

The Need for Longitudinal Studies on Co-occurring Alcohol Use
and Anxiety Disorders among Older Adults
알코올 사용장애와 불안장애의 공존질환을 지닌
고령자에 대한 장기종단적 연구의 필요성

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(Abstract)

Co-occurring alcohol use and anxiety disorders is common in older adults and contributes to poor health outcomes, higher health care utilization, heightened mortality, and social dysfunction in later life. Although there are several proposed theoretical explanations for the association between drinking and mental health disorders (e.g., the precipitation model, the self-medication model, and the mutual maintenance model), few studies have tested the longitudinal time-dependent relationship between alcohol use and anxiety disorders in later life, in part, because longitudinal studies are limited. Better understanding of the temporal sequence of the relationship between alcohol use and anxiety disorders will have implications for improving prevention and treatment programs for at-risk drinking and anxiety in the older population.

Key words : Co-occurring alcohol use and anxiety disorders, Longitudinal relationship, Older adults, Clinical implications

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(초록)

알코올 사용 장애와 불안 장애의 공존 질환은 고령자들에서도 흔하게 발견된다. 이는 여성 동안 사회적 교류 및 건강상태에 부적인 영향을 미치며, 의료 서비스의 빈번한 이용, 그리고 사망의 가능성을 높인다. 음주 문제와 정신건강 장애와의 연관성을 설명하는 이론들이 적지 않지만(예, 촉진 모델, 자가 처방 모델, 및 상호 유지관리 모델), 장기 종단적인 연구의 부족 및 여러 가지 이유로 인해 고령자들을 대상으로 한 시간경과에 따른 알코올 사용 장애와 불안 장애의 관계를 검증한 연구들은 별로 없는 편이다. 고령자들의 알코올 사용 장애와 불안 장애의 공존 질환을 위한 치료나 예방 프로그램의 효과를 높이기 위해서는 시간경과에 따른 알코올 사용 장애와 불안 장애의 관계를 이해할 수 있는 연구 결과들이 도출되어야 할 것이다.

주제어 : 알코올 사용 장애, 불안 장애, 공존 질환, 고령자, 임상적 함의

I. Co-occurring At-risk Drinking and Mental Illness is Common in Older Adults

It is well known that alcohol use is strongly associated with mental health problems among younger adults (Crum et al., 2013; Fergusson, Horwood, & Boden, 2009). Multiple population-based studies which have surveyed the prevalence of addictive and mental disorders in the United States and abroad show that the alcohol use disorders and affective disorders co-occurred about two to three times as often as would be expected by chance alone (Burns & Teesson, 2002; Grant et al., 2004; Hasin, Stinson, Ogburn, & Grant, 2007; Smith & Randall, 2012). A nationally representative survey found that the prevalence of co-occurrences of alcohol use disorders and affective disorders ranged from 12% to 28% among respondents 18 years and older (Grant et

al., 2004).

These co-occurrences also remain and are common in later life (Bartels, Blow, Van Citters, & Brockmann, 2006; Kuerbis, Sacco, Blazer, & Moore, 2014). Literature shows that approximately 29% of older veterans with drinking problems had a co-occurring psychiatric disorder, and affective disorders were the most common co-occurring psychiatric disorder (21%) (Brennan, SooHoo, Lemke, & Schutte, 2015; Devanand, 2002; Lin, Ko, & Wu, 2011). Co-occurrence of at-risk drinking and mental health problems among older adults is a significant public health concern since such co-occurrence among older adults is associated with poor health outcomes, more social dysfunction, higher risk of suicidal attempt, and increased healthcare utilization relative to older adults suffering from each disorder alone (Brennan et al., 2015; Prigerson, Maciejewski, & Rosenheck, 2001; Salmon & Forester, 2012).

With the aging of the population and higher rates of alcohol use among baby boomers (Colliver, Compton, Gfroerer, & Condon, 2006; Satre, Sterling, Mackin, & Weisner, 2011), co-occurring alcohol use and affective disorders among older adults will be a rapidly growing public health concern (Blanco et al., 2013; Carter, Capone, & Short, 2011). Therefore, more research on characteristics of the relationship between alcohol use and mental health among older adults is needed to advance our responses to the negative impact of co-occurring drinking and mental illness on health in later life.

II. The Need for a Better Understanding of the Co-occurrence of At-risk Drinking and Anxiety in Later Life

Although the co-occurrence of at-risk alcohol use and mental health problems among older adults has been documented (Wu & Blazer, 2014), those studies have concentrated on the relationship between drinking and depression (Oslin, 2005; Satre et al., 2011). Relatively less attention has been paid to the association between alcohol use and anxiety among older adults (Bryant et al., 2013; Wolitzky-Taylor, Castriotta, Lenze, Stanley, & Craske, 2010). Anxiety disorders are a common psychiatric condition in older adults (Byers, Yaffe, Covinsky, Friedman, & Bruce, 2010; Hybels &

Blazer, 2003). Studies have been found that the estimated prevalence of anxiety disorders in late age have ranged from 3.2% to 14.2% (Reynolds, Pietrzak, El-Gabalawy, Mackenzie, & Sareen, 2015; Ritchie et al., 2004). Moreover, anxiety in later life is found to often co-occur with drinking (Chou, 2009; Ivan et al., 2014). Some limited evidence from cross-sectional studies suggests that there is a high correlation between alcohol use and anxiety among older adults (Ivan et al., 2014; Lin et al., 2014).

Ivan et al. (2014) found that the majority of older primary care patients with Generalized Anxiety Disorder (GAD), one of the most common anxiety disorders in older adults (Beekman et al., 2000; Flint, 2005; Kirchner et al., 2007; Le Roux, Gatz, & Wetherell, 2005; Wolitzky-Taylor et al., 2010), reported some alcohol use (55%), 8.5% participants reported at-risk drinking (an average of 8 to 14 drinks per week), and 5.0% indicated heavy drinking (an average of more than 14 drinks per week). Lin et al. (2014) also found that any lifetime anxiety disorder among older adults was associated with the increased odds of lifetime alcohol use disorder. The findings of a high prevalence of co-occurring alcohol use and anxiety disorders among older adults and the expected health risks and consequences in later life (Kirchner et al., 2007) indicate that the relationship between alcohol use and anxiety disorders among older adults is a significant issue that warrants continued attention from

researchers and clinicians.

Moreover, studies focusing on older adults is especially needed because alcohol use and anxiety changes over the lifespan (Karlman, Zhou, Reuben, Greendale, & Moore, 2006; Lenze et al., 2005). Consequently, the characteristics (e.g., temporal sequence) of the association between the two might be different from that of younger populations (Gellis, Kim, & McCracken, 2014). Taken together, the epidemiological literature describing the relationship between alcohol use and anxiety disorders among older adults shows that this co-morbidity is both prevalent and clinically relevant. Therefore, it is important to enhance our understanding of the co-occurring alcohol use and anxiety disorders among older adults.

III. The Longitudinal Relationship between Alcohol Use and Anxiety among Older Adults

There have been several proposed explanations for the association between alcohol use and mental health disorders (Back, Brady, Sonne, & Verdum, 2006; Haynes et al., 2005; Khantzian, 2003). These include the following: (1) the precipitation model [in which alcohol use influences anxiety but anxiety exerts no effect on alcohol use, Jane-Llopis & Matysina (2006)], (2) the self-medication model [in which anxiety influences alcohol use but alcohol use exerts no

effect on anxiety (Chan, Dennis, & Funk, 2008; O'Connor, Stewart, & Watt, 2009)], and (3) the mutual maintenance model [in which both variables influence each other (Kaysen et al., 2011; Kushner, Abrams, & Borchardt, 2000; Smith & Randall, 2012)].

The precipitation model postulates that drinking leads to an increase in mental health problems. This model has received favorable empirical support. For example, in a sample of college students followed for 7 years, anxiety disorders increased four folds among those diagnosed as alcohol dependent at either year 1 or year 4 of the study period (Kushner et al., 2000).

The self-medication model proposes that poor mental health influences alcohol intake. People with mental health issues attempt to alleviate negative consequences of these conditions by drinking alcohol to cope with their symptoms, eventually leading to later onset of alcohol use disorder. Studies providing support for this pathway suggest that mood and anxiety disorders can increase the severity, persistence, and poor treatment response of the comorbid alcohol use disorder (Marshall et al., 2012; Ouimette, Read, Wade, & Tirone, 2010; Wolitzky-Taylor, Bobova, Zinbarg, Mineka, & Craske, 2012).

Lastly, the mutual maintenance model suggests that a reciprocal relationship exists between alcohol use and mental health issues. This model posits that mental health issues and

drinking become intertwined in a reciprocal and perpetuating cycle. One condition leads to an increase of the other condition, in turn further maintain or exacerbate the first condition (Hruska, Fallon, Spoonster, Sledjeski, & Delahanty, 2011; Kaysen et al., 2006; Stewart & Conrod, 2008).

It might be possible to apply these models to explain the longitudinal direction of influence between alcohol use and anxiety disorders among older adults. Yet few studies have tested these time-dependent relationships, in part, because longitudinal studies that take into account repeated measures of both variables in the same model are limited (Moore et al., 2005). Longitudinal studies designed to explore the temporal sequence between drinking and anxiety will advance our knowledge of the relationship between alcohol use and anxiety disorders among older adults.

IV. Understanding the Longitudinal Relationship between Alcohol use and Anxiety Disorders Provides a Foundation for Prevention and Treatment Interventions

Understanding the longitudinal temporal sequence of the relationship between alcohol use and anxiety disorders is important to public health because it will provide fundamental knowledge and potential clinical implications for

the development of effectively tailored prevention and treatment interventions (Devanand, 2002). For example, clinicians' approaches would likely vary if anxiety symptoms promote more drinking, as opposed to if the drinking itself generates anxiety among older adults. If anxiety is a leading indicator of changes in alcohol use, clinicians should be aware that patients with anxiety are at increased risk for the subsequent occurrence of alcohol use. Clinicians should make these patients prime candidates for preventive interventions and routinely consider the possibility of a co-occurrence of alcohol use disorder. On the other hand, if alcohol involvement is shown to be a reliable predictor of changes in anxiety, then targeting drinking may help prevent the development of or an increase in anxiety. Therefore, integrated understanding of the developmental pathways and course of the longitudinal relationship between drinking and anxiety among older adults will be essential for clinicians to develop prevention and treatment planning (Smith & Randall, 2012).

In conclusion, co-occurring alcohol use and anxiety disorders is common in older adults and contributes to negative health consequences. Despite growing recognition of the high prevalence of co-occurring alcohol use and anxiety disorders among older adults, the temporal sequence between drinking and anxiety in later life remains unclear, in part, because longitudinal studies are limited. Therefore,

research is needed and relevant to advance our knowledge of the longitudinal relationship between alcohol use and anxiety disorders in older adults. Better understanding of the temporal sequence of the relationship between drinking and anxiety, as well as changes over time, will have implications for improving prevention and treatment programs for alcohol use and anxiety disorders in the older population.

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