Cross-cultural Communication With Patients Who Use American Sign Language

Steven Barnett, MD

Background: *Although American Sign Language (ASL) is the third most commonly used primary language in the United States, physicians are often not adequately prepared for the challenges of conducting an interview with a deaf patient who signs.* Methods: *A search of MEDLINE and PsychINFO databases for research on physician-patient communication and deaf people who use ASL was performed. Expert opinion helped guide discussion and recommendations.* Results: *Few articles examined physician-patient communication involving ASL. Deaf people and their physicians report difficulties with physician-patient communication. Deaf people also report fear that their health care is substandard because of these difficulties.* Conclusions: *Preparing residents and medical students for working with patients and families who communicate in ASL presents many opportunities for teaching about physician-patient communication. ASL is quite different from English, and users of ASL often have sociocultural norms that differ from those of the majority culture. In addition to learning how to communicate with patients and families across languages and cultures, students and residents can learn how to collaborate with interpreters and how low literacy impacts physician-patient communication. Opportunities to teach about family dynamics, disability issues, and nonverbal communication also present themselves when working with families with Deaf members. Physician-patient communication involving ASL is an area that is ready for further research.*

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The majority of the information physicians use to determine a diagnosis and develop a treatment plan is gathered during the medical history.[1] The necessary clear communication is more challenging, however, when the physician and patient do not have a common language.

American Sign Language (ASL) is the third most commonly used primary language in the United States,[2] and evidence suggests that the medical education and health care systems are not adequately prepared to work with ASL users. Deaf people and their physicians report difficulties with doctor-patient communication.[3-10] Deaf people who communicate in ASL report fear that their health care is substandard because of these difficulties[8] and appear to have poorer health and less frequent physician visits than the general population.[11] By teaching about the pertinent cultural and communication issues, family medicine educators can better prepare future family physicians for the challenges of working with patients and families who primarily communicate in ASL.

Although communication challenges are common when one person has a hearing loss, there are also specific cultural and communication issues related to working with deaf people who use ASL that should not be applied to all people who are deaf or hard of hearing. Indeed, ASL is not the primary language for most people with hearing loss. Rather, people with less-severe hearing loss are more likely to communicate primarily in the language spoken in their childhood homes. Similarly, people who develop a severe hearing loss later in life are likely to communicate in the spoken languages they already know. The group most likely to use ASL as their primary language are people deafened in early childhood, before acquiring fluency in a spoken language.

ASL is a language with grammar and vocabulary quite different from English. ASL is "verbal communication" (that is, communication with words), although the words are signed rather than spoken or written. Fa-

From the Department of Family Medicine, University of Rochester.

cial expression and body posture are often part of the vocabulary, grammar, or punctuation of ASL, although they may appear similar to the nonverbal aspects of spoken English. Like other languages, ASL evolves over time and is a medium for expressing poetry, humor, theater, and even music.

The word "Deaf," with an upper-case "D," refers to the community of people who communicate in ASL. Adult members of the Deaf community likely grew up in families with hearing parents and learned ASL and the community's sociocultural norms from peers; often, these peers take on the role of surrogate siblings. Families in the Deaf community usually consist of Deaf adults and their hearing children. Information sharing is a community value, and since ASL requires face-to-face communication, Deaf clubs and social activities are a central part of the community. Community sociodemographics differ from the general population; Deaf adults have lower income and less education[11] and are less likely to smoke[12] and own a telephone[13] than adults in the general population. There are many similarities between the Deaf community and other linguistic and sociocultural minority groups in terms of family, sociodemographics, health, and health care.[14]

In some ways, Deaf adults are better protected than members of other minority groups in terms of access to health care communication. In addition to protection afforded to them by civil rights legislation, both Section 504 of the Rehabilitation Act of 1973 and the Americans With Disabilities Act of 1990 (ADA) require the provision of interpreter services to achieve effective communication when communicating with Deaf patients or Deaf family members of patients.[15] The ADA specifically mandates the availability of qualified interpreters, so working with nonprofessional interpreters, including family members, may not protect clinicians from ADA-related lawsuits. The cost of providing interpreter services is the responsibility of the health care practitioner, even though interpreter costs frequently exceed the reimbursement for medical services. Although intended to break down barriers between health care and people with disabilities, this aspect of the ADA may actually have created a barrier between physicians and their Deaf patients.[16-18]

This paper's purpose is to discuss the pertinent issues related to physician-patient communication with Deaf people. The first step in that discussion is a targeted review of the research to date. Where research is lacking, I used the expertise of clinicians working with Deaf people to guide discussion.

Methods

I searched MEDLINE (1966 through December 2000) and PsychINFO (1967 to January 2001) for research articles related to physician-patient communication with Deaf people, using various combinations of the following search terms: "communication," "physician-patient relations," "physicians," "doctors," "medical education," "hearing-impaired persons," "deaf," and "sign language." I examined the reference lists of research and review articles identified in the search for other articles and used the Institute for Scientific Information Citation Databases to look for articles that cite the research and review articles. For this review, I included only research articles that distinguished deaf people who use sign language from those who do not.

Results

Seven research articles met the search criteria, and their key features and findings are summarized in Table 1. Two studies used qualitative methods to examine clinician-patient communication from the Deaf person's perspective,[7,8] while a third used a mailed survey to learn about Deaf people's perspective on health care communication.[5] Another study looked at differences in adherence with preventive health recommendations based on use of interpreter services.[6] Lass et al studied health care knowledge and vocabulary of Deaf people.[19] McEwen and Anton-Culver compared a group of US Deaf adults and non-English language immigrants to the United States in terms of their health care communication experiences and knowledge of English language medical vocabulary.[10] Only one study examined physician-patient communication with Deaf patients from the physicians' perspective—Ebert and Heckerling surveyed physicians on their knowledge regarding working with patients who sign.[3] No study directly observed physician-patient communication, health care communication involving sign language interpreters, or communication of physicians with hearing parents and their deaf child (either during childhood or involving Deaf adults and their aging parents).

The overall results of these studies indicated that Deaf people experience difficulty communicating with physicians and on average have less health knowledge than hearing individuals. They have a preference for receiving health care from clinicians in facilities where ASL is available and have difficulty communicating with their phsician when working with poorly qualified interpreters.

Discussion

Published research (Table 1) on physician-patient communication involving ASL is limited. We can use the findings of that research, along with the experiences of physicians working with Deaf people, to help guide future research and the content of medical school and

Table 1

Research Articles Related to Physician-Patient Communication and People Who Use American Sign Language

Source	*Study Population*	*Study Goals*	*Data Collection*	*Communication Findings*	*Limitations*
Lass, et al, 1978[19]	36 Deaf adults in New Orleans	Examine health knowledge and barriers	Interpreter-administered questionnaire	• Limited health knowledge • Limited English language health vocabulary • 44% not satisfied with communication with physicians	• Non-random sample • Study group was more educated than the general Deaf population • No comparison group
Schein and Delk, 1980[5]	128 US Deaf leaders	Learn about health care experiences	Mailed written survey	•Preference for qualified interpreters • Preference for health care personnel to learn sign language	• Sample may not be representative of the general Deaf community • Use of a written survey
McEwen and Anton-Culver, 1988[10]	22 Deaf adults (control=119 non-English language immigrants) in Irvine, Calif	Describe communication challenges	Written survey (4th grade reading level)	• Deaf people less likely than immigrants to use their primary language with physicians • Deaf people and immigrants had similar knowledge of medical terms • Deaf people were less likely to try to re-explain themselves to physicians	• Deaf sample from religious services, whereas control group from classes in English as a second language • Written English survey for all participants
MacKinney et al, 1995[6]	90 Deaf adults at a primary care office with staff interpreters (control=85 Deaf adults who were not patients at that office) in Baltimore	Determine impact of special program with easy access to interpreters	Questionnaire administered in ASL or written English	Participants in the Deaf program: • Were more satisfied with communication with physicians • Had better adherence with many preventive health recommendations • Were more likely to have seen a doctor	• Selection bias • Some used a written questionnaire
Ebert and Heckerling, 1995[3]	73 internists at a Chicago university	Examine physicians' knowledge and practices	Written survey	• Most physicians overestimated the accuracy of speechreading • Most physicians reported that interpreter services were the first method to try when communicating with a deaf patient who knows sign language • A minority of physicians used interpreter services with their deaf patients who know sign language • All physicians thought work with deaf patients required more time and effort than with hearing patients	• Single university • Only internists
Steinberg et al, 1998[7]	54 Deaf adults from Pa, NJ, and Del	Learn attitudes about mental health	Interview in ASL	• Preference for deaf clinicians • Preference for sign fluent clinicians • Preference for qualified interpreters	• Study group was more educated than the general Deaf population
Witte and Kuzel, 2000[8]	14 older Deaf adults in Richmond, Va	Describe health care experiences	Focus groups in ASL	• Many communication barriers • Perceive prejudice • Problems with unskilled interpreters	• Single age group

residency education regarding communication with Deaf families (Table 2).

Cross-cultural Communication

Communication norms in the Deaf community differ from those in the majority culture. By being aware of some of these differences, physicians may be able to avoid some areas of cross-cultural miscommunication when working with Deaf people.

Conversation Structure. Rules for conversation structure in the Deaf community differ from those in the majority culture.[20] Because information sharing is valuable and essentially only occurs when face-to-face communication is possible, important information is shared early in the conversations. Social "catching up" occurs after the important business has been addressed; in the Deaf community, conversation closing is a long process by majority community standards.

Contrast this conversation structure with that of the medical interview, where physicians often start with rapport-building conversation and then move to discussing the visit agenda.[21] At the end of the visit, closing the medical interview is often brief and followed rapidly by the physician leaving the room. If unrecognized, these cultural differences in communication styles can lead to miscommunication. Physicians unaware of the different rules may be frustrated by their attempts to join with Deaf patients (or Deaf parents of patients), who seem to move too quickly to discuss the topic of the visit. A Deaf person may be frustrated by the physician's attempt at rapport building, which may be experienced as avoidance or worse. By placing rapport building first, the physician may be communicating that the rapport-building topic is more important than the reason for the visit. Interview closure may also be frustrating, with the physician feeling frustrated that the closure is taking too long and the Deaf person feeling frustrated that the closure is too brief. Moving rapport building toward the end of the medical interview may work better with Deaf patients.

Nonverbal Gestures. When the interview closure seems prolonged, physicians often will use nonverbal gestures to communicate closure: closing a chart, standing up, and moving toward the door are three examples. Because the meanings of many nonverbal gestures are culturally determined, these gestures may not have the expected effect when working with a Deaf person. After Deaf social events, conversations often continue after people have put on their coats and moved toward and out the door. Gestures that the physician experiences as indicating conversation closure do not communicate the same immediacy to a Deaf person. Explicitly stating that the visit is finished, and restating the follow-up plan, may be a better way to close a visit with a Deaf person.

Table 2

Teaching Opportunities Related to Doctor-Patient Communication When Working With Deaf Patients Who Communicate in American Sign Language.

- Cross-cultural communication
- Cross-language issues
- Working with interpreters
- Communicating with a family whose members have differing degrees of fluency in the mainstream language and culture
- Nonverbal communication
- Disability issues
- Low literacy
- Communication within families
- Definition of families and social networks

Physicians may also misinterpret the nonverbal gestures of a Deaf person. Head nodding by the listener may be interpreted to mean agreement, but in ASL this gesture may more likely indicate comprehension or may be a continuer, much like the English "uh-huh." Facial expression, body posture, eye contact, touch, and space between speaker and listener may have different meanings to a Deaf person than to a hearing physician. Awareness of the potential differences in meaning of nonverbal gestures may help physicians avoid miscommunication.

Information Sharing. Differing attitudes regarding information sharing may also influence clinician-patient communication, although the nature of the differences will vary depending on the situation. In some situations, Deaf community attitudes may facilitate information disclosure. Whereas many hearing patients are reluctant to tell their physicians about health beliefs and usage of alternative therapies, Deaf patients often have no such qualms. In the Deaf community, information sharing is valued,[20] and physicians may be surprised by the openness of Deaf patients regarding their health belief models.

In some situations, the Deaf community's value on information sharing may inhibit some Deaf people from addressing health concerns. In a practice with many Deaf patients, it is likely that Deaf people will meet others they know from the Deaf community in the reception room of the clinician's office. Because information sharing is valued and expected, it is socially

acceptable to ask another person the reason for their doctor visit. For those same reasons, it could be considered rude not to answer the question. To keep some health information private, Deaf people may avoid places where they may see others from the Deaf community, including HIV testing centers.[22,23]

Cross-language Communication

When the doctor and patient do not share a language, working with qualified, medically experienced interpreters is usually the best way to facilitate communication. This is true when the patient's preferred language is ASL, and the doctor is not ASL skilled. Often, in health care settings, communication with Deaf patients is attempted using speechreading or note writing. This is unsatisfactory for a number of reasons. For people whose primary language is ASL, speaking, speechreading, reading, and writing are necessarily in a second language. Speaking clearly is difficult when one has never heard the language or oneself speak. Speechreading English is also difficult, with only 30%–40% of English sounds visible unambiguously on the lips.[3,24,25] Writing may be less effective than expected; the median reading level of a deaf high school graduate in the United States is 4th–5th grade,[26] and the medical vocabulary knowledge of US deaf adults is similar to that of non-English speaking immigrants to the United States.[10] Since the doctor can speak and write fluently, using these methods puts most of the burden of communication on the Deaf patient. Communication in ASL, facilitated by an interpreter, allows the Deaf patient to focus on content rather than on the communication itself.

Interpreters. Good communication is essential for doctors, patients, and their family members to work together successfully. Interpreters facilitate that communication. Interpreters are important for both the physician and the patient, although the patient assumes the bulk of the risk related to poor outcomes resulting from ineffective communication when interpreter services are not used. Attitudes and statements that perpetuate the inaccurate belief that interpreter services are for the patient, rather than for clear clinician-patient communication, can be damaging to the clinician-patient relationship.

To be effective, the interpreter needs to be seen and heard. When the communication involves two people, the interpreter will often be to the side and a bit behind the physician. This allows the Deaf person to see both the interpreter's signing and the physician's nonverbal expressions, and the physician is able to hear the interpreter while maintaining eye contact with the patient. If physical space does not allow for this arrangement, or if the situation involves more than two people, such as family meetings or hospital teaching rounds, the physicians should work with the interpreter and Deaf people involved to determine a seating arrangement that allows for good communication.

Translation. Any idea that can be communicated in English can be communicated in ASL, although the ways the idea is communicated may differ. For example, ASL does not have names for some things named in English. For example, the concepts named by the English words "symptoms" and "medication allergies" are often signed in ASL as a list of potential physical manifestations, and the concept "discipline" is often signed as list of potential methods. Because ASL names things differently, open-ended English questions may translate into a list of choices in ASL. How the interpreter chooses to sign the list can influence how the patient answers the doctor's question.[27]

Homonyms are another area where ASL and English differ. For example, the English word "chair" can mean a piece of furniture or a department head. Other languages, including ASL, use different words for each of those concepts. A disastrous translation error related to homonyms involves HIV test results. The English word "positive" has many meanings, including present, as in "HIV positive," as well as confident, beneficial, electrically charged, and greater than zero. The ASL sign typically translated as the English word "positive" (see Figure 1) has fewer meanings; it means beneficial or, in a mathematical context, it means plus. A translation error occurs when it is assumed that the English word "positive" and the ASL sign typically translated as "positive" have all the same meanings. The sentence,

Figure 1

American Sign Language Word Frequently Translated as the English Word "Positive"

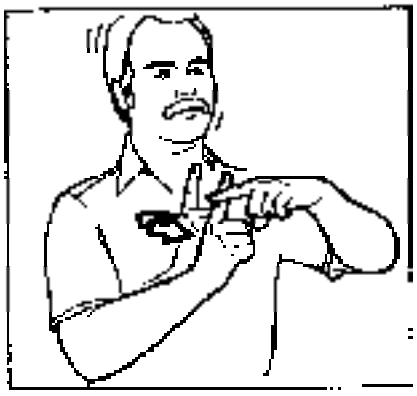

Figure 1 was reproduced from: Newell W. Basic sign communication: vocabulary. Silver Spring, Md: National Association of the Deaf, 1983. Reprinted with permission from the National Technical Institute for the Deaf.

"Your HIV test is positive," communicated through speechreading, notewriting, or with an inexperienced interpreter, may be understood as good news to the Deaf patient.

Education

Lack of access to information results in Deaf people having a limited fund of knowledge about many health-related topics,[22,28-30] and this influences clinician-patient communication. Deaf children are often excluded from communication between their hearing parents and family physician. As adults, they may be unfamiliar with both the information content of those visits and the typical structure of a doctor-patient interview. Hearing parents and siblings of Deaf adults are frequently not fluent in ASL, and this limits a potential source of support and information for new parents who are Deaf. Telephone communication with one's family members or doctors requires reading and typing in a second language and may be an unsatisfactory way to get information, particularly when one is stressed about an illness in the family. Patient education materials from the physician are rarely in the form of videotapes in ASL and thus require reading in a second language. Physicians may need to spend more time with Deaf parents and patients explaining health issues by working with interpreters, pictures, and anatomical models. Because children can learn much about health, health care, and the family's medical history during a visit to the doctor, working with interpreters during these visits is important in the care of families with deaf children, even when the parents or primary caretakers are hearing.

Physicians can work with the Deaf community to address some of the knowledge deficits. A health-related presentation at the local Deaf club is an opportunity for members of the Deaf community to gather and for physicians and medical students to learn about the Deaf community and working with ASL-English interpreters. Deaf community members might also appreciate the opportunity to teach their physicians and others in the health care community about sociocultural aspects of deafness and ASL.

Another way education can further enhance doctor-patient communication with Deaf patients and families is for family physicians to encourage interested Deaf students to pursue careers in health care. Medical students, residents, and practicing physicians who are Deaf can help bridge the language and culture gap between the Deaf and health care communities.

Conclusions

Physician-patient communication involving ASL presents interesting areas for teaching, learning, and research. By broadening our understanding of culture, language, and disability, working with members of the Deaf community helps us appreciate human diversity and to be better teachers and family physicians. As the ADA increases the medical education system's access to Deaf matriculation candidates, we will graduate more physicians whose first language is ASL; some of these graduates will pursue careers in family medicine. By sharing their perspectives on communication and culture, Deaf family physicians can help raise new research questions about communication with their students, colleagues, and patients, either hearing or Deaf.

Research can help us better understand physician-patient communication and can measure the impact of interventions. Observation of health care encounters with deaf children and their hearing parents may provide insight on physician-patient communication with Deaf adults, both as patients and as family members of patients. Observational studies can also document the effect of interpreters on health care encounters, including how their presence affects the visit duration and information exchanged, physician and patient satisfaction, and their influence on the physician-patient relationship and communication dynamics. Understanding interpreter decision making can help us teach physicians, patients, and interpreters how to best work with each other. To do this research, qualitative and quantitative methodologies may need to be modified to account for the differences between ASL and languages that have a spoken or written form. Computer-based surveys in ASL may replace written surveys or spoken interviews, and videorecorded focus group meetings and health care encounters will need to have appropriate camera angles to adequately see and interpret ASL. Information learned about physician-patient communication with Deaf people may help enrich research and education regarding communication with other minority populations.

Correspondence: Address correspondence to Dr Barnett, Family Medicine Center, 885 South Avenue, Rochester, NY 14620. 585-242-9566. Fax: 585-442-8319. Steven_Barnett@URMC.Rochester.edu.

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