Episode: Author Interview: “Opportunities for Global Health Diplomacy in Transnational Robotic Telesurgery”

Guest: Esha Bansal, MD, MPH
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[bright theme music]

TIM HOFF: Welcome to another episode of the Author Interview series from the American Medical Association Journal of Ethics. Joining me on this episode is Dr Esha Bansal, a first-year resident in internal medicine at the hospital of the University of Pennsylvania in Philadelphia. She’s here to discuss her article, coauthored with Drs Saran Kunaprayoon and Linda Zhang, “Opportunities for Global Health Diplomacy in Transnational Robotic Telesurgery,” in the August 2023 issue of the Journal, Robotic Surgery. Dr Bansal, thank you so much for being on the podcast. [music fades]

DR ESHA BANSAL: My pleasure. Thank you for having me.

HOFF: So, what’s the main ethics point that you and your coauthors are making in your article?

BANSAL: We know that global disparities in quality, timeliness, and affordability of surgery, particularly when it comes to minimally-invasive technology like robotics, are unjust and a major preventable cause of health inequity around the world. Our article offers both an ethical analysis of physicians’ role in resolving this problem and proposes a unique policy solution that addresses some of the current barriers to expanding robotic surgery in low- and middle-income countries. First, we look at theoretical constructs like human rights, preference, utilitarianism, structural violence, and procedural justice to argue that building robotic surgical capacity in low- and middle-income countries is an important moral obligation for physicians and health systems in high-income countries.

And then in terms of a solution, our article focuses on transnational robotic telesurgery, which is a form of global health diplomacy. In telesurgery, a surgical team can operate remotely in a location that is physically far away from their patient, including in a different country, by using a robotic console and digital image technologies. Such an approach allows medical teams from high-income and low- or middle-income countries to work together to treat patients who otherwise would not have access to robotic surgery. This can ease some of the traditional cost, human capital, and logistical barriers that have so far prevented most low- and middle-income countries from establishing robust internal robotic surgical centers. And more broadly, it is also a diplomatic approach in that it transfers medical knowledge and builds health care capacity within low- and middle-income countries. In describing this policy approach, we also highlight some of the inherent ethical challenges related to implementing transnational robotic telesurgery, and these include implicit bias in the technology that is used, distributing responsibility and liability across a transnational medical team, and the perpetuation of medical imperialism.

HOFF: And so, what do you see as the most important thing for health professions students and trainees to take from your article?
BANSAL: I think it’s most important for students and trainees in the health professions to know that beyond the compelling ethical justification, the technology for transnational robotic telesurgery already exists. It’s really the willingness, the creativity, and the moral courage that we require in order to utilize this technology for global health equity. In our article, we actually describe the first transnational robotic operation in the world, which occurred between France and the United States over two decades ago in 2001, and we talk about some of the technological gaps that we still need to bridge in order to bring this approach to other regions of the world. We also delve into a case of a robotic cardiac surgery pilot program in Colombia, which used a hybrid approach of both manual and robotic techniques to lower costs, but still provide the benefits of minimally invasive care to patients. And this kind of creativity and medical multilateralism is really essential, I think, to achieving global health goals of all kinds, and particularly those that are related to technology.

HOFF: And finally, if you could add a point to your article that you didn’t have the time or the space to fully explore, what would that be?

BANSAL: One thing I would love to include in this article is a policy proposal that outlines the concrete first steps towards organizing a transnational robotic telesurgical pilot program. There are so many dimensions to think about. These could include information about how countries can relate to one another in establishing the terms of the partnership, the types of procedures that might be implemented first, patient safety and quality concerns that arise from this unique arrangement, and how we can best measure the health and social impacts related to the policy for both the low- to middle-income country partner and the high-income country partner. [theme music returns]

HOFF: Dr Bansal, thank you so much for being on the podcast today, and thanks to you and your coauthors for your contribution to the Journal this month.

BANSAL: Thank you so much. Really appreciate it.

HOFF: To read the full article, as well as the rest of this month’s issue for free, visit our site, journalofethics.org. We’ll be back soon with more Ethics Talk from the American Medical Association Journal of Ethics.