Neurosurgical Forum LETTERS TO THE EDITOR

Philosophical underpinnings of neurosurgical decision-making in the time of the coronavirus pandemic

TO THE EDITOR: We read with great interest and appreciation the article by Bernstein¹ on neurosurgical priority setting, as well as the *Journal's* series of thought-provoking editorials about changes in neurosurgical practice in the face of these unprecedented circumstances (Bernstein M. Editorial. Neurosurgical priority setting during a pandemic: COVID-19. *J Neurosurg.* 2020;133[1]:18–19). We would like to offer a brief reflection on the philosophical principles that underlie the difficult decisions that neurosurgeons the world over have made in order to better serve not only their patients, but their societies and the common good.

Although much of the mainstream conversation has been centered on the ethics of allocation of resources such as ventilators and ICU beds between COVID-19 patients, less has been said of the seismic shifts in neurosurgical practice during the peak of the pandemic to help preserve these resources. Performing emergency cases and postponing or forgoing elective ones has been the trend across the country, and indeed across the world, throughout surgical subspecialties. Numerous guidelines have emerged to dictate best practices for triaging neurosurgical indications.^{2–4} Although there has been some relatively predictable variation (for instance, neurosurgeons in private practice settings were less likely to be in favor of shutting down surgeries or postponing elective cases than those at nonprofit hospitals), the majority of neurosurgeons have both experienced vast cuts in their operative volume and have supported postponing elective procedures.⁵

In thinking about these decisions, one might consider the traditional medical ethics model of “principlism,” which focuses on the conflict between the values of beneficence, nonmaleficence, autonomy, and justice. The justice principle, which by most teachings deals with considerations of finite resource shortage and allocation, is usually less primary in the US healthcare context, which is flush with resources and tends to focus more on the other three tenets. The circumstances around the coronavirus pandemic, however, have brought the justice value to the forefront of decision-making.

In this new territory, it may be helpful to consider frameworks outside of the conventional bioethics model and turn to more foundational tenets of philosophy, namely the friction between utilitarianism and deontology. Utilitarianism is the principle of performing the action that results in the greatest good for the greatest number, and is a subset of consequentialism, in that it is the consequence of the action that matters. This contrasts with deontology, which concerns the morality of the action itself. Deontology, which is drawn from the Greek root of the word “duty,” is a set of principles that centers on the moral responsibility of the actor, regardless of other consequences. For instance, if the means is taking a patient off a ventilator and the end is saving two other patients with that ventilator, deontology would posit that the end does not justify the means (i.e., that it is unethical for the actor, a physician, to sacrifice a patient’s right to life in favor of someone else’s), whereas utilitarianism would find the end justified because the outcome of saving two lives is more valuable than saving one. In relating these concepts more directly to medicine, some use the shorthand that deontology is “patient centered,” whereas utilitarianism is “society centered”—this is in line with the axiom that physicians are deontological, concerned with what best suits the needs of their patient, whereas public health officials are utilitarian in their decision-making.

The circumstances of the pandemic superimpose an ethical imperative on the medical profession. The choice that neurosurgeons face during the peak of the pandemic —“Do I treat my patient or do I preserve the resources (gloves, masks, ventilators) and minimize contact to help others?”—is a false one, because circumstances require that nonemergency procedures be put on hold so that resources can be directed to where they are needed most. In a resource-limited setting, the deontological approach does not permit us to balance competing equivalent values. Thus, in the circumstances of the pandemic we are operating, almost necessarily, in a utilitarian framework.

This theoretical exercise reminds us that neurosurgery is at its core an ethical, compassionate discipline functioning in a broader society, serving a common humanity at a challenging time for all.

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Disclosures

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Response

No response was received from the author of the original article.

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