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

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What could 'fair allocation' during the COVID-19 crisis possibly mean in sub-Saharan Africa?

The COVID-19 pandemic has reached all continents of the world including Africa. Although reported infections in sub-Saharan African 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 and struggling to meet existing health needs, and are likely to be rapidly overwhelmed if large surges of critically ill patients arrive. The COVID-19 pandemic is particularly challenging as the SARS-CoV-2 is easily transmitted through respiratory droplets, including by asymptomatic persons, while a vaccine or effective treatment are unavailable. In low-income African countries suffering from chronic shortages in health care resources, and high morbidity and mortality from non-COVID-19 causes such as HIV and TB, 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 talk of 'fair allocation' of resources has a very hollow ring in settings long familiar with rationing and marked by high disease burdens, poverty, and social injustice.

As a point of departure, the success of any public health measure is anchored in prevention. To be ethically justified, measures must be effective.[1] Effectiveness presupposes feasibility. The recommendation by World Health Organisation (WHO) for physical distancing of at least a metre is no doubt evidence-based as a means of reducing transmission of a severe respiratory illness with droplet spread. But its feasibility is highly questionable in urban slums, informal settlements, refugee camps and homeless shelters. Africa is home to many settings of dense human spaces much better suited to fueling the spread of disease than containing it. In settings of generalized insecurity, where people must venture outside for potable water, sanitary needs, and their daily food rations, well-intentioned recommendations to stay home is a non-starter. A requirement to repeatedly wash hands is distressing where water is unavailable and soap is unaffordable. Unfortunately, this means that public health measures in LMICs may be unable to shield their health care systems from a rapid influx of COVID-19 patients.

Shifting the focus to treatment, ~~many ethical recommendations have~~much attention has focused on allocation~~how to allocate~~ of high-tech medical interventions in hospitals for COVID-19 patients, such as ICU beds, mechanical ventilation and dialysis. Of course, this debate looks different from the perspective of the 10 African countries who 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 it has become apparent from settings where the might of the pandemic has already been felt, most COVID-19 patients may not need the more high-tech approaches. The majority appear to have mild (40%) or moderately severe disease (40%) and will likely be responsive to less complex treatments like oxygen, venturi masks, nasal prongs, decongestants and expectorants, while ventilators, ICU beds and dialysis machines will only be indicated in a minority of the most severe cases.[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 severe shortages of necessary equipment and skilled personnel to provide services. The impact of the

COVID-19 pandemic seen on stronger health care systems in Italy, France, Spain and the United States does not bode at all well for Africa.

Among bioethicists, particularly in high-income countries, the pandemic has sparked a debate about fair allocation of scarce resources, resulting in a substantial number of rapidly issued recommendations and decision aids[4,5,6,7,8]. While these are not explicitly intended for global use, their context of applicability is not specified~~Such directives have traditionally been influential in LMICs~~[9]. But, for reasons indicated below, contextual considerations are critical if ethics guidance is to be meaningful.

Most bioethics frameworks emerging from high income countries recommend that scarce medical resources be allocated in ways that maximize benefits, i.e. that maximize the number of lives saved and improvements in patients' years of post-treatment life. Some claim there is considerable agreement on these criteria among experts and they can be ethically defended on both utilitarian (best overall outcomes) and non-utilitarian (value of human life) grounds. In practice, this means prioritizing scarce resources to patients likely to recover and with a reasonable life expectancy. These criteria are appealing in that they look impartial and biomedical, i.e. determinations based on clinical examinations and prognoses. As Schmidt argues, this is not true on closer inspection.[10] 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 post-treatment. In LMICs, unless social determinants of health are taken into account in designing COVID-19 allocation approaches, 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 Paris or New York~~ 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 without doing further damage to those worst off. Saving the most lives with the most potential post-treatment years in the COVID-19 context should involve thinking beyond the 5% of the population needing mechanical ventilation and ICU beds, and investing in prevention and simpler, less expensive and 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 present to hospitals and clinics, for a variety of reasons.[11] Sicker patients in need of more intensive treatment will likely be in the same boat as most patients with chronic kidney disease in economically ~~very~~ deprived settings, i.e. out of luck. This may be what 'fair allocation' will look like, though that might not be the best choice of words.

There are debates about whether allocating scarce COVID-19 resources to those most likely to recover and who have a reasonable post-treatment life expectancy unfairly favors youth over the aged.[12] 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: those in the 65 and up age range in LMICs are relatively few, because life-expectancy in most of

these countries is low. For example, in the Democratic Republic of Congo, life expectancy is 61 years; in Nigeria, it is 60.4 years~~.~~[13]. When applied to older Congolese~~Conglose~~ or Nigerian COVID-19 patients, it is unclear what 'reasonable life expectancy post-treatment' 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 healthcare settings, it is not clear how it could be implemented in low-income settings faced with an acute public health emergency while already being barely able ~~or unable~~ to meet non-COVID medical demand. What is more realistic, but comes at an ethical cost, is the short-term 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. Arguably, there is an ethical imperative to shift care priorities and human resources in health care institutions when the community is faced with an acute public health emergency. In many settings, elective surgeries have already been postponed, and patients with chronic illness have been discharged from hospitals to make beds available and the number of critical care beds has been increased in proportion to the anticipated demand from COVID-19. Similarly, in LMICs, doctors usually restricted to non-COVID-19 specialities ~~will be or~~ have been re-deployed to assist in COVID-19 wards, emergency rooms and critical care environments. The ethical ~~cost~~ collateral damage of these shifts is (further) neglect~~, at least in the short term,~~ of patients with serious non-COVID health conditions.[14]

Most prioritization frameworks also recommend that frontline health care workers be given priority in scarce resource allocation decision-making on two grounds: because they have exposed themselves to heightened risk to help others (reciprocity), and because they could continue to assist in the COVID-19 response (utility) post-recovery. One could argue that reciprocity extends to all personnel, including administrative staff and cleaners, because they make patient care possible and are placed at heightened risk relative to the general population.[15] However, in sub-Saharan African settings prioritization may only be possible 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 acquired COVID-19 and have died) and the shortage of highly skilled critical care staff in most African countries.

If SARS-CoV-2 infections rise dramatically in sub-Saharan Africa, the main imperative will be to save 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 high-income countries (and even international agencies)[16] will be of limited relevance; what is also needed is guidance informed by how scarcity decisions have been made in LMICs for decades, which are responsive to current circumstances, ~~and~~ embody shared cultural values and are developed through a transparent, community-engaging process. Short of that, how prioritization~~How allocation~~ unfolds will less likely rely on complex allocation schemes emphasizing high-tech critical care, and more likely depend on the judgments of experienced African doctors as they distinguish between those needing symptomatic treatment including oxygen and those to be triaged to palliative care. Perhaps more than elsewhere, health care providers in LMICs during the COVID-

19 crisis could find themselves regularly confronted within what Lisa Tessman calls 'moral failure': situations in which avoiding moral wrong is impossible. Even then, it is up to local bioethicists to makes sense of what unfolds, and to bear witness.

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