



Insomnia in alcohol dependent subjects is associated with greater psychosocial problem severity



Ninad S. Chaudhary^{a,b}, Kyle M. Kampman^{a,c}, Henry R. Kranzler^{a,c}, Michael A. Grandner^{a,c}, Swarnalata Debbarma^{a,d}, Subhajit Chakravorty^{a,c,*}

^a Perelman School of Medicine of the University of Pennsylvania, Philadelphia, PA 19104, United States

^b Washington University in St. Louis, St. Louis, MO 63110, United States

^c Philadelphia Veterans Affairs Medical Center, Philadelphia, PA 19104, United States

^d Thomas Jefferson University, Philadelphia, PA 19107, United States

HIGHLIGHTS

- Insomnia was prevalent in 75% of actively-drinking alcohol dependent subjects.
- Those with moderate–severe insomnia had higher scores for most psychosocial problems.
- They also reported having more employment problems and conflicts with their family.
- Insomnia may aggravate psychosocial problems in alcohol dependent subjects.

ARTICLE INFO

Article history:

Received 23 July 2014

Received in revised form 19 March 2015

Accepted 4 June 2015

Available online 20 June 2015

Keywords:

Alcoholism

Psychosocial factors

Insomnia and sleep and maintenance disorders

ABSTRACT

Introduction: Although psychosocial problems are commonly associated with both alcohol misuse and insomnia, very little is known about the combined effects of insomnia and current alcohol dependence on the severity of psychosocial problems. The present study evaluates whether the co-occurrence of insomnia and alcohol dependence is associated with greater psychosocial problem severity.

Methods: Alcohol dependent individuals (N = 123) were evaluated prior to participation in a placebo-controlled medication trial. The Short Index of Problems (SIP), Addiction Severity Index (ASI), Insomnia Severity Index (ISI), and Time Line Follow Back (TLFB), were used to assess psychosocial, employment, and legal problems; insomnia symptoms; and alcohol consumption, respectively. Bivariate and multivariate analyses were used to evaluate the relations between insomnia and psychosocial problems.

Results: Subjects' mean age was 44 years (SD = 10.3), 83% were male, and their SIP sub-scale scores approximated the median for normative data. A quarter of subjects reported no insomnia; 29% reported mild insomnia; and 45% reported moderate–severe insomnia. The insomnia groups did not differ on alcohol consumption measures. The ISI total score was associated with the SIP total scale score ($\beta = 0.23$, $p = 0.008$). Subjects with moderate–severe insomnia had significantly higher scores on the SIP total score, and on the social and impulse control sub-scales, and more ASI employment problems and conflicts with their spouses than others on the ASI.

Conclusion: In treatment-seeking alcohol dependent subjects, insomnia may increase alcohol-related adverse psychosocial consequences. Longitudinal studies are needed to clarify the relations between insomnia and psychosocial problems in these subjects.

Published by Elsevier Ltd.

1. Introduction

Alcohol dependence is defined as a maladaptive pattern of alcohol use, leading to significant impairment or distress. It is characterized by

tolerance; withdrawal; alcohol use in larger quantities or over a longer time period than intended; repeated unsuccessful efforts to cut down or stop drinking; greater time dedicated to alcohol-related activities; continued alcohol use despite alcohol-related health problems, and interference with recreational, occupational or social activities (DSM-IV-TR, 2000). With the advent of DSM-5, alcohol abuse and dependence were replaced by Alcohol Use Disorder (AUD). The diagnosis of AUD is based on 11 diagnostic criteria: all criteria of alcohol dependence, three alcohol abuse criteria, and craving for alcohol (American Psychiatric Association. DSM-5 Task Force, 2013).

* Corresponding author at: MIRECC, Mail Stop 116, Philadelphia Veterans Affairs Medical Center, University & Woodland Avenues, Philadelphia, PA 19104, United States. Tel.: +1 215 823 5800x6509; fax: +1 215 823 4123.

E-mail address: Subhajit.Chakravorty@uphs.upenn.edu (S. Chakravorty).

The psychosocial problems associated with alcohol dependence may take the form of marital or other interpersonal conflicts, abuse or neglect of a child, and absenteeism or other problems at work (Boden, Fergusson, & Horwood, 2013; Dube et al., 2001; Miller-Tutzauer, Leonard, & Windle, 1991). These psychosocial problems may lead to loss of social supports, unemployment, and in extreme cases violence (Bastien, Vallieres, & Morin, 2004; Dube et al., 2001; Harford & Muthen, 2001; Head, Stansfeld, & Siegrist, 2004; Zhang, Wiczorek, & Welte, 1997). The emotional reactions associated with these psychosocial problems may be anger, sorrow, worry, regret, guilt, and/or sleeplessness and they may manifest themselves as depressive, anxiety and/or insomnia disorders. Despite these negative consequences many alcohol dependent patients continue to drink actively which may be their way of self-medicating their psychiatric symptoms.

Drinking in the context of psychosocial problems and psychiatric symptoms may be explained by Conger's Tension Reduction (TR) Hypothesis. The TR Hypothesis states that psychological distress may be a trigger for alcohol consumption (Conger, 1956; Hodgson, Stockwell, & Rankin, 1979; Young, Oei, & Knight, 1990). Tension reduction has been implicated as contributing to pathological drinking in the context of work–family conflict (Frone & Russell, 1993), neighborhood problems (Hill & Angel, 2005), and economic problems (Pearlin & Radabaugh, 1976). Although prior studies of drinking have used anxiety and depressive symptoms to reflect psychological distress, insomnia [which may also be stress related (Spielman, Caruso, & Glovinsky, 1987), and is included on the Alcohol Effects Questionnaire (AEQ), which is used to assess Tension Reduction (Rohsenow, 1983)] has not been. Therefore, it is possible that stress precipitates insomnia, leading to greater anxiety and depressive symptoms, which could lead to psychosocial problems. Pathological drinking could be used to cope with stress, insomnia, anxiety or depressive symptoms, and psychosocial problems.

Insomnia disorder (as defined by the American Academy of Sleep Medicine) requires the presence of at least one of the following complaints: difficulty initiating sleep, difficulty maintaining sleep, or waking up earlier than desired. These symptoms are associated with at least one of following: fatigue or malaise, attention or memory problems, impairment of social or occupation or family or educational performance, mood disturbances, daytime sleepiness, behavioral problems, reduced motivation or energy, proneness for errors, and, concern or dissatisfaction with sleep. In addition to the above, these complaints must occur despite an adequate opportunity and circumstance for sleep and are present for most nights of the week for 3 or more months (AASM, 2014).

Insomnia has been associated with alcohol abuse in prior epidemiological studies (Ford & Kamerow, 1989; Weissman, Greenwald, Nino-Murcia, & Dement, 1997). The significance of insomnia in alcohol dependence lies in its widespread prevalence with estimates of prevalence ranging from 30 to 95%, depending on the sample investigated (Baekeland, Lundwall, Shanahan, & Kissin, 1974; Bokstrom & Balldin, 1992; Brower, Aldrich, Robinson, Zucker, & Greden, 2001; Caetano, Clark, & Greenfield, 1998; Cohn, Foster, & Peters, 2003; Escobar-Cordoba, Avila-Cadavid, & Cote-Menendez, 2009; Foster, Marshall, & Peters, 2000). These prevalence estimates are up to 9 times higher than in the general population (NIH, 2005). Insomnia has been reported in alcohol dependent subjects when drinking (Chakravorty et al., 2013; Mello & Mendelson, 1970; Skoloda, Alterman, & Gottheil, 1979), during alcohol withdrawal (Bokstrom & Balldin, 1992; Caetano et al., 1998; Escobar-Cordoba et al., 2009), and during early recovery (Brower et al., 2001; Drummond, Gillin, Smith, & DeModena, 1998; Foster et al., 2000).

It is to be noted that insomnia has been independently associated with a variety of psychosocial problems as well. These symptoms have been associated with neurocognitive impairments and problems with impulse control which in turn contribute to psychosocial problems (Fortier-Brochu, Beaulieu-Bonneau, Ivers, & Morin, 2012; Ohayon, 2002; Paine, Gander, Harris, & Reid, 2004; Shochat, Cohen-Zion, & Tzischinsky, 2014; Simola, Liukkonen, Pitkaranta, Pirinen, & Aronen, 2014).

Thus, the above literature demonstrates that psychosocial problems are independently associated with active drinking in alcohol dependence and with insomnia. But insomnia and psychosocial problems are commonly comorbid in actively drinking alcohol dependent subjects. It is possible that insomnia and alcohol use disorder could interact to increase the number or severity of psychosocial problems especially in those seeking treatment (Miller, Tonigan, & Longabaugh, 1995; Moss, Chen, & Yi, 2010).

A recent study of alcohol-dependent subjects who were currently in treatment provided some initial data at this interface (Zhabenko, Wojnar, & Brower, 2012). Subjects with insomnia were significantly less satisfied by their current monetary situation, drank more frequently and consumed more alcoholic beverages, had higher scores on the SIP scales and total scores, had higher scores on the MAST (Michigan Alcoholism Screening Test) and lower mental and physical composite scale scores on the SF-36 (Short Form 36-item) scale, and were more likely to report a history of childhood sexual or physical abuse than alcohol dependent subjects without insomnia. Subjects with insomnia also reported more alcohol-related problems, as reflected by the total score on the SIP (Short Index of Problems). A multivariable analysis showed that the SF-36 mental and physical composite scores, the number of prior drinking days, MAST score, and a history of physical and sexual abuse were significant correlates of insomnia. This study was unique in that it used multiple assessment scales in a Polish sample. However, no information was available on the specific psychosocial problems and the subjects were currently involved in treatment, which may have possibly led to some decrease in their psychosocial problems.

Accordingly, in the present study, we explored the relationship between insomnia and psychosocial problems in a sample of actively drinking alcohol dependent subjects who were recruited from an alcohol treatment setting. It was hypothesized that subjects with insomnia, as compared to those with subclinical insomnia or without insomnia, would have more severe psychosocial and other problems. Knowledge gained from these associations may help us to identify individuals at higher risk of recidivism and thus may aid in the development of a comprehensive treatment plan.

2. Methods

2.1. Design

The study is a secondary, cross-sectional analysis of pre-treatment data from a randomized, placebo-controlled, double blind trial of quetiapine treatment for alcohol dependence (ClinicalTrials.gov identifier # NCT00674765).

2.2. Setting

The study was conducted at the University of Pennsylvania's Treatment Research Center. The Institutional Review Board at the University of Pennsylvania approved the conduct of the study and all participants provided written, informed consent prior to enrollment.

2.3. Subjects

Subjects were recruited through advertisements in local print and electronic media, and through referrals from their outpatient treatment providers. Inclusion criteria were age 18–70 years, a current diagnosis of DSM-IV alcohol dependence, drinking to intoxication for ≥ 15 of the past 30 days, consumption of ≥ 10 standard drinks/drinking day (men) or ≥ 8 drinks/drinking day (women) over the past 30 days, an ability to abstain from alcohol for ≥ 3 consecutive days, and fluency in English. Subjects were excluded from the study if they had past-year dependence on another substance (excluding nicotine or marijuana); had a positive urine drug screen at initial screening; had an unstable/serious medical illness; had a diagnosis of current unstable or serious psychiatric conditions

Download English Version:

<https://daneshyari.com/en/article/898646>

Download Persian Version:

<https://daneshyari.com/article/898646>

[Daneshyari.com](https://daneshyari.com)