Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Special Article

Witnesses and Victims Both: Healthcare Workers and Grief in the Time of COVID-19

Michael W. Rabow MD, FAAHPM, Chao-Hui S. Huang PhD, MA, Med, Gloria E. White-Hammond MD, MDiv, and Rodney O. Tucker MD, MMM, FAAHPM

Division of Palliative Medicine (M.W.R.), Department of Medicine, University of California, San Francisco, CA; Center for Palliative and Supportive Care (C.-H.H., R.O.T.), Division of Gerontology, Geriatrics, and Palliative Care, Department of Medicine, University of Alabama at Birmingham, Birmingham, AL; O'Neal Comprehensive Cancer Center (C.-H.H.), University of Alabama at Birmingham, Birmingham, AL; Bethel AME Church (G.E.W.-H.), Boston, MA; Ministry Studies (G.E.W.-H.), Harvard Divinity School, Cambridge, MA

Abstract

Heathcare Workers (HCWs) recognize their responsibility to support the bereaved loved ones of our patients, but we also must attend to our own professional and personal grief in the COVID-19 pandemic. COVID-19 grief is occurring in the setting of incomplete grief, disenfranchised grief, fractured US governmental leadership, and evidence of great mistrust, systemic racism, and social injustice. In the intensity and pervasiveness of COVID-19, HCW fears for themselves, their colleagues, and their own loved ones are often in conflict with professional commitments. Even at the dawn of promising national and global vaccination programs, significant HCW morbidity and mortality in COVID-19 has already become clear, will continue to grow, and these effects likely will last far into the future. Given the risks of complicated grief for HCWs in the setting of COVID-19 deaths, individual HCWs must put every effort into their own preparation for these deaths as well as into their own healthy grieving. Equally importantly, our healthcare systems have a primary responsibility both to prepare HCWs and to support them in their anticipatory and realized grief. Special attention must be paid to our HCW trainees, who may have not yet developed personal or professional grief management strategies and are coming into healthcare practice during a time of great disruption to both teaching and clinical care. J Pain Symptom Manage 2021;62:647–656. *© 2021 American Academy of Hospice and Palliative Medicine. Published by Elsevier Inc. All rights reserved.*

Key Words

Grief, complicated grief, healthcare workers, COVID-19

EDITOR'S NOTE ***David Casarett, MD, MA***

This is a thoughtful and comprehensive exploration of COVID-related grief among healthcare workers—a topic that is all too often overlooked or minimized.

Key Message

Heathcare Workers (HCWs) recognize their responsibility to support the bereaved loved ones of patients, but also must attend to our own grief. To promote healthy grieving, both individual and system interventions are key to helping HCWs prepare for loss and to supporting HCWs in their grief over the COVID-19 deaths of patients, colleagues, and families.

Your absence has gone through me
Like thread through a needle.
Everything I do is stitched with its color.

W.S. Merwin

The COVID-19 pandemic has transformed how people grieve as well as the relationship between frontline healthcare workers (HCWs) and grief.[1–4] COVID-19

Address correspondence to: Michael W. Rabow, MD, FAAHPM, Helen Diller Family Comprehensive Cancer, University of California, San Francisco, 1825 4th Street, 4th Floor, San Francisco, CA 94158, USA. E-mail: Mike.Rabow@ucsf.edu

Accepted for publication: 19 January 2021.

0885-3924/$ - see front matter
https://doi.org/10.1016/j.jpainsymman.2021.01.139

has impacted the anticipation and rituals of grief and brought HCWs' professional and personal grief into stark focus. As of March 12, 2021, there have been more than 118 million confirmed COVID-19 cases globally, with more than 2.6 million deaths. In the United States (US) alone, there have been over 29 million cases and more than 532,000 deaths.[5] As of March 12, 2021, the Centers for Disease Control and Prevention identified 443,571 COVID-19 cases among US HCWs. Among 353,052 of these cases where data were available, 1,451 HCWs had died.[6] *The Guardian* maintains a database ("Lost on the Frontline") on US HCW deaths due to COVID-19, with 3,544 deaths catalogued and hundreds of individual stories profiled as of March 12, 2021.[7]

The grief associated with the many lives lost due to COVID-19 and the impact on HCWs and other essential workers has not been fully addressed due to the sudden and evolving state of the pandemic. This paper addresses COVID-19-related HCW loss and grief from an interdisciplinary perspective and in the context of four key sociocultural contexts, outlines the risks for complicated HCW grief, and provides recommendations to promote healthy grieving among HCWs.

Grief in Context

Much was known about the basics of grief and bereavement prior to COVID-19. The experience of grief is both normal and nuanced. Researchers have identified the process of anticipatory grief and have delineated normal grief (a basic human emotion) from pathological grief (commonly referred to as "complicated grief"). Complex grief reactions, such as prolonged grief disorder, post-traumatic stress disorder (PTSD), and depression, are thought to occur in a minority (10%−15%) of those who are bereaved.[8,9]

Notably, a key understanding about grief is that the quality of dying can predict complicated grief. The end-of-life experiences and the relationships of the person who died and their loved ones (what happens *before* death and as people face the end-of-life) appear to be as important or more important to the quality and outcome of grief than what is done *after* the death to console the bereaved. Most of the risks for complex grief reactions are realized before the death rather than after, including pre-existing mental illness in the bereaved, strain in the deceased-bereaved relationship, poor social support, sociodemographic stressors, death in the hospital (the ICU in particular), limited preparation and communication, inability for loved ones to say good-bye to the dying, and sudden, traumatic, or violent death.[2,4,10–12] This finding points to the value of a preemptive strategy for grief support. As Morris and Block have written, "bereavement care is best conceptualized as a preventative model of care."[13]

Of course, grief is not to be over-medicalized. The experience of grief is an elemental part of humanity (if one cares about something or someone, one will almost inevitably face the sadness of its loss). Bereavement ceremonies are offered by nearly all religious traditions and grief rituals and practices are a feature of every human culture. As physician Rachel Naomi Remen has said simply, "Grief is how loss heals."[14]

HCW Grief Prior to COVID-19

Grief was often problematic for HCWs even before COVID-19. Despite the inevitable losses of serious illness and the reality of human mortality, grief has long lived uneasily in the practice of clinicians. This may be especially true for physicians, given that discipline's tendency to see illness as an enemy to be battled against and death as a professional failure.[15] Physician grief might be described as compartmentalized and disenfranchised, with physicians attempting to deny, minimize, or hide their grief as insignificant or somehow improper in professional interactions.[4,16,17] Even before COVID-19, physicians have likely paid a price for their unprocessed grief. One third of physicians felt guilty about patient deaths and half felt a sense of failure.[16] HCWs' grief is associated with burnout and distress as bereaved HCWs strive to balance caring, professional identities, and evolving work responsibilities.[17–20] Burnout itself may be the direct result of an inability to integrate inevitable, mounting losses into an ongoing career and life. As busy clinicians move "onto the next," grief compounds and the consequences of unprocessed grief accumulate. Among HCWs facing the deaths of patients, psychological grief reactions such as thinking about the patient, feelings of helplessness, crying or despondency, disbelief or shock, difficulty concentrating, anger, and anxiety often persist for more than 1 month and may warrant professional intervention.[21,22]

Factors Complicating COVID-19 Grief in the US

Grief in the time of COVID-19 has novel elements and HCWs have had to adapt to the new strains on their patients and loved ones, as well as to reconcile their own personal and professional relationships to loss in the time of COVID-19. Grief in the pandemic in the US has been challenged further in the context of at least four complicating factors.

Incomplete Grief. COVID-19 grieving is often incomplete both right before and right after death. The loss of ability to have belief-concordant final good-byes and mourning rituals complicates the natural coping and healing processes of grief. While there have been compassionate attempts to allow visitors for dying patients, social distancing has led inevitably to loss of a sense of control and to anxiety, challenging the ability to cope

with the death of a loved one.[1,10] The worry and guilt associated with inability to offer loving presence and companionship for their loved ones have been expressed frequently by distressed families and may increase the risk for complicated grief.[4] Reports from across the country describe in heart-breaking detail the plight of families saying their last good-byes to a loved one via technology or through glass or plastic barriers and their limited ability to comfort dying loved ones with their touch, hug, or kiss.[1] Joy Miller, PhD, founder of Resiliency 2020, has said, "COVID-19 robbed us of our goodbyes."[22] Grief rituals have been adapted to comply with the requirements of social distancing,[23,24] nevertheless, physical separation and social distancing during bereavement can cause significant distress.[2,3]

Disenfranchised Grief. Disenfranchised grief has been defined as "grief that persons experience when they incur a loss that is not or cannot be openly acknowledged, socially sanctioned or publicly mourned."[25] Those loved ones mourning deaths from COVID-19 may experience disenfranchisement due to their own shame or blame from others for having caught COVID-19 (due to personal decisions about masks or social distancing or due to increased risk from comorbidities steeped in negative bias, such as obesity). There may be suspicion of the mourner's own infection risk having been physically close to the deceased. Finally, others may discount the death due to the deceased's age (a bias against the elderly), or due to the sense that the deceased is just yet another statistic or insignificant in the context of a global pandemic.

Inadequate US Governmental Response. The COVID-19 pandemic in the US has been unfolding in the context of a limited, fractured, and politicized governmental response. Public officials and citizens both have had basic disagreements about the appropriate role of the national government in leading a response to the pandemic and the validity and importance of immunological and epidemiological science. Basic elements of infectious disease prevention and containment have become highly politicized, leading to policies, practices, and distribution of resources (including PPE and vaccines) inconsistent across the US.[26] Such national contention likely contributes to US COVID-19 cases and deaths out-of-proportion to population, US public mistrust of healthcare institutions and workers, as well as a sense of anger and abandonment among US HCWs.

Social Injustice, Mistrust, and Racism. COVID-19 has disproportionately affected communities of color, immigrants, indigenous and vulnerable people in communal living environments, unmasking larger issues of social injustice and systemic racism that have a long history and long-term implications.[27,28] Individuals from communities of color may have poorer baseline health and financial indices, higher baseline socio-economic stress, generational trauma, and mistrust of the healthcare system rooted in past and current institutional racism.[29,30] In the US, people of color are more likely to be bereaved from COVID-19 than whites[31] and face this stressor without equal financial and healthcare resources.[32,33] Structural racism often deprives racial and economic minorities from accessing needed healthcare or receiving quality care, resulting in more severe COVID outcomes. There is a rise of anti-Chinese or anti-Asian sentiment, exacerbated by US political figures' COVID-19 responses.[33] Race-specific stigmatization may compound HCW's grief reactions due to fear, shame, and racial divide and create psychosocial pain, mistrust, and suffering.[27,34]

Of course, HCWs are not immune to the systemic racism revealed by COVID-19. HCWs of color in the US and England are nearly twice as likely as white HCWs to test positive for the virus and five times as likely as whites in the general community.[35] In the *Guardian* database, a majority of US HCWs who have died of COVID-19 (63%) were identified as people of color.[7]

The Impact of COVID-19 Grief on Healthcare Workers

> *The expectation that we can be immersed in suffering and loss daily and not be touched by it is as unrealistic as expecting to be able to walk through water and not get wet.*
>
> Rachel Naomi Remen, MD
> Kitchen Table Wisdom

HCWs practice at the frontlines of COVID-19 and experience grief around the deaths of their patients, their colleagues, and their own loved ones. Although much has been written about COVID-19 grief of nonhealthcare workers in both the academic and lay presses,[2,9,22,36–38] the plight of HCWs deserves special attention.

The Impact of COVID-19 on HCW Professional *Grief*

The COVID-19 pandemic has created unprecedented fear and anxiety for HCWs[39] and intensified pre-existing clinician "professional grief" issues (the grief that HCWs have for their patients who die) in at least eight ways. Notably, these elements likely increase the risk for HCW complicated or prolonged grief.

1) COVID-19 is causing a *large number of deaths.* In 2020, COVID became a top cause of death in the US and internationally. By the December 2020, COVID-19 became the leading cause of death in the U.S.[40] What resources clinicians may have had for dealing with patient deaths pre-COVID may be overwhelmed simply because of the sheer

numbers of COVID-19 deaths. COVID-19 has brought death out of proportion to other diseases (such as cancer or influenza) that clinicians previously may have learned to manage or accept.

2) HCWs may be deployed to types and conditions of work (and the attendant COVID-19 deaths) for which they are *unprepared*. For example, during surges in overwhelmed hospitals, dermatologists or surgeons may be required to attend in swamped medical ICUs, or office-based nurses may be redeployed to cover in the emergency department, exposing clinicians to feelings of inadequacy, guilt, and overwhelm. HCWs are being asked or ordered to bear witness to types of deaths they are not used to and in settings they do not typically practice. Such clinicians may not have developed the personal or professional resources to manage such stresses.
3) The *basic logistics* of healthcare during the pandemic may conspire against adequate attention to clinician grief. Healthcare teams are often understaffed during COVID-19 surges, with the need for quarantining of exposed team members threatening healthcare team functioning. HCWs may feel a burdensome commitment to their team and to support each other, assessing the relative risks and costs of working on the COVID-19 frontline for themselves versus for each of their colleagues (e.g. based on age, pregnancy, presence of partners or family, or colleague medical issues). Clinicians may work long hours without adequate breaks throughout the day or relief over the course of days and weeks. Clinicians may not have adequate PPE to feel or be safe.
4) In the absence of a cure and ongoing uncertainty about the best ways to treat COVID-19, clinicians may feel *impotent* to help their patients. Clinicians may feel that their medical knowledge or skills, or both, are inadequate or out-of-date in the rapidly evolving pandemic. HCWs may feel that their healthcare systems or national resources are inadequate to provide the best care possible. Currently, in the context of promising vaccines, physicians are dealing with the slow roll-out of the vaccine, concerns about the social justice of vaccine distribution, and the possibility that the pandemic may get worse before it gets better.
5) The *demographics* of patients who are dying may present an additional stress to HCWs. Moral distress and guilt about the racial and economic inequities in COVID-19 epidemiology and deaths complicate and exacerbate clinician grief. Previously healthy or young people may suffer permanent disability or may die. Couples and multiple members of a single family may infect each other and die suddenly. Many clinicians have stories now of patients emerging from their own ICU stay, only to learn that their love one has died of the disease that nearly killed them.
6) The *way patients are dying* brings added distress for clinicians. Clinicians may be communicating with patients remotely much of the time. Although assessments about telemedicine identify the broad acceptability, satisfaction for patients, and even alternate sources of intimacy, many clinicians may feel like "it's not the same" as in-person care.[41–44] In addition to the distance (seeing patients through goggles or Zoom, touching them through PPE), the ethics of dying of COVID-19 may compound clinician grief. Anger about missed opportunities to prevent deaths due to a poor distribution of healthcare resources may intensify the clinicians' sense of loss. And patients with COVID-19 may die unexpectedly, precipitously, increasing the risk for complicated grief for HCWs. Still other patients may linger in the ICU for weeks prior to dying, with HCWs deeply invested in and connected to them. Clinicians may develop false hopes about patient recovery only to find such patients readmitted to the hospital or dead after a transfer to a rehabilitation facility or discharge home.
7) Surrounded by such extremes of dying and with the potential impact of vaccine distribution systems that prioritize frontline HCWs for the initial limited supply of vaccines, clinicians may suffer a heightened sense of *survivor's guilt*. While HCWs may be recognized by their communities as "heroes" for their work on the frontlines (recognition that may be waning as the pandemic rages on), their own survival (due to prioritized access to PPE, vaccines, or other factors) contributes to their possible guilt while they bear witness to the misery of their patients and their communities.
8) COVID-19 has placed HCWs in a *new and vulnerable place* in the context of dying. Holding the smart phone or tablet up to the dying patient in the ICU, HCWs have been placed more clearly in the face of suffering. HCWs in the pandemic often serve as the surrogate comforter or communicator during times of virtual anticipatory grief and bereavement.[4] While many frontline HCWs have stepped up to serve as the "proxy family" of their patients to bridge the gaps created by social distancing, this exposure to intense suffering represents a new and stressful role for bedside care teams.

The Impact of COVID on HCW Personal *Grief*

Clinicians are bearing witness to suffering and grieving the loss of their patients, but in COVID-19, HCW

loss and grief are also deeply personal− clinicians and their own loved ones are dying as well. While clinicians always have been susceptible to the same illnesses that they treat in their patients and while clinicians may experience counter-transference with patients who remind them of themselves or family members, the COVID-19 pandemic has made these associations more intense.

Many HCWs live in fear of bringing COVID-19 home with them from work, exposing their loved ones as a result of their profession. Some clinicians are choosing instead to isolate themselves from family (staying in hotels, call rooms, or their cars) for weeks at a time to avoid going home and potentially exposing their loved ones.

HCWs themselves may die due to COVID-19 as a member of an affected community (with spread from family or friends or others in their lives outside of healthcare). But HCWs may also die as a direct result of their work. Dr. Li Wenliang of Wuhan, China, was one of the first to raise the alarm about the coming illness in December 2019, but then died himself of COVID-19 weeks later. Lack of adequate PPE forces clinicians to weigh the risks of patient care against the risks of their own or their family's infection; for many clinicians, COVID-19 has become an impossible combination of personal fear and professional obligation. The call of duty to serve on the frontlines of COVID-19 is powerful for many HCWs. But for many, including those with families at home, pregnant women, and those who are older or in poor health, professional commitments run counter to parental and personal obligations.

The Impact of COVID-19 on the Mental Health of HCWs

Given the dual professional and personal stresses of COVID-19 and its ensuing grief, the data emerging about the mental health costs of COVID-19 on HCWs, while not necessarily surprising, is profoundly disturbing. HCWs who survive the pandemic can experience difficult emotions such as loss, guilt, frustration, inadequacy, fear, and powerlessness. They are at risk for vicarious trauma, survivor's guilt, moral distress, compassion fatigue, and burnout.[4,37,39,45–47] Rates of anxiety and depression have increased among HCWs, with frontline providers at particular risk.[36,48,49] HCW exposure to intense suffering during the COVID pandemic is associated with increased depression, anxiety, insomnia, and distress amongst the bedside care teams.[50.] Although the rates of pathological grief among HCWs in the COVID-19 pandemic are not yet known, they are likely to be high given the multiple risk factors HCWs have.[2,4] Historically, suicide has been the only cause of death greater for physicians than nonphysicians.[51] Though data about HCW suicides are limited for the COVID-19 pandemic and while the exact cause of some well-publicized clinician suicides may not be known definitely, news of HCW suicides causes shock and fear to ripple across clinician communities.[52] The mental health burdens of the COVID-19 pandemic may last for decades.[53]

Healthcare Worker COVID-19 Grief Preparation and Support

Given all the personal and professional losses due to COVID-19 and the future losses expected over the next months and years, the task for HCWs is not to *avoid* having to grieve, but rather to be able to experience *healthy grieving*. Tasks for healthy adjustment to grief include: accepting the reality of the loss; experiencing the pain of grief; adjusting to an environment that no longer includes the lost person, object, or aspect of self; and reinvesting emotional energy into new relationships.[54] Ultimately, healthy grieving means integrating the loss into one's life with the ability to understand and normalize the grief process, acknowledge personal limits, and know when getting away and caring for oneself is necessary.[54] Importantly, it is key to remember that grief is a normal human emotion and resilience is the norm, rather than the exception, in the face of loss.[55–57]

While the world works to address the pandemic, individuals and healthcare systems can work to protect HCWs from pathological grief disorders, allowing grief to be, simply and appropriately, the natural healing of loss. Although there is not yet a robust literature confirming effective strategies for either protecting or supporting grieving HCWs in the COVID-19 pandemic, historical lessons and expert recommendations for individual HCWs and for healthcare systems should be considered. The recommendations below for addressing HCW grief are consistent with the findings of a recent narrative review of the literature on postpandemic clinician mental health.[58]

Historical Lessons

Current HCWs were not in practice during the 1918 Pandemic and most have not experienced massive disaster scenarios. However, information can be gleaned from the HCW experience attending to natural or human-made disasters, including the role of psychological first-aid, community building, and formal psychosocial interventions.[59] Additionally, HCWs in the preantiretroviral period of the AIDS epidemic demonstrated that a sense of community, social activism, and solidarity among HCWs engaged together in a difficult health and social challenge can be supportive and sustaining for HCWs in the face of fear, anger, and grief.[60]

Individual Grief Preparation and Support Strategies: Resiliency and Rituals

Protecting HCWs in anticipation of grief through preparation, education, and reflection may be as important or more important to HCW outcomes than the necessary care and support offered to HCWs who are already bereaved. Prior to grief, individual HCW preparation strategies include those designed to promote the general emotional well-being, stamina, and resiliency of a HCW.[61] Having studied resilient people in difficult situations, Southwick and Charney wrote their seminal book, "Resilience: the Science of Mastering Life's Greatest Challenges."[62] Many of their findings apply directly to HCWs, including keeping altruism at the core of one's moral compass, maintaining participation in a community of belief, receiving and offering social support, being inspired by role models, staying physically fit (exercise, sleep, diet and avoiding excessive alcohol), continuing lifelong learning, and maintaining mission and purpose. Other widely-accepted self-care and self-awareness advice, some of which has been associated with improved coping with stress and grief, includes regular breaks from work ("disconnecting from the disaster"), relaxing activities, mindfulness meditation, journal writing, and gratitude practices.[4,63,64] Also important is minimizing an individual HCW's risk for COVID-19 in the first place via proper PPE, physical distancing, hand washing, COVID-19 testing, and patient screening. Many HCWs feel the distress of "not being able to do our best" or "not doing enough" due to conflicting responsibilities, limited PPE, limited treatments, hospital, county, state and federal policies, social and political limitations, overwork, and exhaustion. Individual clinicians must understand that their emotions and an experience of moral distress may be normal and common among their peers. In addition, HCWs are encouraged to distinguish between what an individual has the power to change and what they have no control over (and must accept). Creative pursuits have been recommended, with the concept that the "spark" of life is an antidote to burnout. Finally, interpersonal connection in professional and personal settings can be deeply helpful, with the meaningful experience for HCWs of being a part of community and mattering *as a person* to others.

Once grief has been experienced, strategies to support individual HCWs through their grief include recognizing losses and expressing grief, privately and, perhaps more importantly, publicly.[65] Attending remote memorial services or grief support groups are possibilities. For many, small gestures or more formal rituals can be helpful to make life feel less chaotic and promote meaning, including a taking a brief and simple pause after hearing about or witnessing a death, saying the names of those who have died, lighting candles, and reading poems. Empirical data prior to COVID-19 suggest some strategies to support bereaved frontline HCWs. These include critical incident stress debriefings, facilitated discussion groups, story-telling, music, writing, and bereavement counseling.[66–69] Notably, a two-session peer support education group offered to HCWs within hospital settings were found to be inadequate to reduce provider burnout or improve effective grief coping.[70] A more intensive intervention, Healing Loss Workshop, comprised of a three-day experiential and educational program offered at a local retreat center, was found to be feasible and more effective in increasing awareness of grief reactions, identifying resources for grief support, and gaining new tools for healing and self-care among interdisciplinary HCWs.[69] HCWs must practice what they preach and doing their own advance care planning is important preparation during a pandemic.[4] For some, with complicated grief, depression or anxiety, professional psychologic and/or psychiatric care is indicated.[71]

Numerous healthcare institutions and professional organizations have developed resources and resource lists for their employees and the public to promote wellness, process moral distress, and deal with grief.[58] Table 1 presents a list of web-based resources and tools available to HCWs that address various aspects of COVID-19-related grief. The Center to Advance Palliative Care (CAPC) has collected many of these strategies, labeling them "Emotional PPE" (available here: https://www.capc.org/covid-19/emotional-ppe/).

The list of self-care and resiliency suggestions is long and we are reminded of these helpful suggestions frequently in emails from our employers, colleagues, and families. Many have joked that not getting so many self-care emails would promote their self-care. Ultimately, consistently doing one or two things fitted to the individual likely is more important than trying and failing to do it all from a long list of recommended websites, podcasts, apps, worksheets, and aphorisms.

Systemic Grief Preparation and Support Strategies: Structures and Leadership

In the current crisis, even constant mindfulness meditation and regular attendance at Zoom memorials by individual HCWs are likely not enough. The roots of much of HCW distress are grown in the soil of our healthcare systems, and many of the most powerful solutions are likely to be systemic, either to enhance individual resiliency or to prevent harms to individuals. Health systems need to assume a primary responsibility to invest in grief support resources and offer protected time for HCWs to adequately seek support and process grief.[69] Such care systems should be informed by the tenets of trauma-informed care.[47,72] All HCWs require

Table 1
Selected Web-based Resources for Health Care Professionals Coping with COVID-related Grief and Losses

Categories	Topics	Website
Individual Resources		
General resources	Resiliency, Clinician Grief, and Team Health	https://www.capc.org/covid-19/emotional-ppe/.
Anticipatory grief	How 'Anticipatory Grief' May Show Up During the COVID-19 Outbreak	https://www.healthline.com/health/mental-health/how-anticipatory-grief-may-show-up-during-the-covid-19-outbreak
Losing patients to COVID	Losing Patients to COVID-19 and Managing Grief	https://consultqd.clevelandclinic.org/losing-patients-to-covid-19-and-managing-grief/
Losing colleagues to COVID	Grief and Loss in the Workplace During COVID-19	https://www1.nyc.gov/assets/doh/downloads/pdf/imm/workplace-grief-and-loss.pdf
Nondeath loss	COVID-19 and nondeath loss	https://www.adec.org/page/ADECconvo7
Grief coping	Grief, Bereavement, and Coping With Loss (PDQ®) —Health Professional Version	https://www.cancer.gov/about-cancer/advanced-cancer/caregivers/planning/bereavement-hp-pdq
	How the Discomfort of Grief Can Help Us: Recognizing and Adapting to Loss During COVID-19	https://www.hsph.harvard.edu/coronavirus/covid-19-news-and-resources/covid-19-mental-health-forum-series/
	Dealing with Loss, Grief, and Bereavement in a Pandemic	https://www.aacnnursing.org/Portals/42/ELNEC/PDF/Loss-Grief-Bereavement-in-a-Pandemic-Module.pdf
	Managing Bereavement Around the Coronavirus (COVID-19)	https://complicatedgrief.columbia.edu/wp-content/uploads/2020/04/Managing-Bereavement-Around-COVID-19-HSPH.pdf
Complicated grief	COVID-19 and Complicated Grief	https://www.adec.org/page/ADECconvo4
Racism and COVID	Stresses and Hope: Facing Racism and COVID-19	https://news.chapman.edu/2020/06/03/stresses-and-hope-facing-racism-and-covid-19/
Institutional Resources		
General resources	The Good Listening Project	https://www.goodlistening.org/
Leadership	Grief Leadership During COVID-19	http://complicatedgrief.columbia.edu/wp-content/uploads/2020/04/Grief-Informed-Leadership-During-COVID-19.pdf
Best practices	COVID-19: Best Practices in Grief and Bereavement Tele-therapy	https://www.adec.org/page/ADECconvo2
	Meet My Loved One: Supporting Person-Centered Human Connections at Bedside in Times of the COVID	https://www.youtube.com/watch?v=UKczhKqFhDs https://alliantquality.org/wp-content/uploads/2020/08/MMLO_508.pdf

adequate training for the specific jobs they are being required to do. Shifts and schedules must be designed with the dual goals of health center productivity in the face of the current needs, but also HCW sustainability as well. HCWs require adequate PPE. Workplaces must be psychologically safe for HCWs, including promoting open communication about needs and distress and the provision of proactive psychological support for processing and to promote coping.[36,37] Workplaces can promote community among HCWs to share support for each other.

Illness, dying, and death are basic human experiences. Healthcare workplaces must continue as human, soulful environments. The essence of medical care is forming human connections between patients, families, and healthcare personnel.[73] While COVID-19 greatly impacts how individuals connect with each other, we cannot sacrifice the medical professionals' commitment to know and honor the patient and themselves in all their frail but moving humanity. Systems can support recognition of individual HCWs as well as patients.[48] For instance, in March 2020, the University of Alabama at Birminghams's Center for Palliative and Supportive Care developed the "Meet My Loved One" (MMLO) bedside communication tool which invites family to partner with the healthcare team to collaboratively care for patients, including understanding important racial, cultural, and personal elements of patient personhood.[74]

As with all essential workers, if HCWs are expected to leave homes where their families are sheltering-in-place, many will require adequate childcare. Systems should be able to identify HCWs who are at risk for poor outcomes and take steps to prevent these morbidities via adjustments of work settings, hours, or expectations and just-in-time psychological support. Our healthcare institutions must create systems and workflows to address the inevitable psychological toll of healthcare work in the time of COVID-19, including complicated grief, depression, burnout, and post-traumatic stress. This should include formal mechanisms to recognize deaths, offer basic psychological first-aid, adequately debrief difficult experiences, and process grief. Notably, effective debriefing requires a substantial commitment by individuals and institutions as single sessions may be associated with harm.[75] Healthcare center leadership must be communicative, responsive, and express gratitude for their workers. Based on a study of 69 healthcare professionals

during the early days of COVID-19, Shanafelt summarized what they needed from their organizations and leaders: "hear me, protect me, prepare me, support me, and care for me."[39]

HCW Trainee Grief and COVID-19

Special attention must be paid to our trainees. Before COVID-19, trainees were already at heightened risk for poor outcomes, including burnout, from the stresses and trauma of routine clinical training.[76,77] In COVID-19, the disruption to the typical systems of clinical care, supervision, and education has profound impacts. Existing systems to support trainees with the traditional trainee experiences of inadequacy and overwhelm may be disrupted by COVID-19. Trainees likely have not yet fully developed their own personal resources for managing the trauma of some clinical experiences and the stress of clinician grief. They may not have the perspective of experience to know how best to process their grief, to understand their right to express it, or the professional relationships that encourage healthy grieving. Thus, interventions urgently must be developed to address both the routine trainee experiences of facing professional grief for the first time, as well as the extraordinary experience of personal and professional grief in the time of COVID-19.

Conclusion: Next Steps

With the scope and unpredictability of the ongoing COVID-19 public health crisis, we must acknowledge a growing, global mental health crisis, including among HCWs. While no one can predict definitively what it takes for HCWs to mourn, grieve, process, and heal in the time of COVID-19, it is imperative try to prevent when possible and mend when necessary the psychological injury being caused by the pandemic. Clearly, much research is needed into how to prevent and treat complicated grief in patients as well as in HCWs in the time of COVID-19. In addition, more research is needed to understand the ongoing indications and best practices for providing clinical care under PPE as well as remotely, including the impact of both masks and video technology on the patient-clinician relationship. Finally, as a major constituent of the cultural and political "system," healthcare must figure out how to become trustworthy and anti-racist in the face of the systemic racism laid bare in the time of COVID-19.[78,79] Examining privilege and power are necessary within healthcare and among its practitioners.

Through recognition of the risks for complicated or prolonged grief, we have an opportunity to promote both individual and systemic resiliency and resources to address HCW personal and professional grief in the time of COVID-19. Ultimately, competent clinical care requires not just our expertise but our humanity and vulnerability as well. HCWs owe such a comprehensive commitment to our patients, their loved ones, our own loved ones, and to ourselves.

Disclosures/Conflicts of Interest

All authors have nothing to disclose and no conflicts of interest.

No funding was received for this paper.

References

1. Moore B. Dying during Covid-19. Hastings Cent Rep 2020;50:13–15.

2. Morris SE, Moment A, Thomas JD. Caring for bereaved family members during the COVID-19 pandemic: before and after the death of a patient. J Pain Symptom Manage 2020;60:e70–e74.

3. Yardley S, Rolph M. Death and dying during the pandemic. BMJ 2020;369:19–20.

4. Wallace CL, Wladkowski SP, Gibson A, White P. Grief during the COVID-19 pandemic: considerations for palliative care providers. J Pain Symptom Manage 2020;60:e70–e76.

5. John Hopkins Coronavirus Resource Center. Available at: https://coronavirus.jhu.edu/map.html. Accessed March 12, 2021.

6. CDC COVID Data Tracker. Available at: https://covid.cdc.gov/covid-data-tracker/#health-care-personnel. Accessed March 12, 2021.

7. Guardian database "lost on the frontline." Available at: https://www.theguardian.com/us-news/ng-interactive/2020/aug/11/lost-on-the-frontline-covid-19-coronavirus-us-healthcare-workers-deaths-database. Accessed March 12, 2021.

8. Lundorff M, Holmgren H, Zachariae R, Farver-Vestergaard I, O'Connor M. Prevalence of prolonged grief disorder in adult bereavement: a systematic review and meta-analysis. J Affect Disord 2017;212:138e149.

9. Lichtenthal WG, Roberts KE, Prigerson HG. Bereavement care in the wake of COVID-19: offering condolences and referrals. Ann Intern Med 2020;173:833–835.

10. Mayland CR, Harding AJE, Preston N, Payne S. Supporting adults bereaved through COVID-19: a rapid review of the impact of previous pandemics on grief and bereavement. J Pain Symptom Manage 2020;60:e33–e39.

11. Aoun SM, Breen LJ, Howting DA, Rumbold B, McNamara B, Hegney D. Who needs bereavement support? A population based survey of bereavement risk and support need. PLoS One 2015;10:e0121101.

12. Hebert RS, Dang Q, Schulz R. Preparedness for the death of a loved one and mental health in bereaved caregivers of patients with dementia: findings from the REACH study. J Palliat Med 2006;9:683–693.

13. Morris SE, Block SD. Adding value to palliative care services: the development of an institutional bereavement program. J Palliat Med 2015;18:915e922.

14. Remen R. The healer's art curriculum. Available at: http://www.rishiprograms.org/healers-art/the-healers-art-course-description/. Accessed January 14, 2021.

15. Laor-Maayany R, Goldzweig G, Hasson-Ohayon I, et al. Compassion fatigue among oncologists: the role of grief, sense of failure, and exposure to suffering and death. Support Care Cancer 2020;28:2025–2031.

16. Granek L, Tozer R, Mazzotta P, Ramjaun A, Krzyzanowska M. Nature and impact of grief over patient loss on oncologists' personal and professional lives. Arch Intern Med 2012;172:964–966.

17. Lathrop D. Disenfranchised grief and physician burnout. Ann Fam Med 2017;15:375–378.

18. Funk LM, Peters S, Roger KS. The emotional labor of personal grief in palliative care: balancing caring and professional identities. Qual Health Res 2017;27:2211–2221.

19. Tsui EK, Franzosa E, Cribbs KA, Baron S. Home care workers' experiences of client death and disenfranchised grief. Qual Health Res 2019;29:382–392.

20. Sanchez-Reilly S, Morrison LJ, Carey E, et al. Caring for oneself to care for others: physicians and their self-care. J Support Oncol 2013;11:75–81.

21. Lerea LE, LiMauro BF. Grief among healthcare workers: a comparative study. J Gerontol 1982;37:604–608.

22. Robinson B. Virtual grieving: when pandemic death stares us in the face.. Forbes 2020. Available at: https://www.forbes.com/sites/bryanrobinson/2020/07/13/virtual-grieving-when-a-colleague-loses-the-battle-to-covid-19/#308d0a2761b1. Accessed January 14, 2021.

23. Dias E, Jones RC. Last anointing.. .New York Times; 2020. Available at: https://www.nytimes.com/interactive/2020/06/06/us/coronavirus-priests-last-rites.html. Accessed January 14, 2021.

24. CDC Funeral guidance for individuals and families. Available at: https://www.cdc.gov/coronavirus/2019-ncov/daily-life-coping/funeral-guidance.html. Accessed January 14, 2021.

25. Doka KJ. Ethics, end-of-life decisions and grief. Mortality 2005;10:83e90.

26. Hanage WP, Testa C, Chen JT, et al. COVID-19: US federal accountability for entry, spread, and inequities-lessons for the future. Eur J Epidemiol 2020;35:995–1006.

27. Ago Y. We're not all in this together: on COVID-19, intersectionality, and structural inequality. Am J Public Health 2020;110:2020–2022.

28. Gravlee CC. Systemic racism, chronic health inequities, and COVID-19 : a syndemic in the making? Am J Hum Biol 2020: 1–8.

29. Gil RM, Marcelin JR, Zuniga-blanco B, et al. COVID-19 pandemic : disparate health impact on the Hispanic /Latinx population in the United States. J Infect Dis 2020;222:1592–1595.

30. Moore JT, Pilkington W, Kumar D. Diseases with health disparities as drivers of COVID-19 outcome. J Cell Mol Med 2020: 11038–11045.

31. Verdery AM, Smith-Greenaway E, Margolis R, Daw J. Tracking the reach of COVID-19 kin loss with a bereavement multiplier applied to the United States. Proc Natl Acad Sci U S A. 2020;117:17695–17701.

32. Egede LE, Walker RJ. Structural racism, social risk factors, and Covid-19 — a dangerous convergence for black Americans. N Engl J Med 2020;383:e77.

33. Devakumar D, Shannon G, Bhopal SS, Abubakar I. Racism and discrimination in COVID-19 responses. Lancet 2020;395:1194.

34. Teixeira JA, Teixeira JA. Stigmatization, discrimination, racism, injustice, and inequalities in the COVID-19 era. Int J Health Policy Manag 2020;9:484–485.

35. Nguyen LH, Drew DA, Graham MS, et al. Coronavirus pandemic epidemiology consortium. Risk of COVID-19 among front-line health-care workers and the general community: a prospective cohort study. Lancet Public Health 2020;5:e475–e483.

36. Selman LE, Chao D, Sowden R, et al. Bereavement support on the frontline of COVID-19: recommendations for hospital clinicians. J Pain Symptom Manage 2020;60:e81–e86.

37. Janssen DJA, Ekström M, Currow DC, et al. COVID-19: guidance on palliative care from a European Respiratory Society International Task Force. Eur Respir J 2020;56: 2002583.

38. Moore KJ, Sampson EL, Kupeli N, Davies N. Supporting families in end-of-life care and bereavement in the COVID-19 era. Int Psychogeriatr 2020;32:1245–1248.

39. Shanafelt T, Ripp J, Trockel M. Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. JAMA 2020;323:2133–2134.

40. Woolf SH, Chapman DA, Lee JH. COVID-19 as the leading cause of death in the United States. JAMA 2021;325:123–124.

41. Bashshur R, Doarn CR, Frenk JM, Kvedar JC, Woolliscroft JO. Telemedicine and the COVID-19 pandemic, lessons for the future. Telemed J E Health 2020;26:571–573.

42. Ekeland AG, Bowes A, Flottorp S. Effectiveness of telemedicine: a systematic review of reviews. Int J Med Inform 2010;79:736–771.

43. Kruse CS, Krowski N, Rodriguez B, et al. Telehealth and patient satisfaction: a systematic review and narrative analysis. BMJ Open 2017;7:e016242.

44. Kissi J, Dai B, Dogbe CS, Banahene J, Ernest O. Predictive factors of physicians' satisfaction with telemedicine services acceptance. Health Informatics J 2020;26:1866–1880.

45. Fumis RRL, Junqueira Amarante GA, de Fátima Nascimento A, Vieira Junior JM. Moral distress and its contribution to the development of burnout syndrome among critical care providers. Ann Intensive Care 2017;7:71.

46. Pendry PS. Moral distress: recognizing it to retain nurses. Nurs Econ 2007;25:217.

47. Brown C, Peck S, Humphreys J, et al. COVID-19 lessons: the alignment of palliative medicine and trauma-informed care. J Pain Symptom Manage 2020;60:e26–e30.

48. Wei E, Segall J, Villanueva Y, et al. Coping with trauma, celebrating life: reinventing patient and staff support during the COVID-19 pandemic. Health Aff (Millwood) 2020;39: 1597–1600.

49. Lu W, Wang H, Lin Y, Li L. Psychological status of medical workforce during the COVID-19 pandemic: a cross-sectional study. Psychiatry Res 2020;288:112936.

50. Lai J, Ma S, Wang Y, et al. Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. JAMA Netw Open 2020;3:e203976.

51. Albuquerque J, Tulk S. Physician suicide. CMAJ 2019;191:E505.

52. Knoll C, Wakins A, Rothfeld M. I couldn't do anything': the virus and an E.R. doctor's suicide. New York Times; 2020. Available at: https://www.nytimes.com/2020/07/11/nyregion/lorna-breen-suicide-coronavirus.html. Accessed January 14, 2021.

53. Kohli P, Virani SS. Surfing the waves of the COVID-19 pandemic as a cardiovascular clinician. Circulation 2020;142:98–100.

54. Hanbury R. The impact of COVID-related grief on palliative care clinicians. CACP resources. Available at: https://www.capc.org/events/recorded-webinars/impact-covid-related-grief-palliative-care-clinicians/. Accessed January 4, 2021.

55. Stolove CA, Galatzer-Levy IR, Bonanno GA. Emergence of depression following job loss prospectively predicts lower rates of reemployment. Psychiatry Res 2017;253:79–83.

56. Chang BP, Bonanno GA. Battle scars and resilience at the health care frontline. Acad Emerg Med 2020;27:934–935.

57. Bonanno GA. Loss, trauma, and human resilience: have we underestimated the human capacity to thrive after extremely aversive events? Am Psychol 2004;59:20–28.

58. Schwartz R, Sinskey JL, Anand U, Margolis RD. Addressing postpandemic clinician mental health: a narrative review and conceptual framework. Ann Intern Med 2020;173:981–988.

59. McFarlane AC, Williams R. Mental health services required after disasters: learning from the lasting effects of disasters. Depress Res Treat 2012;2012:970194.

60. Edelman EJ, Aoun-Barakat L, Villanueva M, Friedland G. Confronting another pandemic: lessons from HIV can inform our COVID-19 response. AIDS Behav 2020;24:1977–1979.

61. Shanafelt TD, Sloan JA, Habermann TM. The well-being of physicians. Am J Med 2003;114:513–519.

62. Southwick S, Charney D. Resilience: the science of mastering life's greatest challenges. Cambridge: Cambridge University Press; 2012.

63. Kearney MK, Weininger RB, Vachon ML, Harrison RL, Mount BM. Self-care of physicians caring for patients at the end of life: ''being connected. a key to my survival. JAMA 2009;301:1155e1164.

64. Sansó N, Galiana L, Oliver A, et al. Palliative care professionals' inner life: exploring the relationships among awareness, self-care, and compassion satisfaction and fatigue, burnout, and coping with death. J Pain Symptom Manage 2015;50:200–207.

65. Fadul N, Elsayem AF, Bruera E. Integration of palliative care into COVID-19 pandemic planning. BMJ Support Palliat Care 2021;11:40–44.

66. Keene EA, Hutton N, Hall B, Rushton C. Bereavement debriefing sessions: an intervention to support health care professionals in managing their grief after the death of a patient. Pediatr Nurs 2010;36:185–189.

67. Macpherson CF. Peer-supported storytelling for grieving pediatric oncology nurses. J Pediatr Oncol Nurs 2008;25:148–163.

68. Phillips C, Welcer B. Songs for the soul: a program to address a nurse's grief. Clin J Oncol Nurs 2017;21:145–146.

69. Fallek R, Tattelman E, Browne T, Kaplan R, Selwyn PA. Helping health care providers and staff process grief through a hospital-based program. Am J Nurs 2019;119:24–33.

70. Eagle S, Creel A, Alexandrov A. The effect of facilitated peer support sessions on burnout and grief management among health care providers in pediatric intensive care units: a pilot study. J Palliat Med 2012;15:1178–1180.

71. Taylor WD, Blackford JU. Mental health treatment for front-line clinicians during and after the coronavirus disease 2019 (COVID-19) pandemic: a plea to the medical community [published online ahead of print, 2020 May 26]. Ann Intern Med 2020: M20–2440.

72. Browne D, Roy S, Phillips M, Shamon S, Stephenson M. Supporting patient and clinician mental health during COVID-19: via trauma-informed interdisciplinary systems. Can Fam Phys 2020;66:e190–e192.

73. Soriano JB. Humanistic epidemiology: love in the time of cholera, COVID-19 and other outbreaks. Eur J Epidemiol 2020;35:321–324.

74. Tucker, Rodney O., Huang CS. Meet my loved one. Available at: https://www.uab.edu/medicine/palliativecare/patient-care/covid-19-resources. Accessed January 15, 2021.

75. Brooks SK, Rubin GJ, Greenberg N. Traumatic stress within disaster-exposed occupations: overview of the literature and suggestions for the management of traumatic stress in the workplace. Br Med Bull 2019;129:25e34.

76. Butler LD, Carello J, Maguin E. Trauma, stress, and self-care in clinical training: Predictors of burnout, decline in health status, secondary traumatic stress symptoms, and compassion satisfaction. Psychol Trauma 2017;9:416–424.

77. Zhou AY, Panagioti M, Esmail A, et al. Factors associated with burnout and stress in trainee physicians: a systematic review and meta-analysis. JAMA Netw Open 2020;3:e2013761.

78. Warren RC, Forrow L, Hodge Sr DA, Truog RD. Trustworthiness before trust - Covid-19 vaccine trials and the black community. N Engl J Med 2020;383:e121.

79. Fortuna LR, Tolou-Shams M, Robles-Ramamurthy B, Porche MV. Inequity and the disproportionate impact of COVID-19 on communities of color in the United States: the need for a trauma-informed social justice response. Psychol Trauma 2020;12:443–445.