#### **ORIGINAL PAPER**



# "Making Sure We Are All Okay": Healthcare Workers' Strategies for Emotional Connectedness During the COVID-19 Pandemic

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#### Abstract

Healthcare workers have been on the front lines throughout the COVID-19 pandemic, treating affected patients and navigating overwhelmed healthcare systems. Emotional connection has been associated with resilient outcomes following collective trauma. This qualitative study examined how healthcare workers define emotional connectedness during the COVID-19 pandemic and their adaptive emotional connection strategies. Data were gathered through the first wave of the online COVID-19 Pandemic and Emotional Well-Being study, a prospective panel study of the psychological impact of COVID-19 on frontline workers and the general public. This study focused on three extended-response questions about definitions of and strategies for emotional connectedness. Data were analyzed using reflexive thematic analysis. Participants conceptualize emotional connectedness as having empathy and value, help and support, presence, and vulnerability. They also describe emotionally connected relationships as being characterized by mutuality and frequent contact. Participants identify current behavioral strategies for cultivating emotional connectedness, such as using technology, providing instrumental help or sending gifts via mail, and building quality time within their households. They also report challenges in maintaining these connections. Future research must contribute knowledge about effective interventions for essential healthcare workers in the aftermath of COVID-19. Specific recommendations for social work practitioners are also discussed.

 $\textbf{Keywords} \ \ COVID\text{-}19 \cdot Healthcare \ workers \cdot Qualitative \ research \cdot Collective \ trauma \cdot Social \ support \cdot Emotional \ connection$ 

In early 2020, the spread of the highly contagious novel coronavirus disease 2019 (COVID-19) caused a global pandemic and effected drastic disruptions to social, economic, and healthcare structures across the world. With the death toll in the United States exceeding 187,000 in August 2020 (Centers for Disease Control & Prevention 2020), scientists are rapidly working to develop a vaccine that will halt the virus's spread and permit relaxation of presently-necessary, nationally-implemented physical distancing measures (Lurie et al. 2020). In the meantime, the self-isolation measures

accompanying this pandemic have highlighted significant mental health concerns consequent to individuals' limiting physical contact, social activities, religious services, and other traditional means of emotional connection (Usher et al. 2020).

All of the radical changes and losses associated with the COVID-19 pandemic constitute a form of collective trauma, a stressful event that universally affects a geographical area and/or social group and fundamentally disrupts the structures of, and bonds within, communities (Erikson 1998). Following exposure to collective trauma, communities and institutions—and the individuals who comprise them—can display elevated distress, tension, and dysregulation (Erikson 1998; Hirschberger 2018). The collective trauma experiences of essential healthcare workers (e.g., physicians, nurses, technicians, and other healthcare personnel), in particular, are compounded by the day-to-day stress of working with infected patients, shortages in protective equipment, and fears of infecting others (Potloc & Canadian Public Health Association 2020). Consequently, interdisciplinary



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mental health experts have prioritized research on the mental health and well-being of frontline healthcare professionals working amidst the COVID-19 pandemic, specifically studies focused on healthcare workers' coping mechanisms, emotional supports, and structural or instrumental resources (Holmes et al. 2020). This exploratory study was designed to provide novel insight into one aspect of essential healthcare workers' mental health during the COVID-19 pandemic: emotional connection with others.

# Stress Among Healthcare Workers During Pandemic Conditions

Healthcare workers face a heightened level of work-related stress during infectious disease outbreaks (Cao et al. 2020; Walton et al. 2020). A meta-analysis of literature examining the psychological impact of past outbreaks among healthcare workers found their average rate of psychological distress to be approximately 40% (Vyas et al. 2016). For healthcare workers exposed to SARS, H1N1, Ebola, or HIV, the average rates of post-traumatic stress disorder (PTSD), depression, and anxiety were approximately 21%, 46%, and 45%, respectively. Qualitative inquiry has further illuminated the psychological challenges healthcare workers face during pandemics: Maunder et al. (2003) study with Toronto medical workers during the SARS outbreak revealed pervasive themes of emotional distress, with healthcare workers reporting fears of infecting loved ones, anxiety, and uncertainty about the future. Similarly, a study of the 1995 Kikwit Ebola outbreak found that healthcare workers experienced psychological stress due to concerns about contracting Ebola and the safety of their families, isolation from family and colleagues, and perceived loss of control (Hall et al. 2008).

For healthcare workers, the COVID-19 pandemic presents high-pressure circumstances that have been associated with psychological distress in previous disease outbreaks. Cao et al. (2020) found that, compared with prior to the pandemic, Chinese medical workers in a COVID-19 fever clinic worked longer hours and more shifts. Medical staff also reported experiencing reduced levels of concentration, feeling more tired but getting less sleep, and having higher than typical patient loads. In addition, pandemic conditions have been linked with emotional stress in healthcare workers. A recent study of 2299 staff members at Fujian Provincial Hospital found that the frontline clinical staff working with COVID-19 patients experienced significantly higher levels of fear, anxiety, and depression, compared with hospital administrative staff (Lu et al. 2020). Lai et al. (2020) found that healthcare workers in hospitals in China reported high rates of depressive symptoms (45%), anxiety (45%), insomnia (34%), and distress (72%). A recent study of 578 healthcare workers in Canada found 47% reported a need for psychological support and reported feeling anxious (67%), unsafe (49%), overwhelmed (40%), helpless (29%), and discouraged (28%; Potloc & Canadian Public Health Association 2020).

While higher levels of workplace stress may be expected in healthcare settings during a public health crisis, the added dynamic of quarantining and physical distancing can complicate healthcare workers' capacities to cope with this stress (United Nations 2020). Quarantining includes interpersonal isolation measures designed to prevent the spread of a highly communicable disease and results in limited in-person contact with others. During the COVID-19 pandemic, quarantine measures across the United States have led to closure of community spaces in addition to widespread cancellation of gatherings designed for celebration and connection with others. Experts warn that such quarantine measures and social isolation in the aftermath of collective trauma could increase mental health concerns (United Nations 2020). Among medical staff, specifically, increased levels of post-traumatic stress, acute stress disorder, anxiety, and depression are frequently reported during and after quarantine measures are imposed (Brooks et al. 2020; Torales et al. 2020). Such psychosocial adjustment and mental health difficulties can also impede healthcare workers' ability to perform their jobs and have been linked with burnout and poor medical decision making (Kumar 2016).

# **Emotional Connection as a Coping Resource**

Theories of communal coping offer one possible framework to understand the linkage between emotional connection and positive adaptation in the face of adversity. Communal coping occurs during times of shared stress or trauma, when collaborative problem solving, emotional support, and group coping are used to navigate challenging circumstances (Lyons et al. 1998). Fundamental to communal coping theory, however, is the belief that stress coping is an inherently social process; the stressor is viewed as one shared by those involved, and the solutions and coping processes are subsequently framed as shared experiences (Lyons et al. 1998). Thus, individual burden, blame, and guilt are mitigated by the belief that "We're all in this together." In addition to the individual benefits that one derives from emotional connection during collective trauma (e.g., expanded access to resources, stress buffering, emotional support), this framework asserts that communal coping serves critical functions for relationships themselves, including maintaining and strengthening relational commitments so as to promote connections that endure beyond the stressful circumstance.

Empirical research has indeed identified emotional connection as a key coping resource for healthcare workers, shedding light on why quarantine conditions may be so



challenging. Studies on resilience and well-being among medical workers have consistently identified social support and connection with others as a primary coping mechanism to help manage stressful working conditions (Vorell and Carmack 2015; Ziegelstein 2018). For example, a qualitative study of intensive care unit nurses—a group known to experience disproportionately high levels of work-related post-traumatic stress-found that resilient nurses relied on a positive social network as a primary source of support and encouragement during challenging times (Mealer et al. 2012). Participants' positive social networks were characterized by consistent emotional support, communication, and connectivity. Research has additionally identified organizational-level opportunities for connection that promote resilience among healthcare staff. Peer support and debriefing groups, instrumental and emotional support from supervisors, and opportunities for both on-site and remote psychological support have helped medical workers manage the anxiety and isolation of working in crisis conditions (Walton et al. 2020).

Although connection to others has demonstrated clear benefits to healthcare workers' mental health and well-being, the quarantine and physical distancing measures associated with COVID-19 have disrupted many traditional channels for maintaining these connections. Early research from Chinese healthcare settings indicates that social connection remains the primary coping strategy for healthcare workers, but has been adapted to align with public health guidelines and quarantine restrictions (Cao et al. 2020). For example, Beijing hospital staff have indicated that video-chatting and phone conversations with family are common coping strategies to manage the daily stress of working with COVID-19 patients (Cao et al. 2020).

# **Current Study**

To date, there is no published research examining how healthcare workers in the United States are experiencing emotional connectedness during the COVID-19 pandemic. Given literature underscoring healthcare workers' stress during disease outbreaks, coupled with theoretical and empirical understandings about the value of communal coping, the connective, interpersonal experiences of healthcare workers during COVID-19 necessitate exploration. The current study addressed this gap in knowledge through a thematic analysis of essential healthcare workers' conceptualizations of emotional connectedness, primarily focusing on their experiences of emotional connectedness and, secondarily, their adaptive strategies to maintain emotional connectedness with loved ones during the pandemic. Lastly, areas for future research and practice recommendations with this population are discussed.

#### Methods

# **Participants and Procedures**

Data are from the COVID-19 Pandemic and Emotional Well-Being Study, which is an international, prospective panel study of the psychological impact of the COVID-19 pandemic on first responders, essential classified workers, and the general public. This study received Institutional Review Board approval from Case Western Reserve University. Participants responded to online advertisements posted to social media (i.e., Twitter, Instagram, Facebook), emailed via listservs, and surveys sent by hospital administrators in the Midwestern United States following direct outreach by the research team. Participants were recruited to anonymously answer questions via an online survey about how the COVID-19 pandemic may be affecting their emotional well-being and the type of coping strategies they were using to minimize emotional distress. The only exclusion criteria were that participants needed to be over 18 years of age and speak/understand English. After informed consent, participants completed questions on demographics, the extent to which they were concerned with COVID-19 issues, level of contact with confirmed COVID-19 cases, coping strategies used to reduce stress, and overall mental health and relational health.

Data for this study are from wave one, collected between April 12, 2020 and May 22, 2020. During this time period, 808 participants, residing in 24 countries and 47 states in the United States, consented to participate. Of those, 118 reported current employment in the healthcare industry, and 103 completed the three extended-response questions of interest in this study. Given the focus on essential healthcare workers' experiences, eight participants were excluded because of their nonessential worker status. Six of the healthcare participants indicated having a residence outside of the United States, and these responses were also excluded, resulting in a total of 89 participants with data for this analysis. To explore current conceptualizations of emotional connectedness, participants responded to the following prompt: "How would you define 'emotionally connected/close'?" Participants also answered the following two questions about their contemporary strategies for experiencing emotional connectedness: "How have you stayed emotionally connected/close to friends and family during the COVID-19 pandemic?" and "How have you adapted to this reduced contact with family? If you find reduced contact with family to be positive for you, please state that."

## **Analyses**

Descriptive analyses were conducted for the sample population, which included those who reported living in the United States, were employed in the healthcare industry,



and identified as essential employees during the COVID-19 pandemic (i.e., those who were required to report to work rather than work from home or not work at all). Reflexive thematic analysis was employed to synthesize and organize patterns of meaning in the qualitative data. Data for the three extended-response questions were downloaded from the survey's REDCap online platform and uploaded into the qualitative analysis software, NVivo 12 (QSR International 2018). The analysis was completed by the first three authors, with master's-level (AEB, EKM) and doctoral-level research training (KAB). Guided by Braun and Clarke's (2006, 2019) approach to thematic analysis, the first two authors reviewed all data and collaborated to inductively create a codebook based on initial impressions of semantic and conceptual data patterns. Using this codebook, the first two authors independently coded all the data, iteratively refining codes and memoing notes and reflections. Upon completing the first round of coding, the two coding processes were merged into a single project file and the third author independently reconciled any discrepant preliminary coding decisions. Following reconciliation, the first two authors collaboratively developed the remaining coding hierarchy by categorizing primary codes into secondary codes, and subsequently, themes. Working iteratively and jointly, the first two authors developed working definitions of each theme, informed by the data and primary/secondary codes (Braun and Clarke 2006). Trustworthiness was maintained through confirmability (i.e., inductive coding process, independent coding) and dependability (i.e., maintenance of an audit trail; Lincoln and Guba 1986).

# **Findings**

# Sample Characteristics

The study sample included 89 adults who resided in the United States, were employed in healthcare, and identified as essential workers (see Table 1). Over two-thirds of the participants were from Midwestern states. The average age of the sample was 33.18 years (SD = 11.36, range 20-68) and the majority was female (86.52%) and White (87.58%). The majority of participants identified as a nurse (62%), physician (14%), or administrator (13%). On average, participants reported having worked 8.49 years (SD = 9.52, range < 1-45) in the healthcare industry with an average of 42.26 hours per week (SD = 15.51, range 1-82) during the COVID-19 pandemic and an average of 43.82 hours per week (SD = 13.54, range 16-80) prior to the COVID-19 pandemic. Over a third of the sample (36.35%) was a caregiver for a child, older adult, someone with a disability or illness, or other family member. Over two thirds (70.11%) reported two or more

Table 1 Demographics of study sample of essential healthcare workers in the United States (N=89)

	n	M (SD)/%	Range
Age, year	89	33.18 (11.36)	20–68
Gender			
Male	11	12.36	
Female	77	86.52	
Transgender	1	1.12	
Race/ethnicity			
White only	78	87.58	
Black only	4	4.49	
Asian only	3	3.37	
Mixed race	2	2.25	
Hispanic/Latinx	2	2.25	
Employment title			
Nurse	54	60.67	
Physician	14	15.73	
Administrator	12	13.48	
Behavioral/mental health specialist	6	6.74	
Rehabilitation professional	2	2.25	
Years employed in healthcare	89	8.49 (9.52)	1-45
Average hours per week during COVID-19 pandemic	88	42.26 (15.51)	1-82
Average hours per week prior to COVID-19 pandemic	89	43.82 (13.54)	15-80
Caregiver or guardian	32	36.36	
Adults living in the same household	87	2.08 (1.11)	1–7
Children living in the same household	88	.5 (.83)	0–4



adults, and 32.95% reported one or more children, living in the same household.

# **Quality of Emotional Connectedness**

Through participants' conceptualizations of emotional connectedness, we identified four thematic qualities: empathy and value, help and support, presence, and vulnerability. For empathy and value, participants described an emotionally connected experience as being "understood" by another. One participant specified that it is "feeling like you can open up to this person about your emotions and that they understand you." Others tied this experience of being understood to demonstrations of empathy, defining emotional connectedness and closeness as "understanding and empathizing with one another" and "understanding, listening, compassion." The act of listening—referred to by one participant as "truly listening"—was also highlighted as a fundamental part of cultivating an understanding of and empathy toward another. Participants described how these experiences of receiving and offering understanding and empathy were related to a sense of being accepted and valued; as one recounted, emotional connectedness entails "being empathetic towards one another and setting aside past differences. Valuing others for who they are."

In regards to help and support, participants frequently described feeling supported, both instrumentally and emotionally, in emotionally connected interactions. Participants reported feeling that this support was reliable, enduring, and steadfast; in the words of one participant, it is the sense of being able "to rely on them always." This sentiment was echoed by another participant who characterized emotional connectedness as "knowing that that person is there for me no matter what." In addition, participants illuminated the value of help and support in these relationships within the context of the COVID-19 pandemic. One participant described an emotionally connected relationship as "being able to talk with [someone] about all the stress going on and all the uncertainty. Knowing they will support me through all the changes." Yet another participant recounted the value in assistance from her children, stating, "I find comfort in my children at home. I am proud of how they have stepped up in this time to support the home so that I can continue to work and not be concerned."

Participants emphasized the importance of various facets of the theme *presence* in emotional connectedness. Some recounted this in the context of having "shared experiences" with others, living or cooking together, or having "hearts to hearts, time spent together." Participants described the value of physical proximity and affection in emotionally connected experiences; in the words of one participant, presence is exemplified by "being able to be around them [loved ones], give them a hug." Others, however, imparted the importance

of showing up in these emotionally connected relationships through nonphysical demonstrations of love and care. Participants articulated evidence of this presence as "checking in on loved ones and making sure they know how much I love them and care for them" or "caring and thinking of others/them." Moreover, participants illustrated the value of this presence during COVID-19 as a way of caring for others. One participant described enactment of this as a "check-in on friends with children/babies and my family who have medical conditions that make them high risk."

The fourth thematic quality identified from participants' conceptualizations of emotional connectedness was vulnerability. In the words of one participant, emotional connectedness is the "ability to be vulnerable without strings or awkwardness attached." One participant further specified that the depth of the communication was important-emotional connectedness is defined by "[being] open to and [the] ease of expressing and discussing deep thoughts and emotions." Participants emphasized the importance of being able to share oneself with others freely and with "an ability to be transparent." Others underscored being able to talk to others about any topic, and elaborated that this sense of trust and safety develops the capacity to engage in this vulnerability or "communicate [and] share thoughts and feelings," "discuss fears, thoughts, wants and needs," and "be open about struggles."

#### **Structure of Emotional Connectedness**

Participants also discussed the structure of these connections, specifically how frequency and mutuality constitute and organize these interactive experiences. Participants specified the regularity of contact with loved ones, using language like "consistently," "regularly," or "frequently" to describe their conceptualizations of emotional connectedness. They linked the frequency of contact to their ideas of emotional connectedness; this steady, dependable contact cultivates a sense of "knowing what is going on in each other's lives." Indeed, one frontline healthcare worker defined emotional connectedness as "being in contact, staying up to date on life events," and another echoed this by characterizing these relationships as ones in which people are "in contact about daily life, talking about feelings and recent events." During the pandemic, participants underscored the importance of continuing this frequent contact to maintain or cultivate these emotionally connective experiences. As one participant described, "it's hard for the whole family, but we've tried to stay in video contact regularly." Another participant described "calling my parents at least once a day and making sure they are okay...," highlighting how this frequent contact was a way of ensuring the health and wellbeing of loved ones from a distance.



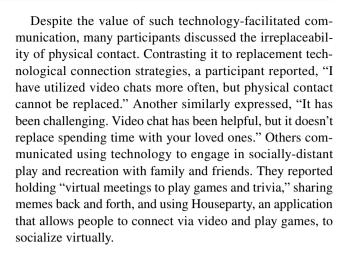
Participants conceptualized emotional connectedness as an experience of *mutuality* in a relationship. Emotional connectedness is fundamentally characterized by all parties offering and receiving the same qualities (e.g., empathy and value, help and support, presence, vulnerability). Language symbolizing this reciprocity, such as "with one another," "each other," or "we," was woven throughout participants' definitions of emotional connectedness. Participants varied in whether they described their conceptualizations from the perspective of the provider (e.g., "understanding another person's emotions) or recipient (e.g., "feeling you are in their thoughts"), highlighting the mutuality that characterizes emotional connectedness. One participant reiterated in multiple ways how these qualities of emotional connectedness (i.e., empathy, support) were fundamentally ones of mutuality: "having an understanding of what each other is going through and experiencing, working to improve each other's mindset and mood, and feeling supported and giving support." Another participant provided insight into how, specifically, mutuality can facilitate emotional connectedness in stating "openness to honestly share my experiences and for my spouse so honestly share her experiences with me." In other words, sharing of the self with others—relating back to the thematic quality of vulnerability—can allow and create space for loved ones to do the same in return.

# **Adaptive Strategies for Emotionally Connecting**

Participants described a variety of behaviors for making and maintaining connections with loved ones throughout the pandemic such as utilizing technology, sending gifts and cards via mail, or initiating quality time with family at home. Others, however, reflected on no real change in their connection strategies and yet others reported withdrawing or having difficulty staying emotionally connected.

# **Facilitative Technology**

A majority of participants related "checking in more often" with phone calls, texting, sending photos, and using vide-oconferencing applications, such as Zoom or FaceTime, "more frequently than before" to adapt to reduced physical contact and stay emotionally connected to loved ones. Some participants described facilitative technology as mollifying sorrow from being physically isolated from family and friends. One participant explained, "I am sad about not being able to physically see my family members, but have been spending a lot of time with them on FaceTime," and another echoed, "talking on the phone more helps not being able to see them in person." Lamenting the loss of shared time, another participant reflected, "I have struggled with guilt and grief at missing time with my family. I have used FaceTime and phone calls to help."



#### **Tangible Demonstrations of Care**

Participants reported offering instrumental help, listing "running errands for each other," or sending concrete communication to loved ones via cards, letters, and care packages. Participants additionally described adapted in-person visits to enhance safety while enjoying loved ones' company, such as "driving by" or "visiting through windows to see family." Many reported visiting in-person on occasion but "maintaining the correct social distancing." Another participant detailed "visiting them once in a while, all the while still maintaining social distancing (by staying in my car, or sitting outside on the porch at least six feet apart)."

#### **Household Connectedness**

Participants described engaging in more "quality time" with family in their household and, in particular, feeling at ease with having their children in the family home. For instance, one participant described "It's been kind of nice. My children are home; we are connecting more" and another similarly echoed, "I find comfort in my children at home." Participants found ways of enjoying recreation together, such as holding game and movie nights, as well as appreciating each other's leisure by "enjoying meals together."

## Withdrawing from Others

In contrast to those increasing contact through connective technology, a smaller number of participants described reducing engagement with family. For some, this seemed extrinsically driven by the dangers of the pandemic; one participant reported "I have not visited my family or partner—it's a long-distance relationship, [they're] also in health-care—for over 1 month. [There have been] three cancelled trips, [and we've] postponed upcoming plans to visit." For others, reduced connection seemed intrinsically driven: "I have become more withdrawn. I don't particularly want to



talk to other people. I am never alone, either, as my kids are always there." Of note, a subset of participants appeared to have misread the question "How have you stayed emotionally connected...?" as "Have you stayed emotionally connected...?" and responded in ways that indicated difficulty maintaining connection with loved ones rather than withdrawing from others, but some responded "no" or "somewhat." Others stated "To the best of our ability" or replied "[I've] tried to, but feel like it's not working."

#### No Change

A subset of participants reported no real change in contact with their families since the pandemic with statements such as "I'm still talking to them frequently," "My habits have barely changed," or "It's no different." One participant explained "It is not far off my baseline. I see my family when I want, about once a week or every 2 weeks." Another reflected "I've had no change in emotional state due to less contact with family outside of my home. [I'm] connecting through Facebook or phone as needed."

# Others' Safety as Motivating Adaptive Strategies

Numerous participants explicitly contextualized their motivations for adapting family and social routines as concern for the health of vulnerable family members with assertions such as "their safety is most important." Commenting on her perceived responsibility and accountability to extended family, a participant explained:

Since COVID-19 started, I have not been around any family besides my 14-year-old son who lives with me. My parents are elderly and my brother's family has a 1-year-old infant at home, so I refuse to expose them to me.

For others, socially isolating from grandparents felt particularly difficult, but the thought of potentially infecting them served as a strong motivator to remain distanced. One participant reflected:

I miss seeing and talking with my grandmother on a regular basis. I am not seeing her and am calling her rarely—when I get time—because I am working and taking care of my kids. I try to think to myself that it is best if I don't see her right now and she stays safe.

Another participant described the interruption in her daughter's grandparent-grandchild relationship as the most difficult aspect of reduced family contact, stating "It has 100% been the most difficult part for me. My parents live 5 min away and are very involved in my daughter's life. They have not seen her for 31 days now."

#### Discussion

# **Main Findings**

Findings from our study offer valuable insight into the interpersonal experiences of healthcare workers in the still-developing context of COVID-19—namely, how healthcare workers define emotional connectedness and how they have adapted to maintain connectedness to loved ones against the backdrop of the pandemic. Healthcare workers described nuanced interactions characterized by expressions of empathy, valuing others, offering help and support, demonstrations of physical and emotional presence, and vulnerability. These conceptualizations of emotional connectedness comport with key concepts of adult attachment literature, underscoring relationships with those characteristics as ones wherein people feel most seen, loved, and secure (Sable 2008). At the same time, however, some participants in our study indicated difficulty tending to their relationships with loved ones. One particularly illuminating response was from a participant who described having become "more withdrawn" and that she did not "particularly want to talk to other people." Others also conveyed difficulty maintaining their relational connections in responses such as "no" or "[I've] tried to, but feel like it's not working."

One potential explanation for these findings is that the qualities participants described as being able to both offer and receive in emotionally connected relationships require intentional attention and effort. One's ability to share such qualities in a relationship—empathy, expressions of love, instrumental help, presence, and vulnerability—can be compromised under stressful circumstances (Sandi and Haller 2015). As healthcare workers are at greater risk for experiencing poor mental and emotional health during the particularly stressful context of disease outbreaks, it is likely that such strains can have cascading effects on social relationships (Brooks et al. 2020; Reynolds et al. 2008). Although individual participants did not directly explicate this linkage, it is noteworthy that their collective conceptualizations of rich, reciprocal, and attuned experiences of emotional connection were also presented alongside expressions of sorrow, frustration, and loss around these adapted modes of connecting with loved ones.

Research supports the notion that social support is imperative in times of crisis and adversity, and the isolation and sense of disconnect that results from physical distancing measures may negatively affect someone's mental health (Hawryluck et al. 2004). While participants did not explicitly discuss the negative consequences of social isolation, the current study illustrates the challenging nature of being separated from friends and family.



The impact of social isolation was highlighted by the sadness and sense of loss articulated in many participants' responses, despite the creativity and energy devoted to maintaining contact with others through video chatting, increased texting, or more phone calls. As participants expressed, increased use of video chat could not replace physical contact or spending in-person time with loved ones. Though not measured in the current study, mental health challenges such as depression, irritability, insomnia, emotional disturbance, and post-traumatic stress disorder can manifest or be compounded due to social isolation (Hawryluck et al. 2004; Reynolds et al. 2008; Yoon et al. 2016). In the broader context of healthcare work, such challenges can result from stressors including long quarantine duration, inadequate supplies, unemployment and subsequent financial loss, as well as boredom, frustration, fears of becoming infected, and inadequate information (Brooks et al. 2020). Healthcare workers who have been quarantined may experience acute stress symptoms as well as feelings of anger, fear, loneliness, helplessness, sadness, and emotional exhaustion (Brooks et al. 2020; Maunder et al. 2003; Reynolds et al. 2008).

Findings from our study highlight that, in addition to participants sharing difficulties in keeping connected with their friends and family, many others described myriad ways of engaging with loved ones and finding joy in the altered social circumstances of COVID-19. Participants in our study conveyed a sense of playfulness in their descriptions of emotional connection activities such as sharing memes and playing group trivia. Participants reported ways of enjoying leisure and play within their families, highlighting game or movie nights and enjoying shared meals. These findings are well situated within the broader literature on recreation which indicates that social forms of recreation and "play" serve as critical stress-coping resources during times of acute or chronic stress (Hutchinson et al. 2008; Iwasaki, Mannell et al. 2005; Kleiber et al. 2002). In particular, individuals' beliefs about the availability of their social support network and their time spent in "leisure companionship" have been identified as stress buffers that reduce the negative effects of stress and trauma on physical and mental health (Hutchinson et al. 2008; Iwasaki et al. 2005). Kleiber et al. (2002) report that leisure-based social connections reduce stress through various mechanisms, including distraction from the stressful circumstance, nurturing a sense of enjoyment with life, having something to look forward to, and providing a sense of normalcy and connection to one's life before the stressful circumstance. Findings from the present study align with this work while also demonstrating the unique ways that virtual social "play" and recreation fulfill a desire for relational connection and offer a form of communal coping amidst the restrictions of physical distancing.



#### Limitations

Despite these contributions, this study had aspects that limit transferability and potential applicability to future research and practice. First, although the authors engaged in strategies (e.g., independent coding, iterative code refinement, memoing) to bolster the trustworthiness of findings, it is possible that crucial aspects of healthcare workers' experiences were overlooked during analysis. It is worth noting that none of the authors were healthcare workers nor were working in any essential capacity during the COVID-19 pandemic; while this may limit nuanced insight into healthcare workers' experiences, it may also mitigate risk of confirmation bias. Second, the parent study did not contain a representative sample—reflected in our subsample of predominantly White, female participants—and included only an initial sample. Third, because data collection is ongoing and only baseline data had been collected at the time of qualitative analysis, this study was cross-sectional in nature, which prevented participants from reflecting on evolving definitions of emotional connectedness or adaptive strategies throughout COVID-19. Further, this study did not measure the mental health symptoms of participants; the study would have been further strengthened by the inclusion of mental health symptoms measures in order to explore the ways in which emotional connection may be promoting resilience among healthcare professionals. Lastly, one of the open-ended questions analyzed in this study ("How do you define 'emotional connected/close'?") lends itself to a phenomenological approach. However, the short responses provided by our participants, as compared with extended interview responses, did not permit deeper exploration of their lived experiences of social connectedness. Subsequent studies in this area may consider in-depth interviews.

#### **Areas for Future Research**

Healthcare workers remain on the front lines, carrying out the global response to the COVID-19 pandemic. Future research should investigate the impact of social isolation on healthcare workers' mental health during the current disease outbreak to build on similar previous research on stress, depression, irritability, and other associated responses (Hall et al. 2008; Usher et al. 2020). Intervention research on how to bolster their well-being must be prioritized to ensure that these critical workers are supported in doing this challenging, demanding, and frightening work and so that their risk for these negative mental health outcomes can be mitigated. Early research during the pandemic has identified potential work-related models to both proactively and retroactively support essential healthcare workers in their professional roles (e.g., provision of protective equipment, infection risk reduction guidelines) and in maintaining a healthy work-life

balance (e.g., paid time off, alternate lodging away from family; Cao et al. 2020; Shanafelt et al. 2020). Studies need to further explore the effectiveness of these interventions in supporting the overall well-being of essential workers. Furthermore, some medical workers are drawn to the profession specifically for the opportunity to emotionally connect with patients while providing care (Zambrano et al. 2012), a noteworthy distinction from other medical and health science careers that do not involve patient interaction. Future research is warranted to explore how workers' perceptions of their roles have changed as a result of COVID-19, and if such changes are linked with reductions in professional and/ or personal fulfillment.

Studies may also seek to disentangle individual-level characteristics (e.g., gender, race/ethnicity, family circumstances, primary job responsibilities, type of healthcare institution) that may contribute to positive or negative appraisals of social disconnection. For example, participants in this study reported making sense of social disconnectedness in the context of keeping others safe. Further exploring these appraisals could contribute to an understanding of how healthcare workers demonstrate resilience from the negative effects of both collective and individual trauma experienced during COVID-19. Notable to our study, as well as others examining healthcare workers' and broader populations' coping during COVID-19, are implicit findings that functional internet acces is an essential resource for maintaining social connection. A survey from the Pew Research Center indicates that over 50% of adults in the United States have deemed the internet an "essential" resource during the pandemic, and another 34% have considered it "important, but not essential" (Vogels et al. 2020). Although participants in our study presumably held internet access on account of completing our online survey, it will be important for future research to examine variation in emotional connectedness, mental health, and coping behaviors among those with and without functional internet access and digital connectivity.

# **Implications for Practice**

Literature from past disease outbreaks (e.g., Maunder et al. 2003) and early research from the COVID-19 pandemic (Cao et al. 2020; Lu et al. 2020) underscore the need for comprehensive, tailored mental health services for frontline healthcare workers. Healthcare workers are at risk for developing a range of negative sequelae following the collective trauma of COVID-19; as noted in a United Nations Policy Brief, intervention services and wrap-around mental health offerings are necessary for this specific population (United Nations 2020). Social workers must mobilize to meet this need. First, social workers can contribute to the development of healthcare institution policies that support opportunities for emotional connection for healthcare workers; within the

workplace, this could include the offering of peer-to-peer support services and more breaks within the work day and, outside of the workplace, this could include less overtime and more dependable scheduling to allow for dedicated time with family (Cao et al. 2020; Shanafelt et al. 2020). To effectively serve healthcare workers, social workers must also develop knowledge and practice skills relevant to this population's unique mental health needs in light of COVID-19 (e.g., trauma-informed care practices for collective and individual trauma). Although healthcare workers share in a collective experience of upheaval from working the front lines of the pandemic's health care crisis, any single worker's constellation of personal and professional circumstances is highly individual. Thus, the textures of each person's pandemic experience—and their consequent support needs—are unique and should be seen and tended to as such. Finally, social workers must cultivate expertise in offering accessible, flexible telehealth services that are well suited to the demanding schedules of healthcare workers, and build upon the findings of this study to identify and bolster emotionally connected relationships that promote resilience among healthcare workers.

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# **Compliance with Ethical Standards**

Conflict of interest The authors declare that they have no conflict of interest.

#### References

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.

Braun, V., & Clarke, V. (2019). Reflecting on reflexive thematic analysis. *Qualitative Research in Sport, Exercise and Health*, 11(4), 589–597

Brooks, S. K., Webster, R. K., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). The psychological impact of quarantine and how to reduce it: Rapid review of the evidence. *The Lancet*, 395(10227), 912–920.

Cao, J., Wei, J., Zhu, H., Duan, Y., Geng, W., Hong, X., et al. (2020). A study of basic needs and psychological wellbeing of medical workers in the fever clinic of a tertiary general hospital in Beijing during the COVID-19 outbreak. *Psychotherapy and Psychosomatics*. https://doi.org/10.1159/000507453.

Centers for Disease Control & Prevention. (2020). Coronavirus disease 2019 (COVID-19): Cases in the United States. Retrieved May 20, 2020 from https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html.

Erikson, K. T. (1998). Trauma at Buffalo Creek. *Society*, 35(2), 153–161.

Hall, R. C., Hall, R. C., & Chapman, M. J. (2008). The 1995 Kikwit Ebola outbreak: Lessons hospitals and physicians can apply to future viral epidemics. *General Hospital Psychiatry*, 30(5), 446–452.



- Hawryluck, L., Gold, W. L., Robinson, S., Pogorski, S., Galea, S., & Styra, R. (2004). SARS control and psychological effects of quarantine, Toronto, Canada. *Emerging Infectious Diseases*, 10(7), 1206–1212.
- Hirschberger, G. (2018). Collective trauma and the social construction of meaning. Frontiers in Psychology, 9, 1–14.
- Holmes, E. A., O'Connor, R. C., Perry, V. H., Tracey, I., Wessely, S., Arseneault, L., et al. (2020). Multidisciplinary research priorities for the COVID-19 pandemic: A call for action for mental health science. *The Lancet Psychiatry*, 7(6), 547–560.
- Hutchinson, S. L., Bland, A. D., & Kleiber, D. A. (2008). Leisure and stress-coping: Implications for therapeutic recreation practice. *Therapeutic Recreation Journal*, 42(1), 9–23.
- Iwasaki, Y., Mannell, R. C., Smale, B. J., & Butcher, J. (2005). Contributions of leisure participation in predicting stress coping and health among police and emergency response services workers. *Journal of Health Psychology*, 10(1), 79–99.
- Kleiber, D. A., Hutchinson, S. L., & Williams, R. (2002). Leisure as a resource in transcending negative life events: Self-protection, selfrestoration, and personal transformation. *Leisure Sciences*, 24(2), 219–235.
- Kumar, S. (2016). Burnout and doctors: Prevalence, prevention and intervention. *Healthcare*, 4(37), 1–9.
- Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., et al. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease 2019. *JAMA Network Open*, 3(3), e203976–e203976.
- Lincoln, Y. S., & Guba, E. G. (1986). But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. New Directions for Program Evaluation, 30, 73–84.
- Lu, W., Wang, H., Lin, Y., & Li, L. (2020). Psychological status of medical workforce during the COVID-19 pandemic: A cross-sectional study. *Psychiatry Research*. https://doi.org/10.1016/j.psych res.2020.112936.
- Lurie, N., Saville, M., Hatchett, R., & Halton, J. (2020). Developing Covid-19 vaccines at pandemic speed. New England Journal of Medicine, 382(21), 1969–1973.
- Lyons, R. F., Mickelson, K. D., Sullivan, M. J., & Coyne, J. C. (1998). Coping as a communal process. *Journal of Social and Personal Relationships*, 15(5), 579–605.
- Maunder, R., Hunter, J., Vincent, L., Bennett, J., Peladeau, N., Leszcz, M., et al. (2003). The immediate psychological and occupational impact of the 2003 SARS outbreak in a teaching hospital. *Canadian Medical Association Journal*, 168(10), 1245–1251.
- Mealer, M., Jones, J., & Moss, M. (2012). A qualitative study of resilience and posttraumatic stress disorder in United States ICU nurses. Intensive Care Medicine, 38(9), 1445–1451.
- Potloc & Canadian Public Health Association. (2020). COVID-19 study: Canadian health workers. Retrieved May 20, 2020 from https://potloc.com/blog/en/potloc-study-canadian-health-workers-insights-front-lines-covid-19-pandemic/.
- QSR International. (2018). NVivo (version 12) [Computer software]. https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home.
- Reynolds, D. L., Garay, J. R., Deamond, S. L., Moran, M. K., Gold, W., & Styra, R. (2008). Understanding, compliance and psychological impact of the SARS quarantine experience. *Epidemiology & Infec*tion, 136, 997–1007.
- Sable, P. (2008). What is adult attachment? *Clinical Social Work Journal*, 36(1), 21–30.
- Sandi, C., & Haller, J. (2015). Stress and the social brain: Behavioural effects and neurobiological mechanisms. *Nature Reviews Neurosci*ence, 16(5), 290–304.
- Shanafelt, T., Ripp, J., & Trockel, M. (2020). Understanding and addressing sources of anxiety among health care professionals during the COVID-19 pandemic. *JAMA*, 323(21), 2133–2134.

- Torales, J., O'Higgins, M., Castaldelli-Maia, J. M., & Ventriglio, A. (2020). The outbreak of COVID-19 coronavirus and its impact on global mental health. *International Journal of Social Psychiatry*, 66(4), 317–320.
- United Nations. (2020). Policy brief: COVID-19 and the need for action on mental health. Retrieved May 20, 2020 from https://www.un.org/ sites/un2.un.org/files/un\_policy\_brief-covid\_and\_mental\_health\_ final.pdf.
- Usher, K., Bhullar, N., & Jackson, D. (2020). Life in the pandemic: Social isolation and mental health. *Journal of Clinical Nursing*, 29(11/12), 1808–1821
- Vogels, E., Perrin, A., Rainie, L., & Anderson, M. (2020). 53% of Americans say the internet has been essential during the COVID-19 outbreak. Pew Research Center Report. Retrieved June 1, 2020 from https://www.pewresearch.org/internet/2020/04/30/53-of-americans-say-the-internet-has-been-essential-during-the-covid-19-outbreak/.
- Vorell, M. S., & Carmack, H. J. (2015). Healing the healer: Stress and coping strategies in the field of temporary medical work. *Health Communication*, 30(4), 398–408.
- Vyas, K. J., Delaney, E. M., Webb-Murphy, J. A., & Johnston, S. L. (2016). Psychological impact of deploying in support of the US response to Ebola: A systematic review and meta-analysis of past outbreaks. *Military Medicine*, 181(11–12), e1515–e1531.
- Walton, M., Murray, E., & Christian, M. D. (2020). Mental health care for medical staff and affiliated healthcare workers during the COVID-19 pandemic. European Heart Journal: Acute Cardiovascular Care, 9(3), 241–247.
- Yoon, M. K., Kim, S. Y., Ko, H. S., & Lee, M. S. (2016). System effectiveness of detection, brief intervention and refer to treatment for the people with post-traumatic emotional distress by MERS: A case report of community-based proactive intervention in South Korea. *International Journal of Mental Health Systems*, 10(1), 51.
- Zambrano, S. C., Chur-Hansen, A., & Crawford, B. (2012). On the emotional connection of medical specialists dealing with death and dying: A qualitative study of oncologists, surgeons, intensive care specialists and palliative medicine specialists. *BMJ Supportive & Palliative Care*, 2(3), 270–275.
- Ziegelstein, R. C. (2018). Creating structured opportunities for social engagement to promote well-being and avoid burnout in medical students and residents. *Academic Medicine*, *93*(4), 537–539.
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