






What the 'greater good' excludes: Patients left behind by pre-operative COVID-19 screening in an Ethiopian town

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Abstract

During the coronavirus disease 2019 (COVID-19) pandemic, bioethical analyses often emphasized population health and societal benefit. Hospital policies frequently focused on reducing risk of transmitting SARS-CoV-2 by restricting visitors; requiring protective equipment; and screening staff, patients and visitors. While restrictions can be burdensome, they are often justified as essential measures to protect the whole population against a virus with high rates of transmission, morbidity and mortality. Yet communities are not monolithic, and the impacts of these restrictions affect different groups differently. An ophthalmological unit outreach program in Ethiopia serves to illustrate. Pre-operative screening policies were designed to protect as many patients as possible but had adverse impacts on underserved communities. As this case study demonstrates, creating hospital policies that truly serve the good of the society may require a more holistic review of impacts on inequitably positioned communities.

KEYWORDS

COVID-19, health disparities, health equity, justice

1 | INTRODUCTION: PANDEMIC ETHICS AND THE GOOD OF THE WHOLE

While ethical frameworks and value systems vary across and within societies, in public health emergencies there is often a shared focus on the *benefit of the whole*. This is framed ethically as a utilitarian approach, in which the threat of large-scale harm to society, such as a pandemic, is taken to justify prioritizing the good of society even at some cost to the wellbeing and preferences of individuals. Internationally, many nations and institutions have responded to the COVID-19 pandemic following this reasoning. Mandates have been placed including physical distancing, staying at home, wearing masks, working from home, restricting travel, viral testing before medical treatment, and implementing vaccination when available. Though each mandate may create discomfort, loss of autonomy, and even harm to individuals, these costs have been justified because they offer protection against the risks of ongoing transmission of the SARS-CoV-2 virus.

The government of Ethiopia (GoE) initially declared a State of Emergency and mandated limiting social gatherings, physical distancing and facial coverings.¹ Many government offices, businesses, primary schools, and universities were either partially or totally closed. Remote work was not possible for most Ethiopians. In addition to strict mask and physical distancing protocols, many hospitals limited the number of procedures per day and also required patients undergoing procedures to demonstrate a negative COVID-19 PCR test result done within approximately three days (exact number varies by hospital) of the procedure date.

Although the above procedures and mandates aim at *benefitting the whole*, this aim raises health equity concerns related to how benefits are distributed between individuals and groups. Sometimes

¹Deressa, W., Worku, A., Abebe, W., Getachew, S., & Amogne, W. (2021). Social distancing and preventive practices of government employees in response to COVID-19 in Ethiopia. *PLoS ONE*, 16(9), e0257112.

polymakers who strive for a universal good overlook the systematic effects policies have on disadvantaged individuals and groups. Over the course of the pandemic, there has been greater recognition of the disproportionate burdens of COVID-19 infection on populations already suffering health disparities.² In what follows, we describe how policies that use a 'benefit the whole' calculus play out in clinical settings, using as an example a hospital policy in Ethiopia that requires screening for COVID-19 using a SARS-CoV-2 PCR test prior to surgery. As this example demonstrates, hospital policies that aim to protect the good of the whole may, in effect, protect only or primarily the good of socioeconomically advantaged communities, with no or limited benefits for socioeconomically disadvantaged communities. Ultimately, we demonstrate a situation in which weighing of "universal good" against "individual good" neglects health disparities that just policies must not neglect. Because the effects of this neglect are morally serious and the damage of entrenching health disparities unfair, we propose rethinking clinical policies aimed at the good of an undifferentiated 'whole'. Section I presents the case study. Section II identifies three alternative ways to incorporate health justice considerations in hospitals caring for underserved patients: justice as fairness, justice as equity, and responsive justice. Section III concludes that health equity can and should be dealt with by public health policy in a context-sensitive way that disaggregates groups that benefit from groups that suffer harm. In the final analysis, even when policies aim for a public good, such as preventing virus transmission, they can unwittingly create a public harm, further advantaging people already advantaged. When this occurs, public policies fall short of realizing a truly *just* and truly *universal good*.

2 | CASE STUDY: DISPROPORTIONATE EFFECTS OF A COVID-19 MITIGATION STRATEGY ON LOW-INCOME PATIENTS

A hospital in an urban area of Ethiopia has an outreach program that provides ophthalmology services for underserved low-income and impoverished people in collaboration with local churches and governmental and development institutions.³ The costs of the service are covered by international donors. An eye nurse from the team treats patients with medications at outreach centers. But if patients' impairments require intervention, such as cataract surgery, they are scheduled for the procedure at the hospital.

²See, for example, Adebisi, Y.A., Ekpenyong, A., Ntacyabukura, B., et al. (2020). COVID-19 Highlights the need for inclusive responses to public health emergencies in Africa. *American Journal of Tropical Medicine and Hygiene*, 104(2), 449–452; Assefa, N., Sié, A., Wang, D., et al. (2021). Reported barriers to healthcare access and service disruptions caused by COVID-19 in Burkina Faso, Ethiopia, and Nigeria: A telephone survey [published online ahead of print]. *American Journal of Tropical Medicine and Hygiene*, 105(2), 323–330; Public Health England. (2020). Disparities in the risk and outcomes of COVID-19. Retrieved December 15, 2021, from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/889195/disparities_review.pdf.

³Identity of hospital and more information about the hospital is withheld for purposes of confidentiality.

Transportation and surgical fees are covered by donation. After the COVID-19 pandemic, the hospital formulated a new policy to test every patient prior to going to the operation theatre with a SARS-CoV-2 PCR test, as is common in many Ethiopian healthcare institutions. The test costs 1,500 ETB which is more than 37 USD (based on March 3, 2021, exchange rate) per patient. The marginal cost of the surgery to the donor is 1,000 ETB (since human resource and facility costs are not charged), meaning the test adds 150% of the cost of the surgery to the program. The donor charity is obligated to pay for both the COVID-19 PCR test and the marginal cost of surgery.

In Ethiopia, eye care is primarily provided in the government sector, which is overwhelmed by the volume of patients given the volume of need. Surgical care is limited to larger cities and is not sufficient to meet all needs. Ethiopia for a time adopted a policy of having cataract surgery done by "cataract surgeons" (nurses trained in cataract surgery), but this still was not sufficient to clear the backlog of cataract blindness. Several charities regularly carry out surgical campaigns to try to clear the cataract burden. In major cities, private services are available for those able to pay; typically, cataract surgery costs about 8000–10240 ETB (160–200 USD) in the private setting.

At this point in the pandemic, vaccines were not available. However, even with vaccines now available, as of April 2022 vaccination rates are 10% or less in Ethiopia according to the Institute for Health Metrics and Evaluation (IHME).⁴ COVID-19 testing has not been free for preoperative testing purposes in Ethiopia, and there are no government subsidies for preoperative testing. The PCR testing requirement is hospital specific and remains in place as of April 2022 even though the number of daily nationwide cases has dropped to less than 100 (less than one per million per day).

The Eye Unit requested the hospital waive the PCR test for low-income patients who cannot afford it and justified this request by noting that this group of patients has a relatively low risk of transmitting COVID-19. The risk of transmission for these patients was argued to be low for two reasons. First, the procedure is short (under an hour), which involves less time at the hospital than a visit to the outpatient department or an MRI examination. These outpatient visits, tests and procedures do *not* require a SARS-CoV-2 PCR test and yet, theoretically, bring greater risk of transmission based on time of exposure. Second, general anesthesia with mechanical ventilation is not required for these eye surgeries, which means that the procedure is not aerosol-generating, and patients would be masked by the surgical drapes.

Despite these arguments, the hospital administration declined the request for a waiver. The refusal might be based on the concern that procedures can lead to cardiac arrests and resuscitation attempts which, though exceedingly rare in this context, are aerosol-generating and place staff and patients at risk. A second basis for

⁴<https://covid19.healthdata.org/ethiopia?view=cumulative-deaths%26tab=trend>

refusal might be the precedent that an exception sets. By granting this request, hospital administration could face additional waiver requests from the various hospital departments which manage approximately 1000 outpatients per day. Managing many waiver requests can be challenging and can require increased resources. Given resource constraints, especially during a pandemic, the judicious use of staff time and attention is a paramount concern.

This PCR testing policy raises the ethical question of whether the calculation of the “greater good” in this case fairly represents the needs of low-income communities. Testing aims to limit transmission of COVID-19 in the hospital, and in turn, reduce transmission in the wider community. For those who can afford testing, it represents a small inconvenience for the broader benefit of preventing COVID-19 transmission. However, for those who cannot easily afford testing, the sacrifice is much larger. The outreach program could pay the additional cost of testing, but this would mean 60% fewer patients could receive operations, given limited available funds. In other words, more than half of the number of patients currently receiving cataract surgery would remain visually impaired or blind.

While the impact of vision impairment on individual patients and communities can vary widely, the burden can be significant. In 2020 in Ethiopia, 8.8 million people were estimated to have vision loss, and 780,000 people were blind.⁵ In a 2015 study by Naidoo et al., Ethiopia was identified as having the second highest age-adjusted burden of blindness in the world after Afghanistan.⁶ About half of blindness is due to cataracts.⁷ For comparison, as of April 2022, the Ethiopian Public Health Institute estimates a total of 469,879 COVID-19 cases and 7,508 deaths, with 450,425 recovered from COVID-19.⁸

Vision impairment and blindness are associated with increased risk of death,^{9,10} as well as diminished educational, economic and employment opportunities.^{11,12,13} According to the 2019 Global Burden of Diseases (GDB) Injuries and Risk Factors Study blindness and low vision ranked eighth against all causes of disease by years

lived with disability (YLDs) in those aged 50–69 years, but ranked fourth (behind age-related hearing loss, diabetes, and low back pain) in those aged 70 years and older.^{14,15} The 1993 World Bank Disability-Adjusted Life Years assessment evaluated the burden of blindness more severely than the GDB Study, valuing blindness 60% as severe as death.¹⁶

For patients in communities who are already low resourced, limited sight can result in lost wages and exacerbation of poverty as well as create challenges to maintaining healthy behaviors. One might reason that while a mild case of COVID-19 is not as bad as blindness, death or severe chronic debilitation from severe COVID sequelae is likely comparable to or worse than blindness. However, even if the community served by the outreach program faces the same risks caused by the pandemic at baseline, this community additionally experiences ongoing disability in the context of social disparity. For this community, the high risks of lost wages and ongoing poverty due to untreated vision impairment may outweigh the low risks of transmission of COVID-19 during inpatient treatment.

When those made to sacrifice on behalf of the greater good are disproportionately socioeconomically disadvantaged, how should hospitals respond? Is it fair to burden the poorest members of the community to protect the greater good? It is to this question that we now turn.

3 | POTENTIAL SOLUTIONS: RESPONSIVENESS AND EQUITY IN PUBLIC HEALTH POLICY

In this section, we offer suggestions for maintaining the dual goals of reducing harm through preventing transmission and equitably protecting fair access to healthcare for poor communities. While we focus on the case presented in Section I, we argue that the analysis extends to many hospital, governmental and public health policies targeting the greater good while inadvertently burdening the least well-off members of a community.

The ethical argument in favor of the hospital's mandate on COVID-19 PCR testing follows a utilitarian public health principle insofar as it aims to maximize overall societal health and wellbeing.¹⁷ It does so by focusing on the aggregate societal benefit of stemming virus transmission to staff, patients, families and the broader community, while also keeping frontline healthcare workers in the hospital to provide needed medical care. The question of whether

⁵IAPD Vision Atlas, Country Map & Estimates of Vision Loss in Ethiopia. Retrieved April 15, 2022, from <https://www.iapb.org/learn/vision-atlas/magnitude-and-projections/countries/ethiopia/>

⁶Naidoo, K., Kempen, J. H., Gichuhi, S., Braithwaite, T., Casson, R. J., Cicinelli, M. V., Das, A., Flaxman, S. R., Jonas, J. B., Keeffe, J. E., Leasher, J., Limburg, H., Pesudovs, K., Resnikoff, S., Silvestre, A. J., Tahhan, N., Taylor, H. R., Wong, T. Y., & Bourne, R. R. A. (2020). Vision loss expert group of the global burden of disease study. Prevalence and causes of vision loss in sub-Saharan Africa in 2015: Magnitude, temporal trends and projections. *British Journal of Ophthalmology*, 104(12), 1658–1668. <https://doi.org/10.1136/bjophthalmol-2019-315217>

⁷Berhane, Y., Worku, A., & Bejiga, A. (2006). National Survey on Blindness, Low Vision and Trachoma in Ethiopia. In: Ethiopia FMOHo, (Ed.), Addis Ababa, Ethiopia: Federal Ministry of Health of Ethiopia. pp. 1–66.

⁸Ethiopian Public Health Institute. COVID-19 Reported Cases in Ethiopia. Retrieved April 15, 2022, from <https://ephi.gov.et/>.

⁹McCarty, C. A., Nanjan, M. B., & Taylor, H. R. (2001). Vision impairment predicts 5 year mortality. *British Journal of Ophthalmology*, 85, 322–26.

¹⁰Taylor, H. R., Katala, S., Muñoz, B., & Turner, V. (1991). Increase in mortality associated with blindness in rural Africa. *Bulletin of the World Health Organization*, 69, 335–38.

¹¹Frick, K. D., & Foster, A. (2003). The magnitude and cost of global blindness: an increasing problem that can be alleviated. *American Journal of Ophthalmology*, 135, 471–76.

¹²Eckert, K. A., Carter, M. J., Lansingh, V. C., et al. (2015). A simple method for estimating the economic cost of productivity loss due to blindness and moderate to severe visual impairment. *Ophthalmic Epidemiology*, 22, 349–55.

¹³Reddy, P. A., Congdon, N., MacKenzie, G., et al. (2018). Effect of providing near glasses on productivity among rural Indian tea workers with presbyopia (PROSPER): A randomised trial. *Lancet Global Health*, 6, e1019–27.

¹⁴GBD 2019 Diseases, Injuries, and Impairments Collaborators. (2020). Global burden of 359 diseases, injuries, and impairments, 1990–2019: A systematic analysis for the global burden of disease study 2019. *Lancet*, 396, 1204–22.

¹⁵GBD 2019 Blindness and vision impairment collaborators on behalf of the vision loss expert group of the global burden of disease study. (2021). Trends in prevalence of blindness and distance and near vision impairment over 30 years: An analysis for the global burden of disease study. *Lancet Global Health*, 9, e130–43.

¹⁶World Bank. (1993). *World development report 1993: Investing in health*. New York: Oxford University Press, pp. 26.

¹⁷Institute of Medicine. (1998). *The future of public health*. Washington D.C.: The National Academies Press.

each person subject to the testing requirement is equally resourced to afford the test is not taken into account in appealing to the greatest good. Nor does appealing to the greatest good consider whether individuals' health is equally protected by this particular effort to mitigate transmission. If this policy were applied in a different setting, such as a high-income setting without income inequality, or in a setting of universal healthcare coverage for COVID-19 testing where every patient had access PCR testing and/or eye treatment without charge, then a utilitarian calculus might suffice. For example, the analysis would be very different in a setting like South Africa where PCR testing in public sector hospitals is free. However, in this community, and in many low-income communities across sub-Saharan Africa, patients live hand-to-mouth and do not have discretionary income to pay for COVID testing. In middle-income African nations, such as Ghana, income inequality exists and a PCR testing mandate for eye treatment would disproportionately burden low-income communities when the fees are not covered by national or local entities.

Avoiding further entrenching health and income disparities requires moving beyond utilitarian calculations towards a more holistic policy review process. Powers and Faden make the helpful suggestion that multiple dimensions of wellbeing are "intertwined in complex webs of disadvantage and privilege."¹⁸ In this instance, responding to the needs of the community served by the ophthalmology outreach program requires appreciating the broader impacts of the PCR testing mandate, not just its overall efficacy in preventing COVID-19 transmission. Even if it were maximally effective at preventing virus spread in the hospital, it might simultaneously reduce or eliminate access to crucial healthcare services for poor communities. Attending to this is an important part of determining a socially just policy.

Ultimately, health equity may depend on progress towards Universal Health Coverage, which, if available, would eliminate the need to evaluate how to distribute costs in a public health emergency. However, as we work towards more universal approaches, individual healthcare professionals and institutions are forced to grapple with trade-off situations. Here, absent universal health coverage, the Eye Unit must advocate for an approach that effects justice for the communities they serve when the standard utilitarian framework fails. Societies without universal health coverage should proceed in a way that covers high-priority health services first, according to the World Health Organization.¹⁹ In the case at hand, the priority of mandating PCR testing for a low-risk short-duration procedure must be balanced against the priority of preserving vision for low-income communities.

Three options demonstrate alternative methods for incorporating health equity in a more holistic manner in the ophthalmology outreach

program, while also continuing to mitigate risks of COVID-19 transmission for the population as a whole.

3.1 | Justice as fairness: distributed and sliding scale fees for services

A practical and simple solution is to impose a small surcharge on all clinical services rather than a large surcharge only on those who need surgery. Since all patients seeking care at the hospital benefit from COVID-19 transmission prevention through PCR testing, a universal surcharge would arguably offer a fairer distribution of the burden of testing.

Ethical frameworks that center justice as fairness support this approach. Consider a Rawlsian approach (with the caveat that Rawls did not propose this approach as a tool to be applied directly to health policy evaluation). Rawls' difference principle holds that social and economic opportunities are to be arranged so that they are to the greatest benefit for the least well-off.²⁰ Expanding the distribution of the burden through a universal surcharge in this case would be justified on the ground that it maximally protects those who are least well-off. It aims to protect all patients against COVID-19 transmission while simultaneously better protecting the opportunity of medically underserved patients to secure basic ophthalmological services that are already available to the well-resourced.

Additionally, the fee could be adjusted on a sliding scale in order to better accommodate income-based disparities that obstruct fairness in access to healthcare. For some hospitals, fees like this vary at baseline, for instance, charging a larger fee for patients who are expatriates. A sliding scale for a COVID-19 surcharge on all clinical services aligns with the difference principle because it supports fairer access to health resources by ensuring that the least-advantaged members of the community served by the hospital benefit the most from the policy (i.e., are charged the least). In other words, all patients are charged a COVID-19 fee to cover PCR testing, and all are protected from COVID-19 transmission through PCR testing; the sliding scale allows equal access to healthcare services for underserved patients who would otherwise lack the same opportunities for healthcare in the pandemic as well-resourced patients.

Establishing an income-adjusted fee for COVID-19 transmission prevention might be easier to implement in a hospital that has already adopted a sliding-scale for all services. For hospitals without this baseline, COVID-19 surcharges may offer an opportunity to advocate for piloting sliding-scale fees relative to income or other socio-economic factors. Hospitals can define differences in fees according to nationally predefined limits and boundaries that correlate with income-based disparities or disparities in access to healthcare, such as national definitions of "poverty" and geographic zones that correlate with poverty.

¹⁸Powers, M., & Faden, R. (2008). *Social justice: The moral foundation of public health and health policy*. New York: Oxford University Press 2008, p. 80.

¹⁹World Health Organization, 2014. *Making fair choices on the path to universal health coverage*. Geneva: World Health Organization.

²⁰Rawls, J. (2001). *Justice as fairness: A restatement*. E. I. Kelly (Ed.). Cambridge, MA: The Belknap Press of Harvard University Press, p. 42–43.

These recommendations are not without some concerns. A universal surcharge may hold broader appeal to all patients since it is grounded in the value of treating everyone the same; however, it risks not reducing the cost of the test far enough for individuals who face economic inequities. Similarly, a sliding scale approach may be difficult to implement, especially in the context of a global pandemic where data is unavailable or may not reflect real-time loss of income, housing, and other inequities. Ultimately, improving systems to incorporate justice as fairness effectively will depend on understanding the particular hospital's context pre-implementation, as well as the ability to track the effects of distribution policies in real-time, review data and make necessary adjustments.

3.2 | Justice as equity: defining policy exemptions

Another possible avenue to promote health equity in the community served by the ophthalmology outreach program is to establish equity-based exemptions. Policy exemptions in hospitals can be made on several different grounds, equity among them. For instance, vaccine mandates may allow exemptions grounded in religious beliefs or medical needs. Similarly, mandated PCR testing for surgeries may allow exemptions to testing based on medical factors, such as the lower risk of transmission during cataract surgeries (an argument that already was attempted in the case above). In addition, PCR testing fee exemptions may be made according to the high need for ophthalmological surgery and the high barrier generated by the fee to the community served by the ophthalmology outreach program. Fee exemptions arguably overlap with a sliding scale approach where there are only two levels on the scale, but here we offer reasoning grounded in justice as equity rather than justice as fairness. While the two approaches to justice can often be symbiotic, the justification is different. Unlike justice approaches that aim to equalize healthcare access or opportunity, justice as equity is grounded in *responding to need*. Responding to need is in part about responding to social and structural factors that create disparities in health and healthcare access. A variety of approaches are used to identify relevant social-structural factors that impact health and healthcare, including, but not limited to: social determinants of health,^{21,22,23} structural violence,^{24,25} and structural vulnerability.²⁶ In different ways, each recognizes how health disparities arise from a “diversity of forces,

both external and internal to the clinical encounter, that can sabotage the health of patients regardless of the conscious intentions of the caregiver or the patient, the hospital, or a public health entity.”²⁷

During the COVID-19 pandemic, social-structural vulnerabilities surfaced and were amplified in many countries. In the context of care for patients in the above outreach program, justice as equity emphasizes centering and responding to the needs of those who are most disadvantaged by structural inequities, as the ophthalmology outreach program seeks to do. As it stands, the PCR testing policy and associated fee which attempt to benefit the hospital patient population had the unintended effect of neglecting the needs of the community served by the ophthalmology outreach program and failed to make appropriate accommodations to avoid excluding patients from accessing vital health services. When policies for patient interventions place disproportionate risk or burdens on underserved communities, building in exemptions is ethically warranted.

Exemptions could be made that embed options like appealing to an oversight committee, which uses a protocol designed to treat similar cases similarly. Criteria for exemptions to policies like the Eye Unit PCR testing policy could be defined generally, according to social determinants of poorer health, or more specifically, according to high burden of COVID-19. These two conditions may overlap in practice. As for the sliding scale approach, general metrics identifying social-structural vulnerabilities could include geographic location (such as geographic zones or zip codes), or structural vulnerability metrics (such as the Social Vulnerability Index or Area Deprivation Index). Further specification relevant during the COVID-19 pandemic might involve identifying communities that more severely impacted by COVID-19 transmission in terms of higher rates of infection and/or higher rates of morbidity and mortality. Alternatively, criteria could be specified based on relatively greater social impact from COVID-19 public health policies, such as income-loss and housing insecurity resulting from restrictions on non-essential services and travel. When this information is not known—for instance, due to lack of capacity in lower resourced countries—national definitions of “poverty” could serve to guide exemptions. A multidisciplinary appeals committee that includes representatives from the communities served by the hospital, particularly underrepresented communities, might be assigned to review exemption requests and track for whom and for what reasons exemptions are granted. These initial criteria could then be adjusted as needed.

Ultimately, equity-based exemptions arise out of the understanding that patients presenting for medical care do not do so from equal positions. This ophthalmology outreach program substantially depends on a charity-based model to equalize access to care. Unfortunately, this model has proved insufficient in the context of COVID-19 because it relies on the beneficent impulse of those who voluntarily choose to pay more to help others.²⁸ In order to bridge

²¹Braveman, P., Egerter, S., & Williams, D.R. (2011). The social determinants of health: Coming of age. *Annual Review of Public Health*, 32(1), 381–398.

²²Marmot, M., & Wilkinson, R. (Ed.). (2006). *Social determinants of health*. New York: Oxford University Press.

²³Commission on Social Determinants of Health. (2008). *Closing the gap in a generation: Health equity through action on the social determinants of health*. Geneva, Switzerland: World Health Organization.

²⁴Farmer, P., Kim, J. Y., Kleinman, A., & Basilio, M. (2013). *Reimagining global health: An introduction*. Berkeley, CA: University of California Press.

²⁵Farmer, P. (1992). *AIDS and accusation: Haiti and the geography of blame*. Berkeley, California: University of California Press.

²⁶Bourgeois, P., Holmes, S. M., Sue, K., & Quesada, J. (2017). Structural vulnerability: Operationalizing the concept to address health disparities in clinical care. *Academic Medicine*, 92(3), 299–307.

²⁷Ibid: 4.

²⁸See, for example, Rangan, V. K., & Thulasiraj, R. D. (2007). Making Sight Affordable: The Aravind Eye Care System. *Innovations*, 2(4), 35–49.

this gap, healthcare establishments should consider charging more for tests given to those who are well-resourced in order to fund tests for those who are under-resourced. An equity-based approach promotes justice insofar as it acknowledges that different responses are ethically warranted based on patients' different underlying needs. The claim is not that it would be benevolent or kind to help the poor, as a charity-based framework suggests, but that people without the means to pay for basic health care deserve or have a right to financial support, because everyone is entitled to have access to a basic level of healthcare.

One might argue that logistics for this kind of policy could be challenging. Given the complexities of intersecting health disparities for different marginalized communities, it may become difficult to assess exemptions equitably. Therefore, the healthcare institution should strive to consider advantages and disadvantages beyond ophthalmology, incorporating the needs of patients across different care services when establishing exemptions. Further, individual and interpersonal biases of those with the power to make these decisions could create unfair advantages and disadvantages—reasons why hospital leaders tend to prefer simple, clear-cut policies.

In reply, when hospitals partner with underserved communities and define equity-based criteria using known metrics, the imperfections and challenges of defining the criteria can be addressed in new iterations of the policy or in the agreements among a diverse and inclusive oversight committee. In the final analysis, concerns about not getting it right and making mistakes pale in comparison to known devastating impacts of neglecting basic eye care needs of medically underserved communities.

3.3 | Responsive justice: ongoing review of the benefit/burden calculus

The context of a pandemic is a difficult time to resolve longstanding health inequities. However, the pandemic has also raised awareness of highly disparate impacts of pandemic policies on different communities. It therefore demands an approach to policy-making that is *responsive* in ways that are meaningful and effective across differently situated communities. According to Goering et al., *responsive justice* includes three elements: (re)distribution, recognition, and responsibility.²⁹ Although Goering et al. define responsive justice in a non-pandemic context, their approach is fitting for COVID-19 policy formation, as we will show.

Responsive justice expands justice beyond the elements discussed above, which related to redistributing healthcare resources and offsetting social-structural inequities. It is responsive in the sense that it “emphasize[s] how our obligations regarding justice are grounded in our connections with each other.”³⁰ Hospitals can be

more responsive to the needs of the communities they serve when the standpoint of members of those communities are represented in policy decision-making. Meaningful representation of disenfranchised communities in COVID-19 policy decision-making, like the policy-making at the hospital in Ethiopia, could lead to meaningful and effective partnerships in combating COVID-19 transmission, while also meeting the basic health needs of underserved communities.

Community engagement with people familiar with the physical, social and economic costs of blindness in a low resource setting would offer insight into the harms of not being able to afford PCR testing and therefore surgery, as well as counteract norms that would otherwise omit or silence their perspective. Moreover, establishing an advisory committee with diverse community representation might both support the strengths within the community as well as ease the burden of hospital administrators—volunteers in this hospital's case—struggling with an influx of pandemic-related information and obligations. Establishing connections between this Ethiopian hospital and the community benefiting from the ophthalmology outreach program, such as through a community advisory board, may lead to recognition of important information and creative resolutions. For example, representation from this community might have facilitated the recognition that the PCR testing policy would be a structural barrier to essential medical care; disproportionately burdening low-income communities served by the hospital. Moreover, closer connection to and collaboration with those suffering from lack of access to needed healthcare services may have fostered more holistic reevaluations of policies as conditions changed. For instance, early in the pandemic, when uncertainty existed about the risks of eye treatment procedures that were not aerosol generating, a strict testing mandate may have been more ethically justified. However, with more information, the argument for strict testing mandates is weaker. Depending on factors like the rate of COVID-19 in the community, there might be sufficient evidence to amend the COVID-19 testing policy to apply only for aerosol generating procedures, as these are the ones where the testing is likely to be effective in preventing COVID-19 transmission. Such a change would require collaborative monitoring and might need subsequent revision if conditions changed. Parallel reasoning could apply to other non-aerosol generating procedures as well as other barriers to essential care created by the COVID-19 testing policy.

Community accountability partnerships would ideally be established prior to the onset of a pandemic, as it can be difficult for healthcare institutions to establish formal committees or boards when simultaneously managing the public health emergency. However, where these partnerships are not already established, existing community structures should be considered. Institutional or unit leaders could establish interpersonal partnerships in responding to the pandemic, at a distance if necessary for infection prevention, with a commitment to formalizing these relationships going forward. Ultimately, community involvement in decision-making may lead to other creative solutions beyond the examples proposed here. Depending on the context, community members and leaders may be better positioned than hospital administrators to advocate for

²⁹Goering, S., Holland, S., & Fryer-Edwards, K. (2008). Transforming genetic research practices with marginalized communities: A case for responsive justice. *Hastings Center Report*, 38(2), 43–53.

³⁰*Ibid.*

local government support, foreign aid and other forms of accomplishing fairness and equity beyond the capacity of the particular hospital.

4 | CONCLUSION: THE VITAL ROLE OF HEALTH EQUITY IN PUBLIC HEALTH POLICY

Cataract surgery is considered an elective procedure, but it avoids debilitating harms, such as blindness, and it carries relatively low risk of perioperative COVID-19 transmission. The Ethiopian hospital that implemented mandatory PCR testing sought to create the greatest good for the community, in alignment with prevailing practice in many medical institutions during the pandemic. Unwittingly, the policy (and probably other similar policies) exacerbated health inequities; for that reason, it should be amended. A more just policy must be context-sensitive and speak to the realities of the community's healthcare needs, barriers and insights. It requires engagement with members of the community, especially those most affected. With COVID-19 testing stretched in Ethiopia (5000-8000 tests/day per >110 million people at the time of the case's presentation), most tests go to people who can afford the cost in order for the system to be self-sustaining, given the limited resources to pay for it. In the context of the above case, this means that already highly resourced communities are able to afford the test and proceed with beneficial medical care. At the same time, for under-resourced communities the cost of the test is prohibitive. As a result, poorer communities are unable to accept free medical care that is highly beneficial, and arguably forced to endure risks equivalent or greater in magnitude (in comparison to consequences of COVID-19 transmission). This narrative is likely being replayed in multiple healthcare systems all over the world, and the issues extend well beyond Ethiopia. While advantaged communities continue to benefit from ongoing societal resources and medical care, disadvantaged communities face greater barriers to medical care without societal resources to protect them. Social justice demands a flip here. At minimum, those who benefit the most should take on the greatest cost and responsibility.

The COVID-19 pandemic has amply shown that fair policies must go beyond simple utilitarian formulas aimed at serving the aggregate good and must consider health equity. The tensions faced by an Eye Unit and hospital in Ethiopia serve to illustrate this point on a small scale. The above recommendations should be viewed as a starting point for a broader conversation about how to move towards health equity in public health emergencies. In the final analysis, just policies must include a holistic, equitable and responsive assessment of benefit by asking *who it is for? Which communities are advantaged, and which communities are burdened?* For hospital administrators and healthcare professionals alike, who themselves often come from communities of privilege, embracing a holistic approach can be difficult or impossible without involving individuals with relevant lived experiences.

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