ARTICLE

Fostering resilience in healthcare professionals during and in the aftermath of the COVID-19 pandemic

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SUMMARY

The emergence of the COVID-19 pandemic has had a substantial negative psychosocial impact due to both the outbreak and the global response to it. As we know from previous health crises, front-line workers are among the risk groups for developing serious mental health problems. As a result of the continuous exposure to highly stressful circumstances, directly in their jobs and indirectly through media consumption and related societal pressures, healthcare professionals are at increased risk for distress, compassion fatigue, burnout and emotional disorders. Recent studies have been revealing specific stressors faced by healthcare workers during the COVID-19 outbreak, such as limited resources, work overload, fear of infecting significant others and isolation/loneliness. However, research has shown heterogeneity in adaptation to adversities, with many individuals being able to bounce back. Based on this growing evidence, this article provides a clinical working framework to empower healthcare professionals, by critically discussing resilience-promoting strategies along the intra- and interpersonal dimensions of control, coherence and connectedness.

LEARNING OBJECTIVES

After reading this article you will be able to:

- identify specific challenges posed by the COVID-19 pandemic to healthcare workers
- acknowledge the variability of healthcare workers' adaptational outcomes to the stress induced by the COVID-19 pandemic
- describe resilience-promoting strategies for healthcare workers to cope with global health crises.

KEYWORDS

Healthcare workers; COVID-19; stress; burnout; resilience.

The whole world has been living an unprecedented situation, with a virus that is affecting millions of people, no matter their nationality, ethnicity, socioeconomic status, previous health condition or gender. However, pandemics have been described historically as unequal experiences among socially disadvantaged groups (Bambra 2020), since gender, ethnicity, class and disability determine their position in the social structure. As we know from previous health crises, front-line workers who are directly involved in the diagnosis, treatment and care of patients are at increased risk of developing serious mental health problems (Brooks 2020). Evidence demonstrates that there are multiple and complex ways to react to serious stressors, describing distinct trajectories of responses to potentially traumatic events (Bonanno 2008). Here, we discuss the clinical management of COVID-19-related stress in healthcare professionals, by reviewing and illustrating multiple coping strategies to decrease psychological stress and promote resilience and recovery.

Impact of the pandemic on healthcare professionals' well-being

Caring for others in distress can be emotionally draining and physically demanding (Williams 2020), especially when multiple stressors are combined and have a direct impact on daily life for an unknown period, as the SARS-CoV-2 (COVID-19) pandemic has been doing. The resultant multilayered and ongoing traumatic stress is associated not only with primary stressors inherent in exposure to the virus (i.e. primary sources of stress), but also with secondary stressors that can moderate (reduce, alter or amplify) the role of the primary stressors on adaptational outcomes. The social model of secondary stressors argues that most of these are dictated by (a) social factors and people's previous life circumstances and/or (b) societal and organisational responses to the disease outbreak. Evidence demonstrates that aspects related to this type of stressor (e.g. lack of social support, family-related concerns, inadequate working conditions) might cause higher levels of distress than the pandemic itself, exacerbating negative effects on mental health. Unlike the primary stressors, the aspects related to societal and organisational responses to the COVID-19 pandemic are

manageable and there can be different ways of addressing them (Williams 2021). Box 1 summarises the specific highly stressful context encountered by healthcare workers in their daily life, but particularly during the COVID-19 pandemic.

Owing to their occupational role, healthcare workers are vulnerable to a process called 'empathy-based stress' or 'empathy-based strain', which involves a stressor-strain experience of trauma in the context of their work. The empathy-based stress model (Fig. 1) proposes that adverse work-related psychological and physical outcomes are the result of exposure to other people's traumatic material (i.e. second-hand trauma) combined with engagement in an empathic response to it. Additionally, there are individual (e.g. sociodemographics, coping mechanisms) and contextual (e.g. social support, frequency/form of trauma exposure) factors that may increase the likelihood of experiencing empathy-based strain, adverse occupational health reactions and other negative work-related outcomes (Rauvola 2019).

Addressing and understanding the effects of trauma, equipping individuals with coping strategies and fostering resilient responses in healthcare professionals can have a positive impact on their mental and physical health which, in turn, leads to a greater commitment to provide compassionate, evidence-informed and values-based care for their patients (Williams 2020).

BOX 1 Sources of stress in healthcare services

Specific challenges imposed by the COVID-19 pandemic

- Primary stressors:
  - COVID-19-related uncertainty
  - constant exposure to the virus
  - concerns for one's own health and well-being
  - fear of infecting others
- Secondary stressors:
  - social isolation
  - acute and specialised care
  - lack of material and human resources
  - work overload
  - complex decisions
  - balance between one's own needs and those of patients and families

Fear dimensions

- Care delivery:
  - caring for colleagues who were infected
  - giving a decent patient care (during the worst waves of infection and without the support regularly provided by patients' loved ones)
- Work demands:
  - using and adjusting to personal protective equipment
  - adapting to new workplaces and schedules due to redeployment
  - coping with the fear of becoming sick or dying
- Family and personal life:
  - potential contagion to loved ones
  - meeting familial basic needs

Trauma-related stress

During the COVID-19 pandemic, a study found that healthcare workers showed significantly more fear, irritability, frustration, anger and helplessness than non-healthcare workers (García-Fernández 2022). These professionals also reported significant levels of symptoms of post-traumatic stress disorder (PTSD), depression and anxiety (Li 2021), consequences felt predominantly by women, who constitute the majority of the health and social care workforce (Morgan 2022). A special report in the USA found that, between 2020 and 2021, 18% of healthcare staff quit their jobs and 12% were laid off; among those who kept their jobs, 31% considered leaving (Galvin 2021). Governmental policies differed across countries, as did the available resources to contend with the virus, which exacerbated systemic social inequities and mental health disparities between low- and high-income countries (Bambra 2020).

Despite the negative experiences caused by those risk factors, most individuals do not meet criteria for clinically significant symptomatology or need specialised mental healthcare. Nevertheless, they could benefit from psychosocial care and interventions aimed at reducing those stressors (Kira 2023).

Burnout

With the long-term involvement in physically and emotionally demanding situations, healthcare providers can gradually develop an additional outcome of the empathy-based stressor-strain process: burnout. Burnout has been conceptualised as a multidimensional construct, comprising a feeling of failure and a state of physical, emotional, mental and spiritual exhaustion. It may also involve a negative and cynical/detached attitude towards others and a lack of personal fulfilment at work (Maslach 1981).

Burnout has been shown to often coexist with other mental and physical problems, such as depressive, anxiety and substance use disorders (Ahola 2010). It may also have negative effects on the immune system and increase the risk for infections (Bargellini 2000). There is evidence that these

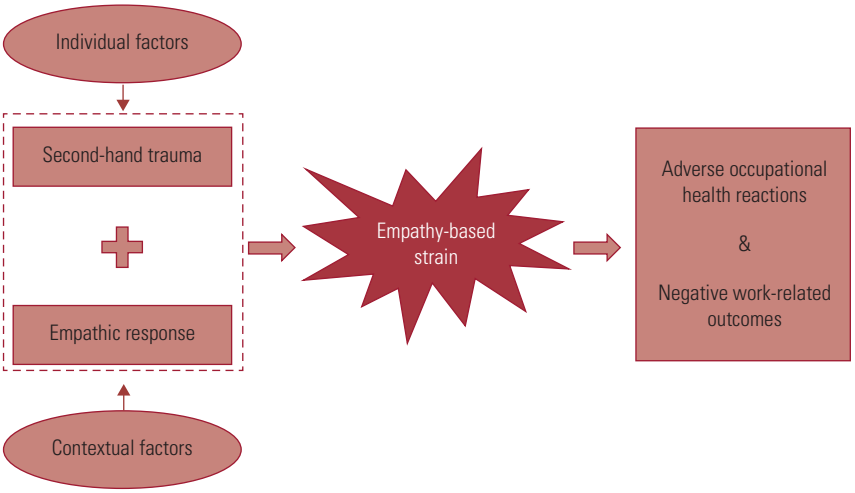

FIG 1 Empathy-based stress model.

negative impacts were greater for those working in units specifically caring for patients with COVID-19 (Giusti 2020). Furthermore, there is strong evidence for an association between burnout and the welfare and functioning of teams and organisations, contributing to increased absenteeism, low productivity and an inability to deliver safe care (Williams 2020).

Uncertainty caused by the COVID-19 pandemic

Although the body of literature is growing, the evidence available on the long-term effects of COVID-19 is still limited and incomplete. However, it is gradually becoming clear that, for some people, acute SARS-CoV-2 infection marked the start of ongoing debilitating symptoms known as 'post-COVID-19 condition' or 'long COVID'. The most common psychiatric symptoms of this syndrome include fatigue, cognitive impairment, depression and anxiety (Sampogna 2022).

Some individuals report intolerance of uncertainty more than others, and this has been recently conceptualised as a major cognitive and psychological stressor found across many psychological disorders and real-life contexts. A high level of intolerance of uncertainty is associated with greater perceived threat and uncertainty, maladaptive coping strategies that maintain and reinforce mental disorders, and somatic stress reactions (e.g. increased heart rate and blood pressure) (Freeston 2020). Given the complexity over the disease course and its treatment outcomes, COVID-19 represents a novel and threatening situation, challenging healthcare services to plan adequate responses (including assessment, diagnosis, treatment and supportive care) and to adjust quickly and effectively to constantly changing international responses, rates of infection and restrictive measures.

Variability in adaptational outcomes

It has been hypothesised that individuals who are exposed to trauma can exhibit four distinct prototypical outcome trajectories over time: (a) chronic psychological dysfunction, (b) psychological recovery, (c) resilience and (d) delayed manifestation of symptoms. Studies suggest that a simple binary model is not enough since individuals who do not show clinically significant symptoms may be neither pathological nor healthy. Rather, they emphasise not only that there are multiple possible adaptational outcomes in the aftermath of life-threatening events, but also that these outcomes can be experienced through many pathways (Bonanno 2008).

Despite the extreme nature of the pandemic, studies on major health-threat events suggest that long-term resilience is likely to be the most common effect, even for those who are close to the disease, which is consistent with previous trauma research claiming that many people can adapt and have the ability to experience positive emotions after potentially traumatic events (Bonanno 2008).

In recent years, the term resilience has been applied in individual, community, organisational and societal contexts to describe the capacity to cope and to adapt in the face of adversity, an attribute particularly important in dealing with circumstances that cannot be readily changed (Williams 2020). Even though resilient individuals may experience some transitory distress during or in the aftermath of trauma, they can still manage the situation effectively and maintain stable, healthy functioning (Bonanno 2008). Considering the interaction between primary and secondary COVID-19-related stressors faced by healthcare workers, characterised by its complex and unprecedented nature, it is imperative to clearly operationalise the

resilient outcome trajectory and make the distinction from other responses that might be more difficult to define (such as recovery and clinically significant symptomatology a long time after the event).

Guidelines for fostering resilience

Resilience has been addressed in an extensive and progressive multidisciplinary area of research, corroborating its complexity and multidimensional nature. Depending on the conceptual approach that is adopted, there are multiple definitions of resilience, referring to it as a process, capacity or outcome. Following a dynamic systems perspective, Masten et al (2021) define resilience as the capacity of a dynamic system to adapt successfully through multisystem processes to challenges that threaten its function, survival or development. This framework reflects the notion that resilience develops and changes over time and includes its manifestation in and mobilisation of many different systems through multiple pathways.

The COVID-19 pandemic endorses the call for a strengths-based approach to better describe personal, social and cultural determinants of positive adaptation and resilient responding. More than reducing the negative effects of the pandemic, it is crucial to enhance resilience factors and empower healthcare professionals, as well as healthcare services, to cope with the specific challenges imposed during the pandemic and in its aftermath.

Within a comprehensive and contextual perspective, the concept of individual resilience is theorised as being contextually dependent since it is the product of the interaction between internal resources and broader social and physical ecology. An extreme event is inherently cross-scale, having an impact not only on individuals but also on the community in which people's lives are embedded. Social factors also have a powerful influence on individuals' social identity, providing meaning, support and agency. Consequently, the common experience of a disaster may be associated with the development of a perceived common fate among survivors and a shared social identity, thus acting as a 'social cure' and facilitating community adaptation (Ntontis 2021). During pandemics it is particularly important to address resilience with an integrative theory because of their global, wide-ranging repercussions on everyday lives (i.e. to achieve a systemic balance between organisational and personal attributes and practices). Rather than adopting an individualistic approach focusing only on burnout and resilience, it is urgent that effective interventions address both workers' personal characteristics and the workplace environment, such as work culture, peer support and leadership (Williams 2020).

The conceptual model adopted here encompasses the influence of risk and resilience factors over time, through several possible trajectories. To reduce healthcare workers' burnout, there is a twofold process involving (a) active mitigation of institutional drivers of burnout and (b) bolstering of resilience. A recent meta-analysis demonstrated that resilience-promoting interventions positively affected adaptational outcomes, corroborating the importance of considering sociocultural factors of well-being, as well as of adapting resilience processes to the unique needs of the targeted population in a specific context (Liu 2022). This is particularly relevant in the aftermath of major disasters, when social inequalities and disadvantages become more prominent. It also highlights the need for changing political priorities to invest in social policies and practices that prioritise the well-being of individuals. To enhance the effectiveness of resilience-promoting strategies over time, it is crucial that organisations create the conditions for them to be implemented, such as including time for self-care during working hours rather than eating into staff's personal time. Empirical evidence also reinforces the successful effect of transforming these into permanent measures, thus recognising the longer-term impact of secondary stressors (Williams 2021). Mind–body techniques could be particularly beneficial for healthcare workers to adaptively cope with chronic COVID-19-related stressors by addressing the role of physiological reactions to stress, cognitive–behavioural aspects, social factors and health-promoting behaviours (Hall 2020). Even though evidence-based interventions for healthcare professionals are available, little is known about the processes that might underlie resilience in the context of the COVID-19 pandemic. Therefore, future studies should explore whether resilience interventions maintain overall effects on adaptational outcomes.

The operational definition used in this article draws on the '3 Cs' of resilience in post-disaster settings – control, coherence and connectedness – suggesting an integrative model of human resilience applied to the context of the COVID-19 pandemic. Considering previous research (Zautra 2008; Polizzi 2020), the proposed clinical working framework adopts a broad systemic view of resilience-promoting interventions, in which personal and organisational resources are threaded together as a long-term strategy to enhance teams' and individual people's well-being. Based on evidence from the social sciences, Reich (2006) proposed three main principles to resilient responding to large-scale disasters: the '3 Cs' (Fig. 2). Therefore, it is necessary to plan and implement measures based on three

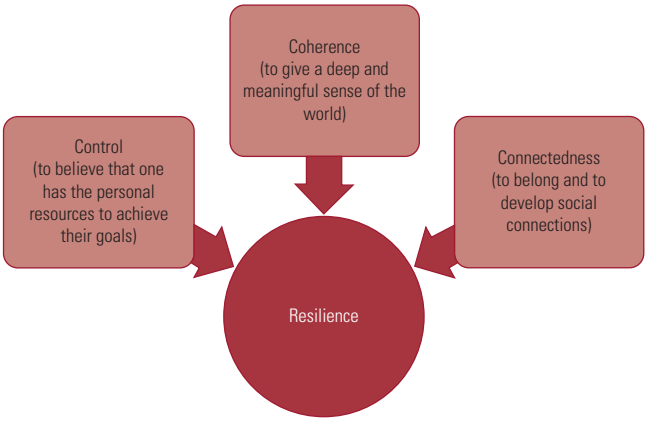

FIG 2 The '3 Cs' model of resilience (after Reich 2006).

fundamental human needs: the need for control (i.e. to believe that one has the personal resources to achieve one's goals), the need for coherence (i.e. to give a deep and meaningful sense of the world) and the need for connectedness (i.e. to belong and to develop social connections).

It is urgent to address the effects of trauma and to foster resilience in healthcare professionals, not only as individuals but also as a group. Thus, the present work aims to outline specific resilience-promoting strategies for each of the 'C' factors to decrease psychological distress and to promote flourishing and thriving during and in the aftermath of the COVID-19 pandemic, as well as in future health crises.

Control

When facing adversity, the process of adaptation can be influenced by self-efficacy and the sense of personal agency, through the belief that one can succeed as well as produce changes in one's life circumstances and environment. Characterised as the ability to proactively control one's emotions, cognitions and behaviours to achieve valued goals, self-control expends internal resources that may be finite and exhausted. In the face of highly stressful situations, these resources can be depleted, which can have a negative effect on information processing, managing daily life and decision-making (Pilcher 2016). Individuals with a higher sense of self-efficacy and control are more likely to be able to regulate their functioning and emotional well-being and less likely to suffer from the potentially health-compromising physiological effects of stress (Thompson 2002).

The psychosocial impact of the pandemic seems to be associated with the perception of risk and control. When the environment appears to be predictable and controllable, and inner responses seem under control, individuals are more capable of psychologically adjusting to negative events. Owing to the uncertainty of the virus, there are multiple factors that are outside the professional's control. Boredom, frustration and a sense of isolation caused by lockdowns and other restrictions are exacerbated by the impossibility of engaging in mundane tasks such as everyday shopping or social gatherings (Brooks 2020). Thus, better management of one's capacity for self-control could be helpful in coping with pandemic-related stress. In the next sections we suggest specific measures to promote the sense of personal control and to counterbalance the perception of risk and fear.

Media consumption

Mass media can have a huge impact on society's perception of the problem after a global crisis through risk amplification, functioning as addictive sources of exposure and influencing the news-making process in such a way that contradicting facts are not integrated into the broader narrative structure (Vasterman 2005). The COVID-19 pandemic led to an 'infodemic' – an overabundance of information (World Health Organization 2020). This can make it more difficult to find trustworthy sources, leading to feelings of disorientation, lack of control and low confidence, and can be used to disseminate unproven therapies and stigmatise groups of people.

When considering media consumption, it is important to analyse both the informational content and the average hours spent per day searching for COVID-19-related information in traditional (e.g. television, radio) and social media (e.g. Facebook, Twitter). Evidence shows that graphic images in media coverage, as well as panic-inducing and sensationalised communication, may serve as an 'emotional amplifier', which means that seeing intrusive, threat-focused messages and potentially traumatic images can contribute to sadness, fear

and worry, leading to deleterious psychological outcomes (Houston 2018).

When working with healthcare workers about media exposure, the impact on mood regulation can be discussed, as well as the cycle of distress that media use can initiate: i.e. to reduce uncertainty and consequent anxiety associated with traumatic events, individuals may seek out more trauma-related information, thereby exacerbating their distress and worry over time and increasing subsequent media consumption (Houston 2018). This cyclical pattern may be associated with long-lasting physiological activity and somatic health problems (e.g. in cardiovascular, neuroendocrine and immune systems), fostering the risk for mental and physical conditions such as depression and infectious disorders (Taylor 2007).

Behavioural activation

The first step of behavioural activation is to collaboratively identify activities that can be good predictors of mood-boosting, starting with those that have the greatest likelihood of success. The more linked to personal values are the activities (i.e. non-prescriptive), the more changes can be experienced in mood (Martell 2010).

Healthcare workers should be encouraged to develop activity monitoring and analyse connections between behaviour and depressive mood, to realise that they feel less depressed when they are more active, especially when doing something enjoyable, to succeed or to approach a problem. An activity schedule recording mood-related information after performing various activities and tasks, even if they seem simple actions, can help to decide when to engage in them in subsequent weeks (Martell 2010: Appendix 1b).

Numerous mobile apps have been developed to allow people to access treatment materials when and where it is convenient, at low cost. 'Moodivate', for example, has been suggested as an effective brief behavioural activation app for depression that helps individuals identify, schedule and re-engage in positive activities (Dahne 2019). Box 2 outlines additional exercises that might improve behavioural activation.

Cultivating healthy habits

In the context of an ongoing and prolonged stressor such as the COVID-19 outbreak, meeting basic needs – for example, eating and drinking, physical exercise and sleep – is a priority. Taking a break is frequently seen as superfluous and selfish. However, good-quality sleep is associated not only with the capacity to deliver better patient care, but also with a better immune system and consequent resistance to infections (Unadkat 2020).

Front-line workers need to willingly integrate healthy eating, proper hydration, regular rest and physical exercise into their daily life. Long and unregular shifts can make it difficult to maintain a self-care routine, but creating a schedule according to one's own specific needs can be helpful, ensuring breaks and days off.

BOX 2 Exercises for healthcare workers to improve behavioural activation

- Short-term goals: To prevent the loss of perceived control in their life, setting small goals can maintain a routine with daily objectives, such as going to the grocery store, calling a friend, going for a walk every week. Day by day, front-line workers can also keep a diary of events, goals and lessons learned throughout the day facing the virus outbreak (Polizzi 2020).
- Long-term goals: Healthcare workers should be mindful about their present situation and envision how the future looks for each of the important areas of their life (e.g. work, family, social). After identifying any disparities, they can anticipate possible challenges and plan concrete actions to readjust and to overcome them (Polizzi 2020).
- Values-driven actions: Identifying the factors that give their life meaning can foster values-driven actions and help to work through stress, rather than avoiding it. This exercise of evaluating the discrepancies between the way in which they are living and the way they want to live may improve motivation to act in congruence with what is important for them. To disclose their deepest motivations, they can ask themselves the following questions (Hayes 2012):
  - What really matters to me?
  - Why did I choose this career?
  - When I have a bad day at work, what motivates me to come back the day after?
  - What do I want other people to say about me when the pandemic is over?
  - How do I want to be remembered by my co-workers when I die? And my family? What about my friends?

Coherence

Every human being has the need to attribute meaning to the world and to create a consistent and coherent sense of events, especially during global crises that disturb the known order and normal structure. However, the successful integration of traumatic experiences requires exposure to and engagement with aversive thoughts, emotions, memories and bodily sensations (Hayes 2012).

Descriptions and labels elaborated through different life experiences have been questioned during the coronavirus pandemic owing to needed changes and adaptations of typical roles and interactions and to concerns about the future (e.g. sense of self, interpersonal relationships, job organisation). These circumstances can produce unhealthy vicious cycles of intense fear responses (e.g. uninterrupted work shifts, constant search for new information about virus transmission) and restrict activities that could be meaningful to individuals (Reich 2006).

Those who are focused on saving other people's lives have been experiencing decreased time, as well as diminished physical and mental energy, to make sense of and cope with their negative emotions. To counteract the destruction of basic assumptions, it is of paramount importance to develop strategies that promote understanding, direction and structure amid the pandemic.

Acceptance-based coping

According to the literature, a mindful and accepting attitude to experiences may promote psychological resilience following trauma (Hayes 2012). In the face of COVID-19, healthcare workers have been dealing with unpleasant and uncontrollable situations at work on a daily basis and are expected to do so in future health crises.

It is important to clarify that to fear the virus is legitimate, since the danger is real, but it is possible, and recommended, that individuals willingly accept and observe their spontaneous physical and emotional reactions to that fear, to distance themselves from it and to consciously choose what to do with it. By becoming non-judgementally aware of internal experiences, it is easier to create a narrative about the situation and the best way to respond to it. The learning of acceptance skills may start with simple exercises (e.g. breath-focused meditation) and then progress to more difficult situations (e.g. see the 'tin can monster' exercise in Hayes 2012), and it can be adapted to different contexts (e.g. individual, group or teamwork). It can be useful to apply acceptance-based methods known to have worked in the context of previous major events and to use the language and personal experiences of individuals involved in them (Hayes 2012).

Writing to reframe and integrate

Whether written or spoken, when individuals convert distress into words, they make complex experiences simpler and facilitate the change of maladaptive behaviours, thus promoting a sense of control and predictability (Pennebaker 1999). A recent study involving healthcare workers corroborates the efficacy of expressive writing interventions in reducing symptomatology in the context of the COVID-19 pandemic (Procaccia 2021).

One way to develop a coherent story about the worldwide health crisis caused by the coronavirus and what one can do to live through this phase safely is writing about it. Expressive writing aims to create a safe environment for individuals to reflect, disclose their feelings and process the difficult event. In the writing task, it is important that healthcare workers explore their deepest emotions and thoughts regarding what they have been experiencing during the COVID-19 pandemic, without worrying about structure, grammatical rules or language used (Vukčević Marković 2020).

Connectedness

Social support has been conceptualised as one of the most significant protective factors against the negative effects of distress on mental and physical health following highly stressful experiences (Slavich 2021). The perception of the availability of others' help when needed can be one of the pathways to maintaining self-control, leading to better self-management and replenishment of resources needed to bolster this capacity and improving daily functioning, health and well-being (Pilcher 2016). Cues of social safeness are associated with psychological (e.g. social hedonic mentalities and caring motives) and physiological (e.g. increased activity of the vagus nerve, heightened heart rate variability, higher levels of oxytocin) mechanisms (Gilbert 2009).

A large body of research has also been consistently associating the interpersonal work environment with stress reactions in stressful workplaces. Creating resilient organisations and systems protects against burnout and contributes to happier individuals, tackling the conditions that lead to occupational stress. Instrumental and emotional support among co-workers and supervisors are important factors in maintaining a culture of respect, safety, responsibility, trust and collaboration. Accordingly, leadership is one of the most important ingredients to ensure that workers are satisfied with the job, as well as motivated and committed to their mission (Williams 2020).

Compassionate interventions

Adopting a compassionate attitude can be particularly important for healthcare workers managing the negative emotions that emerge from the emotional burden, feelings of guilt and failure, and moral injury. The development of compassion towards oneself can also promote prosocial behaviour and kindness towards others who need support, such as patients (Gilbert 2009).

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One of the biggest challenges to healthcare workers brought by the pandemic has been the restrictions on in-person social relationships 'in the name of love' (i.e. to protect the lives of loved ones). In situations where face-to-face interactions (physical closeness and touch, non-verbal communication) are largely inaccessible, online methods (e.g. social media, messaging apps, videoconferencing) are crucial means of communication, mitigating the negative impact of quarantine measures (Brooks 2020). Nonetheless, results are consistent in demonstrating that well-being, a sense of connectedness and social presence are greater with physical encounters (Slavich 2021).

Healthcare workers need to be encouraged to reinforce and strengthen existing connections and to organise meetings with friends and family members within the safety measures imposed by health authorities at that moment (Slavich 2021). As the pandemic progresses and 'stay-at-home' policies are slowly attenuated, face-to-face interactions become more possible and should be prioritised.

Loving-kindness meditation may provide useful strategies for improving unconditional, positive emotional states of kindness, warmth, care and compassion for oneself and others. It involves directing warm feelings towards the self and then extending them to an ever-widening circle of others, starting with what is easiest for the individual (Germer 2009). Box 3 describes two different compassion-based interventions aimed at cultivating this stance.

BOX 3 Compassionate interventions

The compassionate self

To start cultivating compassionate self-to-self relating, the individual can use imagery to imagine being a compassionate person. They begin by focusing on a soothing breathing rhythm in a quiet place. After slowing down the body, they imagine themselves as a deeply compassionate person:

- all the qualities they would have, spending time picturing how each one would make them think, feel and act
- their facial expression
- their tone of voice and possible things to say
- feelings that come from being kind.

Some questions that might help the development of a compassionate internal dialogue are:

- How would you speak to a friend if they were feeling down?
- What advice would you give?
- How would you hold yourself or hold them?

To strengthen this brain state, it can be helpful to imagine empty-chair dialogues, where the compassionate self talks to other parts of the self (e.g. anxious, angry, self-critical) (Gilbert 2009).

Loving-kindness meditation

It is suggested that the individual closes their eyes, focuses on the heart region and brings to mind, in turn, a person for whom they already have tender feelings (i.e. a close friend, a child, husband/wife), themselves, a stranger, a person with whom they experience difficult interactions, and then expanding to the entire universe. While doing this, participants are encouraged to silently repeat short phrases, such as 'May you be safe, May you be healthy, May you be happy, May you be at peace' (Germer 2009).

Affiliative motivation in teamwork

In highly stressful work environments such as healthcare services, interpersonal relationships among peers have been mentioned as a determining factor in effective coping with workplace stressors, as well as in job satisfaction. Some of the most important characteristics of collaborative practice are emotional containment, a sense of a shared identity, understanding and supportive leadership, and open and honest communication skills (Williams 2020).

Front-line workers should be aware of their feelings and perceptions about the organisational culture of healthcare services where they work and the quality of relationships between colleagues. Open and honest communication is vital to collaboration, specially to demonstrate trust and respect to peers. Active listening to others' perspective and assertive presentation of one's own view are determinant to the process. This communication pattern requires understanding, patience and nurturing skills, which are crucial in relying on each other in difficult situations. Peer support should be promoted, by enabling staff to share their experiences and concerns with colleagues, should they feel comfortable and wish to do so; this can also be helpful in managing negative emotions, work overload and fear of exposure to the virus (Stapleton 1998).

Conclusions

The COVID-19 pandemic provides a unique opportunity to address questions of potential relevance to other mass disasters (e.g. natural disasters, epidemics, terrorist attacks), especially when it comes to bolstering resilience and thriving in at-risk populations. Healthcare workers have been facing major challenges throughout this global health crisis, being particularly vulnerable to experiencing adverse work-related physical and psychological outcomes. Nonetheless, the literature demonstrates that resilience is likely to be the most common response in

MCQ answers
1 e 2 b 3 c 4 b 5 d

BOX 4 Further reading

Bonanno GA (2004) Loss, trauma, and human resilience: Have we underestimated the human capacity to thrive after extremely aversive events? *American Psychologist*, **59**: 20–8.

Gilbert P (2020) Compassion: from its evolution to a psychotherapy. *Frontiers in Psychology*, **11**: 586161.

Holmes EA, O'Connor RC, Perry VH, et al (2020) Multidisciplinary research priorities for the COVID-19 pandemic: a call for action for mental health science. *Lancet Psychiatry*, **7**: 547–60.

Kaye-Kauderer H, Feingold JH, Feder A, et al (2021) Resilience in the age of COVID-19. *BJPsych Advances*, **27**: 166–78.

Norris FH, Stevens SP, Pfefferbaum B, et al (2008) Community resilience as a metaphor, theory, set of capacities, and strategy for disaster readiness. *American Journal of Community Psychology*, **41**: 127–50.

the face of adverse events. Resilient coping may be easier for some individuals than for others, and interventions that cultivate flourishing and thriving are crucial to reinforce this capacity: Box 4 lists further reading on this and related topics. The authors of the present paper drew on specific strategies to empower healthcare professionals to go through the pandemic without being overwhelmed by it, to improve personal resources to achieve desired goals, to make sense of the current situation and to develop meaningful social ties.

Author contributions

C.V. and C.C.: conceptualisation and drafting of the article; M.C.C.: critical review of the manuscript.

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Declaration of interest

C.C. is a member of the *BJPsych Advances* editorial board and did not take part in the review or decision-making process of this paper.

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MCQs

Select the single best option for each question stem

1 COVID-19-related stress can lead to:
- a post-traumatic stress disorder
- b secondary traumatic stress
- c compassion fatigue
- d burnout
- e all of the above.

2 According to the '3 Cs' model of resilience, it is necessary to account for:
- a control, commitment and coordination
- b control, coherence and connectedness
- c communication, coherence and connectedness
- d context, communication and coordination
- e context, compassion and coordination.

3 The main goal of resilience-promoting strategies proposed in this article is:
- a to foster the development of psychopathology
- b to stimulate the threat defence system
- c to acknowledge and enhance an individual's strengths
- d to help individuals develop rational thinking
- e to adopt a deficit-centred model.

4 When considering media exposure during global health crises, the evidence shows that:
- a the content of information does not have an impact on mental health
- b media coverage can influence society's perception of the situation
- c to reduce uncertainty and anxiety, individuals tend to stop searching for news
- d graphic and detailed images of events promote positive psychological outcomes
- e the cycle of distress initiated by excessive media consumption elicits the activation of the parasympathetic nervous system.

5 Within compassionate interventions, prompting prosocial motivation involves:
- a correcting cognitive content
- b fostering positive thinking
- c narrowing thinking, attention and behaviour
- d cultivating meaningful, safe and soothing interpersonal relationships
- e avoiding aversive, painful experiences.