




Deaf Health Pathway — Immersing Medical Students in the Cultural and Language Aspects of Deaf Health

Neha Narayan¹ · Arielle Schecter¹ · Michael McKee² · Jason Rotoli³ 

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Abstract

Language and cultural-concordant healthcare providers improve health outcomes for deaf patients, yet training opportunities are lacking. The Deaf Health Pathway was developed to train medical students on cultural humility and communication in American Sign Language to better connect with deaf community members and bridge the gap in their healthcare.

Keywords Deaf · ASL · American Sign Language · Interpreting · Patient–physician communication · Hard of hearing

Deaf American Sign Language (ASL) users, a group of 250,000 to 1 million people with a common language and culture, are an ethno-linguistic minority who suffer significant health disparities yet are frequently overlooked by health interventions [1]. Deaf ASL users, when compared to hearing people, experience higher rates of emergency department utilization and increased prevalence of health conditions [2]. Factors contributing to these healthcare disparities are inaccessible healthcare, poor provider–patient communication, and a lack of health information in ASL [3]. These create barriers to health information and lower health literacy. Additionally, due to a lack of training, healthcare providers are unaware of the unique needs of the deaf patient, including historical traumas, which generate medical mistrust and further marginalization [4]. A recent systematic review found that the primary intervention to address deaf healthcare inequities is the use of sign language in healthcare [5].

Medical education programs are fertile soil for knowledge acquisition but only a small percentage of medical schools include formal education on caring for deaf individuals or

people with disabilities (PWDs). To address this, the Deaf Health Pathway (DHP) was developed to immerse medical students in the cultural, language, and healthcare needs of this population.

Course Design

Immersing students within the deaf community helps students understand the nuances of deaf culture, including their values, stories, and beliefs, while fostering relationships with the community. DHP seminars consist of two 10-week seminars (A/B) during first and second year of medical school with direct instruction from a deaf ASL instructor and an ASL fluent medical provider. The objectives for each of the seminars are seen in Table 1. To optimize education and immerse students in ASL and deaf culture, the seminars remain a no voice zone. The seminars teach basic ASL and grammar, then progress to how to communicate with a deaf patient.

Integration of deaf culture is accomplished through interviewing and attending presentations from deaf community members. Students shadow a medical interpreter to learn the intricacies of interpretation. Off campus events such as “silent” dinners and coffee meetings with deaf community members allow further language and cultural immersion. The course culminates with students utilizing newly acquired skills to interview a deaf standardized patient.

Learning objectives progress is measured midway and at the end of each seminar. The students’ ASL fluency and deaf culture knowledge are assessed by instructors. Failure to meet the learning objectives at either formal evaluation

✉ Jason Rotoli
Jason_rotoli@urmc.rochester.edu

¹ School of Medicine and Dentistry, University of Rochester, Rochester, NY, USA

² Department of Family Medicine, University of Michigan, Ann Arbor, MI, USA

³ Department of Emergency Medicine, University of Rochester Medical Center, Box 655, 601 Elmwood Ave, Rochester, NY 14642, USA

Table 1 Deaf Health Pathway seminar and elective learning objectives

Seminar A	Seminar B	Elective
Learn the basic foundations of American Sign Language as a conduit for understanding deaf culture and interacting with deaf patients, and to formulate an approach for further study of the language	Expand on existing knowledge of American Sign Language to enable more fluid conversation and improve medical vocabulary	Further immersion into the deaf community through experiential learning in one of the following domains: <ul style="list-style-type: none"> • Research • Community engagement • Clinical observership • Education
Gain an introductory exposure to challenges deaf or hard of hearing patients face when interacting with the healthcare system, specifically regarding deaf health, health literacy, and healthcare interpreting	Gain a more in-depth exposure to challenges deaf or hard of hearing patients face when interacting with the healthcare system, specifically regarding deaf health, health literacy, and healthcare interpreting	Develop interpersonal and professional skills while working with a vulnerable population (advocacy, empathy, education)
Become aware of local resources available for the deaf population as well as for medical students when interacting with deaf patients through an interpreting observership (when feasible)	Expand patient interviewing vocabulary with a focus on gathering medical, family, and social histories in ASL	Develop advanced understanding challenges deaf or hard of hearing patients face when interacting with the healthcare system
Gain an introductory exposure to the culture of the deaf population through relevant asynchronous learning (assigned readings, out of class instructional videos) and interaction with local guest speakers or community events (when feasible)	Learn to describe basic normal anatomy and physiology in ASL	Optional: Continue building ASL skillset through community involvement
Develop basic clinical interviewing skills in ASL	Interact with deaf medical professionals through clinical exposure or panel discussions	

allows the course instructors to create an asynchronous individualized remediation plan tailored to the student to fill any perceived knowledge or skill gaps.

Students are offered an optional 4-week deaf community elective during third or fourth year through a community project (see Table 1 for objectives). Students who complete both seminars and electives graduate with a distinction in deaf health.

Results

The Deaf Health Pathway has enrolled 89 students from 2011 to 2022. Eighty-four students completed the seminars, with 21 of them continuing to the elective. Five students did not complete the course due to personal leave. Of the remaining students, 4/84 students (4.7%) required remediation (due to delayed ASL acquisition) and all 84 students eventually successfully completed the seminars. No students required remediation for insufficient cultural knowledge acquisition. Of the students enrolled in the elective, 19/21 (90.4%) of students completed the elective and graduated with a distinction in deaf health.

A barrier to retention in the DHP is balancing the seminars with medical school. Therefore, required attendance was lowered from 100% to 80% of sessions and 2 asynchronous activities were added. Learning a new language can be challenging for certain students. This barrier was mitigated with the development of individualized learning plans. Larger rooms and clear face masks were used during COVID-19 to comply with social distancing requirements and foster visual communication (e.g., spatial awareness and facial expression).

Participating students often developed a passion for deaf health advocacy. Many of the principles learned in the DHP are applicable to other vulnerable populations including demonstration of empathy, best communication practices, and advocacy. The successful integration of DHP at a large medical school provides a model for other medical schools to include deaf or other disability related courses with community involvement.

A future qualitative survey of the attitudes of DHP students and deaf patients could explore the long-term outcomes of the DHP. Additionally, future exploration of how the pathway influences deaf patient outcomes could be considered. We hope that the DHP becomes a part of the core medical curriculum in the future so that every medical student may gain vital knowledge on how to bridge the gap in care for deaf communities.

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Declarations

Ethical Approval None.

Competing Interests The authors declare no competing interests.

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