COVID-19 as a Traumatic Event: Mental Health Lessons from Cognitive Behavioral Therapy

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Abstract

Description
As a psychiatry resident working on an internal medicine rotation during the COVID-19 crisis in April, 2020, I witnessed signs of the burgeoning mental health crisis first-hand—among patients, friends, and healthcare workers. It quickly became evident that this experience was akin to a mass trauma, and in this paper we explore this concept and propose using Cognitive Behavioral Therapy to address the secondary mental health pandemic of anxiety and stress disorders that is developing in real time.

Keywords
SARS-CoV-2; COVID-19; coronavirus infections; coronavirus infections/prevention & control; pandemics; psychological stress/epidemiology; psychological trauma; anxiety disorders; mood disorders; psychological adaptation; quarantine/psychology; Cognitive Behavioral Therapy

Emergency room personnel appeared hypermanic, laughing loudly at their most recent potential exposure to COVID-19. Posters went up outside the hospital employee parking garage proclaiming, “You are heroes,” and a potted plant in the hospital entryway suddenly included an orange painted rock stating, “You got this.” A nurse’s eyes darted wildly as he struggled with the blue plastic sheeting serving as a protective gown. A despondent woman was brought to the hospital for failure to thrive, having stopped eating or getting out of bed when she was stricken with severe depression after her living facility had shut down visits and group activities. Even though I was completing an intern year rotation in internal medicine, my fledgling psychiatric observational skills perked up. Something big was happening in the area of mental health, both in the caregiver arena and the general population.

Traumatic events such as wars, political upheavals and natural disasters are well documented sources of psychological suffering, and the COVID-19 pandemic prompts a re-evaluation of conventional descriptions of mass trauma to include such infectious events.¹ Anxiety-related distress seen during pandemics was described prior to COVID-19, with increases in xenophobia, excessive fear of infection or contamination and compulsive checking regarding the threat. Traumatic stress symptoms seen previously in pandemics include nightmares and intrusive thoughts.² During the spread of COVID-19, the populace of many countries have experienced additional quarantine-related psychological stress such as frustration, boredom, anger and fear.³ Also, the social isolation and loneliness brought on by stay-at-home orders and facility lock-downs represents a public health concern associated with increased depression and anxiety that disproportionately affects older adults.⁴

Despite the contemporaneous nature of the COVID-19 pandemic, much research already describes its tremendous impact on mental health. According to a Mental Health America survey report, for example, the per-day number of depression screenings was 394% higher and the per-day number of anxiety screenings was 370% higher in May of 2020 than in January.⁵
Another study in China found that the general public and non-front-line medical staff suffer from vicarious traumatization during the outbreak.\(^6\)

While research into the psychological impacts of this mass trauma is of course critical and useful, we do not need the statistics to recognize the real-time effects. Even our local coffee shop posted a billboard of mental health hotlines in the drive-through, recognizing no doubt the ubiquitous suffering with cancellations of events, e-learning for students, working at home without available childcare and furloughs and lay-offs. While access to hotlines and entreaties by the mainstream media to attend to self-care represent well-meaning steps in the right direction, are there not more concrete preventive and abortive steps to be taken in the face of psychological stress brought on by pandemics?

Looking at the COVID-19 pandemic through the lens of trauma, a possible answer to this question lies in treatment modalities already well established for stress-related anxiety and PTSD. The tenets of cognitive behavioral therapy (CBT), for example, could well be adapted to fit the needs of pandemic-related psychological stressors. CBT is a form of therapy that looks at the interplay between thoughts, emotions and behaviors using SMART goals: specific, measurable, attainable, realistic and time-limited objectives.\(^7\)

Many practitioners begin CBT with a patient by assessing mood (anxiety and/or depression) with a scale such as the Beck Anxiety Inventory. A standard mood inventory would be a useful starting point, but in addressing COVID-19-related mental health, several specific scales such as the COVID Stress Scale and the Coronavirus Anxiety Scale have been developed and validated.\(^8,9\) While these scales remain proprietary, researchers at the Center of Excellence for Health Disparities Research in Miami have made 2 different inventories available online to the public: The COVID-19 Household Environment Scale, which measures changes in the family activities and dynamics and the Pandemic Stress Index.\(^10\) Whether generic mood assessments or specific measures of pandemic stress or anxiety, these tools represent a good starting point for CBT in that they help to identify the nature and scale of the problem.

CBT targets how people think and what they do, thus being both “cognitive” and “behavioral.” One cognitive technique lies in evaluating evidence that supports or refutes dysfunctional assumptions and maladaptive core beliefs. This technique becomes difficult in a pandemic, as a very real threat to health and finances exists while misinformation and contradictory advice abound. Determining what thoughts represent excessive fear versus sensible precautions might be difficult; concerns leading to wearing a mask in the grocery store seem well-founded; whereas, anxiety that causes avoidance of the hospital in an emergency is often maladaptive. Fortunately, identifying maladaptive thoughts is the first step in the cognitive component of CBT, which also involves assessing their relationship to other beliefs and their negative impact. Thus, CBT can help identify and challenge automatic thoughts that lead to emotional distress while continuing to allow for helpful protective behaviors.

Leaders and media sources should also know that rapid communication and truthfulness in reporting lead to improved mental health outcomes in a pandemic by decreasing the level of confusion.\(^3\) On an individual level, looking at COVID-19 as a traumatic experience again informs us how to identify maladaptive thoughts, in that the presence of PTSD symptoms like nightmares and unwanted intrusive thoughts is indicative of trauma stress, for example. Learning to recognize intrusive thoughts that are unhelpful and replace them with more affirming ones is achievable with CBT exercises.

In addition to adjusting cognition, CBT looks at how changing behaviors can affect mood and thoughts. Pandemic behaviors such as compulsively checking infection rates or media updates and repetitive hand-washing can contribute to anxiety. However, wearing appropriate Personal Protective Equipment (PPE) for a given situation represents helpful behavior, and public health officials should take note that ensuring good access to PPE can have long-term effects on population mental health after a pandemic.\(^3\) Again, COVID-19 provides a gray area that can be difficult for those suffering from anxiety disorders to navigate.
CBT techniques such as keeping a log of emotions related to activities can help navigate this gray area by assessing behavioral impacts on mood. Gradually replacing anxiety-inducing activities (e.g., watching the news) with more pleasurable/adaptive ones (e.g., going for a walk) will have an overall positive impact on mood and mental health. Also, finding alternatives to previously enjoyed activities is an important part of maintaining resilience in uncertain times. Regular exercise is well established to have a positive impact on mood, and in a time when health club memberships are suspended due to public safety, exergames (active videogames), for example, have been shown to assist in overcoming barriers to physical exercise and connecting to family and friends.10

In addition to the increase in negative exposures and loss of pleasurable activities during the pandemic, many have added to their stress levels by imposing expectations of accomplishing great tasks during stay-at-home orders. Not achieving these goals can negatively impact mood, but again CBT has behavioral techniques that can be useful. Activity scheduling can be used to break up tasks into more manageable lists, and can help change patterns of procrastination.

While the current pandemic represents uncharted territory for most of the population, looking at the experience of COVID-19 as a collective trauma informs us on the value of well-established techniques such as CBT in addressing the rise in mental health challenges. CBT has a very strong evidence base, especially in anxiety and stress-related disorders11 and can help individuals struggling with mood issues initiated or compounded by the pandemic. After identifying anxiety or depression levels to establish a baseline, the practice of CBT involves learning to adjust anxiety-inducing thoughts and behaviors to positively impact mood. CBT can improve quality of life and mental health outcomes and should be considered for any patient struggling with stress and anxiety related to the COVID-19 pandemic.

Conflicts of Interest
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