PERSPECTIVE

Age Matters but it should not be Used to Discriminate Against the Elderly in Allocating Scarce Resources in the Context of COVID-19



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Abstract

A patient's age serves as a very useful guide to physicians in deciding what disease manifestations to anticipate, what treatment to offer for certain conditions, and how to prepare for possible emergencies. In the context of the COVID-19 pandemic, determining treatment options on the basis of a patient's chronological age can easily give rise to unjustified discrimination. This is of particular significance in situations where the allocation of scarce critical care resources could have a direct impact on who will live and who will die. This paper examines the fairness of recommendations contained in resource allocation guidelines in the Philippines that have implications for the way elderly patients could be treated or excluded from some forms of critical care treatment in the context of the ongoing Corona virus emergency.

Keywords COVID-19 · Age discrimination · Scarce resources · Allocation · Pandemic

Introduction

Anticipating a surge in demand for ventilators and other critical care equipment at the height of the COVID-19 pandemic, many institutions, agencies, and responsible authorities have had to issue guidelines or recommendations for the allocation of scarce medical resources in their respective territories or jurisdictions. Concerned sectors in the Philippines have been engaged in this kind of exercise. The Task force Ethics

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Guidelines COVID-19 Philippines 2020 (hereinafter referred to as TFG) has published "Ethical Guidelines for Leaders in Health Care Institutions during the COVID-19 Pandemic" with the support of various sectors and stakeholders from government and private sectors. The document is meant to provide real-time guidance to critical care personnel as they make what could be life-or-death decisions.

This commentary seeks to elaborate on the possible significance of specific provisions of the above-named guidelines (hereinafter referred to as "the Guidelines") in an effort to generate clarification and hopefully, forestall what could be discriminatory interpretations relating to the care of elderly patients. Resource allocation guidelines touch on specific criteria that may form the basis for excluding patients from access to particular devices and for prioritizing access for those who qualify for inclusion. Exclusion and prioritization are unavoidable corollaries of distributing available resources in a situation of scarcity. Necessarily, some people have to be excluded from access because there are not enough of the sought-after goods that are being made available. In the process, inclusion and exclusion criteria have to be justified in terms of medical indicators while being also supported by ethical principles or values. The process recognizes that the objectives of medicine and medical care are ultimately premised on two human values—life preservation and quality-of-life improvement.

After starting with an examination of the principle of net utility, the commentary goes on to explore and clarify what the TFG means by "maximizing prognosis." It emphasizes the importance of invoking short-term—rather than long-term—prognosis as a criterion to determine a patient's ability to benefit from the use of critical care resources during the period of scarcity. The commentary then highlights the need to focus on medical indications in making triage decisions in order to avoid unfair discrimination.

Net Utility

In the allocation of scarce resources, the TFG suggests that decisions should be guided by the principles of net utility, equity, duty to care, and respect for persons (TFG 2020). In explaining net utility, the document invokes the need to maximize beneficial goods: "resources should be allocated in such a manner that the greatest number of lives will be saved," and that the allocation "will favor those with the most number of life years, i.e., maximize prognosis" (TFG 2020). It is understandable that when scarcity sets in, the focus of allocation should be on the greatest number of lives saved. Scarcity puts a limit on the number of patients—of human beings—that can be saved. When the number of patients "in competition" is greater than the number that can be saved using available resources, efforts must be directed at accommodating as many patients as possible and that means saving the greatest number of human lives. In the reckoning, each patient—each human life—should count as one. Allocation according to given criteria has the unavoidable effect of choosing who among patients should be given priority. Thus, it is very important to recognize that at the starting point each human life should be regarded as equal to every other.

In the context of scarcity, the human lives competing for priority are not divided into segments. Human beings—rather than human life years—are asking to be saved. If human lives were qualified in terms of life years at the baseline of assessment, some

human beings would be judged to be worth more than others and that would give some human beings an unfair advantage. That would be discriminatory. It would give some patients an unfair advantage if decisions were to be based only on their expected remaining life years. Saving the most number of life years amounts to favoring the young as opposed to the elderly because of the longer life expectancy (all other things being equal) of the former. This goes against the principle that human beings should be treated equally.

To avoid the charge of age-based discrimination, the selection criteria have to be rooted in ethically acceptable grounds rather than merely in a patient's belonging to one age bracket or another. In this connection, the TFG cites the World Medical Association's injunction to "consider only the patient's medical status and predicted response to the treatment, and ... exclude any other consideration based on non-medical criteria" (WMA 2017). The position of the pertinent sentences in the same paragraph under the heading of net utility leads to the understanding that the beneficial goods meant to be maximized are medical goods definitive of the patient's medical status and positive response to treatment. This means that critical resources should be made available as a priority to those who are expected to respond positively.

In this context, it is taken for granted that positive response relates primarily to curative treatment although, in a rapidly changing scenario, a vigilant health care team is mindful that the boundary between curative and palliative care can occasionally be hazy. In cases where the boundary is clear, a life-saving device can be said to bring about a positive response only if it can be expected, based on available evidence, to save a life. Still, what it means to "save a life" requires clarification. How long must a life last so we can truly say that it has been saved? When can a patient be said to have responded positively to curative treatment? The answers to these questions have to be considered in relation to other parts of the Guidelines, especially in light of reports of possibly related conditions that have emerged beyond the short term (Verdoni et al. 2020).

Maximizing Prognosis

The statement in the Guidelines that the allocation "will favor those with the most number of life-years" is understood to "maximize prognosis" (TFG 2020). On that basis, it clearly appears to have the effect of favoring those who are young and have a greater expectancy of remaining life years. This would be particularly true if the prognosis that was meant to be maximized were long-term prognosis. In the long term, the younger can live longer because the elderly can be expected to suffer from other conditions that threaten their lives: increasing frailty, deteriorating immune systems, etc. On the other hand, younger patients who recover from COVID-19 are not likely to experience the same health issues until they are many years older. However, maximizing long-term prognosis would be problematic for a number of reasons. If it were taken to refer to an indefinite period of time, many factors that are unrelated to COVID-19 can affect the outcome. Those factors will not be easy to predict, and some of the factors can be driven by luck. It would not be fair to the parties involved to be subjected to a possibly life-ending triage decision based on such factors.

In a triage situation where there is one remaining available ventilator for either a 4year old or a 14-year old patient, and there is nothing to separate the two in terms of clinical condition and expected response to treatment, it would not be fair to say that the younger patient deserves to have the ventilator because more life-years will be saved. The older child's having less life years to save does not make his life less valuable. Choosing one or the other is not expected to lead to a greater number of lives being saved. There is no reason to prefer one to the other if all lives are equal. Admittedly, as the other patient becomes older, one becomes more guarded as the likelihood that that patient has aggravating conditions that might make survival unlikely even with the use of a ventilator. Hence, a patient's age signals the need to exercise due diligence and check for age-associated comorbid conditions or compromised functions that may render ventilator assistance medically futile. It could then be said that age matters but such a patient is not going to be excluded because of his age. Instead, he can be excluded because of comorbidities or compromised functions that make his survival unlikely even with the use of a ventilator. Age matters in that it provides a very useful clue as to the presence of underlying conditions that need to be verified, but age by itself cannot be the exclusion criterion. It cannot be used to discriminate against the elderly.

Due diligence ought to be exercised even with respect to patients of a younger age if, hypothetically, their age range were associated with physiologic changes that make them susceptible to COVID-19 complications. For example, how should physicians respond if, hypothetically, COVID-19 mortality rates were found to be significantly higher for boys as they entered puberty—compared not only to younger patients but also to elderly ones? They would not suggest that boys entering the age of puberty should be ranked low in priority for ventilators merely on the basis of age. In such a situation, the proper response should be to investigate the phenomenon and find a scientific explanation. A satisfactory explanation will identify the factors and conditions that render boys entering the age of puberty susceptible to COVID-19 mortality. Once a satisfactory explanation is confirmed, some boys within the age range may justifiably be "deprioritized" but on the basis of the identified factors and conditions rather than on the basis of age itself.

Age serves as a marker to remind the health care professional that a particular patient should be assessed for age-associated vulnerabilities. But age could not, by itself, serve as a criterion for exclusion from ICU access. George Kuchel reiterates in an interview that chronological age alone cannot be used to predict a geriatric patient's performance in the face of COVID-19 because "having multiple chronic diseases and frailty is in many ways as or more important than chronological age" and that "an 80-year-old who is otherwise healthy and not frail might be more resilient in fighting off infection than a 60-year-old with many chronic conditions" (Begley 2020). Notwithstanding the numerous defects normally associated with aging that result in greater vulnerability to infections, scientists have expressed optimism about measures to delay or minimize age-related immunological defects (Nikolich-Žugich 2017). Indeed, according to the TFG, "age alone cannot be the sole basis for triage decisions, but should be integrated with other clinical parameters" (TFG 2020). It can be a good basis for more closely investigating a patient's condition and in that sense be integrated with other clinical parameters. Hence, awareness of a patient's advanced age may prompt a physician to use Sequential

Organ Failure Assessment (SOFA) scores (Vincent et al. 1996; Jones et al. 2009; Minne et al. 2008) or Clinical Frailty Score (CFS) tests (Chua et al. 2019; Guidet et al. 2019) in order to obtain reliable evidence for determining ability to benefit from ventilator support.

Short-Term Prognosis

Further clarification is provided to the understanding of maximizing prognosis if attention is focused on short-term prognosis rather than on prognosis over an indefinite period. Maximizing short-term prognosis can then be taken to mean maximizing the likelihood of survival to discharge, or to mean stabilizing the patient to the point of eventually being weaned from ventilator dependence. In this way, the objective of ventilator use or ICU admission is zoomed in on maximizing the number of lives saved for the immediately foreseeable future. Short-term prognosis provides an adequate time frame for examining options for triage purposes in the context of the COVID-19 pandemic. It offers a measure of how long a life must persist before we can truly say that it has been saved. It tells us when we can say that a patient has responded positively to treatment. The time frame also approximates the period when scarcity is expected to prevail, and it does not extend to the period when scarcity is expected to have been overcome already.

This approach is supported by research showing estimated mean duration from onset of symptoms to hospital discharge of 24.7 days (Verity et al. 2020). The prognosis that is relevant to making COVID-19 triage decisions will not be longer than that. The number of remaining life years in the long term should not have a bearing. It will only make sense to include it as a criterion if we want to address health care resource allocation issues other than those that arise in the emergency context of the COVID-19 pandemic.

A health care team does not have to save a long life not because that is not important but because, during the period of emergency, they do not have to spend too much energy and resources on something that goes beyond the aim of overcoming the presumptive shortage of ventilators and ICU beds. This is not to discount the significance of long-term prognosis. Long-term prognosis is a relevant factor for deciding what treatment to provide under normal circumstances, but that is not the same as deciding who to provide scarce critical care resources to between two needy patients in the event of a pandemic-related emergency.

Caring for the Vulnerable to Balance Net Utility

The Guidelines' section on net utility is followed by a section on the duty to care that recognizes a need to temper what appears to be a primarily utilitarian framework for allocation:

To balance the principle of net utility, a conscious effort must be made to consider strongly those who are worst off or those who have lived [the] least number of years (the youngest). This is to be applied only insofar as it is consistent with the dictum to maximize benefits (TFG 2020).

Apart from going under the heading of "duty to care" this portion of the Guidelines is preceded by an explanation that "special care always for the most vulnerable" is an expression of such a duty. Moreover, there is an explicit declaration that the effort is to be taken in order to "balance the principle of net utility." It is in this context that the following points are to be understood:

- a. Consider strongly those who are worst off
- b. Consider strongly those who lived [the] least number of years (the youngest).

Elderly COVID-19 patients are among those who are worst off because they appear to be the most likely to succumb to the disease. Mortality among the elderly is higher than among other age groups. A study of international cases shows that the likelihood of being hospitalized increases with age, and those aged 80 years or older constitute up to 18.4% of the population (Verity et al. 2020). Statistics in the Philippines reflect similar findings. The 65 and above age group constitutes only 4% of the Filipino population, but it accounts for 20% of COVID-19 patients. In contrast, the 0 to 24 age group constitutes more than 50% of the population while accounting for only 8% of COVID-19 cases in the Philippines (David et al. 2020a). More importantly, the 65 and above age group accounts for 37% of severe to critical COVID-19 cases. The 0 to 24 age group accounts for a mere 2% of severe to critical cases (David et al. 2020b). These figures confirm the elderly's vulnerability-being among the worst off in terms of symptoms experienced and, related to this, in terms of the likelihood of mortality. Based on this understanding, the Guidelines can be interpreted to mean that triage committees or attending physicians should "consider them strongly" for the use of a ventilator or ICU support as a manifestation of a duty to care. At the very least, this can be taken to recommend that the elderly qua elderly ought not to be excluded outright from ICU or ventilator support. This would avoid the charge of age discrimination and would presumably "balance" the principle of net utility.

However, it is not easy to see how this can be reconciled with the concomitant recommendation to consider strongly those who have lived the least number of years the youngest. We are told that these recommendations may be applied only if they can be consistent with the dictum to maximize benefits. Taken by itself, the first part of the sentence suggests that exceptions may be allowed that could result in a lower net utility in a balancing effort. However, what the first part giveth, the next part of the same sentence—together with the sentence immediately following—swiftly taketh away!

In the end, it is not clear what we are supposed to make of the idea of balancing in the context of emergency allocation. In a way, the paragraph under examination suggests the need to consider the interests of vulnerable patients at either end of the age scale—the youngest (presumably lacking the competence to speak for themselves) and the worst off (the elderly). However, consideration of those interests has to give way to the imperative to maximize benefits. Can limiting benefits to those that are strictly medical in kind clarify what is meant?

Medical Indications rather than Demographic Categories

A primary ethical tension explored in this commentary attracted worldwide attention through a document cited by authorities responding to the shortfall of ventilators in Italy. Recommendations issued by an Italian professional society stirred concern among some sectors because it included a statement that "An age limit for the admission to the ICU may ultimately need to be set," while invoking the need "to save limited resources which may become extremely scarce for those who have a much greater probability of survival and life expectancy" with the expectation that this would "maximize the benefits for the largest number of people" (Vergano et al. 2020). Indeed, there have been reports coming out of Italy that doctors were given orders not to attach patients over 70 years of age to ventilators (Bosotti 2020; Craxì et al. 2020).

This recommendation came into conflict with a much earlier statement cited and issued by the same professional society that "admission and discharge of patients to intensive care and the limits of treatment must not be influenced by age, gender, social value, religious belief, sexual inclinations or wealth" and that "the only criteria to be used in deciding admission of a patient to, and discharge from intensive care and limitation of treatment are those of clinical appropriateness (defined by the curability of the disease and the effective utility of intensive care for that patient) and ethical legitimacy (defined by the patient's consent and the respect of the criterion of proportionality)" (SIAARTI 2003).

When medical professionals make a medical decision or a medical recommendation in the course of providing medical care, we expect them, because of their medical expertise, to do so on the basis of medical indications—the presence of a medical condition or medical findings supported by medically accepted evidence. If they make a decision or recommendation regarding a particular patient that is not based on accepted medical indications then that decision or recommendation is not, strictly speaking, being made in the exercise of their profession or in their capacity as medical professionals.

A triage allocation decision made in the context of a pandemic emergency is something that may have to be made at the spur of the moment. We recognize that the attending physician or a properly situated triage committee would be in a good position to make decisions consistent with guidelines that address such situations. However, allocation of scarce resources in emergency situations is different from the allocation of resources beyond the short-term for these reasons: issues pertaining to allocation covering a longer period of time require a process of deliberation that is lengthier as society aims to ensure that its values are properly reflected in the decisions; broad sectors of society need to be consulted; and the process of deliberation is also different in that the issues that are meant to be addressed do not necessarily involve choosing among specific patients-specific human lives—that are begging for attention at exactly the same time. For example, when a fair innings approach is suggested in order to favor one life over another, what we are asked to do requires an examination of our values as a society to see if these are consistent with allocating reasonable life length expectations to all. If agreement to use the approach is reached, we expect recommendations pertaining to the allocation of budgetary resources and societal services that can properly bring about fair innings for members of the population. This is not something to be settled at the ICU bedside although the agreement could eventually have implications for bedside management. The point is that short-term allocation in response to an emergency like the COVID-19 pandemic on the one hand, and long-term allocation in response to evolving values of society on the other, should

not be confused with each other. Issues requiring value reexamination should not be compressed into emergency decisions that have to be made at the ICU bedside.

Conclusion

The appropriateness of the Guidelines has to be measured in relation to the declared purpose. According to the document, "the purpose of the principles is to help leaders of health care institutions implement fair, consistent, and coordinated triage processes for the just allocation of scarce medical resources in the time of COVID-19 [underscoring supplied]" (TFG 2020). This evaluation of the specific guidelines has been done with this particular time frame in mind. The proposed system of allocation is meant to be applied during the period of scarcity. The scarcity is only expected to last during the period before and after the flattening of the statistical curve reflecting the rise and the subsequent decline in the number of COVID-19 cases in the country. Hence, recommendations that are premised on the number of lives saved beyond the period of the emergency are misguided. Recommendations meant to "favor those with the most number of life years [expected]" and "consider strongly those who lived [the] least number of years (the youngest)" may, in the long run, result in greater benefits. However they do not necessarily support the objective of addressing the shortfall of critical care resources during the emergency while maximizing the number of lives saved.

It is essential that the recommendations uphold the principle of the equality of all human beings and avoid discrimination against the vulnerable among them. When the pandemic subsides, countries will have an opportunity to reflect on what would have transpired and on how they dealt with the tragedy. As a country, and as a people, we are going to judge ourselves not only on the basis of the number of lives that we would have been able to save but also on the basis of the effort that we put into caring for the most vulnerable among our fellow citizens—our fellow human beings. We will surely be glad that we would have aggressively (and successfully) fought to save many human lives. We will be especially grateful to those among us who risked losing their lives in order to save the lives of others. But we cannot be fully satisfied if we would have neglected the most vulnerable among us in the process and worse, if we would have perpetrated collective discrimination against them.

Authors' contributions Both authors contributed to the conceptualization, drafting, and finalization of the study

Compliance with Ethical Standards

Conflicts of Interest The authors declare that they have no competing interests

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