

REVIEW

COMMUNICATION STRATEGIES EMPLOYED BY HEALTH PROFESSIONALS WITH HEARING IMPAIRED PEOPLE: AN INTEGRATIVE REVIEW*

HIGHLIGHTS

1. Writing and mimicry were the main communication strategies.
2. There is lack of professional qualification for effective communication.
3. LIBRAS is the communication means least used by the professionals.
4. The professionals experience feelings of insecurity, blockage and inability.

Domisy de Araújo Vieira¹ 

Liliane Faria da Silva¹ 

Maria Estela Diniz Machado¹ 

Euzeli da Silva Brandão¹ 

Herleis Maria de Almeida Chagas² 

ABSTRACT

Objective: to identify studies in the scientific literature on the communication between health professionals and hearing impaired people during care provision. **Method:** an integrative review carried out in February 2021 in 14 databases and with manual search, without time frame, in Portuguese, English, Spanish and through the *Hearing Impaired People* and *Health Professionals* descriptors and their variations, without context delimitation. The results were analyzed by organizing them into thematic groups according to their frequency. **Results:** a total of 16 studies were selected, with the following results standing out: use of writing and mimicry as main communication strategies; non-qualification of the professionals for effective communication, with the use of LIBRAS as the least used means; and feelings of insecurity, blockage and disability experienced by the professionals in communicating with hearing impaired people. **Conclusion:** it is necessary to invest in health professionals' qualification in LIBRAS, making communication more effective and contributing to improvements in the care practice.

DESCRIPTORS: Hearing Loss; Communication Barriers; Sign Language; Health Personnel.

HOW TO REFERENCE THIS ARTICLE:

Vieira D de A, Silva LF da, Machado MED, Brandão E da S, Chagas HM de A. Communication strategies employed by health professionals with hearing impaired people: an integrative review. *Cogitare Enferm.* [Internet]. 2023 [cited in "insert year, month, day"]; 28. Available in: <https://dx.doi.org/10.1590/ce.v28i0.91372>.

¹Universidade Federal Fluminense, Niterói, RJ, Brasil.

²Universidade Federal do Acre, Rio Branco, AC, Brasil

INTRODUCTION

Hearing impairment consists of bilateral, partial or total loss of at least 41 decibels (dB), measured by means of an audiogram at frequencies of 500 Hz, 1,000 Hz, 2,000 Hz and 3,000 Hz¹. Deafness and hearing loss are common and found in all regions and countries. An estimated 466 million people worldwide have disabling hearing loss and that number is expected to increase to 900 million by 2050². In Brazil, according to the 2010 Census, 5.1% of the national population has some type of deafness³. Two million Brazilians have severe hearing impairment, encompassing cases of major permanent difficulty up to total hearing inability⁴.

People with hearing impairments are faced with several barriers in public services, especially in health; even after almost three decades after implementation of the SUS, there are indicators that point to the permanence and increase of inequalities regarding access to health services, especially related to the language barrier. Among the various resulting aspects, the lack of qualified professionals in the Brazilian Sign Language (LIBRAS) stands out⁵. From this scenario, the need arises to investigate the diverse scientific evidence on the communication between health professionals and hearing impaired people during care provision.

Thus, it is relevant that the results of existing studies be synthesized to present the scientific evolution of the theme, contribute to the dissemination of communication strategy options and point out the gaps that may subsidize future studies. Consequently, the objective was to identify studies in the scientific literature on the communication between health professionals and hearing impaired people during care provision.

METHOD

An integrative literature review developed through six methodological stages, namely: research question; definition of the criteria for inclusion and exclusion of the studies; definition of the diverse information to be extracted; evaluation; interpretation of the results; and data synthesis⁶. To formulate the research question, the mnemonic combination strategy⁷ guided by the P (Population), I (Phenomenon of Interest) and Co (Context) acronym was used⁸; where P – Hearing impaired people, I – Communication and health professionals, and Co – Care provision. Thus, the research question was as follows: How does the communication between health professionals and hearing impaired people take place?

In an attempt to broaden the search, terms from the context (Co) were not considered in the search strategy, as the context represents all care levels (primary care, specialized outpatient care, general hospitals and university hospitals, among others). This strategy was used to extend retrieval to any of the care levels.

Subsequently, the terms were identified in the following controlled vocabularies: Descriptors in Health Sciences (*Descritores em Ciências da Saúde*, DeCS) from the Virtual Health Library Regional Portal, Medical Subject Headings (MeSH) from PubMed, and Emtree (Embase subject headings) from EMBASE (Elsevier). Terms were also identified in the titles, abstracts and descriptors/MeSH of the preliminary search to define the strategy. The search strategies were used in all databases, and all terms were employed with the OR Boolean operator with crossings with the phenomenon of interest by means of the AND Boolean operator.

To answer the research question, a broad search strategy was adopted, with identified terms (Chart 1).

Chart 1 – Terms identified in the DeCS, MESH and EMTREE controlled vocabularies and in the preliminary search. Rio Branco/AC, 2022

PICo	Identified terms
Participant	<p>"Perda Auditiva" OR "Deficiência Auditiva" OR Hipoacusia OR "Perda da Audição" OR "Pessoas com Deficiência Auditiva" OR "Pessoas com Audição Deficiente" OR "Pessoas com Dificuldade Auditiva" OR "Pessoas com Insuficiência Auditiva" OR "Pessoas com Surdez" OR "Personas con Deficiência Auditiva" OR "Pérdida Auditiva" OR "Pérdida de la Audición" OR "Pérdida de la Capacidad Auditiva" OR "Personas con Dificultad Auditiva" OR "Personas con Insuficiencia Auditiva" OR "Personas Portadoras de Sordera" OR "Personas Sordas" OR "Portadores de Sordera" OR Surdez OR Surdo* OR Auditivo* OR Auditiva* OR Audição OR Surdez OR Sordera</p> <p>"Hearing Loss" OR "Loss, Hearing" OR Hypoacusis OR Hypoacuses OR "Hearing Impairment" OR "Hearing Impaired" OR "Persons With Hearing Impairments" OR "Hearing Disabled Persons" OR "Disabled Persons, Hearing" OR "Hearing Disabled Person" OR "Person, Hearing Disabled" OR "Persons, Hearing Disabled" OR "Deaf Persons" OR "Deaf Person" OR "Person, Deaf" OR "Persons, Deaf" OR "Hard of Hearing Persons" OR Hearing OR Deafness OR Deafnesses OR Deaf</p>
Phenomenon of Interest	<p>("Pessoal de Saúde" OR "Prestadores de Cuidados de Saúde" OR "Profissionais da Saúde" OR "Profissionais de Saúde" OR "Profissional da Saúde" OR "Profissional de Saúde" OR "Trabalhador da Saúde" OR "Trabalhador de Saúde" OR "Trabalhadores da Saúde" OR "Trabalhadores de Saúde" OR "Personal de Salud" OR "Proveedores de Atención de Salud" OR "Trabajadores de la Salud" OR Medico* OR Enfermagem OR enfermeir* OR Enfermería* OR Enfermer* OR Fisioterapeuta* OR "Terapia Ocupacional" OR fonoaudiologia OR Fonoaudiolo* OR Psicologo* OR Psicologia OR "Assistente social" OR "Assistentes sociais" OR "Equipe de Assistência ao Paciente" OR "Grupo de Atención al Paciente" OR "Equipe Interdisciplinar de Saúde" OR "Equipe Multiprofissional" OR "Equipe de Assistência Médica" OR "Equipe de Cuidados de Saúde" OR "Equipe de Saúde" OR "Equipes de Saúde" OR "Assistentes Sociais" OR "Trabajadores Sociales") AND (Comunicação OR "Canal Interpessoal" OR "Comunicação Educacional" OR "Comunicação Educativa" OR "Curso de Comunicação" OR "Educação Comunicacional" OR "Educação Comunicativa" OR Comunicación OR "Comunicación Educacional" OR "Comunicación Educativa" OR "Educación Comunicativa" OR "Barreiras de Comunicação" OR "Entraves à Comunicação" OR "Obstáculos à Comunicação")</p> <p>("Health Personnel" OR "Personnel, Health" OR "Health Care Providers" OR "Health Care Provider" OR "Provider, Health Care" OR "Healthcare Providers" OR "Healthcare Provider" OR "Provider, Healthcare" OR "Healthcare Workers" OR "Healthcare Worker" OR "Health Care Professionals" OR "Health Care Professional" OR "Professional, Health Care" OR Physicians OR Nurses OR Nurse OR Nursing OR Nursings OR "Physical Therapists" OR "Physical Therapist" OR Physiotherapist OR Physiotherapists OR "Therapist, Physical" OR "Therapists, Physical" OR "Occupational Therapy" OR "Speech, Language and Hearing Sciences" OR "Speech and Hearing" OR "Speech-Language Pathology and Audiology" OR "Speech-Language-Hearing Pathology" OR "Social Workers" OR "Social Worker" OR "Worker, Social" OR "Workers, Social" OR "Patient Care Team" OR "Care Team, Patient" OR "Care Teams, Patient" OR "Patient Care Teams" OR "Team, Patient Care" OR "Teams, Patient Care" OR "Medical Care Team" OR "Care Team, Medical" OR "Care Teams, Medical" OR "Medical Care Teams" OR "Team, Medical Care" OR "Teams, Medical Care" OR "Interdisciplinary Health Team" OR "Health Team, Interdisciplinary" OR "Health Teams, Interdisciplinary" OR "Interdisciplinary Health Teams" OR "Team, Interdisciplinary Health" OR "Teams, Interdisciplinary Health" OR "Healthcare Team" OR "Healthcare Teams" OR "Team, Healthcare" OR "Teams, Healthcare" OR "Health Care Team" OR "Care Team, Health" OR "Care Teams, Health" OR "Health Care Teams" OR "Team, Health Care" OR "Teams, Health Care") AND (Communication OR "Communications Personnel" OR "Personnel, Communications" OR "Communication Barriers" OR "Barrier, Communication" OR "Barriers, Communication" OR "Communication Barrier")</p>
Context	<p>= Different Health Care Scenarios - The context (Co) terms were not considered in the search strategy, as the context represents the care types and levels (from primary care such as Basic Health Units to Family Health Teams, specialized care such as specialized outpatient services, and in-hospital care such as general hospitals and university hospitals, among others). With this strategy, it was possible to expand the search and retrieval to any of the care levels; the most important point was to identify how health professionals communicate with hearing impaired people during care provision at any health care level.</p>

Source: The authors (2022), adapted from Joanna Briggs Institute (JBI) Scoping Review, v2022.

The inclusion criteria corresponded to articles and documents that address how health professionals communicate with hearing impaired people during care provision. The focus was on health professionals and on how they communicated with hearing impaired people. In order to obtain more studies, no time frame was defined. Articles and documents that did not fit in line with the main topic of the review (central concept to be examined) were excluded, as well as results that did not correspond to the study objective.

The searches were carried out in February 2021 in the reference databases, information portals and Gray Literature: Regional Portal of the Virtual Health Library (*Biblioteca Virtual em Saúde*, BVS) and its main databases - Latin American and Caribbean Literature in Health Sciences (*Literatura Latino-Americana e do Caribe em Ciências da Saúde*, LILACS), Spanish Bibliographic Index in Sciences (*Índice Bibliográfico Español em Ciências*, IBECS), National Collection of Information Sources of the SUS (ColecionaSUS) and available through BVS; as well as in the PubMed Portal and PubMed Central (PMC) of the *National Library of Medicine* (NLM) and Scientific Electronic Library Online (SCIELO).

The following databases were employed in the CAPES Journals Portal: Elsevier: Embase and Scopus, Clarivate Analytics: Web of Science, Ebsco: Academic Search Premier (ASP), Cumulative Index to Nursing and Allied Health Literature (CINAHL), SocINDEX with Full Text and Institute of Education Sciences (IES) belonging to the U.S. Department of Education: Education Resources Information Center (ERIC). The Epistemonikos integrative database was also used: Database of the best Evidence-Based Health Care, the National Institute for Health and Care Excellence (NICE) portal, which allows retrieving primary studies, research recommendations, guidelines, indicators and protocols, among other types of documents.

A manual search was performed in the Brazilian Digital Library of Theses and Dissertations (BDTD) belonging to the Brazilian Institute of Information in Science and Technology (*Instituto Brasileiro de Informação em Ciência e Tecnologia*, IBCT). The search results were imported into the EndNote reference manager to identify duplicates. Subsequently, they were exported to the Rayyan app of the Qatar Computing Research Institute (QCRI), where the selection process was carried out by reading the titles and abstracts. Control of the process to exclude and include full texts was carried out by two reviewers in an Excel spreadsheet generated from Rayyan.

The data analysis of the integrative review was elaborated in a descriptive way. A chart prepared by the authors was used to extract each primary study included in the review, containing the following information: year of publication, country, title, objective, design, level of evidence of the study and main results.

Categorization of the level of evidence was based on the categorization proposed by the Agency for Health care Research and Quality (AHRQ), in seven levels: Level 1, systematic review or meta-analysis of controlled clinical trials; Level 2, well-designed randomized controlled clinical trial; Level 3, controlled clinical trial without randomization; Level 4, well-designed cohort or case-control studies; Level 5, systematic review of qualitative and descriptive studies; Level 6, descriptive or qualitative studies; and Level 7, opinion of authorities or specialists⁹.

To minimize the risk of research bias, both selection of studies and data extraction, based on the full-reading of all 16 selected articles, were carried out by two reviewers and a third one was consulted in case of doubts.

RESULTS

The flowchart below shows all the bibliographic searches and the process of selection and final inclusion of studies (Figure 1). As a result of the search, the final sample consisted of 16 studies: three (17.64%) from international journals and 13 (2.35%) from national ones.

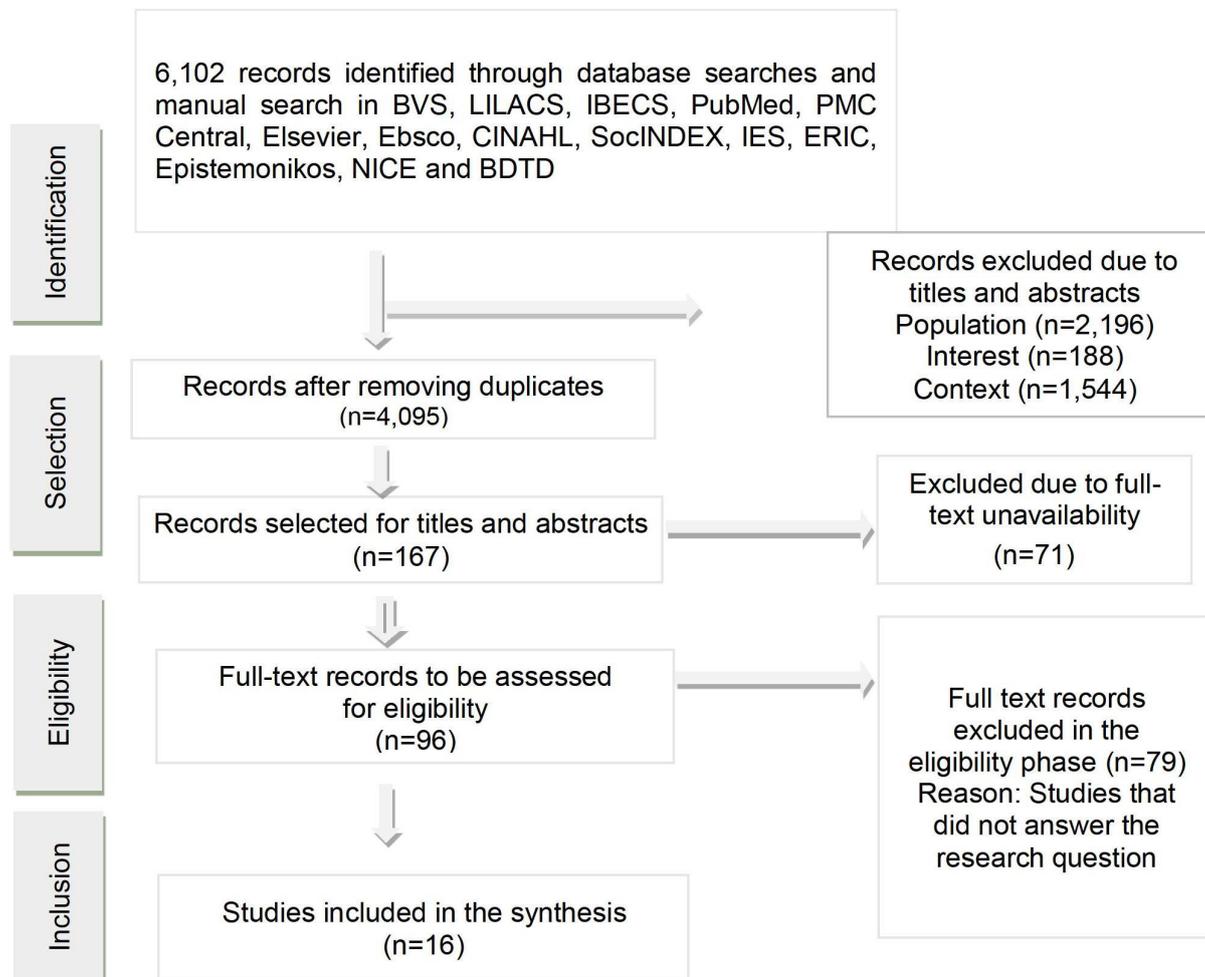


Figure 1 – Study selection flowchart based on the PRISMA recommendation. Rio Branco/AC, 2022

Source: The authors (2022).

From the description of the studies included in the integrative review, the largest number of publications was found in the following years: 2010, 2018 with two studies each year; 2014 and 2017 with three; and the other articles were from 2000, 2007, 2008, 2012 and 2019, with one article each. The origin of the publications was as follows: 13, Brazil (81.25%); one, Croatia (6.25%); one, United Kingdom (6.25%); and one, Colombia (6.25%).

As for the methodological approach, three are qualitative studies, and there is one quantitative and two quanti-qualitative one, with differentiated designs. Regarding the level of evidence (LE) one (6.25%) is LE 3; six productions (37.5%) are LE 5 and 10 articles

(62.5%) are LE 6, according to Chart 2.

Chart 2 - Characterization of the studies selected. Terms identified in the DeCS, MeSH and EMTREE controlled vocabularies and in the preliminary search. Rio Branco/AC, 2022

S	Title/Year/Country	Objective	Design/Level of Evidence	Main results
S1 ¹⁰	Dificuldades e estratégias de comunicação utilizadas pelo enfermeiro e sua equipe no cuidado ao deficiente auditivo. 2010 Brazil	To identify the communication difficulties of the Nursing team with the hearing impaired and to know the strategies developed in non-verbal communication	Descriptive, exploratory study with a quantitative approach Level 5	Mimicry and lip reading were used by almost all the professionals, whereas the aid of a companion and writing were resorted to by the minority. Communication through LIBRAS rarely occurred.
S2 ¹¹	Atendimento à pessoa surda que utiliza a língua de sinais, na perspectiva do profissional da saúde 2010 Brazil	To characterize the communication between health professionals and deaf people who use SL and to describe the relationship resources used by the professionals.	Descriptive-analytical research study with a qualitative approach Level 5	The interpreter promotes improvement in communication, although this is not decisive for food quality care. The professionals are not sufficiently prepared to care for deaf people.
S3 ¹²	Assistência à gestante surda: barreiras de comunicação encontradas pela equipe de saúde 2019 Brazil	To identify the main communication barriers and mean between the health team and deaf pregnant women.	Descriptive and exploratory study of a quantitative nature Level 5	90% of the professionals had no knowledge of LIBRAS. The companion was referred to as the interpreter by 100% of the participants; 75.0% asserted that there were communication barriers between them and the deaf pregnant women. The professionals associate lack of knowledge in LIBRAS with inadequacy of the assistance provided.
S4 ¹³	Communication between Nurses and Deaf People in Health Institutions 2017 Croatia	To examine the communication difficulties experienced by deaf people with a health institution.	Cross-sectional study Level 5	Communication takes place by showing (95.1%), writing (62.5%) and speaking (50%). The manual alphabet (20%) and sign language (12.5%) are less used.

S	Title/Year/Country	Objective	Design/Level of Evidence	Main results
S5 ¹⁴	Smartphone speech-to-text applications for communication with profoundly deaf patients 2016 United Kingdom	To establish the feasibility of communication through voice recognition software for smartphones, when compared to writing or typing.	Prospective study Level 3	The mean time for smartphone dictation was significantly lower than writing or typing. Speech recognition was slightly less precise, but accuracy increased with time spent dictating.
S6 ¹⁵	Língua de sinais: como a equipe de enfermagem interage para cuidar de clientes surdos? 2013 Brazil	To identify how professionals from the Nursing team of a university hospital interact to care for their deaf clients.	Descriptive, exploratory, quantitative and qualitative research study Level 6	57% of the professionals reported never having provided care to deaf clients. 43% have provided care to deaf clients. 46.15 used mimicry; 15.38%, lip reading; 30.77%, written language; 3.85% resorted to drawings; and 3.85% had help from an interpreter to communicate with deaf clients.
S7 ¹⁶	Comunicação entre funcionários de uma unidade de saúde e pacientes surdos: um problema? 2014 Brazil	To investigate the communication between employees and deaf patients in a health unit, and consequent compliance with Decree No. 5,626.	Cross-sectional study Level 5	80% of the participants assist deaf people but they do not feel prepared for this (97.5%) and do not know LIBRAS (92.5%). 77.5% know about the existence of and need to know LIBRAS, but do not seek preparation due to lack of time, lack of information about the course, financial problems, and because they do not see the importance of learning the language specifically. 97.5% would like the unit to provide a specific LIBRAS course.
S8 ¹⁷	Comunicação com deficientes auditivos na ótica de profissionais de saúde 2018 Brazil	To describe health professionals' knowledge and training regarding communication with the hearing impaired.	Quantitative and descriptive research study Level 6	92.4% believed they were unprepared to assist the hearing impaired, 83.8% did not know how to communicate with them, and 96.5% did not know how to communicate in LIBRAS. Many used strategies such as gestures and writing (18.7%) or speech and gestures (11.6%), among others.
S9 ¹⁸	A comunicação com pessoas com deficiência auditiva: uma revisão integrativa 2014 Brazil	To identify in the literature how communication between health professionals and patients with hearing impairments takes place.	Integrative review Level 6	All 19 articles were grouped into the following categories: communication strategies; professional training; professional relationship with deaf people; and suggestions to improve communication between deaf people and health professionals.

S	Title/Year/Country	Objective	Design/Level of Evidence	Main results
S10 ¹⁹	Comunicação do enfermeiro docente na assistência a pessoas cegas e surdas 2017 Brazil	To report communication strategies used by teaching nurses in assisting deaf and/or mute individuals.	Descriptive and cross-sectional study Level 5	71% of the interviewees needed help from a companion, 64% used mimicry, 64% resorted to writing, 50% used lip reading and 29% mastered and used LIBRAS communication.
S11 ²⁰	Como eu falo com você? A comunicação do enfermeiro com o usuário surdo 2018 Brazil	To describe the knowledge and practices of primary care Nursing professionals in assisting deaf users.	Descriptive and exploratory study with a qualitative approach Level 6	Practices used to ease communication: presence of a companion during the consultations; use of writing; use of body language. For the use of writing, it was necessary to ensure that the user knew how to read and write. Body language and use of other senses, such as gestures and lip reading, were also considered communication facilitators.
S12 ²¹	Aspectos da comunicação da enfermeira com o deficiente auditivo 2007 Brazil	To explore the aspects of communication between nurses and the hearing impaired.	Exploratory and descriptive study Level 6	Nurses realize that it is difficult to communicate with the hearing impaired, although some of them do so satisfactorily. In this process, some refer to using both non-verbal communication, through mimicry and lip reading, as well as oral and written verbal communication. Others resort to the companion, breaking secrecy of the consultation.
S13 ²²	Comunicação do profissional de enfermagem com pacientes que apresentam dificuldade de expressão verbal devido à surdez 2008 Colombia	To verify how Nursing professionals communicate with patients who have difficulty in verbal expression due to deafness.	Qualitative and phenomenological approach Level 6	Among the main communication means they use for this purpose are those described below: interaction through the companion, who is used as an interlocutor, writing, careful gestures, making graphs, signs or demonstrations or giving a child treatment to a patient.
S14 ²³	A comunicação da equipe de enfermagem com a pessoa com deficiência auditiva com surdos diversos: um estudo exploratório 2,000 Brazil	To survey aspects related to the communication of the Nursing team with a hearing impaired patient with severe deafness.	Exploratory study Level 6	The main ways to communicate with deaf patients were the following: gestures, lip reading, mimicry, body language and writing.

S	Title/Year/Country	Objective	Design/Level of Evidence	Main results
S15 ²⁴	Intervenções de comunicação bem-sucedidas para cuidados de saúde em pessoas deficientes auditivas 2012 Brazil	To research which the communication interventions are for the health care of people with hearing impairments existing in the Nursing literature from 2000 to 2012.	Integrative review Level 6	The results of this review confirm that non-verbal communication in its sign language modality, visual materials and use of interpreters are extremely successful in care for establishing the communicative process, as they are part of their own linguistic system and are officially recognized as part of a deaf culture.
S16 ²⁵	Comunicação entre a equipe de enfermagem e pessoas com deficiência auditiva 2014 Brazil	To analyze the communication between the Nursing team and people with hearing impairments in a teaching hospital from the city of João Pessoa-PB.	Descriptive research study with a qualitative approach Level 6	It was evidenced that the Nursing team has difficulties establishing communication with hearing impaired people, as they do not know LIBRAS, reason why they use strategies such as lip reading, mimicry, writing and intermediation of companions.

Source: The authors (2022).

The synthesis of the new knowledge produced from all 16 productions that constituted the sample of this review were grouped into three thematic groups, namely:

Thematic Group 1- Communication strategies used by health professionals when providing care to people with hearing impairments

1.1 Communication through speech/lip reading and writing

In this first thematic group, 10 studies (62.5%) indicated lip reading/speech as one of the most used communication practices between health professionals and people with hearing impairments. (S1, S4, S6, S8, S9, S10, S11, S12, S14, S16). As for written communication, greater practice of communication was pointed out, totaling 12 (68.75%) studies (S1, S4, S7, S8, S10, S11, S12, S13, S14, S15, S16).

1.2 Communication through gestures/mimicry

Nine (56.25%) studies mentioned the use of gestures and mimicry as a communication strategy between health professionals and people with hearing impairments, in the following studies (S1, S2, S6, S7, S8, S9, S10, S11, S14).

1.3 Communication through the use of LIBRAS

The use of LIBRAS appeared in four (25%) studies (S1, S4, S7, S10), indicating that LIBRAS is one of the least used communication means between health professionals and people with hearing impairments, similarly to the result below about communication by means of a LIBRAS interpreter.

1.4 Communication by means of a LIBRAS Interpreter

With regard to health professionals' communication through the intermediation of a LIBRAS interpreter with the hearing impaired, it was mentioned in three (18.75%) studies (S2, S6, S15), showing limited use of this communication means.

1.5 Communication through the intermediation of a companion/family member

Regarding communication through the intermediation of a companion, seven (41%) studies (S1, S3, S10, S11, S12, S13, S16) pointed to the intermediation of a companion/family member to maintain communication with hearing impaired people.

1.6 Communication through electronic devices

Communication through electronic devices is presented in only one (6.25%) study (S5). It is observed that written communication is still the main communication means used by health professionals to communicate with hearing impaired people, thus showing that LIBRAS is not yet widespread among health professionals to guarantee adequate care for people with hearing impairments.

Thematic Group 2 – Lack of health professionals' qualification to communicate with hearing impaired people

Health professionals' non-qualification was identified as the main reason for the absence of effective communication between professionals and hearing impaired people, being pointed out in 13 articles (S1, S2, S3, S6, S7, S8, S9, S10, S11, S12, S13, S15, S16), which corresponds to 81.25%.

In order to modify this reality, the studies selected highlight the need for the qualification process to be initiated in academic training, suggesting inclusion of the academic discipline of LIBRAS in all undergraduate courses in the health area as a mandatory credit, being an initial contribution to sensitize, prepare and develop specific skills to face the barriers imposed on the professionals' communication with hearing impaired people.

In addition to that, the studies highlight the importance of permanent qualification in LIBRAS in the practice of health services, as an imperative strategy to break the existing communication barrier, aiming to promote the creation of bonds and improvement of the care provided to hearing impaired people.

Thematic Group 3 – Feeling of the health professionals regarding the difficulty communicating with hearing impaired people

Nine (56.25%) of the studies selected (S3, S4, S7, S9, S11, S12, S13, S14, S16) indicate that the difficulties presented by health professionals while using communication strategies generate negative feelings such as discomfort, insecurity, nervousness, inability, blockage, distress and anguish, as a result of unpreparedness and consequent communication barriers which can directly influence the service offered.

DISCUSSION

This review points out that the strategies most used by health professionals to communicate with hearing impaired people are speech/lip reading, writing and gestures/mimicry. Communication through a companion, by resorting to LIBRAS or to a LIBRAS interpreter and electronic equipment are less used. Although Law No. 10,436 of 2002 provides for the inclusion of LIBRAS as a curricular subject in several courses²⁶, the results of this review showed that it is not widespread among health professionals to guarantee adequate care for hearing impaired people, as there may be gaps in the communication process.

The origin of the word “communication”, from Latin *communicare*, means to participate, to make, to know, to make common. Thus, people share different information through it²⁷. This communication process is the basis for the development of society in social, cultural, political and economic terms. It is associated with movements for human survival, in the search for knowledge expansion, and in overcoming the challenges imposed by the world²⁸.

From this perspective, communication is essential in the care process so that health professionals can understand the users who seek health services, including hearing impaired people²⁹, as it involves transmission and reception of a message from one individual to another, and the message received should be the same as the one that was transmitted. For being divided into verbal and non-verbal communication; its verbal aspect is characterized by spoken or written language, and its non-verbal component conveys messages through language related to any symbol other than spoken or written language³⁰.

Advancements in the effective communication process are a determining factor for the provision of care to patients, directly reflecting on the confidence acquired by the patients in relation to the professionals, as well as favoring the bond established between both, whether by verbal or non-verbal communication²⁷. In this review, the studies pointed to lack of qualification as the main reason for ineffective communication with hearing impaired people, which could compromise health care.

Effective communication takes place when the receiver understands exactly what the sender wants to inform; otherwise, if there is any different interpretation, communication does not materialize as effective³¹. The studies included in the review pointed to the existing communication barrier between health professionals and hearing impaired people, which can be broken by disseminating LIBRAS qualification options among health professionals since their training.

In this sense, a study analyzed the curriculum and the pedagogical project of all undergraduate courses in the health area in Brazilian HEIs and contributed diverse evidence of weaknesses in the training of health professionals regarding the teaching of LIBRAS, reflecting on the integral care of the hearing impaired³². Another study carried out in the municipality of Vitória da Conquista, Bahia, showed that, of the 92 professionals in a Family Health Unit, only three (3.3%) had undergraduate training on strategies to communicate with the deaf, although they never attended any training course or were offered any qualification in the service³³.

The feeling generated in health professionals by the difficulty communicating with hearing impaired people stands out as an important aspect found. Discomfort, insecurity and nervousness can compromise care quality and generate stress. Similar results were found in a study carried out in Paraná with 198 professionals from the Nursing team of basic health units, family health units, health centers and municipal emergency care services. In it, more than half (53.40%) of the health professionals referred negative feelings about the care offered to deaf patients, highlighting inability (10.8%), impotence (7.20%), insecurity (4.10%) and embarrassment (3.60%)³⁴.

In this context, professional qualification can minimize the feelings of discomfort, insecurity, nervousness, inability, blockage, distress and anguish reported by the professionals who need to communicate with hearing impaired people. However, even with the obligations provided for in the aforementioned legal provisions, as well as Decree No. 5,626/05 in its chapters VII and VIII³⁵, the research results indicate LIBRAS as the least used strategy, with 25% of the studies. Writing is still the main communication strategy for the hearing impaired, reaching nearly 68.75%.

It is observed that non-qualification, pointed out in 81.25% of the studies, was the main reason for health professionals not having effective communication with hearing impaired people, which can generate negative feelings due to the communication difficulty with the hearing impaired, mentioned in 56.25% of the studies selected.

This study has limitations related to the number of databases searched, with the possibility of losing studies that were not part of the final sample.

CONCLUSION

The results of this review indicated that, among the strategies used by health professionals to communicate with hearing impaired people, there was predominance of written communication, followed by lip reading, mimicry, communication through the intermediation of a companion/family member, communication through a LIBRAS interpreter and, finally, communication through LIBRAS and electronic devices. These practices used showed weaknesses, disfavoring the communication between health professionals and the hearing impaired.

Therefore, it is suggested that future research studies address health professionals' qualification in LIBRAS as a strategy to break the communication barrier, assessing the effects of the knowledge acquired and demonstrating the changes that have occurred in the in-service practice. It is hoped that this study may contribute to the emergence of effective communication measures with the hearing impaired, as well as to the incentive to offer the LIBRAS academic discipline in educational institutions and permanent qualification actions in the practice of the service.

ACKNOWLEDGMENTS

This study was carried out with the support of *Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brazil (CAPES) - Funding Code 001*.

REFERENCES

1. Presidência da República, Casa Civil (BR). Decreto nº 5.626, de 22 de dezembro de 2005. Regulamenta a Lei nº 10.436, de 24 de abril de 2002, que dispõe sobre a Língua Brasileira de Sinais - Libras, e o art. 18 da Lei nº 10.098, de 19 de dezembro de 2000. Diário Oficial da União; 2005 [cited on 2020 nov 24]. Available in: <https://presrepublica.jusbrasil.com.br/legislacao/96150/decreto-5626-05>.
2. Organização Mundial da Saúde (OMS). OMS alerta que perda de audição pode afetar mais de 900 milhões até 2050. [Internet]. Genebra: OMS; 2020 [cited on 2022 apr 28]. Available in: <https://news.un.org/pt/story/2020/03/1705931>.
3. Secretaria de Direitos Humanos da Presidência da República. Secretária Nacional de Promoção dos Direitos da Pessoa com Deficiência, Coordenação-Geral do Sistema de Informações sobre a Pessoa com Deficiência (BR), Luiza Maria Borges Oliveira, editores. Cartilha do Censo 2010: pessoas com deficiência. Brasília (DF): SDH-PR/SNPD; 2012. [cited on 2022 apr 28]. Available in: <https://www.saopaulo.sp.leg.br/wp-content/uploads/2016/11/cartilha-censo-2010-pessoas-com-deficiencia-reduzido.pdf>.
4. World Health Organization (WHO). Deafness and hearing loss [Internet]. Genebra: WHO; 2021 [cited on 2022 apr 28]. Available in: <https://www.who.int/en/news-room/fact-sheets/detail/deafness-and-hearing-loss>.
5. Souza MFNS, Araújo AMB, Fonseca LF, Freitas DAS, Soares WD, Vianna RSM, et al. Principais dificuldades e obstáculos enfrentados pela comunidade surda no acesso à saúde: uma revisão integrativa de literatura. Rev. CEFAC. [Internet]. 2017 [cited on 2022 apr 28]; 19(3):395-405. Available in: <https://doi.org/10.1590/1982-0216201719317116>.
6. Mendes KDS, Silveira RCPC, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. Texto Contexto Enferm. [Internet]. 2008 [cited on 2018 feb 17]; 17(4):758-64. Available in: <https://doi.org/10.1590/S0104-07072008000400018>.
7. Souza LMM, Marques-Vieira CMA, Severino SSP, Antunes AV. Metodologia de revisão integrativa da literatura em enfermagem. Rev. Invest. Enferm. [Internet]. 2017 [cited on 2021 jun 2]; 2(21):17-26. Available in: <http://hdl.handle.net/20.500.12253/1311>.
8. Santos CMC, Pimenta CAM, Nobre MRC. A estratégia para a construção da pergunta de pesquisa e busca de evidências. Rev. Latinoam. Enferm. [Internet]. 2007 [cited on 2022 apr 28]; 15(3). Available in: <https://doi.org/10.1590/S0104-11692007000300023>
9. Galvão CM. Evidence hierarchies. Acta. Paul. Enferm. [Internet]. 2006 [accessed on 2021 jun 23]; 19(2):VI. Available in: <https://doi.org/10.1590/S0103-21002006000200001>.
10. Britto FR, Samperiz MMF. Dificuldades de comunicação e estratégias utilizadas pelos enfermeiros e sua equipe na assistência ao deficiente auditivo. Einstein [Internet]. 2010 [cited on 2022 apr 28]; 8(1 Pt1):80-5. Available in: <https://doi.org/10.1590/S1679-45082010AO1339>.
11. Chaveiro N, Barbosa MA, Porto CC, Munari DB, Medeiros M, Duarte SBR. Atendimento à pessoa surda que utiliza a língua de sinais, na perspectiva do profissional da saúde. Cogitare Enferm. [Internet]. 2010 [cited on 2022 apr 28]; 15(4):639-45. Available in: <http://dx.doi.org/10.5380/ce.v15i4.20359>.
12. Ferreira DRC, Alves FAP, Silva EMA, Linhares FMP, Araújo GKNA. Assistência à gestante surda: barreiras de comunicação encontradas pela equipe de saúde. Saúde Redes. [Internet]. 2019 [cited on 2022 apr 28]; 5(3):3142. Available in: <https://doi.org/10.18310/2446-4813.2019v5n3p31-42>.
13. Ljubicic M, Zubcic S, Sare S. Communication between nurses and deaf people in health institutions. In: CBU International Conference Proceedings, Research Institute; 2017. v. 5. p. 958-65; Praga (CZ). Available in: <http://dx.doi.org/10.12955/cbup.v5.1052>.
14. Lyall FC, Clamp PJ, Hajioff D. Smartphone speech-to-text applications for communication with profoundly deaf patients. J. Laryngol. Otol. [Internet]. 2016 [cited on 2022 apr 28]; 130(1):104–106.

Available in: <https://doi.org/10.1017/S0022215115003308>.

15. Machado WCA, Machado DA, Figueiredo NMA, Tonini T, Miranda RS, Oliveira GMB. Sign language: how the nursing staff interacts to take care of deaf patients. *R. Pesq. Cuid. Fundam. Online [Internet]*. 2013. [cited on 2022 apr 28];5(3):283-292. Available in: <https://doi.org/10.9789/2175-5361.2013v5n3p283>.

16. Magrini AM, Santos TMM. Comunicação entre funcionários de uma unidade de saúde e pacientes surdos: um problema? *Distúrb. Comum. [Internet]*. 2014 [cited on 2022 apr 28]; 26(3):550-58. Available in: <https://revistas.pucsp.br/index.php/dic/article/view/14880/15215>.

17. Marquete VF, Costa MAR, Teston EF. Comunicação com deficientes auditivos na ótica de profissionais de saúde. *Rev. Baiana Enferm. [Internet]*. 2018 [cited on 2022 apr 28];32:e24055. Available in: <https://doi.org/10.18471/rbe.v32.24055>.

18. Miranda RS, Schubert CO, Machado WCA. A comunicação com pessoas com deficiência auditiva: uma revisão integrativa. *R. Pesq. Cuid. Fundam. Online [Internet]*. 2014. [cited on 2022 apr 28]; 6(4):1695-1706. Available in: <https://doi.org/10.9789/2175-5361.2014.v6i4.1695-1706>.

19. Oyama SMR, Terceiro FABM, Parazzi LC. Comunicação do enfermeiro docente na assistência a pessoas cegas e surdas. *Cuid Arte, Enferm. [Internet]*. 2017. [cited on 2022 apr 28]; 11(1):78-85. Available in: http://www.webfipa.net/facfipa/ner/sumarios/cuidarte/2017v1/11%20Artigo%20Comunica%C3%A7%C3%A3o%20do_Enfermeiros%20%20docente%20pessoas%20cegas%20e%20ou%20surdas.pdf.

20. Soares IP, Lima EMM, Santos ACM, Ferreira CB. Como eu falo com você? A comunicação do enfermeiro com o usuário surdo. *Rev. Baiana Enferm. [Internet]*. 2018 [cited on 2022 apr 28];32:e25978. Available in: <https://doi.org/10.18471/rbe.v32.25978>.

21. Pagliuca LMF, Fiúza NLG, Rebouças CBA. Aspectos da comunicação da enfermeira com o deficiente auditivo. *Rev. Esc. Enferm. USP [Internet]*. 2007 [cited on 2022 apr 28];41(3):411-8. Available in: <https://doi.org/10.1590/S0080-62342007000300010>.

22. Vanegas BC, Castro LH, Páez MP, Ramires NS, Salcedo LJ,C. Comunicación del profesional de enfermería con un paciente que presenta dificultad en la expresión verbal por sordera. *Rev. Colomb. Enferm. [Internet]*. 2008 [cited on 2022 apr 28]; 3(3):13-20. Available in: <https://doi.org/10.18270/rce.v3i3.1398>.

23. Rosa CG, Barbsa MA, Bachion M.M. Comunicação da equipe de enfermagem com deficiente auditivo com surdez severa: um estudo exploratório. *Rev. Eletrônica Enferm. [Internet]*. 2000. [cited on 2022 apr 28]; 2(2). Available in: <https://revistas.ufg.br/fen/article/view/684>.

24. Martínez NL, Miranda RM. Intervenciones de comunicación exitosas para el cuidado de la salud en personas con discapacidad auditiva. *Enferm. Univ. [Internet]*. 2012. [cited on 2022 apr 28]; 9(4):57-68. Available in: <http://www.scielo.org.mx/pdf/eu/v9n4/v9n4a6.pdf>.

25. Dantas TRA, Gomes TM, Costa TF, Azevedo TR, Brito SS, Costa KNFM. Comunicação entre a equipe de enfermagem e pessoas com deficiência auditiva. *Rev. Enferm. UERJ. [Internet]*. 2014. [cited on 2022 apr 28]; 22(2):169-74. Available in: <https://www.e-publicacoes.uerj.br/index.php/enfermagemuerj/article/view/13559>.

26. Presidência da República, Casa Civil (BR). Lei nº 10.436, de 24 de abril de 2002. Dispõe sobre a Língua Brasileira de Sinais Libras e dá outras providências. *Diário Oficial da União*, 25 abr 2002. Available in: <https://presrepublica.jusbrasil.com.br/legislacao/99492/lei-de-libras-lei-10436-02>.

27. Conceição LAC, Marcellos LN, Rachard CDA. Comunicação organizacional: com ênfase na equipe de saúde. *Saúde Foco [Internet]*. 2019 [cited on 2022 apr 28];11:424-30. Available in: https://portal.unisepe.com.br/unifia/wpcontent/uploads/sites/10001/2019/03/035_COMUNICA%C3%87%C3%83O-ORGANIZACIONALCOM-%C3%8ANFASE-NA-EQUIPE-DE-SA%C3%9ADE.pdf.

28. Gomes RAL. A comunicação como direito humano: um conceito em construção. [dissertação]. Recife

- (PE): Universidade Federal de Pernambuco; 2007. 206 p. Available in: http://www.dhnet.org.br/direitos/textos/midia/gomes_comunicacao_como_dh.pdf.
29. Silva MVR, Silva-Filho JA, Silva HEO, Silva RR, Pinto AHA. Estratégias de comunicação não verbal na assistência de enfermagem. *Rev. Parana. Enferm*, 2021;4(1):63-72.
30. Gonçalves FAR, Lima JLSO, Pires JCS. Comunicação organizacional: um instrumento de influência no cotidiano das organizações. *Qualia*. [Internet]. 2016 [cited on 28 apr 2022]; 2(2):01-25. Available in: <https://revistas.unifan.edu.br/index.php/RevistaCSA/article/view/242/184>.
31. Barazzetti VR, Provin WAMS, Filipak ST. A estreita relação entre a comunicação efetiva e a gestão democrático-participativa. *Polit. Gest. Educ.* [Internet]. 2016 [cited on 2022 apr 28];20(2):166-84. Available in: <http://dx.doi.org/10.22633/rpge.v20.n2.9456>.
32. Mazzu-Nascimento T, Melo DG, Evangelista DN, Silva TV, Afonso MG, Cabello J, et al. Fragilidade na formação dos profissionais de saúde quanto à Língua Brasileira de Sinais: reflexo na atenção à saúde dos surdos. *Audiol., Commun. Res.* [Internet]. 2020 [cited on 2022 apr 28]; 25:e2361. Available in: <https://doi.org/10.1590/2317-6431-2020-2361>.
33. Reis VSL, Santos AM. Conhecimento e experiência de profissionais das equipes de saúde da família no atendimento a pessoas surdas. *Rev. CEFAC*. [Internet]. 2019 [cited on 2022 apr 28];21(1):e5418. Available in: <https://doi.org/10.1590/1982-0216/20192115418>.
34. Francisqueti V, Teston EF, Costa MAR, Souza VS. Sentimentos da equipe de enfermagem ao atender um paciente com deficiência auditiva: desafios do cuidado. *Rev. Educ., Artes e Incl.* [Internet]. 2017. [cited on 2022 apr 28];13(3):31-51. Available in: <http://dx.doi.org/10.5965/1984317813032017031>.
35. Brasil. Decreto nº 5.626 de 22 de dezembro de 2005.Regulamenta a Lei nº 10.436, de 24 de abril de 2002, que dispõe sobre a Língua Brasileira de Sinais - Libras, e o art. 18 da Lei nº 10.098, de 19 de dezembro de 2000. [Internet]. *Diário Oficial da União, Brasília, DF*, p. 28, 23 dez. 2005. Seção 1. Available in: http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2005/decreto/d5626.htm.

*Article extracted from the master's/PhD thesis "COMUNICAÇÃO PELA LÍNGUA BRASILEIRA DE SINAIS NO CUIDADO A CRIANÇA COM DEFICIÊNCIA AUDITIVA: UMA PROPOSTA DE QUALIFICAÇÃO PARA OS PROFISSIONAIS DE SAÚDE DA ATENÇÃO PRIMÁRIA" , Universidade Federal Fluminense, Niteroi, RJ, Brasil, 2022.

Received: 24/01/2022

Approved: 15/03/2023

Associate editor: Dra. Virginia Souza

Corresponding author:

Domisy de Araújo Vieira

Universidade Federal Fluminense

Rua Maria Das Dores nº 141, conjunto Esperança 1.Q02,C03 CEP:69915-126

E-mail: domisyvieira@id.uff.br

Role of Authors:

Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - **Vieira D de A, Silva LF da**. Drafting the work or revising it critically for important intellectual content - **Vieira D de A, Silva LF da, Machado MED, Brandão E da S, Chagas HM de A**. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - **Vieira D de A, Silva LF da**. All authors approved the final version of the text.

ISSN 2176-9133



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).