Personality Dimensions in Male Patients with Early-Onset Alcohol Dependence Who Seek Treatment

Cuneyt Evren, MD, Ercan Dalbudak, MD, and Duran Cakmak, MD
Research, Treatment and Training Center for Alcohol and Substance Dependence (AMATEM), Bakirkoy State Hospital for Psychiatric and Neurological Diseases, Istanbul, Turkey

Abstract: Aims: The aim of this study is to examine the capacity of different personality dimensions to predict early-onset alcoholism (EOA). Methods: Participants were 176 consecutively admitted male inpatient alcohol dependents. Patients were grouped as EOA (onset before age 25) and late onset alcoholism (LOA). Results: Overall severity of psychopathology and alcohol dependence were higher in EOAs (51.1%) than LOAs, whereas self-directedness (SD) dimension of personality was lower in EOAs. Among the other personality dimensions only lower SD scores, together with lower current age predicted EOA. Conclusion: Present study suggests that it is important to take EOA into consideration while planning the treatment of alcohol dependency, because of their higher probability of having low SD scores, as well as higher severity of psychopathology and alcohol-related problems.

Introduction

Cloninger et al. (1) proposed a typological distinction for alcoholism as the type I/type II. According to this typology, characteristics of type II or “male-limited” alcoholism are: early onset of alcoholism, history of paternal type II alcoholism, severe alcoholism, little environmental influence, antisocial traits and frequent criminality. In contrast to this, type I or “milieu-limited” alcoholism is mostly defined as opposite of type II (1, 2). Some studies confirm this dichotomy of male alcoholism and show that the age-of-onset is a valid classification criterion (3). Other studies criticize this dichotomy (2) and suggest that type II may represent a separate diagnosis of antisocial personality disorder and not alcoholism (4).

Among temperament dimensions of personality, high novelty seeking (NS) usually predicted early onset alcoholism (EOA) and criminality and discriminated alcoholics exhibiting antisocial behavior (5). Some studies, however, found no link between temperament scores and type I or type II (6, 7). Studies using Temperament and Character Inventory found lower self-directedness (SD) and cooperativeness (C) scores among EOAs than LOAs (2, 8). In a study of Turkish alcohol dependents, SD was the only determinant for EOA among other personality dimensions (8).

The aim of this study is to examine the personality dimensions that predict EOA. Concurrent depression, anxiety, overall severity of psychopathology, and severity of alcohol dependency were also assessed by using multivariate analysis.

Method

Setting

The study cohort consisted of 176 consecutively admitted male inpatients of a specialized center for substance use disorders who met DSM-IV diagnostic criteria for alcohol dependence. Patient’s written informed consent was obtained after the study protocol was thoroughly explained. Interviews with the study group were conducted after detoxification, i.e., 4–6 weeks after the last day of alcohol use. EOA defined as onset of alcohol abuse at the ages below 25 and LOA at age of 25 and above. Consistent with previous study (53.3%), 90 (51.1%) patients were considered to be EOA (8).
Measures
Other than the semi-structured socio-demographic data form designed for this study, the following valid and reliable self-rating measures were used: Temperament and Character Inventory (TCI) (9) including the following dimensions: (1) harm avoidance (HA); (2) novelty seeking (NS); (3) reward dependence (RD), and (4) persistence (P). Dimensions of character: (1) self-directedness (SD); (2) cooperativeness (C), and (3) self-transcendence (ST). The severity of dependence was assessed by using the Michigan Alcoholism Screening Test (MAST) (10). The Spielberger’s State-Trait Anxiety Inventory (STAI) (11) was used to measure anxiety. Psychopathologic symptoms were assessed with the Symptom Checklist-Revised (SCL-90-R) (12) and severity of depressive symptoms was evaluated by using the Beck Depression Inventory (BDI) (13).

Results
The mean age and the years of education were lower among the EOAs (41.3±8.4 and 9.2±3.6 respectively) than LOAs (44.9±7.9 and 10.4±4.3 respectively) (t=-2.95, p=0.004 and t=-2.05, p=0.042 respectively). No differences were found for family substance abuse history, and marital and employment status.

The MAST and SCL 90 mean scores were higher for the EOAs (32.0±8.9, 1.6±0.8 respectively) than LOAs (26.3±10.4, 1.4±0.7 respectively), (t=3.97, p<0.001; t=2.09, p=0.038 respectively). No statistical differences were found between the groups in terms of STAI and BDI. Mean score of self-directedness (SD) was lower in EOAs (23.2±6.0) than LOAs (25.7±6.0) (t=3.97, p=0.007). No statistical differences were found for other TCI dimensions.

To assess the relative abilities of the variables to predict EOA, a multivariate logistic regression analysis was performed using EOA as a dependent variable. Independent variables were age, TCI, BDI, MAST, STAI and SCL-90. According to this analysis, SD (B=0.072, Wald=6.8, OR=1.08, 95% CI=1.02–1.13, p=0.009) and current age (B=0.06, Wald=8.0, OR=1.06, 95% CI=1.02–1.11, p=0.005) were the only predictors of EOA.

Discussion
Higher severity of psychopathology and alcohol-related problems in EOAs than LOAs is consistent with previous studies (14). Since EOA means abusing alcohol during adolescence, which is an important period in terms of physiological and psychosocial development, a higher rate of physical, social and psychological problems is expected among EOAs. For our study sample, which consisted of a treatment seeking group, this finding may be the reason for younger age being one of the predictors for EOAs.

Studies that only measured temperamental dimensions of personality found inconsistent results (5–7). Studies that used TCI, which also measures character dimensions of personality, revealed a relationship between EOA and lower CD scores (2, 8). Low SD is defined by poor impulse control or weak ego strength along with characteristics of being irresponsible, purposeless, fragile, blaming, destructive, unreliable and poorly integrated, as well as low self-acceptance and immaturity. The previous studies suggested that all categories of personality disorder are distinguished by low SD (9), particularly among substance abusers (15). The other main finding of the present study was that lower scores on SD are related to EOA. The importance of this finding is that the present study claims to overcome the limitation of previous studies by controlling the other factors such as severity of psychopathology and substance-related problems (2, 8). This finding partly supports the critics of Cloninger’s typology in that it may represent a separate diagnosis of personality disorder and not alcoholism (4, 5). The prevalence of personality disorders, however, was not assessed in the present study, which may be considered as a limitation of the study. Also character scores may not be stable over time (9). Berglund et al. (16) suggest that the long duration of excessive alcohol consumption appears to have an influence on personality traits. Thus, the present study does not address a causal relationship between EOA and personality dimensions or severity of psychopathology. Another limitation is that the study group was restricted to a treatment seeking male population. Despite these limitations, it is suggested that the needs of EOAs,
including their higher probability of having low SD scores, psychopathology and alcohol-related problems, should be considered when planning alcohol dependency treatment.

References