

Toolkit for Emotional Coping for Healthcare Staff (TECHS):

Helping Healthcare Workers Cope with the Demands of COVID-19

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Abstract

In response to the COVID-19 pandemic, healthcare workers (HCWs) are experiencing elevated levels of emotional distress, including traumatic stress, which may continue for months and years to come. To support HCWs, the Center for Pediatric Traumatic Stress created the Toolkit for Emotional Coping for Healthcare Staff (TECHS), a free, online, evidence-supported program. TECHS offers self-assessment tools for traumatic stress reactions and three coping tools that are rooted in cognitive behavioral and family therapy principles. TECHS, which comes in the form of a slide set and a pre-recorded webinar, can be implemented flexibly (e.g., small or large groups, individually, one one-hour administration or multiple shorter sections of time). Ideally, small groups of HCWs engage in TECHS together to help support team resilience. In implementing TECHS in a group, it is important to ensure participation is optional and to review expectations for confidentiality. The purpose of TECHS is to address the emotional needs of HCWs related to the pandemic and to offer a long overdue evidence-informed program that addresses the fourth aim of healthcare, improving the work life of HCWs. Sustaining emotional support programs such as TECHS is critical to maintain a functioning, effective, and healthy workforce across our healthcare institutions.

Introduction

Similar to previous epidemics, healthcare workers (HCWs) across disciplines are exhibiting high rates of anxiety, traumatic stress, sleep problems and depression in response to the COVID-19 pandemic.^{1,2} Sources of anxiety include concerns about healthcare institutions protecting HCWs from infection, preparing HCWs to provide care in a new or unfamiliar setting, and supporting HCWs as individuals in terms of stress and emotional support.² Studies from the SARS pandemic suggest that up to one-half of HCWs will experience significant emotional distress, including posttraumatic stress symptoms, which may persist for years.¹

Posttraumatic stress symptoms include re-experiencing of a particularly frightening event(s), avoidance of reminders or thoughts of this experience(s), changes in thinking and emotional functioning, and increased arousal (e.g., difficulty sleeping, concentrating, jumpy). Traumatic stress symptoms may occur for a few weeks to months or years following exposure to actual or

threatened serious injury, death, or violence.³ Secondary traumatic stress is the response to being exposed to trauma experienced by others, particularly in one's professional role.⁴ HCWs on the frontlines of the COVID-19 pandemic are at personal risk for serious illness, are at risk for transmitting this illness to loved ones, and are witnessing immense suffering of patients and their families.

To address the emotional needs of frontline HCWs during and following this pandemic, the Center for Pediatric Traumatic Stress developed the Toolkit for Emotional Support for Healthcare Staff (TECHS)⁵ in March 2020. In this paper we describe this development process and initial activities to disseminate and implement TECHS in the early months of the COVID-19 pandemic in the United States.

Intervention

The overarching goals of the TECHS program are (1) to promote use of healthy, evidence-based coping strategies among frontline HCWs experiencing stress related to the COVID-19 pandemic and (2) to facilitate team resilience and connectedness. The two learning objectives of the TECHS program are for HCWs to be able to (1) identify two options for self-assessment of traumatic stress reactions and (2) describe three coping tools for HCWs facing COVID-related stress.

Development of TECHS.

The primary mission of the Center for Pediatric Traumatic Stress is to provide HCWs in pediatric settings with training and interventions to reduce or prevent traumatic stress responses in patients and families and in providers themselves. TECHS evolved from a conceptual framework and related treatment model that we use in interventions for families of children with cancer, Surviving Cancer Competently Intervention Program (SCCIP).⁶ SCCIP employs a traumatic stress framework that is rooted in cognitive behavioral and family systems principles.

The theory and mechanisms that underlie SCCIP are highly relevant for HCWs facing the COVID-19 pandemic. First, HCWs in the era of the COVID-19 pandemic face the sudden onset of a remarkably frightening situation, full of unknown but likely challenging and evolving stressors over time, that may include life threat to oneself and others. Second, like others facing potentially traumatic experiences, HCWs on the frontlines of the COVID-19 pandemic may benefit from cognitive behavioral interventions that help them learn to notice and challenge potentially maladaptive thinking and beliefs. Third, social support (from family or colleagues) is key to coping with potentially traumatic events. The team approach to healthcare presents opportunity for HCWs to turn to colleagues for support.

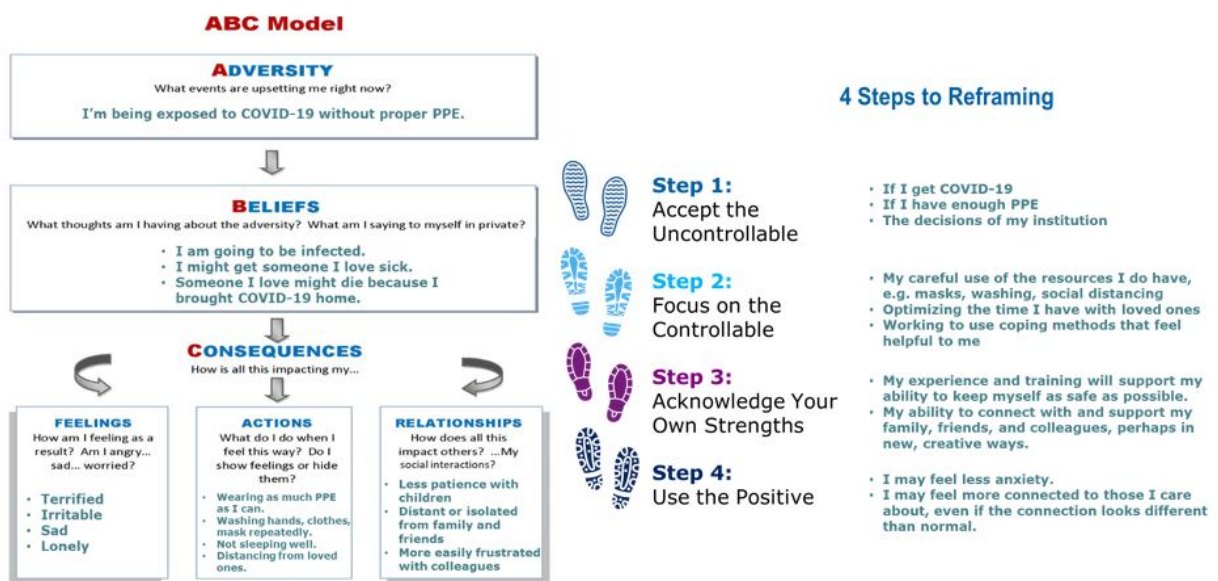
Self-assessment of traumatic stress reactions

As part of TECHS, we developed a self-assessment tool that is an adaptation of a reliable and valid measure of adult acute stress symptoms, the Acute Stress Disorder Scale.⁷ HCWs using TECHS can rate items on this scale and self-score the tool to learn if their level of traumatic stress reactions is significant. Guidance on accessing the scale (provided free of charge), interpreting the score, and recommending the appropriate level of care for those with significant reactions is included in TECHS.

Tool #1: ABC Model

The Adversity-Beliefs-Consequences Model is based on cognitive behavioral therapy and supports HCWs in understanding their own reactions to a specific adverse event (see Figure 1). HCWs select one recent or particularly troubling experience, identify the thoughts or beliefs they had in response to this adversity, and then consider the consequences of this adversity and its related beliefs. Consequences may be positive or negative and may fall in three categories: emotional, behavioral, and/or interpersonal consequences. For example, potential adversities include not having consistent access to proper personal protective equipment or inability to be home to support family due to work demands.

Figure 1. Toolkit for Emotional Coping for Healthcare Staff (TECHS) – ABC Model + Steps to Reframing



Tool #2: Steps to Reframing

The second tool, Steps to Reframing, is also grounded in cognitive behavioral principles of evaluating one's thoughts and considering alternative ways of thinking (see Figure 1). HCWs are asked to (1) identify the uncontrollable aspects of an adversity, (2) focus on the aspects that are controllable, (3) leverage their strengths and strengths of their colleagues or family, which facilitates (4) shifting the consequences (emotional, behavioral, interpersonal) to a more positive place.

Tool #3: COVID-19 Roadmap

The third and final tool, COVID-19 Roadmap, employs an analogy of a journey to encourage HCWs to take a broader perspective on this stressful time. This tool draws from cognitive behavioral principles of challenging all-or-nothing beliefs and perspective taking. For example, HCWs are invited to see beyond the immediate adversity and consider the larger context. This tool asks the HCW to recall where they may have been on the roadmap in the early stages of the COVID-19 pandemic, where they are now, and where they might be at a time in the future. This exercise highlights that this pandemic will have a beginning, middle and an end.

Interpersonal/Team-Based Focus

Throughout TECHS, HCWs are encouraged to take an interpersonal and team-based perspective. They are prompted to consider how colleagues, family, and friends might vary in identification of adversities, beliefs and consequences, as well as in each step to reframing. HCWs are also asked to think about where on the COVID-19 Roadmap their colleagues or others might be. Finally, TECHS suggests HCWs reflect on how much they have shared about their own adversities, beliefs, and consequences with others in their life. When delivered in a group format to a team of HCWs or in large group settings, HCWs learn about how others are having similar experiences and reactions. TECHS also offers a common language for teams to use to discuss COVID-related difficulties and stress.

Place and Time

TECHS is accessible without charge from <https://bit.ly/COVIDhealthcarecoping>. It has been delivered exclusively online at the present time due to restrictions imposed by the COVID-19 pandemic. However, it could be used in in-person settings as well and we expect to do so once restrictions are lifted. TECHS was developed by The Center for Pediatric Traumatic Stress, a Treatment and Services Adaptation Center in the National Child Traumatic Stress Network. The Center for Pediatric Traumatic Stress is co-located at Nemours Children's Health System in Wilmington, DE and at the Children's Hospital of Philadelphia. We developed and released the first version of TECHS quickly in March 2020 at a time when the spread of COVID-19 in the United States became evident. Minor refinements were completed during initial presentations of TECHS in April 2020. We expect to update it, as needed, to reflect changes in the pandemic trajectory over time. The most recent version of this program is available at <https://bit.ly/COVIDhealthcarecoping>.

Population

The target population of TECHS is frontline HCWs, which includes medical providers (e.g., pediatricians, nurse practitioners), mental health providers (e.g., social workers, psychologists, psychiatrists), nurses, patient service representatives (e.g., check-in and scheduling staff), environmental services staff, security, medical interpreters, emergency medical transport workers, management or leadership staff, and others working in healthcare during the pandemic. While the Center for Pediatric Traumatic Stress focuses on pediatric settings, TECHS was created for HCWs in any healthcare setting, from pediatric to adult care to nursing home and long-term care staff and residential drug treatment facilities. The tools in this toolkit appear to have relevance across cultures and countries; based on interest from international colleagues, TECHS has been translated into Spanish and Japanese. Links to these resources can be found on the aforementioned website.

Purpose

Quadruple Aims of Healthcare include enhancing patient experience, improving population health, reducing costs, and improving the work life of healthcare providers. Although concerns for burnout and secondary traumatic stress in HCWs have been long-standing, this COVID-19 pandemic highlighted the need for universal emotional supports for HCWs. Such supports must be based in evidence, easily accessible to HCWs, and include guidance on when a higher level or more intense form of emotional supports are indicated. The purpose of TECHS is to address

these needs in this time of crisis related to the pandemic and to offer a long overdue evidence-informed program that addresses the fourth aim of healthcare.

Implementation

TECHS was designed to optimize flexibility of its use so that busy and stressed HCWs can more easily access this resource. TECHS comes in two formats, a slide set and a pre-recorded webinar. HCWs may choose to review the slide set and/or watch the one-hour webinar all at once, or break TECHS up into smaller chunks (e.g., one tool at a time). The recorded online webinar has been viewed by 2,994 groups or individuals worldwide as of April 13, 2020, when it became available. The Spanish version of the TECHS webinar has been viewed 781 times since it was made available on May 6, 2020. The Japanese version of the TECHS slide set has been downloaded 645 times since it was made available on May 10, 2020.

TECHS is optimally used in small groups or healthcare teams of trusted colleagues, because this allows for sharing perspectives and leveraging strengths across individuals. However, group administration is not always feasible, so TECHS is also designed to be used by an individual.

TECHS may be administered via live webinar or in-person, facilitated by a mental health professional or other professionals. At Nemours, we conducted a number of small group live webinars for different teams at Alfred I. duPont Hospital for Children and also provided TECHS in a Grand Rounds talk. To maximize the reach of this universal emotional support program, healthcare institutions can offer it during existing meeting times for large and small groups. Offering staff the ability to use TECHS during paid worktime may be especially key to reaching the full range of salaried and hourly staff and those with varying home responsibilities and online access. Repeated review of TECHS is also important, as a way to refresh coping skills and as a way for institutions to demonstrate commitment to the well-being of their staff.

Finally, when implementing TECHS in a discussion-based format at a healthcare institution, it is critical that HCWs are not required to share personal information. Some HCWs may choose to seek emotional support from people or services outside of their workplace, whereas others may be interested in sharing their thoughts and feelings about a challenging or scary situation with co-workers and managers. A clear and open discussion about confidentiality should occur at the beginning of any group-based TECHS administration.

Evaluation

As TECHS was initially adapted from an evidence-based intervention in March 2020, there have been no formal evaluations to date. We ask that participants complete a brief, five question pre and post surveys for live webinar administration of TECHS at Nemours. These questions ask HCWs to rate how aware they are of their own level of stress related to COVID-19 and how confident they are in their ability to cope with COVID-19-related stress, as well as to rate their knowledge about evidence-supported coping strategies. Most HCWs are reporting high initial levels of confidence in ability to cope with COVID-related stress. Future examination of the effectiveness of TECHS should consider how TECHS may enhance or expand existing coping strategies for HCWs and how it may encourage or facilitate team resilience and connectedness.

Adverse Effects

No adverse effects have been reported for TECHS. TECHS is based on efficacious cognitive behavioral and family systems approaches with proven track records for benefit and low likelihood of risk. Although we have not received any evidence of these, potential adverse effects could include triggering distress in HCWs with pre-existing mental health difficulties and/or HCWs experiencing elevated levels of distress, i.e., when asked to consider their emotional functioning and coping. Some HCWs may not choose to seek such resources through an employer and may feel uncomfortable to engage in such programs at work. For these reasons, it is crucial that institutions using TECHS carefully consider ways to ensure TECHS is highly accessible and optional. Alternative options for support would also help meet the varying emotional needs and preferences of HCWs.

In implementing any universal tool for emotional support and coping, healthcare leaders should develop clear guidelines and processes to support HCWs who may require a higher level of emotional support. The optional self-assessment of traumatic stress reactions included in TECHS allows HCWs to self-score and see brief guidance on determining their potential need for more intense support. Institutions may also offer general guidance about symptoms or emotional or behavioral reactions to stress that might suggest mental health treatment is warranted.

Sustainability

As a free, online program, TECHS requires minimal resources from healthcare institutions. Keys to sustaining this type of universal program include clear, consistent and repeated messaging from hospital leadership about what TECHS is and how to access it, as well as dedicated time to implement and regularly review these tools. To fully integrate these evidence-based tools into hospital culture, leaders at every level should employ and model use of emotional coping strategies.

Public Health Significance

The traumatic stress, anxiety, depression and sleep difficulties HCWs are experiencing related to the COVID-19 pandemic are likely to persist and may impact job satisfaction, burnout and workforce readiness over time. The COVID-19 pandemic continues to unfold and the effects of this crisis will last beyond the creation and broad implementation of a vaccine. Moreover, HCWs have long been at risk for traumatic stress and secondary traumatic stress related to delivering healthcare and witnessing suffering and death. Sustaining emotional support programs such as TECHS is critical to maintain a functioning, effective, and healthy workforce across our healthcare institutions.

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