

ETHICS CASE

What about Learners' Roles in the Operating Room Should Be Disclosed to Patients?

Commentary by Michael J. Kirsch and Steven J. Kasten, MD, MHPE

Abstract

This case commentary primarily focuses on properly disclosing the participation of medical trainees when obtaining informed consent in the educational health care environment, particularly in relation to the development of institutional standardization of informed consent processes. The article addresses what it means to obtain informed consent, the elements thereof, and how ethical principles can be better applied to clinical practice in order to ensure truly informed consent. Concepts of capacity, disclosure of information, patient understanding, voluntary decision making, and consent are discussed as they relate to the case.

Case

Two weeks ago, Ronald learned that the recently biopsied, strangely-colored, large mole on his foot is melanoma. Given the lesion's size, Ronald's surgery will be done by a plastic surgeon, Dr. Rosh, at the academic medical center near his home. Dr. Rosh plans to do a wide excision of the lesion and a skin graft, which he describes to Ronald, who agrees to this approach.

On the day of the surgery, Ronald is waiting in the preoperative area. The resident physician working with Dr. Rosh that morning greets Ronald, "Hello, my name is Dr. Friedman. I am a plastic surgery resident here and I will be assisting Dr. Rosh today."

Ronald expresses surprise, "I thought Dr. Rosh would be doing my surgery. No offense, but I don't want a student doing my surgery. May I please talk to Dr. Rosh?"

Dr. Friedman tries to clarify his role, noting that he's not a student and, as a senior resident physician on Dr. Rosh's team, "It's typical for me to be involved with many of Dr. Rosh's cases. I do these all the time and have a lot of experience." Ronald, still worried, states, "I understand you are qualified to assist Dr. Rosh, but I really just want Dr. Rosh doing the surgery. My brother had a lot of complications after a surgery once. I don't want to take any chances."

"I understand," says Dr. Friedman, as Dr. Rosh enters the room. Ronald briefs Dr. Rosh on his conversation with Dr. Friedman.

Dr. Rosh replies, "Ronald, you do have some say in this, but we do our best work when we work as a team. In fact, it's critical that we work as a team. I don't do any surgeries by myself. Dr. Friedman is one of our best, and I need her assistance in your case today."

Ronald thinks a bit and sighs. "Well, I'm not comfortable with this, but I don't have much choice, do I?" Ronald is shaking a bit, visibly distressed and anxious. They are relieved at Ronald's words, however, and decide to leave it at that. Ronald is wheeled to the operating room.

As they prepare to enter the operating room, Drs. Friedman and Rosh look at one another and acknowledge to each other feeling uncomfortable about Ronald's expression of defeat and capitulation just before surgery. They wondered particularly about how they might have responded differently to Ronald's fears about complications.

Commentary

This case highlights many of the ethical considerations that underlie the integration of medical education into surgical practice. The primary concept that is addressed by this situation is that of [informed consent](#), particularly what patients should be told about the roles of trainees in their care. Informed consent is a somewhat nebulous process that has come to govern disclosures of the risks and benefits of medical procedures offered to patients. It was originally envisioned as a way of ensuring collaborative decision making between the patient and the physician regarding medical care [1]. In modern practice, however, the process of obtaining informed consent has been largely reduced to having the patient sign a piece of paper stating the procedure and the major risks associated therewith. By that standard, our patient, Ronald, might have given his informed consent. However, one could argue that it fails to meet the standards envisioned when the concept of informed consent was first introduced.

The process of informed consent requires satisfying standards with respect to five key domains: decision-making capacity, disclosure of information, patient understanding of information, patients' voluntary decision based upon that information, and, finally, patients' authorizing, or actually agreeing to, the proposed intervention [1]. Ronald appears not to have any factors that would limit his capacity, thus satisfying the first requirement. However, his consent arguably fails to meet the standards of the other domains. Before examining these failures, we must first discuss the present practice of obtaining informed consent.

The Informed Consent Process in the Educational Environment

The process of disclosing trainee participation is not standardized. Previous work in ophthalmology has shown that few hospitals have policies for this disclosure, specifically in terms of who should perform it or what it should include. Institutions that do have policies in place overwhelmingly favor the attending physician being the one to provide the disclosure [2, 3]. However, the prevailing lack of institutional oversight of the consent process can lead to confusion on the part of clinicians who are left without guidance. Despite lack of standardization at the institutional level, there is precedent in mandating the disclosure of the names and roles of those participating in a patient's care but not the method of delivering these disclosures [4]. Research on disclosure of resident participation has shown that informing patients of resident involvement in procedures is highly successful (95 percent consent rate) when a scripted statement is prepared beforehand and then delivered to the patient [4]. In order to ensure adequate understanding, this consent process should be carried at the preoperative visit for patients, which gives them sufficient time to internalize the information, formulate any questions that they might have, and withdraw their consent should they so desire. It has also been shown that patients have poor literacy when it comes to the roles and titles of trainees [5]. For this reason, it is imperative that the consent process describe and emphasize the qualifications and credentials of the trainees who will participate in the procedure. A patient who would otherwise consent to the procedure might refuse consent due to a poor understanding of the qualifications and roles of trainees, which is a failure in the process of obtaining informed consent.

How Does the Training Environment Affect the Content of Informed Consent?

With regard to the content of the disclosure, it should be recognized that the data establishing the risks of the recommended procedure were generated from the surgeon's previous experience, which included resident involvement, and studies performed at teaching institutions that included resident involvement. Therefore, the data are most likely generalizable to other care environments with resident involvement. This focus on content will help to ensure that the patient is basing his decision on data presented to him rather than on a gut reaction to having a trainee involved in his procedure. Previous work has recommended the inclusion of resident physician participation as a part of the disclosure rather than being optional [4]. While it could be argued that it is disingenuous to presume resident physician involvement, it is often a deviation from the standard of practice to not involve resident physicians in the procedures performed in teaching hospitals. Rather than ask the patient to give his blessing to be used as practice for a trainee as Ronald was asked to do, it might be cleaner and less uncomfortable to bill this issue as a necessary and integral part of the process.

Yet inclusion of resident participation as a given part of a standard disclosure might seem simply to be an attempt to sidestep a complex discussion with the patient because

it fails to take into account the inherent complexity of the uncertainty underlying disclosure of surgical risk. The assumption that Ronald makes is one that might seem intuitive: that by allowing a less experienced medical professional to play a role in his procedure, he is assuming a greater risk of complications. While this line of reasoning might seem logical, the truth is less clear. A growing body of work suggests just the opposite. At academic medical centers, surgical residents carry out many of the functions that allow the institutions to run surgical services. This involvement occurs to such an extent that to exclude residents from participation in patient care would be a significant departure from standard practice at these institutions. Several studies have shown that lack of standardization of care leads to increased morbidity and mortality [6, 7]. It follows, then, that deviation from standard practice (including reducing or restricting resident involvement) could lead to increased risk. Thus, Ronald's desire to protect himself from additional risk of complications by excluding the resident from his surgical team might, counterintuitively, have the opposite effect. Viewed in this way, the practice of including resident participation in the standard disclosure when obtaining informed consent might not be an attempt to avoid a difficult discussion. Instead, this bundling could be a legitimate effort to provide the patient with a complete disclosure, one with expected risks and benefits that are known and supported by data.

Following a sufficient disclosure of the information necessary for the patient to make an informed decision, the patient must have an understanding of this material. Ronald clearly did not have an adequate understanding of the resident physician's involvement in the procedure he was about to undergo, given his surprise and resistance once informed of the participation of a resident in his care. One could argue that this disclosure might unnecessarily increase the anxiety levels of the patient well in advance of a procedure, but research has shown that this is not the case [9]. It is, however, the case that patients have very poor recollection of the content of the disclosure after the procedure [9], and those who did not recall being informed at the time of consent that trainees would participate in their care were much more concerned about it than those who did recall being informed [9].

Informed Consent Requires Proper Timing

The period of time between the consent process and the procedure allows patients to consider the question of whether they are willing to have resident participation in their care or would prefer to seek care elsewhere. This is a question that might weigh heavily on the minds of those seeking to undergo elective cosmetic procedures. However, the authors believe that there are no differences between the concerns about risk of cosmetic patients and patients undergoing [cataract surgery](#), a procedure that can similarly have significant impact on the patient's quality of life. Even if a patient is presenting to a particular surgeon for a cosmetic procedure, the risks and outcomes cited in the disclosure would presumably be based on published data and the surgeon's experience with that procedure as performed with resident participation. Patients who

still have questions or concerns might also be referred to the results of cosmetic resident clinics, which have been shown to have similar outcomes to practices run by attending surgeons alone with respect to satisfaction and rates of complications [9].

Because of the late stage at which the full disclosure of resident participation in his procedure was made to Ronald, Drs. Rosh and Friedman end up engaging in some form of coercion. They might have felt this was necessary, given the institutional pressures regarding operating room time as well as the standard procedures regarding the integration of trainees into procedures and care of the patient. However, the ethical implications of this approach are clearly uncomfortable for all parties involved, given their individual reactions. At the core of their discomfort is the violation of the fourth requirement of informed consent, the voluntary nature of the patient's decision making. The combination of the timing at which this information is presented to Ronald, along with the pressure that the two surgeons place on him, runs counter to this requirement. Ronald sums it up when he says, "I don't have much choice, do I?" This uncomfortable situation could have been avoided with earlier and adequate disclosure. Even if Ronald were to have the same negative reaction to the idea of Dr. Friedman participating in his procedure, there would at least be sufficient time for him to have a complete understanding of the information and to make a voluntary decision without the undue influence of the surgeon.

The final provision that informed consent must satisfy is that the patient actually agrees to undergo the proposed intervention under the conditions specified about resident physician involvement. While Ronald eventually does acquiesce by agreeing to both the procedure and Dr. Friedman's involvement, this process does not satisfy the requirements of informed consent. It falls short of meeting the standards of adequate disclosure, understanding, and the voluntary nature of consent. By obtaining Ronald's consent in this way, Drs. Rosh and Friedman have— despite what we can assume to be their best intentions—failed to respect Ronald's autonomy as a person and, ultimately, failed to obtain informed consent to perform this procedure.

References

1. Appelbaum PS, Lidz CW, Meisel A. *Informed Consent: Legal Theory and Clinical Practice*. Fair Lawn, NJ: Oxford University Press; 1987.
2. Chen AJ, Scott IU, Greenberg PB. Disclosure of resident involvement in ophthalmic surgery. *Arch Ophthalmol*. 2012;130(7):932-934.
3. Steeples L, Mercieca K, Smyth K. Consent for cataract surgery training: a national trainers' survey. *Eye (Lond)*. 2012;26(5):666-670.
4. Gan KD, Rudnisky CJ, Weis E. Discussing resident participation in cataract surgery. *Can J Ophthalmol*. 2009;44(6):651-654.

5. Hemphill RR, Santen SA, Rountree CB, Szmit AR. Patients' understanding of the roles of interns, residents, and attending physicians in the emergency department. *Acad Emerg Med.* 1999;6(4):339-344.
6. Rowan CM, Nitu ME, Rigby MR. Inconsistencies in care of the pediatric hematopoietic stem cell transplant recipient with respiratory failure: opportunity for standardization and improved outcome. *Pediatr Transplant.* 2014;18(2):230-235.
7. Rozich JD, Howard RJ, Justeson JM, Macken PD, Lindsay ME, Resar RK. Standardization as a mechanism to improve safety in health care. *Jt Comm J Qual Saf.* 2004;30(1):5-14.
8. Vallance JH, Ahmed M, Dhillon B. Cataract surgery and consent: recall, anxiety, and attitude toward trainee surgeons preoperatively and postoperatively. *J Cataract Refract Surg.* 2004;30(7):1479-1485.
9. Koulaxouzidis G, Momeni A, Simunovic F, Lampert F, Bannasch H, Stark GB. Aesthetic surgery performed by plastic surgery residents. *Ann Plast Surg.* 2014;73(6):696-700.

Michael J. Kirsch is a third-year medical student at the University of Michigan Medical School in Ann Arbor.

Steven J. Kasten, MD, MHPE, is an associate professor, an associate chair for education in the Department of Surgery, and a faculty member for the Master of Health Professions Education program at the University of Michigan Medical School in Ann Arbor. He is also the director of Graduate Medical Education Innovation for the medical school and has more than 15 years of experience in residency program leadership and graduate medical education oversight. He received his MD from the University of Michigan and his MHPE from the University of Illinois at Chicago.

Related in the *AMA Journal of Ethics*

[How Should Trainee Autonomy and Oversight Be Managed in the Setting of Overlapping Surgery?](#), April 2018

[Informed Consent: What Must a Physician Disclose to a Patient?](#), July 2012

[Managing Risk in Cataract Surgeries Performed by Resident Ophthalmologists](#), December 2010

[Plastic Surgery's Contributions to Surgical Ethics](#), April 2018

The people and events in this case are fictional. Resemblance to real events or to names of people, living or dead, is entirely coincidental.

The viewpoints expressed in this article are those of the author(s) and do not necessarily reflect the views and policies of the AMA.

**Copyright 2018 American Medical Association. All rights reserved.
ISSN 2376-6980**