Deaf Strong Hospital: An Exercise in Cross-Cultural Communication for First Year Medical Students

JULIE RICHARDS, LISA HARMER, PAMELA POLLARD, AND ROBERT POLLARD, PHD

Deaf Strong Hospital (DSH) is a role-reversal exercise for first-year medical students in which students are "patients" in a simulated health-care setting in which the "health care professionals" are volunteers from the local Deaf community. DSH was designed to teach the first-year students about techniques for overcoming communication barriers as well as some of the specific challenges in communicating with deaf or hard-of-hearing patients.

Interacting with Deaf patients presents unique challenges to physician-patient communication. Not only do cultural and linguistic barriers exist but nonverbal communication and awareness of the patient's needs for visual information add an additional dimension to the problem. Reliance on written English as a means of communication is not adequate as literacy levels tend to be lower among Deaf people. A history of distrust exists between Deaf and medical communities; doctors tend to be less enthusiastic about Deaf patients than hearing patients and many in the Deaf community perceive that they receive a lower standard of care than hearing people (1).

The uniqueness of the experience of the Deaf community in the health care setting and their distrust of the medical profession date back to the 19th century. The French physician Itard performed horrific experiments on students at a deaf school, resulting in the death of one student and permanent injury to many others (2). The eugenics movement of the early 20th century resulted in Deaf individuals being encouraged by the medical profession not to marry or to have children . Many members of the Deaf community now see cochlear implants as an extension of the eugenics movement, an attempt on the part of the health care system to eradicate Deaf culture and language just as the eugenics movement sought to eliminate unwanted minority populations. Many culturally Deaf adults view deafness not as a disability but as an identity — they therefore disagree with the decision to use cochlear implants in young children in order to make them "hearing" (3).

The need for education to improve interactions by medical professionals and patients has been recognized; studies have documented biases in physicians' attitude in relating to patients from other cultural backgrounds and to disabled patients. Ten years ago, a survey found that despite medical training, the attitudes of medical students toward disabled people was not statistically different than those of the population at large (4). It has also been shown that medical students also ascribe stereotypical attributes to patients based on irrelevant characteristics such as physical attractiveness (5). Medical education has attempted a variety of approaches to improve student communication with disabled patients. As a result of completing courses on issues relating to disability and health care, students reported a change in their attitudes toward people with disabilities and an increased ability to see disabled people as individuals (6,7). The University at Leeds held a one-day course on deaf awareness and communication skills. This course included an exercise where students were given ear plugs and sent out to order lunch in the community without speaking in an attempt to duplicate what many Deaf people experience when interacting with the hearing culture (8). At the University of Rochester School of Medicine, educational programs involving communication with deaf people have been taught for about eight years. In one course, students have the opportunity to practice interviewing simulated Deaf patients with a professional American Sign Language interpreter. Another unique effort is the role-reversal exercise known as Deaf Strong Hospital.

Deaf Strong Hospital

Deaf Strong Hospital was first established in January 1998 as an exercise in which hearing medical students acted out illness scenarios in a "hospital" staffed by Deaf volunteers from the Rochester community. The students were instructed not to speak and were provided only with instructions for fingerspelling the alphabet and a few basic signs in American Sign Language (ASL). The volunteers, in turn, were instructed to communicate with the students in fluent ASL and

Julie Richards is a third-year MD/PhD student, currently doing graduate work in the lab of Dr. Steve Dewhurst in Microbiology and Immunology. *DSH is supported by the Office of Medical Education, Medical School Senate, and the Dept. of Pshychiatry.*

to limit voiced words and lip reading. A typical scenario leads a student through a series of stations. For example, the student gives a "receptionist" her name and insurance information, waits in a waiting room until her name is fingerspelled, explains symptoms to a "physician" who provides a diagnosis and instructions, and visits a "pharmacist" who dispenses medication along with information on interactions and side effects.

In designing the second Deaf Strong Hospital held in October 1998, we established the following learning objectives for students participating in the exercise:

1. Increase the level of comfort for students in dealing with Deaf (and other disabled) people, allowing the students to recognize cultural differences in the context of a common goal–providing health care.
2. Introduce the students to the complexity of American Sign Language and allow them to realize the limitations of fingerspelling and lip-reading in the medical setting. In addition, students are encouraged to be creative in utilizing nonverbal communication.
3. Allow students to experience the disempowerment of the medical setting for patients who are not fluent in English and the frustration of being unable to communicate important health information.
4. Allow students to experience the difference in ease of communication and depth of content possible when an interpreter is available to facilitate communication.
5. Introduce students to the difficulties of obtaining informed consent when literacy barriers preclude ready comprehension of written patient information materials.

Physician/Patient interactions

The Deaf Strong Hospital exercise was designed so that the longest interaction between students and deaf volunteers were spent with the volunteers acting as either emergency or primary care physicians. Students were instructed to communicate symptoms such as nausea or heart palpitations without speaking; the volunteers often would make the students try several alternative methods of explaining a symptom before acknowledging comprehension. The volunteer would then explain to the student his/her diagnosis along with important instructions relating to medication or, in the case of one scenario, that the student was contagious. Many students proceeded to the exercise's next step without a clear idea of the extent of their health problem.

Waiting Room/Reception

Students waited in long lines for receptionists who took their name, complaint, and insurance information, then sent the students to a waiting room where names were "called" using fingerspelling with the manual alphabet. For many students, the process was confusing and frustrating, mimicking the experiences that many patients have in the health care system, especially those with significant language and cultural differences. It is a common experience among Deaf or hard-of-hearing patients that their names will be called in spoken English in a waiting room, forcing them to pay close attention and attempt to read the lips at a great distance of the person calling their names. The students, with only a rudimentary familiarity with the manual alphabet, often missed their first chance at an appointment with the "doctor" because they either did not see or did not recognize their name when it was called.

Pharmacy

A visit to the hospital pharmacy was meant to illuminate several ideas to the students. First year medical students are aware of the many dangers associated with drug side effects and interactions but might not realize the important role of the pharmacist in communicating that information. As in the interactions with volunteer "physicians," the inability to communicate concerns to the "pharmacist" was designed to elicit feelings of disempowerment and frustration. Although the Americans with Disabilities Act mandates access to sign language interpreters for deaf patients, the majority of interactions with professionals in the pharmacy setting still occurs without the aid of an interpreter.

Interpreter Services

All students were given a name tag at the start of the exercise specifying which of three illness scenarios they would follow. Some of these name tags also displayed a symbol which communicated to volunteers that the student was eligible for the services of one of four professional sign language interpreters at the event. All students were instructed to ask for interpreters at the reception desk but most (without a symbol) were denied access to an interpreter because they had "not requested the interpreter in advance." The inequality in care between the majority of students who did not use an interpreter and the minority with interpreter access was purposeful and designed to highlight the importance of interpreting services in promoting improved cross-linguistic communication.

Surgical Consent

All students were required to sign a surgical consent form before leaving the exercise. The form consisted of excerpts taken nearly verbatim from an actual form used routinely at Strong Memorial Hospital for outpatient surgeries. The form (written at a 12th grade reading level) was provided in Spanish, German, Russian, and French (not English); in addition, the following line was inserted: "If I have read and understood this form, I will sign it only with my first initial and last name." Students were instructed to choose the form which was written in the language with which they had the most experience. Of course, this rendered many students functionally "illiterate" in this situation but they were instructed to

sign the form regardless. Of 91 students completing the form, only 6 signed the form with first initial and last name as instructed; 3 refused to sign and would not have received medical treatment had the scenario been real.

"Patient" Information

In addition to the reception, physician, pharmacy, and surgical consent stations, students were free to visit an information table with articles and pamphlets on Deaf culture and ASL. Also, information on the NYS relay service, TTY telephones, and other assistance devices for the deaf and hard of hearing were available for students.

Small Groups

Following the exercise, the students were organized into small groups of 8-10 students led by a health care professional with knowledge of Deaf culture and understanding of issues relating to disability and cross-cultural communication. Group leaders were instructed to discuss a variety of issues with the students. Students began by relating their success (or lack thereof) communicating with the deaf volunteers and their personal reactions to the experience. After being provided with the details of the ASL and English communication scripts for each illness scenario, the students discussed what information they missed and how the gaps in information might have affected their health care had they actually been ill. Students who used an interpreter were encouraged to compare their ease of communication to the less successful interactions of their classmates. Group leaders asked students to discuss the pitfalls of informed consent and the problems associated with technical forms in low literacy populations. The discussion was then moved to the broader topics of interaction with non-English speaking patients and the linguistic and cross-cultural factors which may cause discomfort in physician-patient interactions. The Deaf volunteers also participated in a small group in which they discussed their experiences, advice for improving the exercise, and perspectives on improving health care delivery to Deaf patients.

Student evaluations

Overall, the student response to Deaf Strong Hospital was very enthusiastic. Of 90 students responding to the statement "I have learned valuable things through my participation in Deaf Strong Hospital," 85 "strongly agreed" or "agreed", while 3 were "not sure" and 2 "disagreed" or "strongly disagreed." 83 of 89 students "strongly agreed" or "agreed" with the statement "the DSH experience is likely to positively impact my attitudes and behavior in future interactions with patients who do not speak English." 87 (of 90) students "strongly agreed" or "agreed" with the statement "Cross-linguistic and cross-cultural issues are important to address in medical education"

Conclusion

Health care delivery is dependent on adequate communication between the health care provider and patient. The provider's communication responsibilities include taking a medical history, providing information on diagnoses, medications, and treatments, and obtaining informed consent for medical procedures. Any of these may be compromised when significant cultural or linguistic barriers exist between the physician and the patient; these barriers can be amplified by the presence of an unbalanced power structure in the relationship between physician and patient, favoring the physician.

In order to improve physician communication with both deaf patients and other cultural and linguistic populations, Deaf Strong Hospital has been organized for two medical school classes and has been positively received by the vast majority of students. It is hoped that the exercise will become standard in the first year curriculum in order to further exposure to communication issues faced in health care, a subject that is difficult to teach in standard lecture format.

Acknowledgments

The authors wish to thank the Office of Medical Education, Medical Student Senate, and the Department of Psychiatry at the University of Rochester School of Medicine and Dentistry for their continuing support. We thank Basya Veyberman and past members of the Rochester chapter of PAH, MD (Promoting Awareness in the Health care, Medical, and Deaf communities) for all of their hard work. We also wish to thank the Deaf volunteers without whom Deaf Strong Hospital would be impossible.

Literature Cited

1. Zazove, P. Understanding deaf and hard-of-hearing patients. *Am Family Physician* (1997) 56(8): 1953-54.
2. Lane, H. *The mask of benevolence: disabling the Deaf community.* Vintage Books, New York (1997): 212-213.
3. Shapiro, J. *No pity: People with disabilities forging a new civil rights movement.* Times Books, New York (1993): 74-104.
4. Duckworth, SC. The effect of medical education on the attitudes of medical students towards disabled people. *Medical Education* (1988) 22: 501-505.
5. Johnson, S et al. Students' stereotypes of patients as barriers to clinical decision-making. *J Medical Education* (1986) 61: 727-735.
6. McCrory, D and Marrone, J. The physician and the disabled patient: a challenge to medical education. *J Medical Education* (1984) 59: 429-431.
7. Pollard, R Q. A consumer interview seminar that enhances medical student attitudes toward persons with disabilities. *J Behavioral Science and Medical Education (in press)*(1998).
8. Smith, MCA and Hasnip, JH. The lessons of deafness: deafness awareness and communication skills training with medical students. *Medical Education* (1991) 25: 319-321.

About the Cover

Serving Deaf and Hard of Hearing Patients

JULIE RICHARDS

Rochester, NY has the largest per capita deaf population in the US. Because of this fact, local health care professionals and students are likely to be treating deaf patients while serving the community at large. Inability to effectively communicate can compromise the quality of health care for both health care provider and patient. Fortunately, there are many local resources for the health care community and for the deaf or hard of hearing patient.

The Health Association's MCAHI (Monroe County Association for the Hearing Impaired) is a useful starting point for the professional interested in learning more about serving deaf and hard of hearing patients. MCAHI offers classes in American Sign Language (ASL), information and referral services, interpreting and assistive listening devices, accessible communication consultations and leadership on public policy. MCAHI can be reached at 423-9490 (voice). Sign Language classes are also offered by a variety of other local institutions, including MCC, BOCES, Nazareth College, RIT, Rochester School for the Deaf, SUNY Geneseo, and the University of Rochester.

Physicians are required by law to provide a sign language interpreter if requested under the Americans with Disabilities Act (ADA). At Strong or Highland hospital, contact Kathy Miraglia, (Coordinator of Interpreting Services; see cover, left), at 475-4778. Check with other institutions to find out about whether interpreters are provided. Private services can also be found through the Rochester Yellow Pages under "Deaf Services". It is important to request an interpreter as far in advance as possible. When working with an interpreter, remember to look at the patient, not the interpreter even when the interpreter is voicing. Many find this disconcerting as the patient will be watching the interpreter's signs. The facilitation an interpreter provides in communication can increase the flow and complexity of information exchange, improving the delivery of health care.

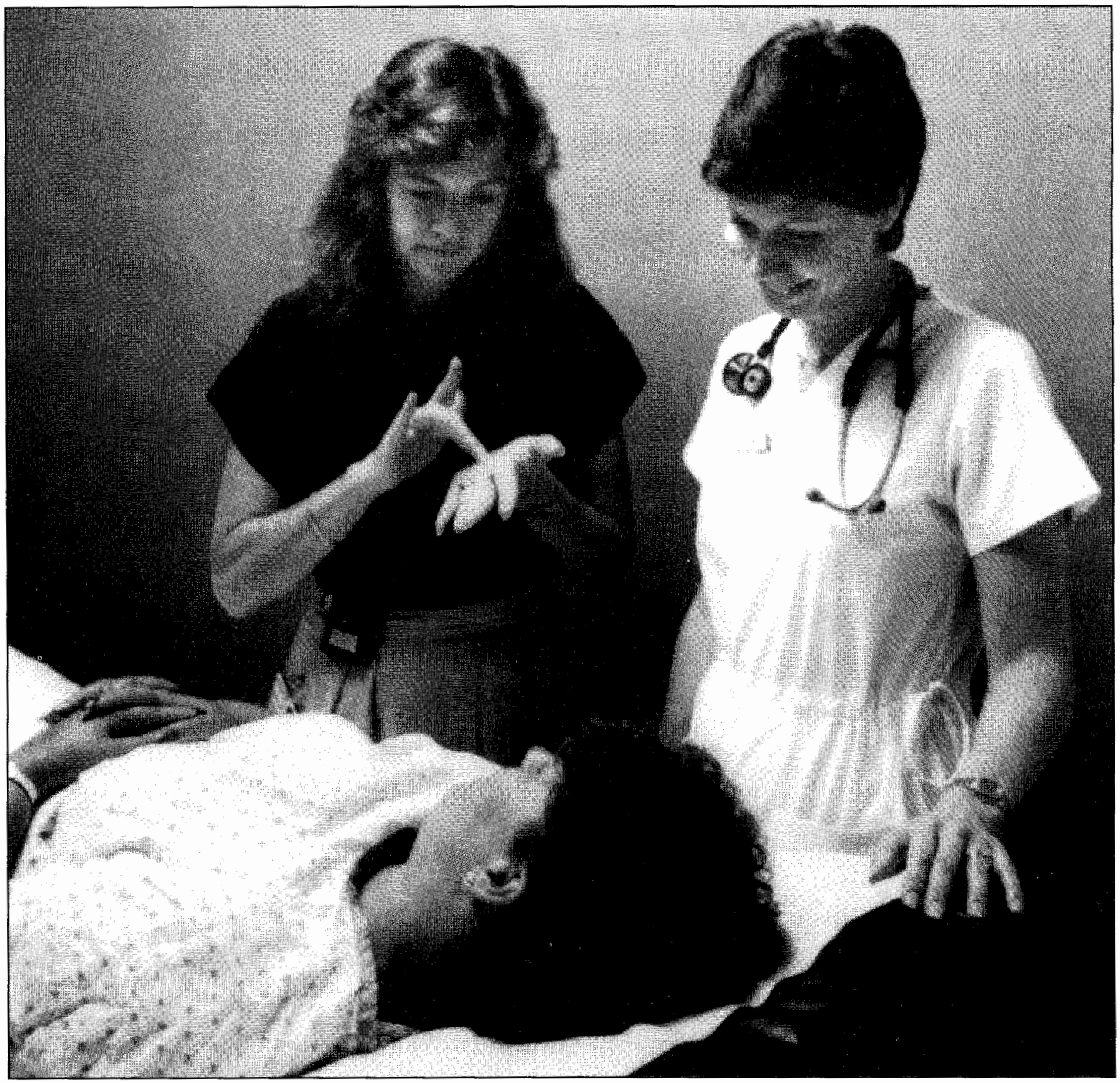
If the patient does not want an interpreter, there are several helpful tips for facilitating communication:

1. Face the person to whom you are speaking.
2. Speak clearly, slowly, and naturally.
3. Do not shout or exaggerate lip movements.
4. Rephrase rather than repeat–many English phrases are ambiguous when lipreading–rephrasing increases the context of the original statement.
5. Do not cover your mouth, chew, or turn away from the patient.
6. Writing can be helpful, but remember that literacy levels vary in the deaf population as in any other population.
7. Above all, be patient.

Servicing deaf and hard of hearing patients is an important and rewarding part of serving the Rochester community. Many remain unaware of the diversity of Deaf culture that enriches this community. It is hoped that through educational activities like Deaf Strong Hospital (see article page 5) communication issues can be address that affect not only deaf and hard of hearing patient populations but also populations with other language and cultural differences.

JURMC

JOURNAL OF THE UNIVERSITY OF ROCHESTER MEDICAL CENTER



A STUDENT PUBLICATION

Volume 10 • Spring 1999