Ethics Dispatch

"The object of philosophy is the logical clarification of thoughts. Philosophy is not a theory but an activity."

- Ludwig Wittgenstein

Hot Topic: The Ethics of Blood Shortages

The United States is facing its worst blood shortage in over a decade. To make matters worse, the shortage is happening during the COVID-19 pandemic. In a joint statement, the Red Cross, America's Blood Centers and the Association for the Advancement of Blood and Biotherapies noted that:

In recent weeks, blood centers across the country have reported less than a one-day's supply of blood of certain critical blood types – a dangerously low level. If the nation's blood supply does not stabilize soon, life-saving blood may not be available for some patients when it is needed.

This shortage was evident early in the pandemic, with hospital systems across the nation reporting a 10% decline in blood donations since March of 2020. Though there are many reasons why this is the case, it's clear that the pandemic has prompted much of the shortage. According to The Guardian, "the pandemic has contributed to a 62% drop in blood drives across schools and colleges."

A Crucial Resource

These shortages are significant; blood is a crucial resource in care settings across the United States, especially now. It's used routinely for blood transfusions, and blood transfusions help treat individuals with diseases like sickle cell anemia and leukemia. Blood is also used for surgery and to help treat injuries. More recently, the FDA approved of the use of convalescent plasma in treating hospitalized COVID-19 patients, noting that:

Based on the totality of the scientific evidence available, it is reasonable to believe that the known and potential benefits of COVID-19 convalescent plasma with high titers of anti-SARS-CoV-2 antibodies, when used under the conditions described in this authorization, outweigh its known and potential risks for the treatment of

COVID-19 in patients with immunosuppressive disease or receiving immunosuppressive treatment.

More research is warranted to be certain about the benefits of convalescent plasma for treating COVID-19. It's clear, however, that if there are scientifically plausible benefits, the continuing blood shortages may fuel an already growing problem in the United States.

Whose Blood?

The current blood shortages pose a myriad of questions, many of them ethical. The first sort of question involves how we ought to understand human blood beyond that of a life source for individual bodies. Is my blood merely my own, or somehow also a community resource? The notion of "community blood banks" seems to connote the latter, i.e., my blood is for me but also for others when needed.

Of course, there are noted minority religious views regarding these matters. Jehovah's Witnesses, in particular, see blood as absolutely *not* to be shared. Is this a mistaken view? Ought such beliefs to be respected, but only within limits such as pediatric life-saving? Are Jehovah's Witnesses actually to be lauded, morally commended, for willingness to die instead of demanding their share of what has become a scarce medical resource during pandemic times?

Whose Responsibility?

Another set of ethics questions pertains to moral responsibility. When blood is a scarce medical resource at the national, regional and local levels, then do hospital systems—and perhaps their ethics committees—have a moral obligation to promote blood donation? If so, ought this begin with ethics committee members, clinicians and hospital executives leading by example? Or if this is not care providers' duty, then why not?

If responsibility for blood procurement appropriately resides elsewhere, then who *ought to be* responsible for ensuring adequate—and not safe only—supplies of a critical life-saving resource? Government? The FDA's Center for Biologics Evaluation and Research (CBER) regulates for safety in the collection of the nation's blood supply. Should they also be tasked to ensure an adequate supply?

Is this something that ought to concern religious groups other than Jehovah's Witnesses? Should we encourage for-profit commercial entities to make certain there is blood available when needed? Ought we leave this critical need up to nonprofit organizations like the American Red Cross? If we are too often running at a one-day supply of an essential resource that flows by the gallons (1.2-1.5 gallons on average) through the veins of 332 million people in this nation alone, it would seem that someone may be shirking responsibility. Who?

Whose Priority?

When resources are limited, how should blood be allocated? Recently, the American Society of Anesthesiologists Committee on Patient Blood Management issued strategies for conserving, and reducing the need for, limited blood supplies. Their goal, ultimately, was "to optimize the blood health of each patient . . . and conserve limited blood resources for those who need it most." But who "needs it most?" Should priority be given to those with life-threatening illnesses and a high chance of survival? What if the patients' chances of recovery are a coin-toss?

Case Study

A 75-year-old, female identifying patient is admitted to the ICU for abdominal distress. Her name is Graciela.

Graciela's family members tell hospital staff that she has not been feeling "herself" as of late. She's been drowsy, visibly jaundiced, and in a constant state of pain. One morning, her sons found her hunched over and gasping for breath. They immediately called 911.

After a series of tests, Graciela's medical team determines that she is showing signs of seemingly irreversible multi-system organ failure with one or more probable causes, but none of them curable given the current state of medical knowledge and treatments. Her hemoglobin is notably low, requiring transfusions to make the patient feel better, but without any hemorrhaging site noted. With proper care, inclusive of additional blood transfusions, Graciela's prognosis is estimated to be a life expectancy of 3 to 6 months.

An attending physician informs Graciela and her family about what has been learned, what her care team knows, what they still don't know, and what is anticipated as a likely outcome. Understandably, both patient and family are distraught by this bad news. While consoling his mother, Graciela's son Roberto asks her doctor if there isn't *some*thing that might be done to help his mother. He insists that she wants to be healed and return to her previous happy existence as a doting grandmother and gardener. If neither doctors nor God produces the miracle all are praying for, Graciela wishes to be kept as comfortable and pain-free as possible, at home and surrounded by family. Graciela nods her agreement to what the son has stated.

Given these stated goals of care, the primary team requests a palliative care consult. After evaluating the patient, Palliative recommends various comfort measures including pain medications and routine blood transfusions as needed. Their chart note indicates hope that by following this course of palliative care, the patient might remain alert and comfortable for the remaining months of her life.

The attending physician, although in agreement with palliative recommendations, is worried about the proposal to continue transfusing his terminally ill patient. A national blood shortage significantly impacts not only this health system but all others and their patients. An executive memo to physicians in this hospital recently called upon everyone to utilize blood products judiciously and conservatively on account of a critical shortage everywhere.

But what would "judicious" use of blood mean in Graciela's situation? Indeed, there is a 22-year-old patient in the hospital named Julian who also needs routine blood transfusions (in combination with other therapies) for sickle cell anemia. He is otherwise not dying, or not anytime soon, if given access to sufficient resources of donated blood. Then too there are the multiple trauma victims arriving at the Emergency Room daily in this busy urban hospital. What happens to those hemorrhaging patients if we run out of blood for having used up our supply on dying patients like Graciela?

Graciela's care team, discussing this dilemma, feels morally distressed. If these were normal times with blood products well stocked, then all patients who stand to benefit from transfusions—Graciela, Julian and those in trauma bays—could be treated equally and equitably without allocation concerns. However, when blood

is a scarce resource, when there are patients who need the resource for long-term survival and not mostly for palliation, what then should be done? On the other hand, excellent palliative care at the end of life is also significant. There is value to helping someone live out the remaining months of their lives with optimal quality of life. This seems a worthy goal, even if the anticipated outcome is not long-term survival.

What should be done? Graciela's attending physician requests an ethics consultation.

Bioethics in the News

- **Bioethicists Weigh In: Unvaccinated Man In Need of Heart Not Placed on Transplant List**
- **Health Equity Summit at The Hastings Center**
- **A Crisis in Bioethics? Public Outrage Challenges Received Bioethical Principle**
- **With rising covid cases, young people should consider advance-care planning**

Ethical Musings: Scarce Blood and Quality of Life

In the case above, both Graciela and Julian, plus other unnamed ER patients, need blood transfusions both to extend life and to improve their quality of life. Their medical needs for blood differ mostly in terms of a life-years benefit. In Graciela's case, it is more like life-months, since long-term survival is unlikely. For other patients such as Julian who are expected to live many years with standard of care treatments, including transfusions, the life-years benefit is significantly greater. Ought that matter for who receives blood in times when it is in short supply?

Most Benefit?

It may reasonably be argued that, in cases where there are blood shortages, the scarce resource should go to Julian and trauma victims—or other similar patients with a good chance for long-term survival. One could argue that this should be written into hospital policy so as to guide care providers in an ethically fitting

response to triage situations. Indeed, current hospital policies could be extrapolated as supporting this course of action even if those triage policies do not specify allocation of blood products in particular. Ought we not *always* allocate any scarce resource to those who stand to benefit the most?

Well, not necessarily. Examples abound of ICU beds occupied for months, even during pandemic surges, by patients who are neurologically devastated, by patients whose prognosis is grim even for survival to leave the hospital. Staffing is in short supply, along with blood products and some other essential items for standard of care procedures. Yet we persist in treating all patients equally without regard to levels or degree of actual benefit. Don't we?

The rationale for doing hospital care differently is grounded in the idea that Graciela's situation is morally dissimilar from that of Julian's. Julian has a chance at living a relatively long life if he receives standard of care treatment including transfusions. Graciela, at 75, has already lived a relatively long life; and anyway, she will die within a few weeks or months whether or not she gets transfused.

Moral Dilemma

On the other hand, it could be argued that Graciela and Julian's cases are not *really* distinct. Although there is a difference in anticipated survivability, a difference in time, is that in itself a morally significant difference? It's worth illustrating this point with the following thought experiment:

> ***Scarce Pill Case****: Dr. Jones has two patients, Kimberly and Manuel. Both Kimberly and Manuel need Pill A for their aggressive diseases. Let's suppose that prognostication of life expectancy somehow has become advanced to the point of near certainty. So if Kimberly receives the medication, her medical team is close to certain she will live 10 months. If Manuel receives the medication, however, his medical team has strong evidence that he will live 10 months and 2 days. What's more, both Kimberly and Manuel have expressed that they want the pill, because it matters to each of them that they maximally live out the rest of their lives. "Every day counts!" say both patients. They each believe the pill treatment would promote their quality of life; but quantity matters also.*

However, the hospital has a shortage of Pill A; in fact, they are down to the very last pill. The only patients in the hospital who currently need the pill are Kimberly and Manuel, and they both need it soon, or else they will die.

Dr. Jones contemplates this dilemma. On the one hand, she believes that giving the life-saving pill to Manuel is justified, since Manuel then will live a somewhat longer life than if she gave the pill to Kimberly. On the other hand, this rationale seems absurd, as it is only a difference of 2 days, which seems relatively insignificant. If it were truly significant, then the physician could be justified in giving the pill to someone else if it meant helping them live 10 months, 2 days and 28 minutes. What Dr. Jones knows in this situation is that Kimberly's life matters to her in the same way Manuel's life matters to him, no matter how many months, days, or minutes those lives comprise. "What then should I do?" she wonders. "How should I decide?"

Dr. Jones is right to be puzzled. The only real difference between Kimberly's and Manuel's claims to Pill A seems to be the evidence in hand that Manuel will live 2 days longer if he receives Pill A. This difference is likely morally compelling to Manuel, but probably not so to Kimberly, who also doesn't want to die any sooner than necessary.

Essential Context

What both patients and their physician agree is morally relevant to this dilemma is the desire of both patients to live as long as possible, and to do so with optimal quality of life. Both quantity and quality are valued. Sometimes one is more so, and sometimes the other, depending on additional factors not specified in this thought experiment—which therefore fails on grounds of lacking sufficient context. Contextuality is of essential moral significance for knowing what ought to be done in moral dilemmas. There is always more going on than what is initially evident or presented.

We might apply these same considerations to the Case Study above. Suppose hypothetically that Julian is given the blood treatment because, according to his medical team, he will benefit more from the treatment. Specifically, he will live a longer life. Furthermore, suppose that Graciela's son, Roberto, finds out. Let's

imagine that Roberto tracks down his mother's medical team and protests on the following grounds:

> Why did you choose to give the blood treatments to the other patient [i.e., Julian] over my mother? I understand he is young. I also understand that he needs the treatment to survive, but my mother needs it too! Sure, she only has a few months to live, and the treatment won't help her survive organ failure. But my mom's quality of life matters to her in the same way Julian's quantity of life matters to him.

Quality v. Quantity

As in the Scarce Pill Case, the difference above seems to be that Julian will live a longer life if he receives the blood treatment, whereas Graciela will die in a few months, albeit comfortably. It matters to Graciela that she receives optimal palliative care at the end of life. Quality of life matters to all of us. It also matters to Julian that he survives sickle cell anemia, finishes school, and fulfills his personal goal of becoming a marine biologist. Quantity of life, having opportunity to live out a full life, also matters to most all of us. Graciela's medical team, then, faces an apparent dilemma: either promote the qualitative goals of care of one patient or the quantitative goals of care of another patient. Resolving the dilemma requires discernment of additional factors that, in this context of conundrum, matter also for knowing ultimately what ought to be done.

This touches on the ethics of scarce resource allocation. Jonsen et al. (1992) classify this as an issue related to "Competing Claims of Care." They argue that, in cases where not much is known about patient preferences, priority should be given to the patient with a "better prognosis": "When one person is likely to die even if treatment is given and another person has a much better prognosis with treatment, the contextual feature of scarcity of resources becomes decisive in the decision."

So Julian ought to be prioritized over Graciela for scarce blood products. Is that so?