Teaching medical students about communicating with patients who have sensory or physical disabilities

Persons with disabilities often receive worse quality health care, along various dimensions, than do others (Rosenbach 1995; Chan et al. 1999; Lawthers et al. 2003; Iezzoni et al. 2000, 2001, 2004a, 2004b; Weil et al. 2002; O'Day, Killeen, and Iezzoni 2004, in press). They also report less satisfaction with interpersonal aspects of care, such as physicians incompletely discussing their health problems and not answering all their questions (Iezzoni et al. 2002, 2003, 2004b). Given the long history of societal stigmatization and marginalization of persons with disabilities, these observations raise important concerns. Healthy People 2010 (U.S. Department of Health and Human Services 2000), which sets national health priorities, notes that persons with disabilities are often left behind. In particular, misconceptions about people with disabilities contribute to disparities in the services they receive, especially fewer health promotion and preventive interventions.

No evidence suggests that clinicians fail to provide appropriate services to patients with disabilities because of discriminatory attitudes toward disability. However, this area has received little study, and "as clinicians, we are subject to all the same factors that influence others, and are not immune to prejudice" (Olkin 1999, p. 74). Disability thus joins such attributes as race, ethnicity, and non-majority cultural traditions, which are increasingly targets for medical educators teaching about providing culturally competent, patient-centered care. However, with some exceptions (Conill 1998; Mitka 1999; Crotty, Finucane, and Ahern 2000; Sabharwal and Lanouette 2000; Sabharwal 2001; Kahn 2003), medical school training initiatives have not considered issues related to disability.

In this study, we sought information from medical students about their attitudes toward disability, their medical school education about communicating with patients with disabilities, and their suggestions for teaching future medical students about
interacting with patients with disabilities. We conducted focus groups interviews with students as they neared completion of medical school. For our purposes here, we narrowly defined disability as impaired vision, hearing, or mobility; another set of focus groups considered psychiatric disabilities.

Methods

Moderator's Guide

The moderator's guide is the "script" outlining discussion topics for the focus groups. To construct our moderator's guide, we drew from findings of our prior study about health care experiences of persons with vision, hearing, or mobility impairments or psychiatric disabilities. That project analyzed both nationally representative surveys (Iezzoni et al. 2001, 2002, 2003, 2004b; Weil et al. 2002) and group interviews (17 focus groups, 122 interviewees: Iezzoni et al. 2004; O'Day, Killeen, and Iezzoni 2004, in press). Those analyses raised particular concerns about clinician-patient communication and physicians' attitudes toward patients with disabilities. For example, one deaf woman reported that "the medical community ... [doesn't] see us as a linguistic minority" but instead views her with "a certain kind of pity" (Iezzoni et al. 2004). One blind man observed, "A lot of people—even doctors—look at people with disabilities as being more or less a nobody" (O'Day, Killeen, and Iezzoni 2004).

Given this background, the moderator's guide addressed three general topics: (1) students' views of living with disabling conditions; (2) students' educational experiences with patients with these disabilities; and (3) student's perceptions of different educational strategies for teaching them to communicate better with patients with disabilities. We conducted two pilot interviews with third-year internal medicine residents to test the moderator's guide and revised the scope of the topics based on these results. The moderator's guide is available upon request.

Recruiting Focus Group Participants

We interviewed students during their final medical school year. By their final year, students have had considerable clinical experience and their styles for interacting with patients have matured. Although most were in their fourth years, some had also completed other graduate degrees, extending their time as medical students. We conducted two focus groups during early evenings in February 2002.

We approached the three Boston medical schools—Boston University, Harvard, and Tufts Medical Schools—for permission to recruit their students. Two schools (“A” and “B”) gave permission and offered e-mail lists of their final year students. We wrote a solicitation e-mail describing the study and inviting participation that was then forwarded to students by the respective Deans' offices. We offered a $50 honorarium, dinner, and parking reimbursement. We invited all students who responded to this e-mail to participate.

Conducting and Analyzing the Focus Groups

Each of the two focus groups lasted about two hours; the first author moderated both groups. The institutional review boards at both Beth Israel Deaconess Medical Center and Harvard Medical School approved this study, and before starting, we obtained written informed consent from interviewees. We videotaped the focus groups so that we could accurately assign speakers to their statements throughout the transcripts. After concluding, we asked students to complete questionnaires about their demographic characteristics and specialty choices.

A professional transcription service produced a verbatim transcript. We compared the transcript to the videotape to ensure accuracy and replaced actual names with pseudonyms. After preliminary reviews of the transcripts, we identified common topics that became our "coding categories." Using qualitative text analysis software,
topics that became our “coding categories.” Using qualitative text analysis software, Nvivo (QSR International 2003), we sorted texts by coding categories to facilitate analysis. The authors repeatedly reviewed these texts, using concepts and ideas raised by interviewees to identify primary themes. After we completed preliminary analyses, another author (an experienced medical educator) independently read the two transcripts to assess the validity of our conclusions.

Results

The focus groups involved 14 students, two from School A and 12 from School B, including 7 women and 5 racial or ethnic minorities. The students had made the following residency choices: 5 internal medicine; 2 family medicine; 2 radiation oncology; one each pediatrics, emergency medicine, radiology, and otolaryngology; and one remained undecided. The discussion coalesced around four major topics described below. We edited illustrative quotations to reduce length and redundancy.

Perceptions of Sensory and Physical Disabilities

With one major exception (described below), the students mentioned sensory and physical disabilities in empathetic and caring terms. However, they held largely negative views of living with disability, perceiving loss, frustration, isolation, and possibly depression as potential consequences. They also expressed admiration for persons with these disabilities who, from the students’ perspectives, are “coping well” and living active lives. They did recognize environmental barriers, such as absent curb cuts, as exacerbating disability. They also admitted that they still had much to learn about living with disability.

They reported that their views about disability experiences were not primarily informed by societal sources, such as books, movies, television, or legal or political positions. Students also reported that the patients they had seen during medical school did not largely shape their perceptions. Instead, most drew their insight from aging family members who have become increasingly blind, deaf, or frail; a few described younger friends or family members who had accidents or injuries. “My grandfather is 106,” said Lynn, whose comments exemplify those relating to aging relatives. “Starting around age 90, both his hearing and his sight started going down. Prior to that he was a voracious reader, reading the newspaper and watching TV. With the loss of vision and hearing, his interaction with the world decreased exponentially. I think his mental faculties went down as well because he wasn’t stimulated with his external environment. So he retreated within himself.”

The students described few experiences with peers, teachers, or active professionals who have sensory or physical disabilities. Several mentioned an attending physician who uses a wheelchair. “He’s a very strong man and a wonderful role model,” Rachel observed. “He has done remarkable things, and he doesn’t complain, certainly not to his students.” However, Rachel and other students perceive that this physician feels profound loss from disability having prevented the active clinical career he had planned.

Students admitted that they knew little about living with sensory and physical disabilities. They expressed openness to learning and changing their views. “I still have very superficial assumptions based ideas of what disabilities look like,” admitted Colleen. During one summer at college, she worked in a rehabilitation engineering center providing assistive communications technologies:

This woman in her 20s came in. She was in a wheelchair and couldn’t speak. Her head was to one side, and she was drooling. We all spoke to her as if she were a little child. She wasn’t responding, and I thought she didn’t understand a word I said. It was a lot of “goo goo, ga ga. You’re getting a computer. Isn’t that wonderful?”
We set her up with a computer with word prediction software and various shortcuts.... We were trying to teach her how to use the thing, saying, "Hit the F button." She kept missing the F button and hitting the bathroom button. And we’d say, "That's okay. You're doing great!" Finally, someone had the good sense to say, "Do you need to go to the bathroom?"

Then we got her set up with the word processing program. Even at that point, I underestimated what was going on in her head because of what she looked like. Within about two seconds, she typed, or word-predicted, the sentence, "This is just like having a baby: you wait nine months and then go to the hospital." The baby was her getting the computer after waiting for so long. This was not at all in tune with what I had imagined from looking at her! I think about that a lot.

Although students generally spoke in empathetic terms, one student suggested that current social mores prohibit verbalizing critical views. Paul believes that people with disabilities still face "insidious discrimination. We try to avoid flagrant forms of discrimination and try to respect other people." Although Paul feels that the "Americans with Disabilities Act has raised general political awareness of what's right, it's a very expensive law. Plenty of people feel imposed upon." Paul doubts that average persons would allow fares "to rise 50 cents to make the subway accessible for handicapped people." These comments were the students’ only mention of the 1990 civil rights law for persons with disabilities.

Students openly voiced stigmatized attitudes toward one subgroup of persons with mobility problems—morbidly obese persons. The students suggested that their negative perceptions reflected their belief, which students acknowledged to be often false, that morbidly obese persons bear responsibility for their conditions. Rachel introduced this topic tentatively, saying, "This is going to make me a few enemies," but then described her frustrations caring for a woman on the bariatric surgery service. "She still really loved to eat and was asking for food a lot. I felt like, 'Isn't there some way you can control this?'" Rachel reported joking and pejorative comments among clinicians about obese patients. "I think that the blame and stigma attached to obesity is very different from other disabilities."

Tom felt that "everyone's natural reaction is to see if it's the patient's fault. People treat a person with an inherited disorder much nicer than someone who had some role in causing their disease, right or wrong." However, Arthur, who also spent time on the bariatric surgery service, found his attitudes shift somewhat after attending support groups for morbidly obese patients:

What really struck me during these support groups was hearing how painful their lives are.... It gave me a lot more respect for these people. It's shocking. I certainly had no idea; I could not have guessed. Some of these people have lost their jobs, and their friends won't go out with them. Their entire support structure disappears because of their disability.

And in spite of that, it's still hard to see these people and not say, gosh. I think of smoking the same way, too. Gees, we know this is not good for you. There's still a piece of me that wants to say, "How much you eat should be somewhat under your control."

"Morning" Versus "Afternoon" Classes

Although medical school curricula do differ, most schools teach basic science and courses about specific diseases during the first two years. During that time, schools generally introduce students to clinical activities, including gathering patient histories and conducting physical examinations. The last two years of medical school typically are totally clinical, with students performing clerkships in different
specialties in hospitals and clinics.

When asked about relevant teaching in Years 1 and 2, students uniformly spoke of the dichotomy between what they called "morning" and "afternoon" classes. During the first two years, Schools A and B schedule what students perceived as "hard science" courses (e.g., pathophysiology) in mornings and "touchy feely" courses (e.g., patient-physician communication, culturally competent care) in afternoons. Students explicitly viewed morning courses as more important than afternoon courses, seeing this segregated scheduling as proof of these views. As Paul observed, "This notion starts early in medical school that some things are less important than others. Certainly, the afternoon classes are an imposition on our free time."

Interviewees felt that, especially during the first year, efforts to make students into sensitive and caring physicians could perversely generate the opposite effect. Each week, the course would introduce students to new, potentially sensitive clinical situations, such as substance abuse, mental health problems, or sexually transmitted diseases. According to Lewis:

> It was very frustrating. A whole year, every Wednesday afternoon, they would teach you to be empathic. This is something that you sort of have or you don't have. It's hard to teach. You get banging over the head with this message so much that you go the other way, in a way. ...They defeat their primary purpose by overstating it. It was patronizing. Make it to the point. These are bright students. They don't need to be told the same message 25 different times.

Some students felt, in retrospect, that afternoon courses offered valuable information that was dismissed at the time because students perceived considerable pressure from demanding morning classes. "We joked plenty about the afternoon nap that we were required to have," admitted Vera. "Nonetheless, by the end of second year, you feel that time is really valuable," especially once students begin learning to do histories and physical examinations.

Students suggested that afternoon courses taught much that related to disability, although few students were exposed to persons with sensory or physical impairments during those sessions. Students felt that classes on learning to work with interpreters could extrapolate to situations involving deaf and hard of hearing patients. Carly remembered that, during her afternoon class, "they brought up the idea that with someone who is wheelchair-bound, the wheelchair is part of them. You can't just grab the wheelchair and push it along. I also had a patient who was acutely blind, and I had to examine him. No one told me anything about how to examine the patient. I simply told him what I was going to do before I did it."

One relevant experience during School B's first year involved a single home visit to a patient. This activity generated mixed reviews. Several students admitted that, now several years later, they viewed the experience as valuable; however, at the time, they had not. "It was more or less a social visit," Emily said. "I had no purpose there. I didn't have anything to offer in exchange for their time. I felt I was putting out the patient a little bit. I didn't want them to think they had to serve me cookies and tea." However, Paul valued his first year home visit:

> It was two patients, a husband and wife. The wife had a terminal illness and wasn't conscious most of the time, and her husband was taking care of her. When you hear about the situation, you imagine how all consuming a disease is. But when I went to their small house, I realized that her bed was in the living room. All the medical paraphernalia was there. All parts of the house were related to this. ... When you go and observe things, you develop a much better psychosocial perception of their life.
Clerkship Experiences

Once they enter the clinical years, students must interact directly with patients with sensory and physical impairments. Some students acknowledged being nervous about addressing disability with patients. "We're scared that our words are going to offend people," admitted Vera, "just by using one wrong word. We don't know whether it's right or wrong to talk about the disability."

Ben, though, feels that "one of the great things about being a medical student is a sort of forgiveness by the patients toward your awkwardness, and they try to teach you." Monique learned from a blind woman:

   The patient was really good at self-advocacy. A lot of times, people would come into the room and not introduce themselves. Since she's blind, she didn't know who was speaking to her. So she stopped the person and asked who they were. That was good. It brought home the point. I tried being very careful to say who I was and what I was doing there. This might be true of a lot of patients who may not remember you the next time around.

Although communication plays a central role in clerkship experiences, few received much training from clinical instructors about specific ways of interacting or facilitating communication. Persons who are deaf or hard of hearing raised particular issues. Lewis noted:

   Particularly with patients that are hard of hearing, it's more difficult to develop a therapeutic bond. ... You may not develop the kinship that you would with a patient that was younger, that you might be able to talk to and share some commonalities with more easily. It's really difficult and frustrating for both the medical student and the patient. It becomes a little bit more like veterinary medicine, as opposed to taking care of a human being.

Tom feels that sensitive clinical contexts exacerbate the situation, "especially if you're talking about a test where someone might have cancer. You're yelling at the top of your lungs, trying to make them understand you. It creates frustration on both sides." Tom said he could ask his resident for advice on handling this situation, but "I'm not sure anyone really had a great way of dealing with it."

Students also denied being taught how to assist patients with physical disabilities. They wondered if they should even mention wheelchairs to wheelchair users. "You don't know how much you should assist patients and how much to leave them," Alan confessed. "No one has ever shown us during med school. You see people locking the wheelchair and going through these steps. Then, the one time you do try to help, you forget steps, like moving the feet out of the way. You don't know if you're being helpful or just making a fool of yourself."

Clerkship experiences strongly influence students' views of patients. As Arthur said, "My clerkships shaped how I take care of people much more than the afternoon classes did or the first two years. What I hear from my residents and the attendings plays a much bigger role than what I learned anywhere else about how I see different patients."

During their clerkships, students reported encountering troubling comments among some residents about patients "who take more time" because of a physical or sensory disability. But they attributed this to understandable pressures on busy residents. "Medicine can be so harrowing, seeing all these devastating stories," admitted Rachel, "but you have to laugh sometimes. I would hope that the laughter wouldn't be at the expense of the patient. I think that second year and the beginning of third year, you might think you're going to go in and be a moralizing force. But in the end, the laughter is cathartic."
Students felt the need to become part of the clinical team. This sometimes meant suppressing judgments about appropriate speech. "You hear these disparaging comments," recounted Arthur. "But I don't want to be the third-year medical student who goes, 'You know, I don't think that's very respectful to patients,' and then get beat on. You just have to roll with the punches, and after while, you become like them, if you will."

Attitudes of residents and other clinicians figured prominently into students' perceptions of morbidly patients. According to Lewis:

In the operating room, preparing these patients for surgery, the comments would run wild. It was a great inconvenience to take care of these patients. Standard operating tables have a weight limit of 300 pounds, so you have to get a special table. Then it takes six people to transfer the patient. Everyone involved, from assistants to nurses, particularly once the patient was asleep—it's open season on jokes. Of course, a lot of that attitude comes from above and filters down.

Students perceived that time pressures cause busy house staff to circumvent better means of interacting with patients. One example involved use of interpreters, including sign language interpreters. "The more time-pressed residents are, often the worse they are at using interpreters," Vera observed. "They'll talk to the interpreter rather than talk to the patient. They'll speak in the third person: 'Tell him that,' rather than addressing people directly."

Students also reported taking shortcuts to save time or other resources. They did not recognize these strategies as possibly negatively affecting quality of care. Rachel examined patients who remained seated in wheelchairs rather than getting onto examining tables. Colleen recalled interacting with a deaf patient without a sign language interpreter. "We wrote things down and showed it to him, and he would nod. But it was infantile communication, just for the sake of speeding things up. A lot of things you would explain to a patient felt too complicated to write down, so these things were glossed over. So he didn't get nearly as much information about what was going on as another patient might have." No attending physician or resident advised Colleen on better communicating with the deaf patient. "I thought that writing it down was a good idea."

For School B students, virtually all patient encounters occurred in the hospital or clinic. However, School A required fourth year students to take a geriatrics rotation that involved visits to patients' homes and nursing homes. School A students reported learning much from those experiences that relates to persons with disabilities. "You evaluate patients to see how they're functioning in those settings," said Tom. "Are they getting around? Are they able to get food?" Alan described an especially memorable home care patient:

This one gentleman lives a block from the medical center. He's 80-something, African American, this little guy with really severe scoliosis. When you go to his apartment, the whole place is damp because the radiator leaks. You ask him if he's taken his pills, and he says he hasn't taken any this morning. He goes to the faucet, stumbling around, and you wonder why he hasn't fallen a billion times—there's stuff all over the place. The faucet barely works. From the rusty pipe, little drips of water come out. The cup he uses is dirty, and there are piles of dirty dishes. We draw blood, so we bring a supply bag. And when I reach down to get something from the bottom of the bag, it's wet because his carpet was soaking wet.

You think, how does this guy stay here by himself? But he does, and I'm sure he's much happier there than if he were stuck in a nursing home. You also learn visiting him that he's able to do a lot of stuff. He doesn't
You also learn visiting him that he's able to do a lot of stuff. He doesn't have anybody there he can ask. When people come into the clinic, you would never know that their home might be like this. So now I think about those things.

Preferences About Being Taught

Students voiced firm preferences about how they would want to be taught about disability experiences and communicating with persons with disability. They definitely did not want to add disability as yet another category of persons being addressed in the so-called afternoon classes. As Rachel said:

We interviewed the patient with HIV, the homosexual patient—all these categories. It's as if they can't trust us to extrapolate or to be able to have any abstract thought—the idea that even if we haven't specifically interviewed or cared for a patient with such and such characteristic, we wouldn't be able to handle it later on. In that way, it was patronizing. It was a waste of time. I think it actually had the reverse effect. We just didn't want to go that day, and it was frustrating.

Instead, the students strongly preferred bringing persons with disabilities into morning classes addressing specific diseases or conditions. The class could then address both pathophysiologic aspects of conditions as well as the impact on daily life. Years later, students vividly remembered examples of such patient visits to morning classes. One prominent example was "a patient who came to see us in our neuroscience class," said Carly, as other students nodded. "He had Parkinson's. He'd not taken his medication that morning." The man's wife rolled him in in his wheelchair, his body virtually frozen by the disease. He then took levodopa and later rose from his chair, walking across the classroom. "Just having him actually be there and see how difficult it was for him to get started and walking, it was much more meaningful." Rachel remembered the man's wife speaking about "her frustration when he couldn't do certain things."

The students discussed a variety of other approaches for learning about the experience of disability and communicating with patients. They always preferred interacting with "real patients." They liked videotapes of patients but only if short (perhaps 10 to 15 minutes long), focused, and succinct. Being videotaped themselves while interviewing a patient, so that students could assess their technical performance and interpersonal skills, was useful if an experienced instructor reviewed the videotape with them. Simulating disabilities, such as by wearing blindfolds or using wheelchairs for a day, generated mixed opinions. "If it were part of some larger course and was a fun thing, then it might be useful," Colleen suggested. However, most students dismissed this option. "The idea of being a handicapped person seems so fake," Monique argued. "People who are handicapped don't have a choice. They can't go back to their normal life the next day." Lynn worried:

It might end up trivializing disabilities if it's a transient thing for, at the most, 24 hours. Maybe you have some superficial sense of the inconveniences by being blindfolded for one day or being wheelchair-bound. But you don't lose the autonomy or independence. At the end of the day, you can still walk out of the wheelchair or take off the blindfold. The profundity of experience is just not there.

Finally, Vera offered a novel idea for improving medical students' understanding of and communication with persons with disabilities. "I was thinking about a friend of a friend who is deaf and started medical school two years ago. I can only imagine that her classmates are so much more educated just by having a peer. One of the best educational things we could do would be to look at our admissions policies and open the door."

Discussion
Medical schools increasingly train students to provide patient-centered, culturally competent care to diverse populations. With growing numbers of elderly persons and individuals living with disabilities, most future physicians will care for many patients with sensory and functional impairments. Training students about communication and other issues relating to these populations will therefore become increasingly important.

In our study, a self-selected group of final-year medical students admitted that they knew little about effects of sensory and physical impairments on daily life, but they expressed empathy and willingness to learn more. They had largely negative views about the experience of living with disability, perhaps because their point of reference was largely older relatives who were losing independent functioning and elderly hospitalized patients. Thus, the students’ perceptions of sensory and physical disability largely excluded many active younger or working-age adults for whom impairments are the background, not the focus, of their daily lives. Vera’s suggestion, of having more persons with disabilities practicing medicine, could solve this problem, but not for many years (Steinberg et al. 2002).

The students strongly urged medical educators not to separate teaching about the pathophysiology of disease from its implications for patients’ daily activities. Instead, bringing patients into classrooms both to demonstrate physiological aspects of conditions and to talk about the impact of their conditions on their lives provides compelling and memorable lessons. The students repeatedly underscored that, during preclinical training, adding disability as yet another patient attribute deserving empathy could possibly hinder rather than help develop awareness of disability-related communication issues. From the students’ perspective, segregating topics relating to communication and the experiences of living with diseases into afternoon classes explicitly devalued their importance.

Important drawbacks to our methodology limit the generalizability of our findings. We recruited participants from only two medical schools, both in Boston. Despite several e-mail solicitations, we only attracted 14 students, although we could have accommodated ten more. The students volunteered to participate. Although the honorarium might have attracted them, this group of students was probably predisposed to be interested in the topic and thus more likely than a randomly sampled group of students to express empathy and voice concern about persons with disabilities. The moderator uses a wheelchair, which could have made students less willing to express negative views of persons with disabilities. Therefore, our findings clearly require confirmation by additional studies.

Despite this, several findings seem potentially generalizable because they parallel attitudes elsewhere in society or among medical educators. That morbidly obese patients would raise questions for students was not surprising; society widely stigmatizes this condition and “blames” the patients (Pérez-Peña and Glickson 2003). Some students expressed guilt about having these negative perceptions, but felt reinforced by similar views among residents. Students who got to know these patients better understood how destructive obesity had been to patients’ relationships and lives. Introducing these concerns into pathophysiological teaching about obesity, while openly acknowledging students’ ambivalence, could therefore prove useful. However, inviting morbidly obese patients into classrooms might not be feasible or appropriate, for various reasons. Of primary importance is ensuring that classroom encounters not hurt patients. In addition, having a “real patient” in the room might stifle discussions about this stigmatized condition; in this instance, a brief videotape of an obese person discussing his or her daily life could present the issues. Certainly, selected obese individuals might welcome live classroom encounters as opportunities to inform future physicians.

Beyond this specific topic of obesity is the students’ strong preference for learning about disability from persons with actual conditions during relevant pathophysiology
about disability from persons with actual conditions during relevant pathophysiology teaching. This strategy risks putting persons with disabilities "on display," a practice with troubling historical roots (Thomson 1997). However, not inviting persons with disabilities into medical classrooms implicitly silences them, preventing them from having important opportunities to inform physicians-in-training about critical concepts and practical issues that could ultimately improve medical practice.

Elaine, who has osteogenesis imperfecta, relishes her annual visit to medical classes:

She tries to get the medical students to see disability outside of the medical definition, which thinks of it as only something to be cured. "I have to get them out of the mentality of being the caretakers," she says. "I always say, "Look, you're not going to cure us. So don't try! Make us function." ... Elaine finds that many of the medical students do listen to her. Sometimes, she says, she'll run into them later and "they'll say they learned something." (Mason 2004, 32-33)

More research is needed to explore the best way to introduce disability issues into medical teaching in a way that transcends traditional and paternalistic medical concepts of disability but adds usefully to student's practical knowledge.

The students witnessed residents taking shortcuts when caring for persons with disabilities, and some reported using such shortcuts themselves. The students did not associate these shortcuts with substandard quality but instead viewed these strategies as reasonable compromises born of intractable time pressures. However, some of these shortcuts represent the exact problems persons with disabilities report when describing poor quality care. For instance, continually examining a man with quadriplegia in his wheelchair rather than on an examining table partially precipitated a lawsuit against Kaiser Permanente of California; the man developed a decubitus ulcer on his buttock that his physicians failed to detect (Glionna 2000, 2001). Some deaf persons report that writing notes with physicians provides inadequate communication (Ebert and Heckerling 1995; Barnett 1999, 2002; Iezzoni et al. 2004). However, resolving these difficulties goes well beyond medical student training: they result from systematic problems in the way health care delivery is organized and financed (Cassel, Besdine, and Siegel 1999; Institute of Medicine 2001; Iezzoni 2003). Residents and attendings also seemed unaware of the problems. Thus, training on this topic might need to start with more senior clinicians.

The few students who performed home visits during a fourth year geriatrics rotation seemed to offer insights that extend well beyond a narrow focus on disability. Other students provided mixed appraisals of their single home visit during their first-year afternoon class. Students argued that, at that early stage, they could only "socialize" with their home visit hosts. By the fourth year, though, these students had gained sufficient clinical knowledge to appreciate the experience and to participate in providing care. More exploration of learning during fourth year home visits could examine how many visits are needed to make major teaching points. Alan, who went into family medicine, relished his home care experiences. But relatively few visits could suffice for most students.

The students provided varied appraisals of other potential teaching techniques, such as videotapes of patients and being videotaped while interviewing patients. However, the students recognized the limitations of exercises in simulating disability, such as using a wheelchair or being blindfolded for a day. Students suggested that such simulations might make them aware of unanticipated environmental barriers. But most focused on the emotional experience being "fake"—that, because the exercise was time limited, students could not understand the full impact of difficulties that people with disabilities confront. They anticipated one take-home message: that having a disability is depressing. The students failed to recognize that, for many persons who have lived for long periods and found...
accommodations for their disability, their daily lives carry the same varied emotions as for other persons (Blaser 2003). Such simulations are therefore generally not an appropriate means of teaching medical students about the experience of disability.

Disabilities are diverse, and the medical students we interviewed focused primarily on one segment of this population—elderly persons with sensory and physical impairments related to aging and chronic conditions. Although that perspective fails to encompass the entire spectrum of disability, it is nonetheless a reasonable starting point given current demographic trends. For example, today, an estimated 25 million Americans have hearing loss, and these numbers rise with the aging population (Jackler 2003). However, even among elderly persons, students should not assume a homogeneous response to progressive sensory and physical limitations. When thinking about interacting with persons with disabilities, two messages should predominate: first, never make assumptions about individual persons’ abilities and preferences; and second, simply ask what assistance persons want, and then, to the extent possible, respect those wishes.

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References


Crotty, M., P Finucane, and M. Ahern. 2000. Teaching Medical Students About Disability and Rehabilitation: Methods and Student Feedback. Medical Education. 34:659.


Few efforts to teach medical students communication skills have specifically targeted patients with major mental illness. Indeed, most of the limited literature on this topic is decades old, predating significant scientific advances in cognitive neuroscience and psychiatric therapeutics and changes in social policies regarding major mental illness. To gather preliminary insight into training needs, we interviewed 13 final-year students from 2 Boston medical schools. 

Iezzoni LI, Ramanan R, Drews RE. Teaching medical students about communicating with patients who have sensory or physical disabilities. Disability Studies Quart. 2005;25. Available at: www.dsq-sds.org.Google Scholar. Developmentally Disabled Teens: Teaching Tips. Teaching Students with Physical Disabilities. It's not always easy to keep the interest of teens, much less those with developmental disabilities. The more a child struggles with educational issues, the more likely they are to develop very little interest in their education. If this sounds like a student you know, have you considered dyspraxia or sensory integration problems? Medical assistant : communication with patients. The most important abilities of a CMA are: the ability to Communicate effectively, with professionalism and diplomacy to all types of patients. Recognize. Communicating Effectively With People Who Have A Disability North Dakota Center for Persons with Disabilities Authors: Laurie Davis, Consumer Liaison, ND Medicaid Infrastructure Project, NDCPD Dawn Olson, More information. Disability
Information Cards. Introduction FAST FACTS FOR FACULTY Teaching Students with Sensory Impairments Developed by Patricia Carlton and Jennifer Hertzfeld The Ohio State University Partnership Grant Students with sensory disabilities. More information. Training Resource for Small Businesses and Organizations