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### **Early View**

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Alexander Supady, J. Randall Curtis, Crystal E. Brown, Daniel Duerschmied, Lyn Anne von Zepelin, Marc Moss, Daniel Brodie

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#### Ethical obligations for supporting healthcare workers during the COVID-19 pandemic

Alexander Supady, MD <sup>1,2,3</sup>, J. Randall Curtis, MD <sup>4,5</sup>, Crystal E. Brown, MD <sup>4,5,6</sup>, Daniel Duerschmied, MD <sup>1,2</sup>, Lyn Anne von Zepelin, BSc <sup>1,2</sup>, Marc Moss, MD <sup>7</sup>, Daniel Brodie, MD <sup>8,9</sup>

<sup>1</sup>Department of Medicine III (Interdisciplinary Medical Intensive Care), Medical Center – University of Freiburg, Faculty of Medicine, University of Freiburg, Germany

<sup>2</sup>Department of Cardiology and Angiology I, Heart Center, University of Freiburg, Germany

<sup>3</sup>Heidelberg Institute of Global Health, University of Heidelberg, Germany

<sup>4</sup>Cambia Palliative Care Center of Excellence at UW Medicine, Seattle, USA

<sup>5</sup>Division of Pulmonary, Critical Care, and Sleep Medicine, University of Washington, Seattle, USA

<sup>6</sup>Department of Bioethics and Humanities, University of Washington, Seattle, USA

<sup>7</sup>Division of Pulmonary Sciences and Critical Care, University of Colorado School of Medicine, Aurora, Colorado

<sup>8</sup>Columbia University College of Physicians & Surgeons/New York-Presbyterian Hospital, New York, USA

<sup>9</sup>Center for Acute Respiratory Failure, Columbia University Medical Center, New York, USA

#### **Correspondence to:**

Alexander Supady, MD, MPH

Medical Center - University of Freiburg

Department of Medicine III (Interdisciplinary Medical Intensive Care)

**Hugstetter Strasse 55** 

79106 Freiburg

Germany

alexander.supady@universitaets-herzzentrum.de

Orcid-ID: 0000-0003-4056-3652

#### "take home" message:

Based on considerations of justice, healthcare workers must be able to rely on support and protection from the societies in which they work. Prioritization of healthcare workers for vaccines may be a way to maintain a functioning healthcare system.

During the coronavirus disease 2019 (COVID-19) pandemic, some healthcare facilities have, at times, reached the limits of their capacity to handle the surge in patient volume. Hospital beds and other medical resources became scarce as a consequence. Healthcare workers (HCWs) – both clinical and non-clinical – were required to increase their workload, under extremely stressful circumstances.

HCWs are routinely exposed to numerous stressors, which results in high rates of burnout, posttraumatic stress disorder, and suicide, especially among those working in high intensity environments.[1] This has been especially true during the COVID-19 pandemic.[2] Physically stressful working conditions and witnessing the suffering and death of large numbers of patients take a toll. Further, when resources cannot fully meet demand, HCWs may experience moral distress due to rationing decisions.[3] In addition, being confronted with a highly contagious pathogen like the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), there is also the fear of becoming infected oneself or spreading the infection to one's family (see Table 1).[4] This stress may contribute to physical exhaustion and feelings of fear and anxiety, sleepdisorders and insomnia, or even burnout and depression.[2] All of this is compounded in a situation like a pandemic where the effects are felt beyond the work environment, giving HCWs the sense that there is no way to escape the pressures outside the hospital. Anxiety is further heightened by the uncertainty about when the pandemic will end or how bad it will get. With all of this psychological trauma, some HCWs will need extra time away from the hospital, some may never return to their jobs. As a consequence, healthcare facilities and systems could lose HCWs precisely at a time when they are needed most, further aggravating the situation of scarcity created by the increased demand. Therefore, it is crucial to keep working conditions as safe as possible in times of crisis. As patient surge reaches critical limits, tasks not absolutely necessary for patient care should be reduced as much as possible, while preserving safety.

Ongoing support for HCWs is critical at all levels, for instance, from family, friends, and colleagues, as well as healthcare institutions, professional organizations, government and society at large. The support must be aimed at protecting and maintaining the mental and physical wellbeing of HCWs and early identification when they are at risk. For the individual, this support may come in many forms, such as meditation, exercise, creative arts therapy, and religious or spiritual activities. Furthermore, interprofessional teams caring for patients, especially in intensive care units, need to be assisted in fostering community.[5] Psychological support for those in need may include a trauma psychologist in those regions deeply affected by

the pandemic. This support could also help counteract "social contagion", an aggravation of symptoms among peers.[6]

The issue of supporting HCWs, however, is not only a question of physical and mental health; there are moral questions of responsibility, solidarity and justice at stake. HCWs not only have a professional and legal obligation to provide care for patients, but also a moral obligation.[7] This moral obligation is reflected by the acceptance of professional codes like the Hippocratic oath and codes of various medical and allied health associations. However, the extent to which this obligation is appropriate in a situation where the acceptance of it would entail a significant threat to the HCWs own health and well-being is debatable. Neither heroism, nor self-sacrifice can be demanded based on a perceived moral obligation.[7]

Moral imperatives – and, similarly, the legal and professional obligations derived from them – cannot be a unilateral commitment by HCWs; they should instead be considered as part of a societal contract consisting of mutual interests, rights and duties. HCWs should be able to rely on reciprocal obligations from others.[8] The scope of these reciprocal obligations is similarly context- and situation-dependent. In the setting of the COVID-19 pandemic, HCWs must be able to rely on a wide array of support, as well as responsible behavior by other members of society (Table 2). For instance, situations in which HCWs put themselves at risk due to the lack of personal protective equipment (PPE) must be strenuously avoided.[9] Similarly, reciprocal responsibility and solidarity also includes responsible behavior of all members of society. Contact restrictions, social distancing, and the wearing of face masks in public can help save HCWs, health facilities and health systems from being overburdened. Finally, compensation for surviving dependents of HCWs who became infected during their work and died should be part of these reciprocal obligations as a matter of solidarity.

When demand for resources overwhelms supply, the inability to provide standard of care due to lack of staffing or equipment, raises not only moral but also legal questions.[10] HCWs, and in particular physicians, may be at risk for being sued for not providing a normal standard of care despite being in a crisis for which they themselves could not reasonably be held responsible.[11] Working under a crisis standard of care that may, of necessity, be well below the ordinary standard of care, can be a source of extreme stress for all HCWs. This stress should not be compounded by the fear of legal prosecution, whether civil or criminal. The reciprocal responsibility of society at large should therefore entail the protection of HCWs in

general from legal action based on a failure to provide an impossible-to-achieve standard of care in times when clinicians are forced to practice under crisis standards of care.

One additional remedy that has been proposed is to prioritize such individuals for vaccines and treatments that are limited in availability, with the rationale resting on the instrumental value of HCWs as well as on reciprocity or even reward for their commitment to society.[12] This argument has merit, particularly in the context of preserving the HCW workforce, when it comes to the distribution of a vaccine that won't be equally available for all from the outset. However, it will be challenging to balance this argument against prioritization according to medical need. Preserving the lives of HCWs may help preserve one of the scarcest resources in this pandemic and thereby potentially save more lives through their work at the bedside. However, prioritization of HCWs will disproportionately benefit the educated and thereby aggravate existing social and racial disparities, which may be in conflict with egalitarian principles and equity. Several prioritization guidelines for the distribution of COVID-19 vaccines acknowleged prioritization of frontline HCWs. However, other guidelines avoid taking a position with regard to favoring HCWs over elderly patients by awarding both groups the vaccine with equal priority.[13, 14] Both approaches have merit, but considering all arguments we advocate for prioritization of frontline HCWs for SARS-CoV-2 vaccines.

Considering a broader range of treatments beyond vaccines, we believe prioritization of HCWs for receipt of scarce resources should be subordinate to other more convincing principles. It is impossible to fairly judge instrumental value from the socially useful behavior of a person, and weigh it against other values. In addition, the judgement of instrumental value brings with it considerable danger of discrimination through overrating of an alleged instrumental value compared to morally competing principles, such as non-discrimination based on race, gender, age, disability, or socioeconomic status.

The COVID-19 pandemic has put many health facilities and systems and even entire societies under unprecedented levels of stress. For reasons of justice and in order not to jeopardize the functioning of the health sector, HCWs must be able to rely on broad support to fulfill their duties for the benefit of society. Protecting and preserving the healthcare workforce has a direct bearing on the functioning of the entire healthcare system, which is paramount for the well-being of all societies.

#### References

- 1. Braquehais MD, Eiroa-Orosa FJ, Holmes KM, Lusilla P, Bravo M, Mozo X, Mezzatesta M, Casanovas M, Pujol T, Sher L. Differences in Physicians' and Nurses' Recent Suicide Attempts: An Exploratory Study. *Arch Suicide Res* 2016: 20(2): 273-279.
- 2. Azoulay E, Cariou A, Bruneel F, Demoule A, Kouatchet A, Reuter D, Souppart V, Combes A, Klouche K, Argaud L, Barbier F, Jourdain M, Reignier J, Papazian L, Guidet B, Geri G, Resche-Rigon M, Guisset O, Labbe V, Megarbane B, Van Der Meersch G, Guitton C, Friedman D, Pochard F, Darmon M, Kentish-Barnes N. Symptoms of Anxiety, Depression, and Peritraumatic Dissociation in Critical Care Clinicians Managing Patients with COVID-19. A Cross-Sectional Study. *Am J Respir Crit Care Med* 2020: 202(10): 1388-1398.
- 3. Butler CR, Wong SPY, Wightman AG, O'Hare AM. US Clinicians' Experiences and Perspectives on Resource Limitation and Patient Care During the COVID-19 Pandemic. *JAMA Netw Open* 2020: 3(11): e2027315.
- 4. Nguyen LH, Drew DA, Graham MS, Joshi AD, Guo CG, Ma W, Mehta RS, Warner ET, Sikavi DR, Lo CH, Kwon S, Song M, Mucci LA, Stampfer MJ, Willett WC, Eliassen AH, Hart JE, Chavarro JE, Rich-Edwards JW, Davies R, Capdevila J, Lee KA, Lochlainn MN, Varsavsky T, Sudre CH, Cardoso MJ, Wolf J, Spector TD, Ourselin S, Steves CJ, Chan AT, Consortium COPE. Risk of COVID-19 among front-line health-care workers and the general community: a prospective cohort study. *Lancet Public Health* 2020: 5(9): e475-e483.
- 5. Costa DK, Moss M. The Cost of Caring: Emotion, Burnout, and Psychological Distress in Critical Care Clinicians. *Ann Am Thorac Soc* 2018: 15(7): 787-790.
- 6. Jun J, Kelly Costa D. Supporting a Precious Resource: Healthcare Clinicians. *Am J Respir Crit Care Med* 2020: 202(10): 1330-1332.
- 7. Brody H, Avery EN. Medicine's duty to treat pandemic illness: solidarity and vulnerability. *Hastings Cent Rep* 2009: 39(1): 40-48.
- 8. WHO. Ethical considerations in developing a public health response to pandemic influenza. Geneva: WHO; 2007.
- 9. Nava S, Tonelli R, Clini EM. An Italian sacrifice to the COVID-19 epidemic. *Eur Respir J* 2020: 55(6).
- 10. White DB, Lo B. Mitigating Inequities and Saving Lives with ICU Triage During the COVID-19 Pandemic. *AJRCCM* 2020: online ahead of print.
- 11. Cohen IG, Crespo AM, White DB. Potential Legal Liability for Withdrawing or Withholding Ventilators During COVID-19: Assessing the Risks and Identifying Needed Reforms. *JAMA* 2020: 323(19): 1901-1902.
- 12. Persad G, Wertheimer A, Emanuel EJ. Principles for allocation of scarce medical interventions. *Lancet* 2009: 373(9661): 423-431.
- 13. Dooling K, Marin M, Wallace M, McClung N, Chamberland M, Lee GM, Talbot HK, Romero JR, Bell BP, Oliver SE. The Advisory Committee on Immunization Practices' Updated Interim Recommendation for Allocation of COVID-19 Vaccine United States, December 2020. *MMWR Morb Mortal Wkly Rep* 2021: 69(5152): 1657-1660.

14. Kingdom GotU. Independent report: Joint Committee on Vaccination and Immunisation: advice on priority groups for COVID-19 vaccination, 30 December 2020 London: Department of Health and Social Care; 2020.

**Declarations** 

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#### **Tables**

#### Table 1

Stressors for healthcare workers (HCWs) during the coronavirus disease 2019 (COVID-19) pandemic

Stressor	Description
Physical stress	Care for COVID-19 patients is particularly strenuous, since
	wearing of protective gear is required and specific
	interventions like e.g. prone positioning are physically
	demanding for HCWs.
Extra hours	When hospitals become overburdened by the number of
	patients and at the same time suffer from absenteeism of
	diseased HCWs the remaining staff may require to work
	serious amount of extra hours.
Fear of becoming infected or	Close contact to infectious patients poses a risk for HCWs of
transmitting infections to non-	getting infected and also a risk for transmission of SARS-CoV-
COVID-patients, family, or friends	2 to non-COVID-patients.
Restricted visitor policy	Visiting restrictions for relatives and friends of patients causing
	regrets and sorrow for HCWs.
No conceivable spatial or	No outlet to escape the situation because the pandemic as
temporal boundaries of the	well as the stressors are not confined to the hospital and not
pandemic.	knowing when the pandemic is going to end.
Social isolation	Family members of older age are at risk and cannot be seen,
	family celebrations cannot take place.
Fear of losing family members,	HCWs may care for many severely ill patients, constantly
friends or colleagues	aware of the danger of a COVID-19 infection.
Frustration with political leaders	Perceived or real inconsistencies and management failures of
	political leaders increase the feelings of helplessness and
	being at the mercy of others.
Frustration with administration for	Perceived or real management failures of administrative staff
not having enough	when equipment for self-protection is not sufficiently available
equipment/PPE or failure to	increase the feelings of being sacrificed thus causing anger.
protect/testing equipment	
Uncertainty because of frequently	HCWs are are frequently asked about their opinion and for
changing information about	advice; they have to deal with a lot of uncertainty themselves
COVID-19	and can be overwhelmed when facing individuals who do not
	understand social distancing and deny the danger of a
	pandemic spreading rapidly.
Moral distress	Feelings of being left alone for rationing decisions on own
	moral standards when there are limited supporting structures
	and guidelines can lead to considerable moral distress

Table 2

Reciprocal obligations for members society with the goal of limiting the number of infected patients and reducing strain on the healthcare system

Societal level	Responsibilities
All members of society	<ul> <li>Social distancing</li> <li>Contact restrictions and avoidance of large group gatherings</li> <li>Wearing of face masks in public</li> <li>Frequent hand-washing</li> <li>Protection of HCWs from unjustified legal action due to providing crisis standard of care</li> </ul>
Friends, family, and colleagues, neighbors	<ul> <li>Active listening</li> <li>Provide emotional support</li> <li>Encourage HCWs to seek help from mental health specialists</li> <li>Provide help for everyday duties (e.g., shopping, child care)</li> </ul>
Healthcare administrators and institutions	<ul> <li>Ensure adequate personal protective equipment (PPE)</li> <li>Limiting HCWs' work-load by shifting tasks that are not absolutely necessary for patient care to non-clinical personnel</li> <li>Provide for counseling services</li> <li>Develop "work-life balance" programs</li> <li>Promote self-care messaging</li> <li>Provide for education and teaching about recent scientific evidence related to the spread of the SARS-CoV-2 and protective measures</li> </ul>
Unions and professional organizations	<ul> <li>Develop "work-life balance" programs</li> <li>Promote self-care messaging</li> <li>Develop for educational programs about recent scientific evidence related to the spread of the SARS-CoV-2 and protective measures</li> <li>Advocate for HCWs needs to employers, hospital administrations, and governments</li> <li>Protection of HCWs from unjustified legal action due to providing crisis standard of care</li> </ul>
Local, regional, and national government	<ul> <li>Ensure adequate access to PPE for institutions</li> <li>Support development of institutional and regional policies for rationing and triage</li> <li>Provide for financial protection of dependents of HCWs who become infected during their work</li> <li>Thorough explanation and public education regarding (scientific) rationale of restrictions and burdens</li> <li>Protection of HCWs from unjustified legal action due to providing crisis standard of care</li> </ul>