The ethics of learning from patients

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In Brief

IS IT ETHICAL FOR MEDICINE TO USE PATIENTS as learning tools for medical students if these patients have not been given a chance to provide truly informed consent? Dr. Caroline Shooner raises this question in the following article, which claimed second prize in *CMAJ*'s 1996 Logie Medical Ethics Essay Contest. She considers the case of a patient whose trust was shaken when a medical student performed a chest-tube insertion. Shooner concludes that psychologic harm could have been avoided had the patient's right to informed consent been respected. She also argues that few patients will turn down a chance to help students learn if the request is made properly and openly.

En bref

EST-IL ÉTHIQUE D'UTILISER LES PATIENTS comme «outils» d'apprentissage pour les étudiants en médecine sans avoir obtenu un véritable consentement éclairé? Le D[r] Caroline Shooner soulève cette question dans l'article qui suit, pour lequel elle s'est mérité en 1996 le deuxième prix du Concours Logie de dissertation du *JAMC*. Elle étudie le cas d'un patient dont la confiance a été ébranlée quand un étudiant en médecine a procédé à l'insertion d'un drain thoracique. Shooner conclut que l'on aurait pu éviter de causer un tort psychologique à ce patient si on avait respecté son droit de consentement éclairé. Elle affirme en outre que peu de patients refuseront d'aider les étudiants à apprendre si on leur en fait convenablement et ouvertement la demande.

Education

Éducation

Caroline Shooner, who graduated from McGill University in 1996, is a first-year resident in family medicine at Memorial University of Newfoundland. Eventually she hopes to return to university to complete a degree in the humanities because "it seems to me that medicine is really something like applied humanities."

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During training, many of us have experienced the moral uneasiness that accompanies the process of learning clinical procedures by using real patients, often without obtaining their explicit and truly informed consent. Although such procedures are usually adequately supervised and unlikely to cause any physical harm, students are sometimes left with the uncomfortable feeling that somehow the relationship between physician and patient has been impoverished and violated. In the process of learning important skills that will benefit students and potentially benefit the patients they will eventually care for, the essential element of trust has been jeopardized.

Clearly, the involvement of medical students in the assessment and care of patients may cause a potentially serious conflict between the trainee's need to learn and the patient's right to receive adequate care.[1-4] Although physicians-in-training need hands-on experience to master their craft, patients are entitled to the best and safest medical care available.

In order to satisfy the need for adequate training while also respecting the principles of patient beneficence and autonomy, we must ensure that the principles of informed consent have been honoured. Often, this is not the case.[5] We may find that, in the process of guaranteeing patients the right to decide what will be done to their bodies, we serve equally the ethics of patient care and the goals of teaching responsible, humane medicine.

Flustered student, worried patient

To help understand essential elements of the potential conflict of interest between medical trainee and patient, consider this scenario.

Jane Smith (all names are fictitious), a third-year medical student, is starting

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Dr. Caroline Shooner, proudly holding Newfoundland and Labrador flag

the second week of an elective clinical rotation in cardiovascular thoracic surgery. The supervising resident has asked her to accompany him to see John Brown, a 65-year-old man with lymphoma who developed a pneumothorax after a left subclavian central line was inserted. The resident asks if Smith has inserted a chest tube before, and she says she hasn't but has witnessed the procedure twice in the past 2 weeks. This time, says the resident, she will perform the insertion. Eagerly, albeit somewhat anxiously, she accepts the offer.

As they enter Brown's room, the resident quickly introduces Smith as a "physician-in-training" and member of the surgical team, and adds that she will assist with the chest-tube insertion. Brown simply nods and utters "OK." No further explanation is requested or offered.

As the visitors prepare for the procedure, the patient notices that the "physician" holding the syringe containing the local anesthetic appears anxious. Sweat is forming on her forehead and she cannot hide a slight hand tremor. The resident calmly begins to explain the most important steps in a chest-tube insertion. At this point, Brown interrupts them by asking, "Has she ever done this before?"

Smith looks at the patient, then turns to the resident. A vague uneasiness fills the air, until the resident provides reassurance. "Don't worry Mr. Brown, Jane is familiar with this procedure. I myself have done it many times. We are going to perform it together. Everything will go fine."

The patient gives an unconvincing nod and turns on his right side as Smith and the resident begin to prep and drape him. Guided by the resident, Smith performs the insertion rather skilfully. The procedure completed, Brown turns to Smith and taps her on the arm. "You were pretty good, Doctor."

Smith smiles and offers Brown a moist handshake. The resident informs the patient that he will be sent for a chest x-ray after lunch, to ensure that the chest tube is well inserted, and then leaves the room, swiftly followed by the student.

Many medical students have shared Smith's experience, and without doubt many patients find themselves in Brown's shoes every day. The ubiquitous nature of this questionable interaction underscores the importance of addressing the issue of informed consent in the context of medical training.

Reconsidering the case

Using the same scenario, let's examine the situation from the perspective of the medical student and patient.

From Smith's perspective, Brown's need for a chest tube represented a golden opportunity for hands-on, supervised training. She was well aware that the interaction benefited her personally in several ways. Not only will her eagerness and skilful performance likely reflect well in her evaluation and make her a more active member of the surgical team, but also the experience she gained will contribute to her own personal goal of becoming a physician who is able to practise medicine safely.

That latter benefit may even help Smith dismiss the uneasiness she experienced when Brown questioned her competence. After all, the knowledge and skill that she had gained, albeit without Brown's explicit consent, will benefit all patients she sees in the future.

And was the patient really exposed to harm? Smith feels confident that the actual risk to the patient did not significantly exceed the risk posed by a resident performing the same procedure. All in all, Smith concludes, performing the chest-tube insertion actually increases the end benefits without causing any increase in potential harm to the patient.

She reasons that, had the resident done the procedure, the patient would have been the sole beneficiary. In this case, while the patient was provided with what Smith perceives to be adequate therapy, there was the added benefit of a contribution to medical education and to other patients who will need competent care in the future. Still, as Smith left Brown's room she wondered if her uncomfortable uneasiness after hearing Brown's question could have been avoided. Should she have told him? Would it have changed anything? She pondered this as she trotted down the hall, trying to catch up to her resident.

The patient's perspective

From Brown's perspective, the procedure represented a therapeutic option that he should and will accept because it is the appropriate therapy for his medical condition. He was willing to accept the chest tube, as well as the discomfort it entailed, because a competent medical team he

trusted had led him to believe it was the proper course to pursue. As he lay in his hospital bed, slightly short of breath, he tried to reason away his anxiety, tried to remember if anyone he knew has had a chest tube inserted. Is this a risky procedure?

His thoughts were interrupted when the resident and a young woman in a short white coat entered the room. They greeted him politely and introduced themselves. He recognized the resident, but who was this physician-in-training? She was not wearing a name tag. She's probably taking a refresher course in surgery. Or maybe she is simply another resident? Perhaps a student?

As Brown pondered these questions, the resident explained that Smith would participate in the chest-tube insertion. Why not? She must know what she is doing, and Brown has never had any reason to question the trust he bestowed upon his caretakers.

But as the resident and the other doctor begin the procedure, Brown cannot help but notice that Smith's face is turning red with concentration as she prepares, with a trembling hand, the syringe containing the local anesthetic. Has this person ever done this before? She certainly seems nervous, even more nervous than he is, if that's possible. The resident tries to reassure him, but Brown is apprehensive. He's not sure if he wants to continue with this.

It angers him that he did not ask more questions before the procedure started. Exactly who is this physician-in-training? For the first time in his hospital visit, Brown feels betrayed.

Fortunately, the procedure is completed in less time than he expected, and he hardly felt a thing. It wasn't so bad after all. Now he feels foolish now about his anger and apprehensiveness. Still, he could not shake the memory of the fear that squeezed his stomach, or forget the moment when he began to feel unsafe.

Autonomy and beneficence

At least 2 ethical principles, autonomy and beneficence, are at stake when medical students become involved in patient care. The chest-tube incident makes it quite clear that Brown's rights to self-determination and adequate medical care were not respected.

In order to satisfy the principle of autonomy, patients must be provided with enough information and time to make an informed decision about their care. Sufficient information includes not only relevant details about a procedure but also details about the status and experience of the person performing it. The term physician-in-training does not provide a clear description of competence. Even the term medical student may need to be clarified for some patients.

Moreover, once patients have reached a decision, they must also be allowed to express their wishes, without being coerced, about which therapeutic option they prefer or consent to, and the caretaker must respect that decision.

The "blanket clauses" that patients are asked to sign when they enter a teaching hospital, which state that the patient accepts that part of the care will be provided by people designated by the staff physician, do not replace informed consent.[1,6] Patients do not waive their right to choose when they enter a teaching institution. In Brown's case, he should have been allowed to select between letting the resident or the *clearly identified* medical student execute the procedure, knowing that she would be adequately supervised and that he would be contributing to medical education.

The bottom line? It is the patient's prerogative, not the physician's, to decide what is going to be done to his or her body. Clearly, Brown was not given a chance to exercise this right.

For the medical student, informed consent may be perceived as a threat to adequate training because refusals by patients may reduce significantly the number of learning opportunities. At best this is a legitimate but unfounded worry. Even though Article 11 of the Quebec Civil Code indicates that respect for autonomy takes precedence over the provision of "hands-on" training for students, it should not necessarily interfere with the training. Many patients, if they share a trusting relationship with their physician and are given enough reassurance that adequate supervision will be provided, will allow a student to participate in their care.

Moreover, the act of obtaining informed consent could itself be seen as a learning opportunity, not a barrier to medical education, because it implies a high level of communication skills. Surely, these interactive skills are vitally important in the training of ethically concerned, humane professionals.

In order to satisfy the principle of beneficence, caregivers must not cause any avoidable harm to patients in the course of providing them with adequate therapy.

The case of Mr. Brown

In Brown's case, it may be reasonable to assume that the risk of harm was not greatly increased because a student performed the procedure. The resident had known her for 2 weeks and was likely justified in deciding that she was ready to attempt a chest-tube insertion, which he would supervise closely.

However, even though the procedure was completed without complications, Brown's treatment was indeed compromised. When he was deliberately, albeit not

forcibly, denied the chance to exercise his free and informed will concerning who was going to insert the chest tube, the therapeutic alliance Brown had come to rely upon had been jeopardized: his trust was shaken, he felt unsafe and some psychologic harm was done that could have been avoided had Brown's right to informed consent been respected.

It is tempting to minimize the impact of Brown's temporary insecurity by weighing it against the resulting benefits to the common good. However, the same precarious reasoning could be applied to research that involves test subjects in trials that could be harmful but ultimately may benefit the majority. Informed consent is paramount in such trials.

Similarly, patients should be informed and allowed to choose whether a student participates in their care. The potential impact on medical training does not outweigh the moral, ethical and legal necessity of telling a patient the truth.

The search for solutions

Dishonesty can undermine trust within the doctor–patient relationship. It affects patients not only during the medical act but also in the future because it will colour interactions between patients and their caregivers. What is medicine without the trust inherent within it? We must consider ways to promote honesty within medical training.

Perhaps we place too much emphasis on learning how to perform procedures and not enough on learning how to interact with patients. If Brown's need for a chest tube had been perceived by Smith as a great opportunity not only to learn a procedure but also to sharpen her communication skills, the goals of learning would have been met, at least partially, whether or not Brown had allowed Smith to participate in his care. The value of this experience would extend not only to future patients needing a chest tube but also to any patient requesting information about a procedure or therapy.

We may assume too quickly that most patients, if given the choice, will refuse to let students participate in their care. I could not find a study documenting what proportion of patients refuse to take part in medical education if given the choice, but personal experience suggests that our concerns are exaggerated.

To reconcile the need to provide both adequate training and informed consent, we should think of ways to convince patients that involving students in their care is to their advantage. Siegel makes several valid arguments justifying residents' participation in surgical procedures.[7] He cites the need to explain the inherent safety of trainee participation by emphasizing the close supervision it entails, and establishes that teaching hospitals with strong training programs have better morbidity and mortality records than other institutions.

This is logical, because an environment in which staff physicians are constantly challenged by the curious minds of students and residents means the quality of medical care will be maintained at a high level. Finally, several heads are often better than one. In teaching institutions, patients benefit not only from the attention of a staff physician but also have the undivided attention of a brigade of trainees eager to listen to their stories.

Conclusion

The involvement of students in patient care may seem like fertile ground for a disturbing conflict of interest, but a closer look at the issue reveals that patients and medical students are, in fact, "natural allies" who need one another.[8] Although patients may not fully realize it, medical students are often their most fervent advocates, messengers and listeners. Being at the low end of the responsibility hill, students often have more time to spare, and perhaps more patience.

We have everything to gain from building on the honest base of informed consent within the context of medical training. The argument that education may be jeopardized has no firm foundation in fact. When we avoid disclosing the relevant truth to a concerned patient, we enter a vicious circle that reinforces our prejudices and makes us underestimate people's incredible willingness to contribute.

We are so concerned that patients will refuse to contribute to medical training we end up making our fears a reality, and we undermine the very trust that gives patients the incentive to accept student involvement in their care.

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