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EDITORIAL

Access to Health Services Among Deaf People: An Issue of Inclusion and Linguistic Rights

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A commitment to improving diversity, equity, inclusion, and accessibility (DEIA) is critical for better science and a better society. A concrete example of this for deaf people is the use of sign language in academic and clinical environments. In a Brazilian study on deaf people's experience with primary care, most participants reported insecurity about medical appointments. Those who best understood their diagnosis and treatment were bilingual individuals and those who used oral communication.[1] But what role could publishers, medical societies, and scientific organizations play in achieving these goals? In this editorial, we will address access to health services among deaf people and its impact on health outcomes.

Hearing loss and individualities

Studies have shed light on the physiology of the auditory system, which is fundamental to understanding the diversity found in the deaf community. A study by Silva[2] discusses the 3 types of auditory load described in Silman & Silverman's classification system:[3] conductive, neurosensory, and mixed.

The first type is caused by inflammatory processes, excess cerumen in the external auditory canal, changes in the articulation of the auditory ossicles and tympanic membrane, malformations of the external ear, etc. Hearing function can be completely restored in most of these cases. The second type is caused by degeneration due to the natural aging process, industrial or environmental noise exposure, drugs, stress, metabolic alterations, chronic diseases, head trauma, and diseases of the inner ear, such as Ménière's disease or auditory neuropathy, etc. Hearing loss of this type is considered irreversible, and the remaining sensory cells are stimulated through external amplifiers. The third category, defined as mixed hearing loss, occurs due to changes in the auditory system that can simultaneously affect the outer, middle, and inner ear.[2]

According to data from the most recent census,[4] there are about 10 million deaf people in Brazil, which is 5% of the population. This shows the importance of inclusive and specialized care in a variety of contexts: social, cultural, educational, health care, etc. The aforementioned definitions help simplify the diversity found in the deaf community. In the scope of public policy, especially health policy, it is believed that inclusion is essential for guaranteeing the constitutional rights of the population. Regardless of whether they are oral deaf, hearing implant users, sign language users who were born deaf or who acquired deafness in the first years of life – all receive the same type of care in the public health network. Research should address this subject.

Based on the above, critical questions arise, such as: Without accessibility, how do deaf patients communicate their symptoms in medical consultations? What is not conveyed to the doctor when family or friends interpret for deaf patients? When health professionals explain the written details of a prescription to deaf patients, do they really understand the drug regimen or frequency of prescription?

The answer to all such question is becoming increasingly clear: Brazil still lacks specialized medical care for the hearing impaired, both in the public and private sectors. True inclusion can be achieved when medical offices provide interpreters or when health professionals are trained to communicate in sign language.

Accessibility in health services

A study by Nascimento et al.,[5] investigated Brazilian Sign Language (Libras) technologies available in health services,

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demonstrating the difficulties deaf people face, in addition to the lack of knowledge and type of language used by health professionals. The authors report that these spaces "do not always adopt inclusive educational practices and policies that enable the recognition of specific needs." Assistive technologies, which can provide disease prevention guidelines, are encouraged as means of facilitating the communication process. Campos et al.[6] investigated specific challenges in caring for the deaf in primary health care services,[6] particularly the importance of alternative Libras resources and accessibility. Their study also points out the ineffectiveness of care for deaf patients in the public health system. We endorse Araújo et al.[7] discussion of how health professionals use writing to mediate communication with deaf patients. However, the difficulty of understanding written transcriptions of what is being communicated through speech is an important barrier. This is because comprehension structures differ between Libras and written Portuguese; this limitation can be observed in a wide variety of social interaction environments.

In a significant study on the accessibility barriers faced by deaf people in different service sectors, Holdorf & Robinson[8] analyzed accessibility to health services, identifying ten themes, among which we highlight[1] the lack qualified health professionals to care for deaf patients[2] the lack of sign language interpreters,[3] the lack of access to services and information on disease prevention, and[4] the communication preferences of deaf people. In an evaluation of nurses' behavior, Pendergrass et al.,[9] found that they preferred having interpreters to facilitate consultations with deaf patients but were unaware of their role in assuring effective communication. One important finding is that a professional sign language interpreter was only used when no other method of communication was possible or when a risk was involved. The lack of qualified professionals was quite clear, as was the disregard for the importance of sign language in safe and effective communication with the deaf.[9]

Cardiovascular disease and deaf people

In its 2021 World Report on Hearing, the World Health Organization estimated that approximately 217 million people have some degree of hearing loss in North and South America and that 62.7 million (6.2%) have a moderate or high level of it.[10] Deaf people individuals face significant communication barriers that can affect their health literacy. Margellos-Anast et al.,[11] demonstrated that knowledge of cardiovascular disease among deaf individuals is considerably lower than that of the hearing population: 40% of deaf individuals could not list any symptoms of a heart attack, and more than 60% could not list any symptoms of a stroke.[11]

In a study of deaf adolescents, Smith et al.,[12] found that participants did not have adequate information about their family's cardiovascular health history. Uncertainty about one's family medical history can inhibit necessary lifestyle changes, screening tests, clinical evaluations, and the appropriate interpretation of symptoms.[12]

Li et al.,[13] reported that deaf adolescents may participate less in physical activity than their hearing peers. More importantly, social inclusion has emerged as a significant predictor of physical activity among deaf adolescents. This highlights the importance of initiatives to promote social inclusion to improve cardiovascular outcomes later in life.[13]

There is an urgent need for health education interventions among sign language users. One study found that understanding the specific culture and structure of sign language is necessary to provide sign language users with adequate access to health information.[14] It is important to understand the needs of people with disabilities to promote their health and eliminate disparities between people with and without disabilities.

Inclusive Technological Tools

The Internet provides a range of information about tools and computer programs that promote inclusion. A number of technological advances have emerged from the search for tools to improve quality of life. Moreover, the virtual environment can transmit information in a variety of ways – images, videos, graphs, tables, and texts.

On social media, Mendes Francisco has provided a catalog of health-related signs, such as tachycardia (see Figure 1 below).[15] It is important to promote such content, since access to information about diseases, treatments, medications, examinations, and related areas is still limited for deaf people.

In addition to this means of accessibility, the video channel "Libras Biossegurança e Saúde" (Libras, Biosecurity, and Health) catalogs a number of health-related signs (Figure 2).

Thus, among the many possibilities, it is easier to transmit certain contents in a practical, objective way, using graphics and interfaces designed according to the needs of the audience.

Oral language is social and functions as a common means of interaction between people. Deafness impedes

Figure 1 – The tachycardia sign in Libras (adapted from Francisco Mendes).[15]

Figure 2 – Health-related Libras signs (adapted from Francisco Mendes).[15]
Clockwise from top left: shortness of breath, asthma, illness, lung, bronchitis and blood pressure measurement.

or prevents the acquisition of oral language, thus compromising the socialization process. To help bridge this gap, it is necessary to integrate abstract scientific concepts into sign language so that users can appropriate scientific concepts as they are understood in written language.

Just as communication is fundamental to human existence, inclusion must be present in the construction of society. Thus, humanized health care can only be achieved when communication is no longer a barrier. Access to sign language must be increased in health services for better outcomes. The development of public policies and other mechanisms to encourage the training of health professionals is recommended. Recognizing the particularities of sign language is an excellent step towards specialized care for deaf people.

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