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11.1 Epidemiology: Characteristics, Prevalence, and Determinants

Drunkorexia is a term that first appeared in various media outlets in 2008 [1, 2] to describe a pattern of behavior whereby some individuals engage in compensatory diet-related behaviors when consuming alcohol. These behaviors include restricting behaviors, such as skipping meals or cutting back on calories or fat intake, as well as purging behaviors such as excessive exercising, vomiting, or laxative use. Performing such behaviors prior to alcohol consumption inherently enhances the effects of alcohol on the body and substantially raises the health and behavioral risks associated with drinking [3–9]. Although some researchers have proposed alternative labels such as food and alcohol disturbance (FAD) [10] and alcoholimia [11], drunkorexia is the term most often used in the literature and will be used throughout the remainder of this chapter.

Regarding prevalence rates of this behavior pattern, the researchers of many studies have assessed drunkorexia with a single item asking people how often they restrict their food, calories, or fat intake on days that they plan to consume alcohol, and people who indicate that they do so at least some of the time (i.e., not a “never” response) are considered “restrictors” who exhibit drunkorexia behavior. Using this method, these studies have found prevalence rates ranging from 12% to 39% in college student samples [6–8, 12–18]. In studies that use more comprehensive assessment measures with multiple items asking about various restricting and purging behaviors done before, during, and after consuming alcohol, researchers have found greater prevalence rates ranging from 54% to 58% in college student samples [3, 19, 20].

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Research reveals two primary reasons given for drunkorexia behaviors: avoiding weight gain (i.e., restricting and purging behaviors for the purpose of offsetting the calories of the alcohol consumed) and experiencing enhanced alcohol effects (i.e., restricting and purging behaviors for the purposes of getting drunk faster and becoming more drunk with less alcohol) [6, 7, 12–14]. The first reason concerning the avoidance of weight gain is supported by research showing that drunkorexia behaviors are associated with greater levels of disordered eating [7, 21], including body dissatisfaction [5, 19, 22–25], drive for thinness [5, 17, 18, 24, 25], fasting [17], binge eating [4], and bulimia symptoms [4, 5, 8, 18, 25, 26]. Likewise, the second reason concerning the enhancement of alcohol effects is supported by research showing that drunkorexia behaviors are associated with greater levels of alcohol consumption [3–6, 9, 13, 15, 16, 20, 21, 24, 25]; binge drinking episodes [9, 12, 13, 16–19, 25, 26]; alcohol-related problems such as getting into a fight, memory loss, unprotected sex, and sexual victimization [3–9, 24]; and illicit drug use [16, 20].

The aforementioned research relates to the phenomenon of comorbidity between eating disorders and alcohol use disorders [27, 28] and leads to the question of whether extreme drunkorexia behaviors comprise an eating disorder, an alcohol disorder, or both. Based partly on the finding that disordered eating is a slightly better predictor than disordered alcohol consumption in women [4], some researchers [11] propose that drunkorexia should be included as a subcategory of other specified feeding and eating disorders (OSFED) in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition* (DSM-5) [29]. As another proposal, other researchers [10] suggest that drunkorexia be considered as an application of the transdiagnostic model of eating disorders [30]. Accordingly, in people with extreme drunkorexia, poor emotion regulation in the presence of negative life stressors will increase the desire to binge drink (and to quickly and more effectively experience the effects of alcohol). Yet, their overemphasis on weight and shape will lead to caloric restriction and purging compensatory behaviors to offset the effects of alcohol's calories and to avoid potential weight gain from both upcoming and recently completed binge drinking episodes. Although both proposals involve officially categorizing drunkorexia as an eating disorder, both also recognize the dual presence of both disordered eating and substance use that make drunkorexia unique from other disorders.

11.2 Demographic Differences and Other Correlates

Research findings regarding potential demographic differences in drunkorexia behaviors have been mixed. For instance, although some studies found women to exhibit greater drunkorexia behaviors than men [3, 12, 14, 15], other research reveals no significant gender differences [5, 13, 16–18, 24–26, 31]. Additionally, although two studies found greater drunkorexia behaviors among college freshmen [6, 15], other studies failed to find any significant age effects [5, 17, 31, 32]. Meta-analyses, weighted based on study quality, would be useful in better determining

behavioral differences based on gender and age. In addition, future research should further explore potential interactions. Regarding gender, for example, some research suggests that while women may be more likely than men to engage in compensatory behaviors for the purpose of avoiding weight gain, women and men do not differ in doing these behaviors for the purpose of experiencing enhanced alcohol effects [6, 32]. As to demographic variables with consistent findings, Hispanic and non-Hispanic Caucasians tend to exhibit greater drunkorexia behaviors than African Americans [6, 15, 20], and drunkorexia behaviors have been shown to be unrelated to body mass index [13, 18, 32]. Regarding the latter finding, however, it is important to note that important clinical research on severe and extreme cases of drunkorexia is missing from the literature at this time.

Some studies have already explored how drunkorexia is potentially related to various personality, emotion, and mental health variables. Regarding personality, two studies found that drunkorexia behaviors are associated with greater sensation seeking tendencies [22, 23], which is consistent with the desire to experience enhanced alcohol effects. Regarding emotion and mental health, several studies found that drunkorexia behaviors are associated with emotion dysregulation, including limited access to emotion regulation strategies, impulse control difficulties, and difficulties in recognizing and responding to emotional states [17, 32]. Such emotion dysregulation may lead to poor coping strategies such as binge drinking to dull the negative affect or disordered restricting and purging dietary behaviors as an attempt to gain control. Either way, the emotional conflict has been shown to lead to lower levels of self-esteem [32] and greater levels of anxiety and depression [7].

11.3 Proposed Diagnostic Criteria

The negative impacts of both eating disorders and alcohol use disorders have been clearly demonstrated elsewhere. Here, we introduce a possible disorder that encompasses aspects of both, which could be even more debilitating. Moreover, severe restriction of food prior to alcohol consumption enhances the alcohol's effects and leads to even greater alcohol-related health and behavioral risks including sexual victimization and alcohol-related accidents that could be fatal [3–9]. Although much more research is needed prior to establishing drunkorexia as a formal disorder in the DSM-5, the following diagnostic criteria have tentatively been proposed [11]: the co-occurrence of high-risk drinking and diet-related compensatory behaviors for at least three consecutive months, self-evaluation being unduly influenced by body weight/shape (like both anorexia and bulimia), and the person experiencing significant distress and impairment. The severity of the drunkorexia may be mild (1–3 episodes per month), moderate (4–7 episodes per month), severe (8–14 episodes per month), or extreme (14 or more episodes per month). These proposed criteria could help guide future research in the field, allowing researchers to gain better insight into whether drunkorexia is indeed a disorder that is unique from other eating and substance use disorders.

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