

A Bird's Eye View of Integrated Care: Improving patient care outcomes by integrating medical and behavioral health care treatment for complex PTSD

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Introduction

This workshop focuses on 1.) Identifying the complex interplay between physio/medical and psychological symptoms that may be presented by patients with a history of chronic or complex post traumatic stress disorder and 2.) making a case from research and clinical practice that treatment of all behavioral health disorders and in particular complex PTSD requires integrated and collaborative medical and psychological care if patients are to receive effective overall treatment.

What is Integrated Care?

Integrated care between medical and psychiatric practitioners involves a mix of communication, collegiality and coordination of assessment and treatment between providers. It is an idea whose time has come. As evidence grows regarding the complex interrelationships between mind and body, artificial divisions that fragment health care delivery systems become significant barriers to patient care.

The disconnection between physical and behavioral healthcare stems from a variety of factors. Historically, a separation occurred because the biological basis of behavioral health disorders was poorly understood. Early service models for behavioral health developed separate organizational and funding structures. The development between “mind-care” and “body healthcare” runs all the way from separate educational systems to separations in billing mechanisms.

Integrated care combines medical and behavioral health services to more fully address the complete spectrum of problems that patients bring to providers. Integrated care may be even more important for patient populations with complex Post Traumatic Stress Disorder. We believe that a vast majority of patients in primary care have either a physical ailment affected by stress and/or problems maintaining healthy lifestyles because they are stressed. We know that patients with complex PTSD almost always have physical ailments affected by stress.

Symptoms like pain, fatigue, dizziness, headaches, inflammation and/or back pain, insomnia, abdominal pain, shortness of breath and numbness are the 10 most common problems presented by adults in primary medical care settings. All of these problems may be caused by or exacerbated by complex PTSD.

Provision of care at the interface of general medicine and behavioral health is the goal of integrated care. Integrated care occurs when behavioral health and medical providers work together to address both the physical and behavioral health needs of their patients concurrently. Perhaps it seems obvious that patient care would invariably require such collaborative services; but the truth of the matter is they are rarely provided. Barriers to integrated care are well documented both in the literature and in practice. Fee for services reimbursement does not typically reimburse consultations and communication activities between providers or telephone consultations with patients. Other barriers such as physical co-location arise from the traditional split between medical and behavioral health care.

The Report of the President's New Freedom Commission on Mental Health (footnote 1) identified the need for better coordination between primary care and behavioral health care. Collaborative care between providers ensures that the treatment plan and provision of services is appropriate and coordinated across treatment domains in parallel health systems that historically have different perspectives and approaches to health care.

Integrated care suggests both the act of collaboration between providers with an added element involving the systematic linkage of behavioral health and primary care. This linkage may be operationalized by enhanced consensus decision making, by co-location of providers, and/or by frequent consultation and contact between providers.

Elements of integrated Care may include:

- 1) Screening by both providers
- 2) Patient education by both providers
- 3) Medication monitoring; collaborative
- 4) Psychotherapy; primarily by behavioral health provider
- 5) Coordinated care with patient by both providers
- 6) Clinical monitoring; primarily by medical provider
- 7) Follow Up by both providers

As you can see from these integrated care components, a great deal of consultation time is necessary to track and treat adequately.

**A Model for Integrated and Collaborative Care:
"Practitioner Roles"**

- Must have knowledge of medical, psychiatric, substance abuse and social issues and be willing to share knowledge collegially
- Demonstrate differentiation between psychiatric, medical, substance abuse and somatic illnesses as well as connections between them
- Translate assessment to multidisciplinary treatment plan-Consensus treatment model where equal input applies
- Collaborate with patient and other care providers-Track and treat collaboratively

Over the last decade the Department of Veterans Affairs has funded a number of studies exploring both the efficacy and feasibility of providing integrated primary and psycho-therapeutic care. These studies routinely show that integrated care models enhance the quality of overall service delivery and total wellness outcomes for veterans with PTSD (footnote 2).

As we discuss in the next section, it is increasingly clear that integrated treatment is even more important for patients with chronic or complex PTSD due to the multiplicity of medical and behavioral health symptoms that impact one another in this disorder.

What is Chronic PTSD and/or complex PTSD?

The symptoms of PTSD apply well to people who have experienced a discrete or short-lived traumatic event, such as a motor vehicle accident, natural disaster, or rape. However, the symptoms of PTSD do not always completely map onto the experiences of people who have experienced chronic, repeated or long-lasting traumatic events, such as childhood sexual and/or physical abuse, domestic violence, or captivity (such as being in a prisoner in a war camp).

When it comes to these events, the symptoms of PTSD do not really seem to completely describe the psychological harm, emotional problems, and changes in how people view themselves and the world following chronic traumatic exposure. Therefore, some behavioral health professionals believe that we should distinguish between the types of PTSD that develop from chronic, long-lasting traumatic events as compared to PTSD from short-lived events. The diagnosis of “Complex PTSD” refers to the set of symptoms that commonly follow exposure to chronic traumatic events.

The DSM-IV TR diagnostic criteria for PTSD outlines the disorder as: a) exposure to a traumatic event involving a threat to safety or an intense fear response, b) experience of the event in intrusive recollection dreams, flash backs, distress at exposure to triggering cues, psychological reactivity, c) three symptoms of either avoidance of thoughts, feelings, activities, places or people that recall the event, memory loss, loss of interest in life, inability to feel love or a sense that life will be short, and d) two persistent symptoms such as difficulty falling or staying asleep, anger out bursts, trouble concentrating, hyper-vigilance or an exaggerated startle response.

These criteria capture acute and/or recent episodes involving traumatic events but fail to capture both the physiological and psychological impact of chronic repetitive exposure to trauma. Some of the complexities presented by these patients with Complex PTSD involve problems with attachment.

One of the common experiences clinicians have is that the severity of PTSD varies greatly among patients and may be based on the developmental phase in which the trauma occurred and how repetitive the trauma was. As noted above, PTSD researchers have developed several diagnostic terms to describe patients with severe PTSD who often had early trauma exposure that was repetitive and severe. They have coined the diagnostic term “complex post-traumatic stress disorder” and “disorders of extreme stress (DESNOS)” to describe these patients. As described in more detail below, the diagnostic criteria for these disorders involve impairment of affective regulation; chronic self-destructive behavior (eg, self mutilation and drug abuse); amnesic and dissociative episodes; alterations in relationship to self; distorted relationships to others; somatization and loss of sustaining beliefs. Data from the DSM-IV field trials showed that patients with PTSD who had sustained trauma before age 14 were more likely to meet these criteria for complex PTSD.

In complex PTSD, according to Dr, VanderKolk:

“Uncontrollable disruptions or distortions of attachment bonds precede the development of post-traumatic stress syndromes. People seek increased attachment in the face of danger. Adults, as well as children, may develop strong emotional ties with people who intermittently harass, beat, and threaten them. The persistence of these attachment bonds leads to confusion of pain and love. Trauma can be repeated on behavioral, emotional, physiologic, and neuro-endocrinologic levels. Repetition on these different levels causes a large variety of individual and social suffering. Anger directed against the self or others is always a central problem in the lives of people who have been violated and this is itself a repetitive re-enactment of real events from the past. Compulsive repetition of the trauma usually is an unconscious process that, although it may provide a temporary sense of mastery or even pleasure, ultimately perpetuates chronic feelings of helplessness and a subjective sense of being bad and out of control. Gaining control over one’s current life, rather than repeating trauma in action, mood or somatic states, is the goal of healing”. (footnote 3)

This crossover between behavioral, emotional, physiologic and neuroendocrinologic symptoms clearly creates a need for careful and frequent consultation between providers. In clinical practice these attachment issues may produce particularly thorny problems requiring close coordination of care. Unattached patients may have a tendency to sabotage treatment. They may experience heightened somatic symptoms as a means of testing the relationship with their physician. Over attached patients may insist on multiple office visits and if their needs are not either met, validated or diverted to healthier responses they frequently decompensate into self harm or suicidal behaviors.

The following symptoms requiring close coordination of care are descriptive of broad symptom patterns that may develop upon exposure to a traumatic event where a person feels captive and the trauma is chronic or repetitive.

- **Emotion regulation problems**
People with Complex PTSD experience difficulties managing their emotions. They may experience severe depression, thoughts of suicide, or have difficulties controlling their anger. These symptoms correlate with chronic physiological arousal and may show up as heart palpitation, chronic fatigue, problems with adrenal and cortisol functions, and frequent visits to the emergency room for heart pain.
- **Changes in consciousness**
Following exposure to chronic traumatic event, a person may repress memories of the traumatic event, experience flashbacks, or experience dissociation. Dissociative Amnesia may be exacerbated by attempts to medicate distress with substances. Close coordination of care is necessary to monitor use of medications and other substances like alcohol,
- **Changes in how a person view's themselves**
Symptoms in this category include feelings of helplessness, shame, guilt, or feeling detached and different from others. This category often presents as co-morbid depression or dysthymia. Because of these changes patients may form bonds with providers that produce both fear of abandonment and testing of provider loyalty.
- **Changes in how the victim views the perpetrator**
A person with Complex PTSD may feel like he has no power over the perpetrator (the perpetrator has complete power in a relationship). In Complex PTSD, people might also become preoccupied with their

relationship with a perpetrator (for example, constant thoughts of wanting revenge). Learned helplessness may be associated with dysfunctional help seeking behavior with providers.

- **Changes in personal relationships**

These symptoms include problems with relationships, such as isolating oneself or being distrustful of others. Obviously this category is bound to impact relating to doctors and behavioral health professionals.

- **Changes in how one views the world**

People exposed to chronic or repeated traumatic events may also lose faith in humanity or have a sense of hopelessness about the future. The severity of symptoms in this category may have a profound impact on medication compliance, somatization of symptoms and may contribute to the creation of conflictual interactions with providers.

All of these symptoms require careful coordination of care and integration to care to assist these clients with building trust with providers and in building hope in their treatment protocols. (footnote 4)

What is the relationship between physical health and PTSD?

A growing body of literature has found a link between all forms of PTSD and physical health. PTSD may promote poor health through a complex interaction between biological and psychological mechanisms.

The National Center for PTSD and other laboratories around the world are studying these mechanisms. Current research shows that the experience of trauma brings about neurochemical changes in the brain. For example, these neurochemical changes may affect vulnerability to hypertension and atherosclerotic heart disease that could explain in part the association to cardiovascular disorders. Research also shows that these neurochemical changes may relate to abnormalities in other hormone functions, and to increased susceptibility to infections and immunologic disorders.

Research indicates that exposure to traumatic stressors and psychological trauma is widespread. The association of such exposures with posttraumatic stress disorder (PTSD) and other behavioral health conditions is well known. However, epidemiological research increasingly suggests that exposure to these events is related to increased health care utilization, adverse health outcomes, the onset of specific diseases, and

premature death. To date, studies have linked traumatic stress exposures and PTSD to such conditions as cardiovascular disease, diabetes, gastrointestinal disease, fibromyalgia, chronic fatigue syndrome and musculoskeletal disorders. Evidence linking cardiovascular disease and exposure to psychological trauma is particularly strong and has been found consistently across different populations and stressor events. (footnote 5)

As reported by J. Boscarino who is the leading expert in Veteran PTSD research: "Clinical studies have suggested the biological pathways through which stressor-induced diseases may be pathologically expressed. In particular, recent studies have implicated the hypothalamic-pituitary-adrenal (HPA) and the sympathetic-adrenal-medullary (SAM) stress axes as key in this pathogenic process, although genetic and behavioral/psychological risk factors cannot be ruled out. Recent findings, indicating that victims of PTSD have higher circulating T-cell lymphocytes and lower cortisol levels, are intriguing and suggest that chronic sufferers of PTSD may be at risk for auto-immune diseases." (footnote 6)

To test this hypothesis, Boscarino assessed the association between chronic PTSD in a national sample of 2,490 Vietnam veterans and the prevalence of common autoimmune diseases, including rheumatoid arthritis, psoriasis, insulin dependent diabetes, and thyroid disease. His analyses suggest that chronic PTSD, particularly comorbid PTSD or complex PTSD is associated with all of these conditions.

In addition, veterans with comorbid PTSD were found in this study to be more likely to have clinically higher T-cell counts; hyper reactive immune responses on standardized delayed cutaneous hypersensitivity tests, clinically higher immunoglobulin-M levels, and clinically lower dehydroepiandrosterone levels. The latter clinical evidence was concluded to confirm the presence of biological markers consistent with a broad range of inflammatory disorders, including both cardiovascular and autoimmune diseases.

Research with non-veteran populations similarly supports the conclusion draw in Boscarino's studies: that PTSD is significantly associated with insomnia, back pain, swollen joints, dizzy spells, chronic fatigue, concentration problems, high blood pressure and heart palpitations.

In a study published in 2009 journal of Women's Health:

"This is the first study to investigate medical conditions and symptoms in low-income urban healthcare-seeking women who are at high risk for PTSD, supporting previous findings in samples of more affluent and insured women. We found that in lifetime diagnosis of PTSD was associated with the additional medical conditions of chronic pain,

hypertension, coronary artery disease, and thyroid disorder and medical symptoms of insomnia, back pain, swollen joints, dizzy spells, chronic fatigue, difficulty concentrating, high blood pressure and heart palpitations, after controlling for demographic variables and current depression.” (footnote 7)

This study also found a link between PTSD and; chronic pain, coronary heart disease, angina, circulatory system conditions, insomnia, chronic fatigue disorders and general somatization. The study concludes:

“If women with PTSD are not recognized, the pattern of continued health visits without improvement in symptoms is likely to continue. Assessment for PTSD has been suggested in patients who experience somatization, chronic pain, or unexplained medical symptoms or general distress, as these conditions have been linked to PTSD in women. Treatment of PTSD in primary care settings involves recognizing symptoms as early as possible in traumatized individuals and subsequent treatment of symptoms with psychotropic medications or referral for psychotherapy.” (footnote 8)

In a 2008 study by Boscarino, additional findings linked PTSD with a broad range of inflammatory issues:

“ Although the specific reasons for the association between psychological stress and inflammation are unclear, speculation has focused on neuroendocrine alterations, particularly as these relate to circulating plasma cortisol (Boscarino 2004; Boscarino and Change, 1999a). Given this body of research and the evidence that markers of inflammation, such as high WBC counts and high erythrocyte sedimentation rates (ESR) in clinical research were often associated with adverse health outcomes (Andresdottir et al., 2003; Grzybowski et al., 2004), it was hypothesized that the presence of these markers would increase mortality risks among a trauma-exposed population.....Recently it has become evident that the HPA stress axis, and the adrenal gland in particular, is a major site for both the synthesis and action of numerous cytokines (Bornstein and Rutkowski 2002).” (Boscarinio 2004). ” (footnote 9)

Given the broad range of medical disease states and physiological symptoms connected to post traumatic stress disorder, it seems imperative that patients presenting with trauma histories be carefully screened for medical stability concurrent with psychological treatment. Moreover, treating PTSD with psychiatric medications without, at a minimum, checking for neurobiological problems, seems foolhardy at best.

What is the agenda for clinical practice?

One agenda for clinical practice is for behavioral-health workers to increase collaboration with primary and other medical care professionals in order to better address this relationship between PTSD and health problems. All personnel need to become more aware of the potential harmful effects trauma and PTSD can have on health. Specifically, it is important to screen for PTSD in medical settings. Studies of patients seeking physical-health care show that many have been exposed to trauma and experience posttraumatic stress but have not received any behavioral-health care. In answer to this problem, it might be useful to integrate PTSD treatment services with primary medical services.

It is equally important for psychiatric practitioners to coordinate physical care consistently with referral to primary adjunctive services. As we have seen, since complex PTSD can present with a multiplicity of comorbid symptoms, it is not uncommon for practitioners to diagnose and treat only those symptoms currently most uncomfortable for the patient. Depression and anxiety for example may be treated with antidepressant and/or mood stabilizing medications and physical symptoms such as back pain and fibromyalgia may be treated with narcotics. If a PTSD screening is not completed such patients may end up on 8 or 9 medications each of which treats a presenting symptom but none of which ends up treating the underlying problem. Without collaborative care, moreover, patients with complex PTSD may end up making frequent calls and visits to their primary care physician in a chronic "crisis state" better managed through phone coaching for distress tolerance skills by an informed trauma treatment provider.

Good patient care as well as the need for protecting limited primary care medical resources, are both essential reasons for accurate PTSD diagnosis and collaborative referral and treatment protocols between providers.

Footnotes

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