THE INTERSECTION BETWEEN PTSD AND COMORBID DISORDERS: IMPLICATIONS FOR DIAGNOSIS AND TREATMENTS

Gareth Griffiths
doctoral student at VFU "Chernorizets Hrabar"

Abstract: *Post-Traumatic Stress Disorder (PTSD) frequently co-occurs with depression, anxiety disorders, and substance use disorders, complicating diagnosis and treatment. This article explores the bidirectional relationships between PTSD and its comorbidities, focusing on psychological, biological, and social dimensions. By reviewing current literature and theoretical models, it emphasizes the need for integrated care approaches tailored to the multifaceted nature of these conditions. The findings advocate for holistic, patient-centered interventions that address overlapping symptoms and root causes, moving beyond conventional one-size-fits-all treatments.*

Keywords: *PTSD, comorbidity, diagnosis, treatment, depression, anxiety disorders, substance use disorders, holistic care*

Introduction

Purpose of the Study

Post-Traumatic Stress Disorder (PTSD) is a relatively common condition which affects millions of people worldwide, that manifests itself as a collection of symptoms in response to trauma. The disorder itself poses important challenges, yet the frequent co-occurrence of PTSD with other psychiatric conditions, like depression, anxiety disorders, and substance use disorders, makes it even more complex. This occurrence, known as comorbidity, brings about significant blockages to pinpoint the diagnosis and the ensuing effective treatment. Misdiagnosis or ineffective treatment usually stem from the overlapping symptoms of PTSD and its comorbid disorders, which can further increase the suffering of affected individuals.

To enhance diagnostic and therapeutic outcomes, it is critical to understand the link between PTSD and associated comorbidities. This research aims to give a comprehensive understanding of this crucial topic by investigating how various illnesses interact at the psychological, biological, and societal levels.

Scope and Importance

PTSD is essentially everywhere, as it affects populations ranging from military personnel and first responders to survivors of violence, accidents, natural disasters and domestic

abuse. However, its impact is all the more important by the regular presence of comorbid symptoms. There are many studies that show consistently high co-occurence between PTSD and disorders like depression, with rates ranging anywhere between 30% and 80% in some populations (Flory & Yehuda, 2015). Similarly, anxiety disorders and drug use disorders often co-occur with PTSD, which makes understanding the symptoms difficult (Kessler et al., 2005; Sareen, 2014).

The consequences of this comorbidity are hard to understate. Patients with PTSD and comorbid symptoms are more subject to severe symptoms, and poorer treatment outcomes compared to those with "only" PTSD (Hoge et al., 2014). In spite of these clear challenges, research usually focuses merely on PTSD in isolation, often overlooking the interconnection with its comorbid disorders. This gap in understanding prohibits treatment effectiveness and highlights the need for a more integrated approach.

Research Questions

This article will address the following key questions:

1. In what ways does PTSD interact with the most frequent comorbid disorders at psychological, biological, and social levels?
2. What are the challenges that these interactions present for a precise diagnosis and effective treatment?
3. How can theoretical approaches adapt to create more effective strategies in treating PTSD with comorbidities?

Literature Review

Understanding PTSD: Symptoms, Origins and Prevalence

PTSD is regarded as a mental health problem resulting from exposure to traumatic events, such as war, natural disasters, or interpersonal violence. Symptoms, as outlined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5), are classed into four parts: intrusive re-experiencing, persistent avoidance, negative alterations in cognition and mood, and hyperarousal (APA, 2013). The disorder considerably impacts a persons' daily life, which can lead to social unease, work-related problems, and emotional dysfunction.

The etiology of PTSD involves an interplay of genetic, environmental, and neurobiological factors. Stressful experiences activate the hypothalamic-pituitary-adrenal (HPA) axis, leading to dysregulated cortisol levels. FMRI studies have regularly identified hyperactivity in the amygdala and lowered activity in the medial prefrontal cortex (MPFC) as indications of PTSD presence (Shin et al., 2006). Genetic studies reveal that polymorphisms in

the serotonin transporter gene (5-HTTLPR) and glucocorticoid receptor genes increase vulnerability to PTSD (Binder et al., 2008).

Many prevalence studies show that PTSD is a global problem. At some time during their life, 6 to 8% of people will have PTSD, with a higher proportion among trauma-exposed populations such as veterans (15-30%), first responders (20%), and sexual assault survivors (over 25%) (Kessler et al., 2005). These numbers show just how pervasive this disorder is and thus the importance of treating it.

Comorbid Disorders with PTSD

PTSD is often associated with other mental diseases, something that is called comorbidity. The high rates of co-occurrence with depression, anxiety disorders, and substance use disorders render diagnosis and therapy particularly troublesome.

Depression

According to research, as many as 50% of people with PTSD also have major depressive disorder (MDD), which points to a bidirectional link between the two diseases (Rytwinski et al., 2013). Commonly shared symptoms, including anhedonia, feelings of worthlessness, and sleep difficulties, render it challenging to differentiate the disorders. Furthermore, depression worsens PTSD outcomes, as people show increased functional impairment and worse treatment response (Flory & Yehuda, 2015).

Anxiety Disorders

Many people that suffer from PTSD also suffer from anxiety disorders, like social anxiety disorder, panic disorder or generalized anxiety disorder (GAD). These afflictions worsen avoidance behaviors, which leads to a vicious cycle of reduced functioning. For example people with social anxiety usually stay isolated, thus depriving them of social support which would be conducive to their recovery (if anything to disprove their biggest fears in human contact or connection). Also, panic disorder can increase hyperarousal symptoms, which further complicates where when diagnosis starts and another ends (Hofmann et al., 2012).

Substance Use Disorders (SUDs)

Comorbidity between PTSD and Substance Use Disorders enters new territory and studies show that rates may approach 40% (Simpson et al., 2014). According to the self-medication hypothesis, people who suffer from excessive arousal, emotional numbing or invasive sensations can turn to alcohol or drugs. The trouble with this unhealthy approach to dealing with unwarranted stress is that it leads to further drug use or alcohol, which in turn

makes PTSD symptoms worse. Addiction and trauma are two sides of the same coin and treating alcohol or drug use alongside trauma requires integrated approaches (Khantzian, 1997).

Diagnostic Challenges

When comorbid conditions exist, the diagnosis for PTSD becomes much more difficult to determine, because of the presence of misinterpretation of results from shared symptomatology between PTSD and other disorders, such as depression or anxiety. This therefore can also lead to underdiagnoses. Take for instance the symptoms of sleep problems, irritability and trouble focusing. These could be attributed as easily to MDD or GAD as they could to PTSD. Conversely, hyperarousal and avoidance behaviours could easily be confused with phobic disorders or anxiety (Sareen, 2014).

Substance use hides or exaggerates PTSD symptoms, which further complicates diagnosis. In addition, patients with extreme drug dependency may hide or minimize traumatic stories, which would skew the perception of the clinician treating them. Also, clinicians may opt to work on the drug addiction and skip over the underlying PTSD problematic (Norman et al., 2019).

The literatures clearly emphasizes the need of thorough diagnostic procedures involving trauma informed interviews and uniform screening questionnaires. Tools such as the PCL (PTSD checklist) or the Clinician administered PTSD scale (CAPS) are at the forefront of such questionnaires.

Treatment Implications and Gaps

In light of the fact that PTSD and other illnesses coincide so often, treatment plans need to work together. Traditional trauma focused approaches, such as prolonged exposure (PE) and trauma focused cognitive behavioural therapy (TF-CBT) have shown effectiveness in treating people with PTSD. That said, these approaches may not function as well for people with comorbid conditions, as they focus on trauma related symptoms and don’t address other problems that may be occurring at the same time (Foa et al., 2009).

Newer models push for approaches that look at things from different angles. For instance, there are programs that combine Progressive exposure with interventions for depression or drug addiction which show promise. Mindfulness based treatments are also becoming popular as a means to treating comorbid PTSD by regulating their emotions and reducing their hyperarousal (Vujanovic et al., 2011).

Detailed Examination of Treatment Modalities

The following provides a focused examination of specific treatment modalities and how they are adapted for PTSD and common comorbid conditions

Prolonged Exposure (PE) and Comorbid Conditions:

Adaptation for Comorbid Depression: when PTSD is comorbid with depression, PE can be modified by incorporating elements that address depressive symptoms. For instance, integrating behavioral activation strategies to combat anhedonia and increase engagement in life activities can enhance outcomes. Studies have shown that addressing hopelessness and negative self-appraisals during exposure sessions can mitigate depressive symptoms (Hembree et al., 2003).

Efficacy in Substance Use Disorders (SUDs): for patients with both PTSD and SUDs, PE must be carefully adapted to not trigger substance use as a coping mechanism. Techniques like motivational interviewing can precede exposure sessions to build readiness for change, while concurrent pharmacotherapy might be used to manage withdrawal symptoms or cravings (Najavits, 2002). A study by Back et al. (2012) found that integrating PE with substance abuse treatment leads to significant reductions in PTSD symptoms without increasing substance use.

Trauma-Focused Cognitive Behavioral Therapy (TF-CBT) with Comorbid Anxiety:

Tailoring for Social Anxiety: when PTSD overlaps with social anxiety, TF-CBT can be expanded to include social skills training and exposure to social situations, not just trauma-related stimuli. This dual focus helps in reducing avoidance behaviors that are prevalent in both conditions, thus improving social functioning (Hofmann et al., 2010).

Cognitive Restructuring for Multiple Diagnoses: TF-CBT's cognitive restructuring can be used to concurrently address negative cognitions related to trauma, depression, and anxiety. Specific cognitive techniques might target catastrophic thinking in anxiety or pervasive negative self-beliefs in depression, providing a comprehensive approach to cognitive distortions (Resick et al., 2008).

Mindfulness-Based Treatments:

Application for Emotional Dysregulation: Mindfulness therapies like Mindfulness-Based Stress Reduction (MBSR) or Mindfulness-Based Cognitive Therapy (MBCT) are particularly beneficial for managing the emotional dysregulation common in PTSD and its comorbidities. These treatments foster awareness and acceptance of emotional states, reducing reactivity and impulsivity (Vujanovic et al., 2011). A meta-analysis by Khoury et al. (2013)

indicates significant reductions in symptoms of PTSD when combined with other trauma-focused therapies.

Challenges and Considerations:

Balancing Focus: One of the challenges in treating PTSD with comorbidities is ensuring that the focus isn't too heavily weighted towards one disorder, neglecting others. Clinicians must balance interventions to address the full spectrum of symptoms.

Individualization of Treatment: Treatment must be highly individualized, considering the severity of each disorder, patient readiness, and potential interactions between treatments. This requires a flexible, creative approach to therapy planning.

Future Research Directions:

More research is needed to refine these adaptations, particularly through randomized controlled trials that compare combined versus separate treatment approaches. Longitudinal studies could provide insights into the sustainability of treatment gains across multiple disorders.

Even with these improvements, there remains large holes in treatment research. There is a lack of studies that look at how efficient combined models actually work in a real world scenario, and many treatments do not take into account cultural or personal differences (Hoge et al., 2014). Furthermore, the shame that comes with mental health and drug use keep people away from getting the help they need, which underscores how important it is to make care easier to get and less shameful (Hoge et al., 2014).

Integrating Theoretical Frameworks into Treatment Approaches

This section discusses how theoretical models like CBT and transdiagnostic frameworks inform integrated approaches to treating PTSD and its comorbidities.

Theoretical frameworks such as the diathesis-stress model, cognitive-behavioral therapy (CBT), and the transdiagnostic model—provide valuable insights that can directly inform integrated treatment strategies for PTSD and its comorbidities. By applying these frameworks, clinicians can better address the shared mechanisms underlying these conditions and tailor interventions to meet individual needs.

1. Diathesis-Stress Model and Personalized Interventions

The diathesis-stress model highlights the interaction between genetic predispositions and environmental stressors. Understanding this interplay can refine treatment in several ways. For example, identifying patients with heightened amygdala activity or dysregulated cortisol levels could guide the use of pharmacological therapies targeting stress responses. Additionally, interventions like

mindfulness-based stress reduction (MBSR) could be adapted to focus on reducing physiological arousal, which is exacerbated by stress. This model also underscores the need for trauma-informed care that considers both historical and current stressors in the patient's life.

2. Cognitive-Behavioral Therapy and Targeting Distortions

CBT principles emphasize the role of cognitive distortions—such as catastrophic thinking in anxiety or hopelessness in depression—in maintaining PTSD symptoms. Treatments like cognitive restructuring can address these shared distortions across comorbid conditions. For instance, in patients with PTSD and major depressive disorder (MDD), targeting beliefs about self-blame and worthlessness could simultaneously reduce depressive symptoms and alleviate PTSD-related guilt. Similarly, combining exposure therapy with cognitive reframing could reduce hypervigilance in both PTSD and generalized anxiety disorder (GAD).

3. Transdiagnostic Models and Integrated Treatments

Transdiagnostic models focus on common processes like emotional dysregulation and avoidance behaviors, which are prevalent across PTSD and its comorbidities. These insights support the use of treatments such as dialectical behavior therapy (DBT) and mindfulness-based cognitive therapy (MBCT), which target these shared mechanisms. For example, DBT's focus on emotional regulation skills can mitigate PTSD-related hyperarousal while reducing impulsivity often seen in substance use disorders. Furthermore, mindfulness-based approaches help patients recognize and accept distressing emotions, reducing both avoidance behaviors and substance dependency.

4. Addressing Cultural and Somatic Dimensions

The theoretical frameworks also emphasize the role of cultural and somatic factors in trauma responses. Incorporating culturally adapted interventions—such as culturally sensitive CBT or body-based therapies like yoga—can address the diverse ways trauma manifests across populations. For example, somatic experiencing techniques might be particularly effective in communities where trauma is expressed through physical symptoms rather than verbal accounts.

By grounding treatment implications in these theoretical frameworks, clinicians can develop more nuanced, integrative approaches that address the complex interplay of PTSD and its comorbidities. This connection between theory and practice not only enhances therapeutic

outcomes but also aligns care with the multifaceted needs of individuals navigating these conditions.

Gaps and Directions for the Future

These models explain what make people feel vulnerable, but they don't necessarily take into consideration what makes people resilient, like social support or cultural effects. Also, CBT's well known focus on thinking might minimize somatic and emotional dimensions, which shows the need for more all-around approaches (van der Kolk, 2014).

Problems with Diagnosis

Providing the right diagnosis can be tricky because PTSD and its related illnesses have symptoms that match, like emotional dysregulation and avoidance. Some symptoms, like being overly alert in PTSD and anxiety or withdrawing in PTSD and depression, can render it somewhat difficult to tell one from the other (Sareen, 2014). These unclear reactions can lead to a faulty diagnosis, an underdiagnosis, or may sway the clinician in one particular direction, at the expense of the other.

Additionally, culture also affects how symptoms are manifested, as some groups will exhibit trauma reactions via the body instead of psychologically. This shows the importance of having the correct assessment tools that take into account different cultures (Hinton & Lewis-Fernández, 2011).

Difficulties in Treatment

When someone has PTSD and another condition at the same time, they need a combined approach that looks at how the two disorders affect each other. For instance, in depression, use cognitive behavioural therapy (CBT) to deal with depression related hopelessness whilst also using trauma-focused exposure methods. With substance use disorders, techniques to deal with stress and anxiety and at the same time, work on relapse prevention strategies. Anxiety disorders could tackled by attempting to reduce the typical avoidance behaviours that worsen PTSD and anxiety. Standard treatments like cognitive processing therapy (CPT) or prolonged exposure (PE) may need to be modified to take into consideration the comorbid appearances and make sure they don't make symptoms of co-occurring disorders worse (Hoge et al., 2014).

Holistic care

PTSD care needs a reboot—one that focuses on the whole person, not just their symptoms. Mindfulness exercises can help patients face emotions instead of avoiding them, while somatic techniques address the body’s role in holding onto trauma. A team-based approach, where professionals from different fields collaborate, ensures patients get care that

truly fits their unique needs. This isn't just better care—it's faster healing and a better quality of life.

Plans for the Future

More research needs to be done to come up with better ways to include comorbid conditions in trauma-focused care. To make sure that everyone has equal access to effective care, future studies should also look at how well transdiagnostic treatments work, especially in settings with a lot of different cultures.

Discussion

The connection between PTSD and its comorbidities is complicated, making it very hard to diagnose and treat. Depression, anxiety, and substance use disorders often coexist with PTSD, which makes it difficult to break the loop. The lines between these disorders can become fuzzy when symptoms like trouble sleeping, anger, and trouble focusing combine, making it hard for clinicians to figure out what's really wrong (Flory & Yehuda, 2015). Kessler et al. (1995) say that this diagnostic grey area means that people get the wrong care or, even worse, none at all because the bigger picture isn't seen.

Maybe we should rethink how we group and identify these conditions as a way to move forward. Frameworks like the Research Domain Criteria (RDoC) say we shouldn't just remain with fixed categories. Rather, we should look at the underlying processes that link these disorders, such as emotional instability or heightened stress reactions (Cuthbert, 2014). This change could help clinicians come up with more pin pointed treatments that are more in line with what's really happening in a patient's body and mind.

There are some problems that come up during treatment. Cognitive-behavioral treatment (CBT) and exposure-based methods for treating PTSD are effective for some people, but they may not be effective for those who are also dealing with depression or drug abuse (Najavits 2002). If you try to fix one hole in a boat that is sinking while ignoring another leak that is gushing, you will fail. The stress-diathesis framework and other models stress that everyone has unique vulnerabilities that can affect how PTSD and its comorbidities interact (Monroe & Simons, 1991). These vulnerabilities can be genetic, psychological, or formed by early experiences. Because of these individual factors, care cannot be a one-size-fits-all method; it must be tailored to each person.

This is where models of coordinated care come in handy. Trauma-focused treatment and medicines like SSRIs can be used together to treat PTSD and depression at the same time (Sareen, 2014). Mindfulness-based treatments are also becoming more popular because they

help people control their feelings and make them stronger (Vujanovic et al., 2011). This fits with the idea that you need to treat the person as a whole, not just their symptoms.

Based on what we learnt, clinicians need to be able to think in different ways. No longer should one-size-fits-all methods be used for complicated conditions like PTSD with comorbidities. We can better deal with the problems that these conditions cause by combining different types of therapy that are tailored to each person's needs. In the end, this all-around method is not only better at what it does, but it's also more caring.

Conclusion and Plans for the Future

The interaction between PTSD and its comorbidities is as intricate as it is important, influencing how these conditions are recognised, identified, and treated. We've talked about how PTSD doesn't usually happen by itself; it usually happens along with other disorders like depression, anxiety, and drug abuse, which makes things more difficult for both people and professionals who treat them. Realising how everything is linked isn't just a school practice; it's a call for the mental health field to change.

One important thing to remember is that comorbidity makes things harder for people who have them. It makes signs harder to understand, makes it harder to make a diagnosis, and often leads to care that is broken up or not enough. But there is hope because more and more people are realising that treatments for disorders should be as complex as the disorders themselves. Combined methods that look at the mental, physical, and social parts of these conditions have the potential to not only ease symptoms but also deal with the main reasons. For example, a more complete way to heal is to combine therapies that focus on trauma with therapies that address co-occurring problems like drug abuse.

The road ahead is clear: we need research that’s as complex as the problems we’re trying to solve. There is a need to make treatments more flexible and accessible, especially in communities where stigma or resources are barriers. By embracing these challenges, we can create care that’s both innovative and deeply human.

From a clinical point of view, the word is clear: tactics that work for everyone are no longer enough. It is very important that solutions are tailored to each person's specific needs and situations. This entails addressing the larger context in which these disorders occur, including things like childhood trauma, social stresses, and even genetic predispositions, rather than simply treating PTSD or its comorbid conditions in isolation.

In the future, both study and treatment should be guided by a more whole-person, patient-centered approach. This means not only improving treatments that are already in use,

but also looking into new ones, such as advanced neural approaches and mindfulness-based physical practices and emotional freedom techniques (EFT). It's important to keep the human part in mind, which means listening to patients, supporting their experiences, and giving them the tools they need to be involved in their own healing.

The need for a paradigm shift in how we view PTSD and its comorbidities is highlighted by this article's conclusion. We can get closer to a world where people with these conditions get the care they deserve by accepting their complexity and working to integrate them. While the road ahead will surely be hard, the chance for real change makes it worth going on.

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