What Could "Fair Allocation" during the Covid-19 Crisis Possibly Mean in Sub-Saharan Africa?

by KEYMANTHRI MOODLEY, LAURENT RAVEZ, ADETAYO EMMANUEL OBASA, ALWYN MWINGA, WALTER JAOKO, DARIUS MAKINDU, FRIEDA BEHETS, and STUART RENNIE

The Covid-19 pandemic has reached all continents of the world, including Africa. Although reported infections in sub-Saharan low- and middle-income countries (LMICs) are relatively low, they are expected to rise considerably as testing becomes widespread. Many local health care systems have been fragile for decades, struggle to meet existing health needs, and are likely to be rapidly overwhelmed if there are surges of critically ill patients. The Covid-19 pandemic is particularly challenging because the virus, SARS-CoV-2, is easily transmitted through respiratory droplets, including by asymptomatic persons, and both a vaccine and effective treatment are unavailable. In lowincome African countries suffering from chronic shortages in health care resources and high morbidity and mortality from non-Covid-19 causes such as HIV and tuberculosis, what are the key clinical and public health ethics challenges raised by the Covid-19 pandemic, and what room is there for an ethical response? We argue that context matters when it comes to Covid-19 ethical recommendations and that talk of "fair allocation" of resources, which has become a major issue in high-income countries (HICs), has a very hollow ring in settings long familiar with rationing and marked by high disease burdens, poverty, and social injustice.

The success of any public health measure is anchored in prevention. To be ethically justified, preventive measures must be effective, and effectiveness presupposes feasibility. The recommendation by the World Health Organization for physical distancing of at least one meter is no doubt potentially effective for reducing transmission of a respiratory illness spread by droplets. But its feasibility is highly questionable in urban slums, informal settlements, refugee camps, and homeless shelters. Sub-Saharan Africa is home to many dense human settings much better suited to fueling

Keymanthri Moodley, Laurent Ravez, Adetayo Emmanuel Obasa, Alwyn Mwinga, Walter Jaoko, Darius Makindu, Frieda Behets, and Stuart Rennie, "What Could 'Fair Allocation' during the Covid-19 Crisis Possibly Mean in Sub-Saharan Africa?," *Hastings Center Report* 50, no. 3 (2020): 33-35. DOI: 10.1002/hast.1129

the spread of disease than to containing it. In settings of generalized insecurity, where people must venture outside for potable water, sanitary needs, and their daily food rations, a recommendation to stay home is a nonstarter. A requirement to repeatedly wash hands is just distressing if water is unavailable and soap is unaffordable. This means that public health recommendations in LMICs may not translate into actual practices that can shield the countries' health care systems from rapid influxes of Covid-19 patients.

Treatment also poses special challenges in LMICs. In the United States and Europe, much attention has focused on the allocation of intensive care unit beds and high-tech medical interventions in hospitals, such as mechanical ventilation and dialysis, for Covid-19 patients. But this debate looks different from the perspective of the ten African countries that have no mechanical ventilation units:2 the ethical problem disappears, or rather, it becomes another ethical debate about how such an appalling situation is even possible. Fortunately, as has become apparent from settings where the pandemic has already been felt, most Covid-19 patients may not need the high-tech approaches. The majority appear to have mild or moderately severe disease and will likely be responsive to less complex treatments like decongestants, expectorants, and oxygen administered via venturi masks or nasal prongs.3 The bad news: even if only a small percentage of Covid-19 patients need critical care, very many will not receive it due to shortages of equipment and personnel. The impact of the Covid-19 pandemic on the more robust health care systems in Italy, France, Spain, and the United States does not bode well for sub-Saharan Africa.

Among bioethicists, particularly in high-income countries, the pandemic has sparked a debate about the fair allocation of scarce resources.⁴ While the recommendations and decision aids they have issued are not explicitly intended for global use, their context of applicability is not specified.⁵ But contextual considerations are critical if ethics guidance is to be meaningful.

May-June 2020 HASTINGS CENTER REPORT 33

When applied to older Congolese or Nigerian Covid-19 patients, it is unclear what "reasonable life expectancy posttreatment" would even mean. Does it refer to "locally reasonable"? Is "reasonable" the right word?

Most bioethics frameworks emerging from HICs recommend that scarce medical resources be allocated in ways that maximize benefits—that is, that maximize the number of lives saved and improvements in patients' years of posttreatment life. Some claim that there is considerable agreement on these criteria among experts and that they can be defended on both utilitarian (best-overall-outcomes) and nonutilitarian (value-of-human-life) grounds. In practice, applying these criteria means prioritizing patients likely to recover and with a reasonable life expectancy when distributing scarce resources. These criteria are appealing in that they look impartial and biomedical, with determinations based on clinical examinations and prognoses. As Harald Schmidt argues with respect to the U.S. context, however, this is not true on closer inspection. Given the social determinants of health, those who are disadvantaged in society are disproportionately unhealthy and, therefore, in emergency care are less likely to recover and less likely to have a reasonable life expectancy after treatment. In LMICs, unless social determinants of health are taken into account, those who are worst off may be least likely to access needed care, compounding social injustice. And the elites in those societies, infamous for flying abroad to avoid their own health systems when they get sick, could come out on top yet again.

It may well be that, in LMICs, you cannot take a utilitarian approach that benefits the majority of patients without doing further damage to those worst off. In the context of treatment decisions for Covid-19, saving the most lives with the most potential posttreatment years should involve thinking beyond the 5 percent of the population that needs mechanical ventilation and ICU beds and investing in prevention and simpler, less expensive, and less skills-intensive treatments (like oxygen) that can benefit the majority of patients. This includes targeted interventions beyond health care institutions such as identification of cases by community health workers and mobile clinics, especially since many sick and exposed persons will not even present to hospitals and clinics, for a variety of reasons.7 Sicker patients in need of more intensive treatment will likely be in the same boat as most patients with chronic kidney disease in economically deprived settings—out of luck. This may be what "fair allocation" will look like, though that might not be the best choice of words.

In HICs, bioethicists debate whether allocating scarce Covid-19 resources to those most likely to recover and who have a reasonable posttreatment life expectancy unfairly favors youth over the aged.⁸ It is interesting to think about the age question from a LMIC perspective. On the one hand, many African countries are predominantly young; this could be advantageous in the face of a virus that disproportionately threatens older persons. But there is another way of putting it: in LMICs, those in the sixty-five-and-up age range are relatively few because life-expectancy in most of these countries is low. For example, in the Democratic Republic of Congo, life expectancy is sixty-one years; in Nigeria, it is 60.4 years.⁹ When applied to older Congolese or Nigerian Covid-19 patients, it is unclear what "reasonable life expectancy posttreatment" would even mean. Does it refer to "locally reasonable"? Is "reasonable" the right word?

Emerging bioethics guidance also recommends treating Covid-19 and non-Covid patients equitably. While this principle may be suitable for well-resourced health care settings, it is not clear how it could be implemented in lowincome settings faced with an acute public health emergency while already barely able to meet non-Covid medical demand. What is more likely to happen, but will come at an ethical cost, is the prioritization of Covid-19 patients with acute illness over non-Covid-19 patients who have chronic, potentially less reversible conditions like chronic pulmonary disease with poor outcomes or terminal malignancy. This shift in care priorities and human resources in health care institutions can be ethically defended in the short term as a response to an acute public health emergency in which there are many unknowns. The ethical collateral damage of such a shift is (further) neglect of patients with serious non-Covid health conditions, 10 along with the complicated problem of when and how to shift resources back again.

Most prioritization frameworks also recommend that frontline health care workers be given priority for receiving scarce resources, on two grounds: because they have exposed themselves to heightened risk to help others (a matter of reciprocity) and because they could continue to assist in the Covid-19 response (a matter of utility) after recovering. One could argue that reciprocity extends to all personnel, including administrative staff members and cleaners, because they make patient care possible and are placed at heightened risk relative to the general population. However, in sub-Saharan African settings, prioritization may be possible only for frontline health workers actively involved in Covid-19 patient care. This policy may be ethically defensible given the

risks they face (globally, many frontline health care workers have acquired Covid-19 and died) and the shortage of highly skilled critical care professionals in most sub-Saharan African countries; keeping these frontline health workers alive must be a top priority.

If SARS-CoV-2 infections rise dramatically in sub-Saharan Africa, the main imperative will be to save those who can be saved with what few resources are available to lessen the damage to communal life. It will not be pretty. Ethical recommendations imported from HICs (and even international agencies)12 will be of limited relevance; what is also needed is guidance that is informed by how scarcity decisions have been made in LMICs for decades, that is responsive to current circumstances, that embodies shared cultural values, and that is developed through a transparent, community-engaging process. Short of that, how prioritization unfolds will less likely rely on complex allocation schemes and external committees focused on high-tech critical care and more likely depend on the judgments of experienced African doctors as they distinguish between those needing symptomatic treatment such as oxygen and those to be triaged to palliative care. To be ethically defensible, such judgments should incorporate relevant ethical considerations and reasoning and should be documented for potential evaluation. Perhaps more than elsewhere, health care providers in LMICs during the Covid-19 crisis could find themselves regularly confronted with what Lisa Tessman calls "moral failure": situations in which avoiding moral wrong is impossible. Even then, it is up to local bioethicists to make sense of what unfolds—and to bear witness.

- 1. N. E. Kass, "An Ethics Framework for Public Health," *American Journal of Public Health* 91, no. 11 (2001): 1776-82.
- 2. R. Maclean and S. Marks, "10 African Countries Have No Ventilators. That's Only Part of the Problem," *New York Times*, April 18, 2020.
- 3. Z .Wu and J. M. McGoogan, "Characteristics of and Important Lessons from the Coronavirus Disease 2019 (Covid-19) Outbreak

- in China: Summary of a Report of 72,314 Cases from the Chinese Center for Disease Control and Prevention," *Journal of the American Medical Association* 323 (2020): 1239-42.
- 4. R. D. Truog, C. Mitchell, and G. Q. Daley., "The Toughest Triage—Allocating Ventilators in a Pandemic," *New England Journal of Medicine* 382 (2020): 1973-75; E. J. Emanuel et al., "Fair Allocation of Scarce Medical Resources in the Time of Covid-19," *New England Journal of Medicine* 382 (2020): 2049-55; D. Sokol, "The Life and Death Decisions of Covid-19," *BMJ Opinion* (blog), March 20, 2020, at https://blogs.bmj.com/bmj/; L. O. Gostin, E. A. Friedman, and S. A. Wetter, "Responding to Covid-19: How to Navigate a Public Health Emergency Legally and Ethically," *Hastings Center Report* 50, no. 2 (2020): 8-12.
- 5. J. A. Singh and K. Moodley, "Critical Care Triaging in the Shadow of Covid-19: Ethics Considerations," *South African Medical Journal* 110, no. 5 (2020): 341-42.
- 6. H. Schmidt, "The Way We Ration Ventilators Is Biased. Not Every Patient Has a Fair Chance," *New York Times*, April 15, 2020.
- 7. R. Cash and V. Patel, "Has Covid-19 Subverted Global Health?," Lancet 395 (2020): 1687-88.
- 8. D. Archard, A. Caplan, and F. William, "Is It Wrong to Prioritise Younger Patients with Covid-19?," *BMJ* 369 (2020): doi:10.1136/bmj.m1509.
- 9. "The CIA Factbook," Central Intelligence Agency, April 23, 2020, https://www.cia.gov/library/publications/resources/the-world-factbook/
- 10. T. Roberton et al., "Early Estimates of the Indirect Effects of the Covid-19 Pandemic on Maternal and Child Mortality in Low-Income and Middle-Income Countries: A Modelling Study," *Lancet Global Health* (May 12, 2020 [epub ahead of print]): doi:10.1016/S2214-109X(20)30229-1.
- 11. T. Haaser, "Rewarding through Prioritization: The Limits of Reciprocal Obligation in Allocating Scarce Medical Resources in the Covid-19 Crisis," *Journal of Medical Ethics* (blog), April 9, 2020, https://blogs.bmj.com/medical-ethics/2020/04/09/rewarding-through-prioritization-the-limits-of-reciprocal-obligation-in-allocating-scarce-medical-resources-in-the-Covid-19-crisis/.
- 12. World Health Organization, *Ethical Considerations in Developing a Public Health Response to Pandemic Influenza* (Geneva: WHO, 2007), https://www.who.int/csr/resources/publications/WHO_CDS_EPR_GIP_2007_2c.pdf.

Covid-19: Ethical Challenges for Nurses

by GEORGINA MORLEY, CHRISTINE GRADY, JOAN MCCARTHY, AND CONNIE M. ULRICH

he Covid-19 pandemic—with, at the time of this writing, nearly two million cases worldwide and 113,030 deaths¹—has highlighted many of the difficult ethical issues that health care professionals confront in caring for patients and families. The decisions such workers face on the front lines are fraught with uncertainty for all

Georgina Morley, Christine Grady, Joan McCarthy, and Connie M. Ulrich, "Covid-19: Ethical Challenges for Nurses," *Hastings Center Report* 50 (2020): 35-39. DOI: 10.1002/hast.1110

stakeholders. Our focus is on the implications for nurses, who are the largest global health care workforce but whose perspectives are not always fully considered.²

We see three overarching ethical issues that create a myriad of concerns and will likely affect nurses globally in unique ways: the safety of nurses, patients, colleagues, and families; the allocation of scarce resources; and the changing nature of nurses' relationships with patients and families.

May-June 2020 HASTINGS CENTER REPORT 35