

# The mental health of doctors during the COVID-19 pandemic\*

Niall Galbraith,<sup>1</sup>  David Boyda,<sup>1</sup>  Danielle McFeeters,<sup>1</sup> Tariq Hassan<sup>2</sup>

BJPsych Bulletin (2020) Page 1 of 4, doi:10.1192/bjb.2020.44

<sup>1</sup>Department of Psychology, University of Wolverhampton, UK; <sup>2</sup>Department of Psychiatry, Queen's University, Providence Care Hospital, Kingston, Ontario, Canada

Correspondence to Niall Galbraith ([n.galbraith@wlv.ac.uk](mailto:n.galbraith@wlv.ac.uk))

\*A video abstract for this article is available at <https://vimeo.com/414651981>.

First received 2 Apr 2020, final revision 22 Apr 2020, accepted 24 Apr 2020

© The Authors 2020. This is an Open Access article, distributed under the terms of the Creative Commons Attribution licence (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

**Summary** Doctors experience high levels of work stress even under normal circumstances, but many would be reluctant to disclose mental health difficulties or seek help for them, with stigma an often-cited reason. The coronavirus disease 2019 (COVID-19) crisis places additional pressure on doctors and on the healthcare system in general and research shows that such pressure brings a greater risk of psychological distress for doctors. For this reason, we argue that the authorities and healthcare executives must show strong leadership and support for doctors and their families during the COVID-19 outbreak and call for efforts to reduce mental health stigma in clinical workplaces. This can be facilitated by deliberately adding 'healthcare staff mental health support process' as an ongoing agenda item to high-level management planning meetings.

**Keywords** COVID-19; mental health; coronavirus; healthcare professionals; doctors.

Research has consistently shown that the healthcare professions experience higher levels of work stress than the general population, even under normal circumstances,<sup>1,2</sup> and stress in doctors is associated with both physical<sup>3</sup> and mental health problems.<sup>4,5</sup> Healthcare professionals also have a higher likelihood of suicidality relative to other occupational groups,<sup>6,7</sup> and work-related stress is a common factor in those who complete suicide.<sup>8,9</sup>

Studies have also shown that many doctors find it difficult to tell their colleagues or employers about their mental health difficulties.<sup>10</sup> The most commonly cited reasons are perceived stigma and anticipated damage to future career prospects.<sup>11–13</sup> Suicidal ideation in doctors can present particularly strong fears of stigmatisation.<sup>14</sup> Such concerns may be underpinned by feelings of shame and professional failure, and associated worries about fitness to practise and licence restrictions.<sup>15–17</sup>

Not only do doctors find it difficult to share mental health concerns with colleagues, they are also often reluctant to get professional help. Research shows that many doctors would rather seek help from friends and family than look for psychological/psychiatric consultation.<sup>11</sup> Again, the same worries about career prospects and stigma underpin these preferences. Furthermore, there is evidence that many doctors are even reluctant to disclose mental health problems to their friends and family.<sup>18</sup>

## The mental health challenges faced by doctors during the COVID-19 crisis

During acute health crises, healthcare services are placed under excess pressure, making working life even more stressful than normal.<sup>19</sup> In a pandemic, the number of patients requiring treatment increases significantly, placing strain on healthcare resources and on personnel alike. Additionally, doctors perceive a greater risk to self owing to their exposure to the patients who are most poorly – adding further stress.<sup>20,21</sup> Compounding this stress is the shortage of personal protective equipment (PPE) that can arise during a pandemic.<sup>22</sup> The perceived risk of infection is warranted: a meta-analysis of the occupational risk from the 2009 swine flu pandemic (influenza A (H1N1)) reports that the odds of healthcare personnel contracting the virus were twice those of comparison groups.<sup>23</sup> This heightened risk for doctors and nurses might be due to their greater exposure to the respiratory secretions of patients.<sup>24</sup>

A further stressor is the increased risk of infection for the families of healthcare professionals on the front line.<sup>25</sup> Data from the 2009 swine flu pandemic shows that 20% of doctors and nurses with symptoms reported symptoms in at least one of their family members.<sup>26</sup> One way for front-line doctors to mitigate infection risk to their families is through social distancing. However, although the protective benefits of social contact and support at times of stress are

well demonstrated,<sup>27</sup> social distancing deprives the individual of a crucial buffer against mental health difficulties precisely when they are at greater risk of stress.<sup>28</sup>

Research from previous epidemics/pandemics (such as the SARS outbreak from 2003, the MERS epidemic from 2012 or Ebola outbreaks in West Africa) shows that healthcare professionals can experience a broad range of psychological morbidities, including trauma,<sup>29,30</sup> which might endure for many months after the outbreak.<sup>31,32</sup> The relationship between traumatic life events and suicide is well documented<sup>33</sup> and trauma from disaster events can increase suicidal ideation in emergency workers.<sup>34</sup> Fears over risk to health and social isolation contribute to psychological distress,<sup>35</sup> as do perceptions of ‘infection stigma’ from the community.<sup>36</sup> However, the negative effects on mental health can be found in doctors irrespective of whether or not they worked directly with infected patients.<sup>37</sup> Although the strains of front-line healthcare during an infectious outbreak can lead to sickness absence and higher staff turn-over,<sup>20,38</sup> most evidence suggests that doctors and nurses feel a strong professional obligation to continue working in spite of the danger.<sup>39,40</sup> However, given the pressures of needing to maintain high-quality healthcare provision during a pandemic, combined with doctors’ reluctance to seek help or disclose their difficulties, it is possible that this kind of professional commitment might relate strongly to presenteeism. Indeed, a recent review reported that physicians were at the highest risk of ‘infectious illness presenteeism’ when compared with a range of other occupational groups.<sup>41</sup>

Having to balance their own safety with the needs of patients, family and employers and in the face of limited resources can lead to distressing ethical dilemmas for doctors and, potentially, to moral injury. Moral injury can arise when one feels compelled to make decisions that conflict with one’s ethical or moral values.<sup>42</sup> The effect of moral injury on subsequent mental health can depend on the quality of support provided to employees during and after such events.<sup>43</sup>

### Managing doctors’ stress at the organisational level during the outbreak

There is evidence that employer support for healthcare professionals during pandemics and disaster management can be very protective. Such support should include safeguards such as care for those doctors and nurses who become ill, in addition to medical and financial support for their families and protection from malpractice threat. Healthcare professionals’ motivation and morale are significantly improved when they perceive that their efforts are recognised and reciprocated by employers and authorities in these ways.<sup>44,45</sup> An important part of this support is the perceived efficacy of the training and personal protective equipment that healthcare professionals receive as well as the general quality of organisational leadership and communication.<sup>22,46,47</sup> These factors are important not just for motivation – they are also associated with better psychological outcomes in healthcare professionals on the front line during epidemics.

There are also many ways to tackle mental health stigma in the workplace. The foundation for this is creating a

culture that encourages open communication and seeks to reduce the stigmatisation of psychological vulnerability.<sup>48</sup> This may include devising activities that challenge unhelpful attitudes and that instead promote desired values, as well as expanding knowledge and encouraging positive behavioural change.<sup>49</sup> The anti-stigma project Time to Change,<sup>50</sup> provides a suite of simple interventions for implementation in the workplace.<sup>51</sup> Elsewhere there is good evidence for peer support training in health crises or disaster management. One example is the Trauma Risk Management programme (TRiM), where non-clinical personnel are trained to assess peers following traumatic events and provide short-term support or access to professional care if required. Mental Health First Aid (MHFA) operates on a similar model and both it and TRiM can be effective in reducing mental health stigma in the workplace.<sup>45,47</sup>

### Stress management at the individual level

There is evidence that psychological interventions for work stress can be effective in healthcare professionals.<sup>52</sup> Recent reviews attest to the effectiveness of mindfulness-based interventions for work stress and suicide ideation;<sup>53–57</sup> mindfulness-based interventions also have a sound theoretical basis.<sup>58,59</sup> Mindfulness skills are particularly suited to high-stress work settings, in that they can be practised privately or in groups, in almost any environment and can be conducted as briefly as time permits. Negative automatic cognitions are a key trigger in stress reactions.<sup>60</sup> Mindfulness interventions encourage us to ‘notice’ our thoughts and to view them as objective events that happen *to* us. This enables us to objectify our own negative thoughts, gaining a new perspective on how those thoughts influence our emotions and behaviour and enabling better management of the distress that would normally accompany them. The effectiveness of online mindfulness courses also has a good evidence base.<sup>61</sup>

### Conclusions

Healthcare executives and managers should be aware of the potential for the COVID-19 outbreak to elevate the risk of psychological distress and suicidal ideation in doctors. The literature shows that, although healthcare professionals place high value on provision of training and equipment during such pandemics, effective leadership and managerial support for clinicians and their families are also highly protective against negative psychological outcomes. One of us (T.H.) is involved in setting up a support network of psychiatrists with the sole aim of supporting all physicians during this unprecedented event. Managers and clinicians might also remember that many doctors are reluctant to reveal their difficulties even when experiencing significant psychological distress. Workplace interventions that reduce mental health stigma and promote sharing and support for colleagues with psychological difficulties might improve help-seeking behaviour and attitudes. Mindfulness practice has versatility and a strong evidence base in workplace stress reduction and is therefore a viable technique for groups or individual clinicians to manage stress during the COVID-19 outbreak.

## About the authors

**Niall Galbraith**, Reader in Health Psychology, Department of Psychology, University of Wolverhampton, UK. **David Boyda**, Senior Lecturer in Psychology, Department of Psychology, University of Wolverhampton, UK. **Danielle McFeeters**, Senior Lecturer in Psychology, Department of Psychology, University of Wolverhampton, UK. **Tariq Hassan**, Associate Professor, Department of Psychiatry, Queen's University, Providence Care Hospital, Kingston, Ontario, Canada.

## Author contributions

All authors contributed to the design, analysis of literature, writing and revision of the article.

## Declaration of interest

None.

ICMJE forms are in the supplementary material, available online at <https://doi.org/10.1192/bjb.2020.44>.

## References

- Aiken LH, Clarke SP, Sloane DM, Sochalski J, Silber JH. Hospital nurse staffing and patient mortality, nurse burnout, and job dissatisfaction. *JAMA* 2002; **288**: 1987–93.
- Caplan RP. Stress, anxiety, and depression in hospital consultants, general practitioners, and senior health service managers. *BMJ* 1994; **309**: 1261–3.
- Buddeberg-Fischer B, Klaghofer R, Stamm M, Siegrist J, Buddeberg C. Work stress and reduced health in young physicians: prospective evidence from Swiss residents. *Int Arch Occup Environ Health* 2008; **82**: 31–8.
- Coomber S, Todd C, Park G, Baxter P, Firth-Cozens J, Shore S. Stress in UK intensive care unit doctors. *Br J Anaesth* 2002; **89**: 873–81.
- Rogers ME, Creed PA, Searle J. Emotional labour, training stress, burnout, and depressive symptoms in junior doctors. *J Vocat Educ Train* 2014; **66**: 232–48.
- Schernhammer ES, Colditz GA. Suicide rates among physicians: a quantitative and gender assessment (meta-analysis). *Am J Psychiatry* 2004; **161**: 2295–302.
- Lindeman S, Läärä E, Hakko H, Lönnqvist J. A systematic review on gender-specific suicide mortality in medical doctors. *Br J Psychiatry* 1996; **168**: 274–9.
- Kölves K, De Leo D. Suicide in medical doctors and nurses: an analysis of the Queensland Suicide Register. *J Nerv Ment Dis* 2013; **201**: 987–90.
- Brooks E, Gendel MH, Early SR, Gundersen DC. When doctors struggle: current stressors and evaluation recommendations for physicians contemplating suicide. *Arch Suicide Res* 2018; **22**: 519–28.
- Hassan TM, Ahmed SO, White AC, Galbraith N. A postal survey of doctors' attitudes to becoming mentally ill. *Clin Med* 2009; **9**: 327–32.
- Hassan TM, Sikander S, Mazhar N, Munshi T, Galbraith N, Groll D. Canadian psychiatrists' attitudes to becoming mentally ill. *Br J Med Pract* 2013; **6**(3): a619.
- Chew-Graham CA, Rogers A, Yassin N. 'I wouldn't want it on my CV or their records': medical students' experiences of help-seeking for mental health problems. *Med Educ* 2003; **37**: 873–80.
- White A, Shiralkar P, Hassan T, Galbraith N, Callaghan R. Barriers to mental healthcare for psychiatrists. *Psychiatr Bull* 2006; **30**: 382–4.
- Gerada C. Doctors, suicide and mental illness. *BJPsych Bull* 2018; **42**: 165–8.
- Shanafelt TD, Balch CM, Dyrbye L, Bechamps G, Russell T, Satele D, et al. Special report: suicidal ideation among American surgeons. *Arch Surg* 2011; **146**: 54–62.
- Davis M, Detre T, Ford DE, Hansbrough W, Hendin H, Laszlo J, et al. Confronting depression and suicide in physicians: a consensus statement. *Jama* 2003; **289**: 3161–6.
- Hampton T. Experts address risk of physician suicide. *JAMA* 2005; **294**: 1189–91.
- Henderson M, Brooks SK, del Busso L, Chalder T, Harvey SB, Hotopf M, et al. Shame! Self-stigmatisation as an obstacle to sick doctors returning to work: a qualitative study. *BMJ Open* 2012; **2**(5): e001776.
- Tam CW T, Pang EP, Lam LC, Chiu HF. Severe acute respiratory syndrome (SARS) in Hong Kong in 2003: stress and psychological impact among frontline healthcare workers. *Psychol Med* 2004; **34**: 1197–204.
- Shiao JS, Koh D, Lo LH, Lim MK, Guo YL. Factors predicting nurses' consideration of leaving their job during the SARS outbreak. *Nurs Ethics* 2007; **14**: 5–17.
- Chen MI, Lee VJ, Barr I, Lin C, Goh R, Lee C, et al. Risk factors for pandemic (H1N1) 2009 virus seroconversion among hospital staff, Singapore. *Emerg Infect Dis* 2010; **16**: 1554–61.
- Devnani M. Factors associated with the willingness of health care personnel to work during an influenza public health emergency: an integrative review. *Prehosp Disaster Med* 2012; **27**: 551–66.
- Lietz J, Westermann C, Nienhaus A, Schablon A. The occupational risk of influenza A (H1N1) infection among healthcare personnel during the 2009 pandemic: a systematic review and meta-analysis of observational studies. *PLoS One* 2016; **11**(8): e0162061.
- Bhadelia N, Sonti R, McCarthy JW, Vorenkamp J, Jia H, Saiman L, et al. Impact of the 2009 influenza A (H1N1) pandemic on healthcare workers at a tertiary care center in New York City. *Infect Control Hosp Epidemiol* 2013; **34**: 825–31.
- Wong TW, Yau JK, Chan CL, Kwong RS, Ho SM, Lau CC, et al. The psychological impact of severe acute respiratory syndrome outbreak on healthcare workers in emergency departments and how they cope. *Eur J Emerg Med* 2005; **12**: 13–8.
- Choi SH, Chung JW, Jeon MH, Lee MS. Risk factors for pandemic H1N1 2009 infection in healthcare personnel of four general hospitals. *J Infect* 2011; **63**: 267–73.
- Ma H, Qiao H, Qu H, Wang H, Huang Y, Cheng H, et al. Role stress, social support and occupational burnout among physicians in China: a path analysis approach. *Int Health* 2019; ihz054 [Epub ahead of print] 25 Jul 2020. Available from: <https://doi.org/10.1093/inthealth/ihz054>.
- Huremović D. Social distancing, quarantine, and isolation. In *Psychiatry of Pandemics: A Mental Health Response to Infection Outbreak* (ed D Huremović): 85–94. Springer, 2019.
- Styra R, Hawryluck L, Robinson S, Kasapinovic S, Fones C, Gold WL. Impact on health care workers employed in high-risk areas during the Toronto SARS outbreak. *J Psychosom Res* 2008; **64**: 177–83.
- Sim K, Chong PN, Chan YH, Soon WS. Severe acute respiratory syndrome-related psychiatric and posttraumatic morbidities and coping responses in medical staff within a primary health care setting in Singapore. *J Clin Psychiatry* 2004; **65**: 1120–7.
- Maunder RG, Lancee WJ, Balderson KE, Bennett JP, Borgundvaag B, Evans S, et al. Long-term psychological and occupational effects of providing hospital healthcare during SARS outbreak. *Emerg Infect Dis* 2006; **12**: 1924–32.
- Su TP, Lien TC, Yang CY, Su YL, Wang JH, Tsai SL, et al. Prevalence of psychiatric morbidity and psychological adaptation of the nurses in a structured SARS caring unit during outbreak: a prospective and periodic assessment study in Taiwan. *J Psychiatr Res* 2007; **41**: 119–30.
- McFeeters D, Boyda D, Siobhan O. Patterns of stressful life events: distinguishing suicide ideators from suicide attempters. *J Affect Disord* 2015; **175**: 192–8.
- Stanley IH, Hom MA, Joiner TE. A systematic review of suicidal thoughts and behaviors among police officers, firefighters, EMTs, and paramedics. *Clin Psychol Rev* 2016; **44**: 25–44.
- Maunder RG, Lancee WJ, Rourke S, Hunter JJ, Goldbloom D, Balderson K, et al. Factors associated with the psychological impact of severe acute respiratory syndrome on nurses and other hospital workers in Toronto. *Psychosom Med* 2004; **66**: 938–42.

- 36 Bai Y, Lin CC, Lin CY, Chen JY, Chue CM, Chou P. Survey of stress reactions among health care workers involved with the SARS outbreak. *Psychiatr Serv* 2004; **55**: 1055-7.
- 37 Um DH, Kim JS, Lee HW, Lee SH. Psychological effects on medical doctors from the Middle East Respiratory Syndrome (MERS) outbreak: a comparison of whether they worked at the MERS occurred hospital or not, and whether they participated in MERS diagnosis and treatment. *J Korean Neuropsychiat Assoc* 2017; **56**: 28-34.
- 38 Goulia P, Mantas C, Dimitroula D, Mantis D, Hyphantis T. General hospital staff worries, perceived sufficiency of information and associated psychological distress during the A/H1N1 influenza pandemic. *BMC Infect Dis* 2010; **10**: 322.
- 39 Wong EL, Wong SY, Lee N, Cheung A, Griffiths S. Healthcare workers' duty concerns of working in the isolation ward during the novel H1N1 pandemic. *J Clin Nurs* 2012; **21**: 1466-75.
- 40 Khalid I, Khalid TJ, Qabajah MR, Barnard AG, Qushmaq IA. Healthcare workers emotions, perceived stressors and coping strategies during a MERS-CoV outbreak. *Clin Med Res* 2016; **14**: 7-14.
- 41 Webster RK, Liu R, Karimullina K, Hall I, Amlöt R, Rubin GJ. A systematic review of infectious illness: presenteeism: prevalence, reasons and risk factors. *BMC Public Health* 2019; **19**: 799.
- 42 Litz BT, Stein N, Delaney E, Lebowitz L, Nash WP, Silva C, et al. Moral injury and moral repair in war veterans: a preliminary model and intervention strategy. *Clin Psychol Rev* 2009; **29**: 695-706.
- 43 Greenberg N, Docherty M, Gnanapragasam S, Wessely S. Managing mental health challenges faced by healthcare workers during covid-19 pandemic. *BMJ* 2020; **368**: m1211.
- 44 Damery S, Draper H, Wilson S, Greenfield S, Ives J, Parry J, et al. Healthcare workers' perceptions of the duty to work during an influenza pandemic. *J Med Ethics* 2010; **36**: 12-8.
- 45 Imai H, Matsuishi K, Ito A, Mouri K, Kitamura N, Akimoto K, et al. Factors associated with motivation and hesitation to work among health professionals during a public crisis: a cross sectional study of hospital workers in Japan during the pandemic (H1N1) 2009. *BMC Public Health* 2010; **10**: 672.
- 46 Aiello A, Young-Eun Khayeri M, Raja S, Peladeau N, Romano D, Leszcz M, et al. Resilience training for hospital workers in anticipation of an influenza pandemic. *J Contin Educ Health Prof* 2011; **31**: 15-20.
- 47 Cates DS, Gomes PG, Krasilovsky AM. Behavioral health support for patients, families, and healthcare workers. In *Bioemergency Planning: A Guide for Healthcare Facilities* (eds A Hewlitt, ARK Murthy): 195-214. Springer, 2018.
- 48 Halpern J, Gurevich M, Schwartz B, Brazeau P. Interventions for critical incident stress in emergency medical services: a qualitative study. *Stress Health* 2009; **25**: 139-49.
- 49 Hanisch SE, Twomey CD, Szeto AC, Birner UW, Nowak D, Sabariego C. The effectiveness of interventions targeting the stigma of mental illness at the workplace: a systematic review. *BMC Psychiatry* 2016; **16**: 1.
- 50 Henderson C, Thornicroft G. Evaluation of the Time to Change programme in England 2008-2011. *Br J Psychiatry* 2013; **202**(suppl 55): s45-8.
- 51 Time to Change. *Activities for your workplace*. Time to Change (<https://www.time-to-change.org.uk/get-involved/get-your-workplace-involved/resources/activities>) [updated Jan 2020; cited 31 Mar 2020]).
- 52 Ruotsalainen JH, Verbeek JH, Mariné A, Serra C. Preventing occupational stress in healthcare workers. *Cochrane Database Syst Rev* 2014; **11**: CD002892.
- 53 Burton A, Burgess C, Dean S, Koutsopoulou GZ, Hugh-Jones S. How effective are mindfulness-based interventions for reducing stress among healthcare professionals? A systematic review and meta-analysis. *Stress Health* 2017; **33**: 3-13.
- 54 Raab K. Mindfulness, self-compassion, and empathy among health care professionals: a review of the literature. *J Health Care Chaplain* 2014; **20**: 95-108.
- 55 Fjorback LO, Arendt M, Ørnbøl E, Fink P, Walach H. Mindfulness-based stress reduction and mindfulness-based cognitive therapy: a systematic review of randomized controlled trials. *Acta Psychiatr Scand* 2011; **124**: 102-19.
- 56 Bartlett L, Martin A, Neil AL, Memish K, Otahal P, Kilpatrick M, et al. A systematic review and meta-analysis of workplace mindfulness training randomized controlled trials. *J Occup Health Psychol* 2019; **24**: 108-26.
- 57 Williams JM, Duggan DS, Crane C, Fennell MJ. Mindfulness-based cognitive therapy for prevention of recurrence of suicidal behavior. *J Clin Psychol* 2006; **62**: 201-10.
- 58 Hayes SC. Acceptance and commitment therapy, relational frame theory, and the third wave of behavioral and cognitive therapies: republished article. *Behav Ther* 2016; **47**: 869-85.
- 59 Kabat-Zinn J. An outpatient program in behavioral medicine for chronic pain patients based on the practice of mindfulness meditation: theoretical considerations and preliminary results. *Gen Hosp Psychiatry* 1982; **4**(1): 33-47.
- 60 Feldman G, Greeson J, Senville J. Differential effects of mindful breathing, progressive muscle relaxation, and loving-kindness meditation on decentering and negative reactions to repetitive thoughts. *Behav Res Ther* 2010; **48**: 1002-11.
- 61 Spijkerman MP, Pots WT, Bohlmeijer ET. Effectiveness of online mindfulness-based interventions in improving mental health: a review and meta-analysis of randomised controlled trials. *Clin Psychol Rev* 2016; **45**: 102-14.

