with mania in both men and women.

Limitations
- Alcohol consumption determined by self-report
- Non-representative sample

Implications
- True "low-risk" drinking among individuals with BD may be abstinence from alcohol.
- Given the self-selected sample, these findings may under-estimate the strength of the association between alcohol use and BD

The authors may be contacted by e-mail care of: goldsteinbi@upmc.edu