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Living with a Dual Diagnosis of Post-Traumatic Stress and Substance Use Disorders

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ABSTRACT

Background: Living with a dual diagnosis such as post-traumatic stress disorder and substance use disorder is extremely challenging to individuals with mental illness. Re-experiencing the trauma, avoidance of stimuli exaggerated startled responses, irritability, and alterations in mood, especially chronic depression, are common in post-traumatic stress. Individuals with substance use problems have loss of behavioral control and the inability to abstain. **Purpose:** The purpose of this review is to describe the concept of dual diagnosis to promote understanding of this condition and discuss potential interventions for patient care in psychiatric nursing. **Method:** A thorough review of the literature for peer reviewed studies on dual diagnosis, post traumatic stress disorder, and substance use disorder resulted in several articles. **Results:** A comprehensive assessment and provisions for management of anxiety are necessary to improve self-esteem and coping skills. Interventions for coexisting mental illness and substance use disorders are more effective with integrative interventions that address the disorders concurrently.

INTRODUCTION:

Mental illness is a psychological or behavioral set of symptoms manifested by an individual's disability, distress, or loss of freedom (Halter, 2014). Promoting mental health and providing adequate treatment for mental illness is a vital part of healthcare, especially in the nursing field. The psychiatric mental health nurse is an essential member of the healthcare team by providing mental health assessments, diagnoses, and interventions to individuals across the lifespan (Halter, 2014).

One concept of mental health is a dual diagnosis, which is the coexistence of two or more psychiatric disorders (Halter, 2014). Patients with a dual diagnosis suffer more needs that are complex and may fall between the gaps in mental health services, receiving inadequate care for their conditions. It is essential for nurses to understand the complex needs of these individuals to uphold quality care within the clinical and community setting. The purpose of this review is to describe the concept of a specific dual diagnosis to promote comprehension of this condition and quality care in psychiatric nursing.

Post-Traumatic Stress Disorder (PTSD) and Substance Use Disorder (SUD) are two psychiatric conditions that often co-exist. The occurrence of PTSD in patients with SUD is around three times higher than in the general population (Gielen, Havermans, Tekelenberg, & Jansen, 2012). In a qualitative study, Gielen et al. established that clinicians believed discussing traumatic experiences bring on cravings and probable relapse. Clinicians underestimated the interference of PTSD in SUD patients, thus preventing an adequate diagnosis and treatment of PTSD (Gielen et al., 2012). PTSD and SUD as a common problem is illustrated in Figure 1.

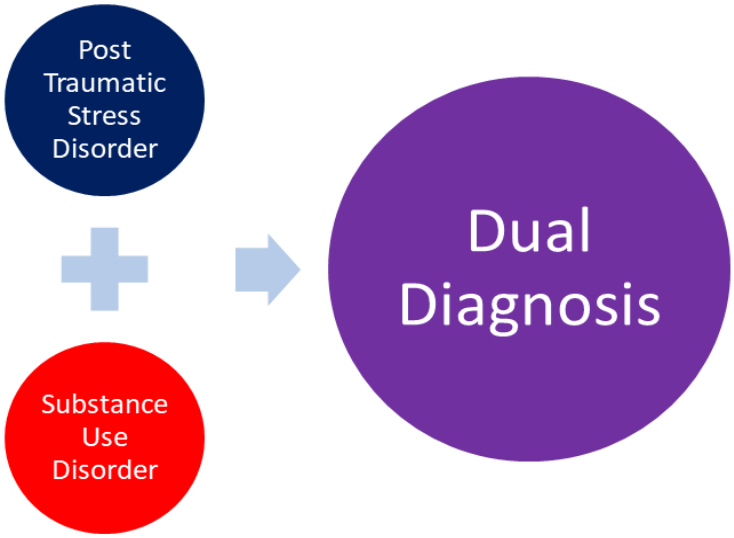

Figure 1. **PTSD and SUD is a common dual diagnosis problem**

The outcome of a meta-analysis indicated, because of the harmful associations of co-occurring PTSD and SUD with school dropout, joblessness, prison, homelessness, and divorce, it is possible that treatment effects may be increased through support from a team of clinicians (Lenz, Henesy, & Callender, 2016). Individuals with this dual diagnosis have poorer health outcomes because of inadequate treatment for the entire problem. These patients are a vulnerable population, and it is essential to learn, understand, and meet their needs to provide high-quality psychiatric care.

CHARACTERISTICS, SYMPTOMS, AND BEHAVIORS

Adam (not his real name) is a 42-year-old male who was voluntarily admitted to the inpatient psychiatric unit in the mid-western region for PTSD and SUD. Adam suffers from physical and mental health issues that are mostly connected to military service. He reports combat experience in the Persian Gulf War, the experience of military sexual trauma, and a history of physical and emotional abuse from his father.

When Adam walks down civilian streets, he constantly watches the windows for potential snipers. He tries to avoid these situations, as well as events with large crowds, because of the anxiety it causes him. This anxiety makes it impossible to sleep at night, so he uses alcohol to "blackout" until morning. Adam drinks a fifth of vodka or whiskey in 1 to 2 days, twice a week. Adam drinks alone in his house. He has had many encounters with the law, and staying at home keeps him out of trouble. He lost his job, his friends, and all meaningful relationships. He feels like he is in a “deep hole” and he is unsure how to get out of it.

Adam is anxious and has a flat affect when attending group therapy. He knows exactly who is in the room and where every possible exit is located. He identifies with feelings of fear, anxiety, and guilt from his time in combat. When asked to discuss his trauma experience, Adam asks to move on to the next question. He is unsure if all this trouble is "worth it," but he is hopeful for a recovery in the future. He believes that he can achieve sobriety and overcome his symptoms by using his intelligence and determination.

PSYCHOPATHOLOGY

PTSD is a pathological expression of anxiety that occurs in individuals after experiencing or witnessing an event involving a threat to physical integrity, serious injury, or death (Gore & Lucas, 2015). The brain structure primarily associated with PTSD is the amygdala. Exposure to traumatic stimuli leads to fear conditioning that activates the amygdala and associated structures. This activation along with neurotransmitter and endocrine involvement produce the symptoms of PTSD (Gore & Lucas, 2015).

SUD is the pathological use of a substance that leads to intoxication and withdrawal if the substance is removed (Halter, 2014). SUD occurs when an individual's behavior repeatedly results in adverse consequences, such as failing to attend school, work, or family obligations (APA, 2012). Alcohol specifically stimulates the release of the neurotransmitter dopamine from the ventral tegmental area (Wackernah, Minnick, & Clapp, 2014). This is part of the mesolimbic dopamine system, which is associated with reward and behavioral motivation. The continuous activation of this system results in an addiction to alcohol and other addictive substances (Wackernah et al., 2014).

The classic symptoms of PTSD are aggressive and distressing. Individuals with PTSD do not hold the resources or skills necessary to cope with their experience, so they turn to substances as a form of self-medication (Boden et al., 2014). Tolerance, dependence, and abuse develop with prolonged substance use, creating the dual diagnosis frequently seen within the clinical setting. PTSD symptoms, especially among veterans with combat experience, have been shown to exacerbate those of SUD despite a lower amount of alcohol consumption compared to SUD alone (Fuehrlein et al., 2014). A circular effect takes hold, and the two disorders interact and feed off one another. To understand this process fully, one can begin by analyzing the classic symptoms of PTSD, which include hypervigilance, avoidance behavior,

alteration in mood, and reoccurrence of the traumatic event through flashbacks (Halter, 2014).

Hypervigilance is an enhanced state of arousal that involves exaggerated behaviors used to detect a threat (Halter, 2014). Watching for snipers in windows, being aware of everyone in a room, and locating all the exits from a room, illustrate that Adam is experiencing hypervigilance. This arousal state can lead to sleep disturbances, irritability, and feelings of anxiety (Halter, 2014). Adam states that he has difficulty falling asleep because of this anxiety, illustrating some of these complications.

Sleep disturbance is a hallmark sign of PTSD that drives individuals to use substances (Vandrey, Babson, Herrmann, & Bonn-Miller, 2014). Adam's need to use an excessive quantity of alcohol to sleep until morning illustrates this concept. Although this may work for short-term use, the substances eventually lead to increasingly severe sleep issues because of tolerance and withdrawal symptoms. Overall, this dual diagnosis leads to increased substance misuse, more daytime PTSD symptoms, poorer physical health, greater suicidal ideation, and reduced quality of life (Vandrey et al., 2014).

Avoidance behaviors occur when an individual orients their thoughts, emotions, and behaviors away from an unpleasant experience (Boden et al., 2014). This is a primary coping mechanism of individuals with PTSD to manage the psychological demand of their trauma, although it has been shown to increase the severity of their symptoms (Pineles et al., 2011). Adam illustrates avoidance behaviors by purposely evading streets with tall buildings with windows and events with large crowds. Additionally, Adam avoided answering a question regarding his traumatic experience, illustrating another behavior consistent with this coping strategy.

Substance use directly relates to avoidance behaviors by having the ability to alter emotional states and alleviate unpleasant experiences (Cooper, Frone, Russell, & Mudar, 1995). Dependence then may develop because of the anticipated fear of returning PTSD symptoms when the substance is discontinued (Boden, Babson, Vujanovic, Short, & Bonn-Miller, 2013). Although avoidance can be beneficial in varying circumstances, this coping skill leads to the development of a dual diagnosis. Within this extreme form of trauma, avoidance masks serious psychological issues and interferes with recovery and healing (U.S. Department of Veterans Affairs, 2015).

Alterations in mood associated with PTSD include negative thoughts, feelings, and emotions similar to the manifestations of chronic depression (Halter, 2014). Depressive symptoms and PTSD are considered to be intertwined, be part of shared vulnerability, and have similar predictive factors (O'Donnell, Creamer, & Pattison, 2004). Some of these factors include experiencing stressful life events, particularly those that involve pain, regret, guilt, or loss. These negative emotions are part of a phenomenon called survivor guilt, which is seen in patients with PTSD and clinical depression (Hutson, Hall, & Pack, 2015). Adam lost his job, friends, and all meaningful relationships. Adam also experiences guilt when thinking about his time in combat, and he is unsure if all this trouble is "worth it." These factors may indicate affective and emotional symptoms associated with both PTSD and depression.

Depressive symptoms are a numbing emotional response to cope with the trauma of PTSD (Price & Van Stolk-Cooke, 2015). Substance use, specifically alcohol, is a CNS depressant that enhances this numbing effect. Concurrent use by a patient is, again, a self-medication measure to escape intolerable situations and thoughts. Prolonged alcohol use may worsen the depressive symptoms, leading to lethargy, sadness, and hopelessness (Halter, 2014). Adam illustrates this concept with his metaphor of being in a deep hole.

Frequent recollection of a traumatic event, a flashback, is an important symptom of PTSD. Flashbacks result in dissociative experiences, where the individual behaves as if they are experiencing the traumatic event at that time (Halter, 2014). Flashbacks can induce feelings of anxiety, paranoia, and avoidant behavior (Dobry & Sher, 2013). Self-medication with substances may result from this behavior as previously discussed with other symptoms of PTSD. Adam did not verbalize or portray flashback or dissociative symptoms during the time of observation; however, this symptom is essential to identify when defining this dual diagnosis.

As a nurse caring for Adam, it is crucial to identify nursing diagnoses relevant to the coexisting conditions to initiate care. The distressing symptoms of PTSD and SUD ultimately put Adam at risk for self-harm behaviors including self-mutilation, suicide, and para-suicidal acts (Hutson et al., 2015). Nursing diagnoses relevant to this behavior include risk for self-directed violence, the risk for suicide, and risk for self-mutilation (Halter, 2014). These are the most relevant diagnoses because of the direct threat to Adam's safety. Additional diagnoses relevant to Adam's symptoms include ineffective coping, disturbed sleep pattern, social isolation, anxiety, and hopelessness (Halter, 2014).

NURSING INTERVENTIONS AND OUTCOME CRITERIA

The psychiatric mental health nurse's priority is *patient safety*. Because, Adam is at risk for suicidal behavior, self-harm, and self-mutilation, the initial short-term outcomes include the patient expressing feelings, verbalizing suicidal ideas, refraining from suicide attempts, and developing plans for the future (Halter, 2014). The nurse should educate the patient on prevention of suicide, assess for warning signs of impending suicidal crisis, implement one-to-one observation to restrict access to lethal means, employ effective coping strategies unique to the patient, and therapeutically communicate with the patient to identify feelings, ideas, and the plan of care (Stanley & Brown, 2012). Figure 2 illustrates the interventions needed for nursing management of dual diagnosis.

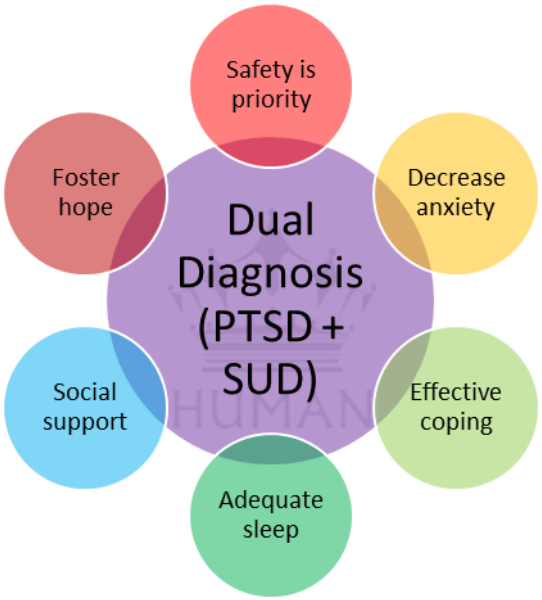

Figure 2. **Interventions for nursing management of dual diagnosis.**

The next nursing diagnosis for Adam is *ineffective coping pattern*. Adam uses substances and avoidant strategies to escape the disturbing symptoms associated with PTSD. Outcomes that the nurse should promote include identifying ineffective and effective coping mechanisms, utilizing a support system, using the new coping mechanisms, and engaging in actions to reduce known stressors and triggers (Halter, 2014). The nurse should support the patient emotionally and physically in modifying the lifestyle to maintain sobriety. The nurse should also use therapeutic communication techniques to assist in identifying feelings of anxiety, fear, denial, depression, or anger that may represent a potential stressor (Doenges, Moorhouse, & Murr, 2014). Active listening may assist the nurse in identifying positive and

negative coping mechanisms unique to the patient. The nurse should gradually provide implementation and continuation of the lifestyle changes to promote patient adherence (Strobbe, 2013).

The *disturbed sleeping pattern* is one of Adam's primary distressing symptoms. Realistic outcomes for this diagnosis include successful sleep induction, appropriate hours of sleep, consistent sleep pattern, minimal awakening, and feeling restored after sleep (Halter, 2014). Promoting sleep for individuals with PTSD and SUD may be accomplished by administering the prescribed pharmacological interventions and providing education on beneficial sleep measures, stimulus control, relaxation techniques, and cognitive reframing (Vandrey et al., 2014). The nurse may also cluster care, incorporate a nighttime routine, and promote a dark, quiet environment conducive to sleep.

Social isolation is a relevant nursing diagnosis for Adam, specifically relating to his avoidant behaviors. Outcome measures include attending group meetings, interacting with group members, and demonstrating an interest in engaging with family and friends (Halter, 2014). As an intervention, the nurse should encourage participating and socializing with group members. Establishing social support and a social network is associated with the diminished intensity of PTSD symptoms, which may additionally reduce the need for self-medication through substance use (Guay et al., 2011). Also, sharing wartime experience among peers and family members is associated with comradeship and community that promote the long-term benefits of resilience and adaptability to the traumatic experience (Sixsmith, Sixsmith, Callender, & Corr, 2014).

Adam experienced feelings of *anxiety*. Outcomes related to this diagnosis include monitoring the intensity of anxiety, eliminating the precursor of anxiety, developing and using effective coping strategies, and maintaining role performance and supportive relationships (Halter, 2014). The nurse should first assess the current level of anxiety exhibited by the patient to plan appropriate interventions. In mild to moderate anxiety, the nurse should expect anxiety-provoking situations, use nonverbal communication to show interest and support, encourage verbalization of feelings from the patient, use therapeutic communication techniques to clarify these feelings, encourage problem-solving and formation of alternate solutions by the patient, and provide healthy outlets to express built up energy (Halter, 2014).

Hopelessness is the final nursing diagnosis identified for Adam. This diagnosis not only addresses Adam's mood alterations, but it also promotes effective healing and recovery for the dual diagnosis as a whole (Levi, Liechtentritt, & Savaya, 2012). Fostering hope is an essential nursing intervention, as it promotes wellbeing in patients that have exhausted their personal resources, specifically in those who have experienced trauma (Levi et al., 2014). A primary outcome of this diagnosis is the expression of feelings of self-worth (Halter, 2014). A targeted intervention includes discussing hope with the patient. This discussion could revolve around what hope means to the patient, potential sources of hope, what threatens hope, and what makes hope thrive (Levi et al., 2014).

CONCLUSION

The overall assessment, diagnosis, and treatment of dual diagnoses are complex because of the multifaceted and intertwining symptoms. Long-term care for individuals living with dual diagnoses is more effective with integrative interventions that address the disorders concurrently. This requires nurses to understand the comprehensive state of the patient to provide adequate support and care. Dual diagnoses are simply one concept among many that require high-quality nursing care for effective recovery. Supporting continual education on mental illness and the demand for knowledgeable mental health nurses should be the highest priority moving forward.

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