

A DIFFERENT VIEW

Paediatric ethical issues during the COVID-19 pandemic are not just about ventilator triage

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Administrators and providers worry about an overwhelming shortage in critical life-saving ventilators for adults during the COVID-19 pandemic. Attention has focused on developing algorithms for ventilator allocation using several factors, including: pre-existing illness, likelihood to return to baseline health and length of ventilation (a negative factor in adults).¹ These factors, however, do not easily translate to paediatric medicine nor does ventilator allocation represent an urgent crisis for paediatric medicine. Infants and children are much less likely to be clinically impacted by COVID-19 than adults.² While many efforts have focused on designing triage scenarios for ventilator allocation, we are concerned there are other unrecognised areas in paediatric ethics that require our immediate attention. Here, we highlight four of these crucial ethical concerns: additional triage situations, the negative psychosocial effects on children and their families, the moral and emotional toll on clinicians and system inadequacies.

1 | BROADENING OUR VIEW OF SCARCE RESOURCES: AN EXAMPLE FROM NEONATOLOGY

All of the authors have been asked: 'Should we stop ventilating extremely premature infants due to this COVID-19 crisis in order to free up ventilators for critically ill adults who may benefit?' This question concerns us for four reasons. First, there is an implicit

assumption that extremely premature babies are less deserving than adults. Second, the practical issues would be daunting, since many neonatal ventilators cannot be used for adults. For example, the Dräger Babylog VN500 has a maximum tidal volume of 300 cc and is designed for patients < 20 kg.³ Third, the 'toughest triage'¹ decision in paediatrics will likely not involve ventilators. Infants rarely need to be ventilated due to COVID-19.² Many neonatal patients can be managed without a ventilator. The majority of neonates requiring respiratory support at any given time can be managed with continuous positive airway pressure, delivered as a bubble CPAP (using tubing and water), ventilator-delivered CPAP (when available) or High Flow Nasal Canula.⁴ Fourth, factors helpful for triaging adults (length of time on ventilator, pre-existing conditions, co-morbidities) do not apply to premature babies. For premature babies, who succumb to their disease, most die within the first few days and many have no baseline co-morbidities when the initial decision is taken.⁵ Therefore, suggestions to stop ventilation for extremely premature infants are philosophically suspect, practically naïve and may inadvertently perpetuate a subconscious bias devaluing the worth of an extremely premature infant when compared with an older child or adult.⁶⁻⁸

Broadening our view to other triage decisions for scarce resources would be helpful. The time we spend reflecting on ventilator triage decisions—which will most certainly not be needed—results in lost time for addressing other urgent issues. The most precious resource for paediatric medicine during the

COVID-19 pandemic will likely be clinical staff, their expertise and their time. Time management will be important for our experts. For example, if excess time is spent reflecting on ventilator triage guidelines, there will be less time to address other important ethical issues. Redeployment of skilled paediatric personnel to adult medicine is likely to happen before ventilator shortages. This redeployment may result in 'under-care' of children with chronic medical conditions as staff-to-patient ratios change. These are difficult decisions, and while solidarity is encouraged, redeployment should be based not only on competence but consider risks to the personnel and the patients they leave behind.

Paediatric intensive care beds may become a scarce resource as the numbers diminish when hospitals convert them into adult beds. Or even if paediatric intensive care capacity remains the same, paediatric wards may be dedicated to adults. This loss of paediatric bed capacity may lead to ripple effects into neighbouring community hospitals, who transport their sickest patients to paediatric hospitals. While we hope this will be offset by declining admissions from respiratory syncytial virus and influenza as the season changes, there is still potential for difficult triage decisions ahead.

Broadening our view of scarce resources to look—right now—beyond ventilators, will help anticipate triage decisions, balancing the burdens on the healthcare provider, the patient and the community. Broadening our view of what constitutes a 'controversial issue', within the context of a global crisis, requires a careful balance of community values and medical capabilities while protecting against discrimination.

2 | IMPACT ON CHILDREN AND FAMILIES: AN EMERGENCY

There are many other urgent ethical issues that will affect the lives and health of children. Most of these hidden costs are outside the realm of traditional health. Many children already experience food insecurity. In the United States, many children receive free and reduced-cost breakfasts and lunches at school funded by the state.⁹ When schools close, these food supplies are not available. Children will go hungry unless alternative sources of nutrition are put in place.

In economically disadvantaged homes, children may be left unsupervised as parents seek work or have to look for social welfare resources to take the place of income. Parents with substance abuse will be more fragile. Some children may live in abusive environments where safety was only found at school. Other children will have to face situations where COVID-19 medically affects one or all parents and guardians; for those without extended family or friends who can care for them, the trauma of dealing with a seriously ill parent—or a parent's death—will be exacerbated by the shock and trauma of having to be placed into foster care or other unfamiliar care situations.¹⁰ Increasing awareness in the general community, enlisting volunteers and frequent check-ins can help protect these children. Established relationships between social workers, psychologists and the paediatric community can positively influence these children's lives.

Recognising the indirect, yet, serious consequences the COVID-19 pandemic will impose on vulnerable children can help paediatricians anticipate, prepare and collaborate efficiently. Attention to these issues will likely have more immediate and long-term impact on childhood morbidity and mortality than will decisions in NICUs or PICUs.

3 | MORAL AND EMOTIONAL TOLL ON HEALTHCARE PROVIDERS

Ethicists should also focus on dealing with clinicians' moral distress that is caused by many issues including the allocation and shortage of resources. The existing lack of adequate personal protective equipment (PPE) remains a source of fear, anxiety and health risk for our field. We must continue to demand that sufficient and effective PPE be provided at all times. But we know that supplies sometimes run short. That raises questions about how much risk to ourselves we should take to save patients.

Clinicians may disagree with decisions taken by their superiors. Medicine is generally a deontological enterprise, but it mainly becomes a utilitarian one in a time of pandemic. A clinician does not treat a system, but an individual patient. This individualistic focus will likely lead to moral distress when clinicians have to consider what is best for the population, rather than what is best for an individual patient. Some practitioners will become the patients' direct support system, when patients die in isolation without loved ones, or parents cannot be at their child's bedside due to COVID-19 concerns. Some clinicians will face financial strain on practices while others will be forced to take on more hours. Video and phone consultation are developing rapidly and changing doctor-patient relationships. The emotional and mental health toll of this pandemic on healthcare workers will require much reflection in the months and years to come. Solidarity and leadership, with an awareness of the sacrifices, innovations and creativity we are asking of these healthcare workers, can help us through this crisis. As we contemplate the ethical challenges ahead of us, our collective response to these challenges will define us both professionally and personally.

Paediatricians, ethicists and administrators can begin to find ways to facilitate and prioritise emotional support as this pandemic continues.

4 | ORGANISATIONAL ETHICS AND PITFALLS OF AMERICAN INDIVIDUALISM

In the United States and some other countries, the operational healthcare system has thrived on institutional individuality and competition. Under the current crisis, a competitive spirit results in missed opportunities for regional collaboration. This could contribute to inconsistent messages to the community on new standards of care. The lack of collaboration also results in repetitive work and loss of precious time for our experts and hospitals.

In areas of the world where more regional systems exist, common protocols developed in unison help clinicians devote more time and energy to direct clinical care. Uniform messages help provide patients and citizens with clear messages: where and when to screen and where to go to be admitted. When such regional coordination and trust prevail, there is no second-guessing among patients or doctors regarding which hospital will do what. There is no competition between hospitals for resources. Countries that have not yet instituted a regional unified approach could still do so in order to enhance collaborative efforts. Moreover, in resource poor countries, global coordination and solidarity will be instrumental in overcoming COVID-19.

Focusing on collaboration could help not only the paediatric providers but patients and countries as well.

5 | CONCLUSION

In conclusion, the COVID-19 pandemic is creating many ethical challenges. One of the most difficult is for ethicists to focus on the issues that are likely to have the greatest impact. Ventilator allocation in a crisis situation is a deeply tragic choice that requires careful balancing of a number of values. Today, there are frameworks in place to guide such allocation decisions. By contrast, many of the ethical issues that we highlight in this paper and that are likely to have a large impact on children's health through the pandemic have not received careful and sustained attention. Along with ethical frameworks for triage of critically ill patients, we should develop frameworks for triaging human resources in order to address scarce paediatric resources, enhance support of vulnerable children, advocate for solidarity, and provide uniform messages for the communities we serve.

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