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# **ORIGINAL ARTICLE**

# Accessibility of adolescents with hearing impairment to health services

Acessibilidade do adolescente com deficiência auditiva aos serviços de saúde

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#### **ABSTRACT**

The aim of this paper was to identify difficulties and ease of access to health services by adolescents with hearing impairment from the perspective of their family caregivers. This is a qualitative study with the participation of 10 caregivers of hearing-impaired adolescents. The results show that caregivers seek health care services sporadically, in cases of illness and/or for regular consultations. The participants reported experiencing prejudice and indifference on the part of health workers at the health care services. Moreover, they stated the health workers have difficulty communicating with the hearing-impaired users, which violates the principles of the Unified Health System and leads to unsatisfactory consultations. It is concluded that the lack of preparation and confidence of health workers significantly hinder the quality and humanization of care since communication is the basis for human understanding.

Descriptors: Hearring loss; Adolescent; Health Services Accessibility; Nursing; Health Communication.

#### **RESUMO**

Objetiva-se identificar a perspectiva do cuidador familiar acerca das facilidades e dificuldades no acesso do adolescente com deficiência auditiva aos serviços de saúde. Estudo de abordagem qualitativa, no qual participaram 10 cuidadores de adolescentes com deficiência auditiva. Os resultados mostram que a busca pelos serviços de saúde ocorre esporadicamente, em casos de adoecimento e/ou consultas regulares. Os participantes relataram preconceito e indiferença vivenciados dentro dos serviços de saúde. Soma-se a dificuldade que os profissionais têm em comunicar-se com os surdos, ferindo os princípios do Sistema Único de Saúde e levando a consultas insatisfatórias. Conclui-se que a falta de preparo e a insegurança dos profissionais dificultam significativamente a qualidade e a humanização da assistência, uma vez que a comunicação é a base para o entendimento humano.

Descritores: Perda auditiva; Adolescente; Acesso aos Serviços de Saúde; Enfermagem; Comunicação em Saúde.

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## INTRODUCTION

Hearing impairment (HI) is the partial or total inability to hear sounds due to the absence of electrical stimuli to the brain. Children with HI may exhibit delays or alterations in speech. Moreover, they may be born with congenital HI or acquire it at the time of delivery, in the neonatal period or throughout their lifetime. A child without HI perceives very low sounds, from zero to 15 decibels (dB), whereas a child with HI may only hear or perceive sounds above 25 dB<sup>(1)</sup>.

Globally, 278 million people have HI, which corresponds to 4.6%, according to the World Health Organization (WHO). Two-thirds of this population are in developing countries. The incidence of HI at birth is one to three out of every 1,000 live births. Currently, the WHO estimates that around 360 million people suffer from disabling hearing loss and 32 million of these sufferers are children<sup>(2)</sup>.

In Brazil, according to the 2010 Census published by the Brazilian Institute of Geography and Statistics (IBGE), 9.7 million people or the equivalent of 5.1% of the population suffer from HI. Of these individuals, 2,147,366 people have severe HI, in which hearing loss ranges from 70 and 90 dB. About one million of this population are adolescents aged 19 or under<sup>(3)</sup>.

Consequently, it is imperative to discuss issues concerning the accessibility of these adolescents to health services. However, despite the laws and policies to ensure people with disabilities have access to public health services and people with HI get adequate care and treatment, divergences are found in practice because health care primarily focuses on curative action and health workers feel unqualified to attend these populations<sup>(4)</sup>.

Workers who provide care to adolescents must consider these users are going through a complex transition from infancy to adulthood, characterized by physical and psychological changes, identity formation and questions about life. Furthermore, adolescence encompasses issues such as bullying, sexuality, socialization and understanding about oneself<sup>(5)</sup>, all of which can be harder to cope with in adolescents with HI.

The official language of deaf people is sign language (LIBRAS, in Brazil); however, hearing-impaired adolescents have difficulty communicating with health workers and, consequently, encounter problems while accessing health services and rarely receive humanized assistance, often leading to insecurity, mistrust and resentment during care<sup>(6,7)</sup>. In this context, health care teams feel uncomfortable because they are unprepared to understand adolescents with HI, which prevents these teams from providing the necessary care<sup>(8)</sup>. Effective communication is understood as a fundamental part of adolescent care and it is considered the basis for forming bonds and providing comprehensive care.

A search in the Virtual Health Library revealed gaps in the literature regarding this subject matter. Results showed health workers do not understand sign language and even children and adolescents with cochlear implants have difficulty communicating with health teams. Moreover, psychosocial difficulties and low self-esteem were also found among deaf people who use oral language<sup>(9)</sup>.

Therefore, it is necessary to reflect on existing laws and their enforcement. Special attention is needed with adolescents since, in addition to all the dimensions of vulnerability they experience, they have a deficiency that hinders communication and often compromises their family and social relationships<sup>(10)</sup>.

In this sense, health workers must be able to assist families in coping with the situation and stimulate the growth and healthy development of adolescents with HI, which modifies negative thoughts, reduces feelings of culpability and attributes new meanings to quality of life.

Consequently, this study aims to identify the perspective of the family caregiver regarding the difficulties and ease of access of adolescents with HI to health services.

#### **METHOD**

This is a qualitative study. Data were collected at a special needs school for the deaf in a municipality in southern Brazil. This school is a philanthropic institution funded through agreements with public authorities and community donations. It provides bilingual education for students with several degrees of deafness.

Ten main caregivers of adolescents with HI enrolled at the institution participated in the study. In this study, adolescents were considered individuals between the ages of 10 and 19, as established by the WHO. The criteria for inclusion were primary caregivers of adolescents with HI attending the special needs school. Caregivers who did not communicate verbally and those who cared for deaf adolescents with other associated pathologies were excluded.

Data were collected in November 2017 using individual semi-structured interviews recorded on an MP4 device and conducted at the school premises. The data were subjected to thematic analysis<sup>(11)</sup>, according to the following six stages: familiarization with the data through transcription, reading and rereading; generation of initial codes by coding important characteristics; grouping of main themes, bringing together the relevant data for each potential theme; verification of themes according to the encoded extracts and generation of an analysis map; definition and assignment of names to themes; creation of the academic analysis report.

The ethical precepts of Resolution nº 466 of 12 December 2012 were observed and data were only collected after the project was approved by the Research Ethics Committee

(CEP), opinion no 2.333.560. Written informed consent was obtained from the participants, at which time they learned about the objective of the research, its risks and benefits and the guarantee of anonymity. The interviewees were identified with the letter "C" (Caregiver) followed by a sequential number.

# **RESULTS**

The 10 participants were the mothers of adolescents with HI between the ages of 10 and 16. All the adolescents had severe deafness. One of the adolescents used a hearing aid and another adolescent had a bilateral cochlear implant. The results were divided into the following two categories: the search for health services; difficulties faced in the care provided by the health services.

# The search for health services

It was observed that the caregivers sought the health services sporadically, in cases of illness, vaccination and/or regular follow-up and development monitoring consultations:

She goes when she has something, pain, or for a vaccine [...] (C6).

When he's got a fever, something like that, I take him (C7).

[...] vaccines when needed [...] and when you see it is something that will not go away alone, a fever that is taking too long (C10).

The search for health services reflects some difficulties regarding access such as the precariousness of care related to the lack of professionals and the absence of a free demand for care:

A shortage of physicians; the most common problem is lack of health workers (C3).

The usual problem of having to stand in line at the early hours of the morning, and when you get there, they cannot always see you on that day [...] we all have to deal with the difficulties, but, of course, his language is the biggest difficulty (C10).

According to these statements, deaf adolescents have the same difficulties when accessing health services as those faced by the general population. Furthermore, they must cope with difficulties communicating, which can increase their vulnerability.

# Difficulties faced in the care provided by the health services

The difficulties confronted when receiving care at the health services include prejudice and indifference. According to the

participants, health care workers classify these adolescents as incapable, debilitated and sick because of their hearing loss. From the perspective of the caregivers, this perception of deaf adolescents is linked to the lack of knowledge and preparation of health workers.

The nurses kept whispering [...] thinking it strange that the boy next to us shouted the whole time and would not calm down while mine did not shout; then the other one said, "Oh, it must be because he is sick" (C1).

[...] and he [the health worker] looked at me really seriously and said, "But do the deaf have earache?" [...] he was amazed that deaf kids can have an earache (C4).

The way she attended us was terrible, it was the only time I felt totally rejected by a doctor [...] it seemed he did not accept his condition of being deaf and his inability to answer [...] it was very fast, she asked and I answered for him and I thought she was very cold (C9).

The participants also stressed difficulties in relation to communication between the adolescents and the health workers and the lack of privacy during care.

[...] especially the language, conversation, communication; there is none (C8).

Difficulty communicating, you know, like, for example, now he knows LIBRAS and could very well communicate using LIBRAS and then there would be none (communication) if I do not interpret (C9).

According to the caregivers, the fact that the health workers have no knowledge of LIBRAS creates a distance between the user and the professionals, as information of the adolescent's health condition must be transmitted, thus preventing autonomy and individualized treatment:

The doctor asks, I signal to her and she shows us [...] where it is hurting [...] but I am the one who does the interpreting for her; the doctor or the nurse does not communicate at all (C6).

During the consultation, I signal to the doctor to say what she is feeling [...] then he examines something, but that is all (C8).

Therefore, the care provided is considered inadequate by the participants due to the lack of understanding that makes it impossible to know the real problem and prevents the deaf adolescent from understanding the adopted therapeutic approaches.

I think a person who knows LIBRAS, an interpreter [...] is lacking and should be provided (C2).

I think they should have a specialized person who knows LIBRAS, who knows how to talk to them, who knows how to understand them [...] (C3).

Health services should provide someone who knows LIBRAS; they should have them because a lot of children need them (C5).

An interpreter. First of all, an interpreter. For the future, at least, because I will not be able to take her but then I will know that place, that establishment has an interpreter who is able to understand her (C6).

In contrast, the presence of a health worker who knows how to communicate with the hearing-impaired adolescents positively affects the progress and outcome of care, revealing the importance of a minimal understanding of LIBRAS.

The difference in care [...] the doctor on duty knew LIBRAS, knew the basics of LIBRAS and managed to start a conversation with her [...] it was huge for her because someone understood her and that was great (C6).

I was surprised by the nurse who wanted to clean his foot, wipe it with saline solution and he would not let him, frightened and crying and the nurse started using sign language and you have no idea how that changed care, how it calmed him [...] (C10).

It is noted that the basic knowledge of LIBRAS favorably alters the outcome of care; however, as noted earlier, this situation is sporadic rather than a common practice in the daily lives of people with HI. In the following statement, C1 reveals the reality of many deaf people when they seek assistance at the health services.

I have never met a doctor, I have never met a nurse, I have never met anyone who knows LIBRAS in all these years. No one communicates with him (C1).

One of the solutions, as mentioned by the interviewees, is the presence of a LIBRAS interpreter at the health services when providing care for deaf adolescents. This professional would enable more effective communication and ensure the privacy of adolescents since they would not need a family member to translate their statements to the physician or nurse.

#### DISCUSSION

Access to health care is a right of all citizens and a duty of the state, according to the Constitution of the Federative

Republic of Brazil of 1988. This right is further endorsed by the principles of the Unified Health System (SUS), which ensure universal unprejudiced access, comprehensive care, problem-solving capacity and equity in health services according to the needs of each individual<sup>(12)</sup>.

Public social inclusion policies aim to expand health actions and guarantee all people receive care regardless of their restrictions, thus promoting equity. Some examples of the National Policy of Persons with Special Needs are Law no 10.436 that regulates LIBRAS and ensures adequate care and treatment for people with disabilities in public services, Law no 10.098 that guarantees access to communication and the Statute of Children and Adolescents that confers protection to the health of this population (4).

Receptive assistance in health care must include qualified listening to help solve problems or minimize the problem situation brought by users. The establishment of bonds is crucial to ensure humanized care and follow-up, when needed<sup>(13)</sup>.

Although receptive assistance improves understanding of the needs of users and facilitates access to health services through dialogue and the promotion of health care actions, many users, when seeking care, report their discontent with the shortage of health workers, difficulties in scheduling appointments, the limited number of consultations offered and the long waiting times. These problems are the greatest barriers to health care<sup>(14)</sup>.

In addition to the participants of this study, the general population also faces obstacles to access, such as the irregular coverage of the Family Health Strategy (FHS), geographical barriers, difficulties scheduling appointments and the lack of referrals and counter-referrals<sup>(15)</sup>.

A study showed that deaf patients are more likely to use emergency services than the non-deaf population. Deaf users who communicate through sign language are a minority population with poor access to health services, such as primary care, due to communication barriers<sup>(16)</sup>.

The deficiency in communication has created gaps in primary care that increase the vulnerability of this population and impair care.

The absence of communication between patients and health workers calls for a mediator for dialogue, which results in a breach of confidentiality. Interaction is also considered unsatisfactory since patients misunderstand the words of health workers, leading to compromised communication during consultations and the consequent inability to respond to the problem situation appropriately given the lack of active participation in the discussion and in decision making<sup>(17)</sup>.

Moreover, in the health service itself, the deaf are confronted with the prejudice and indifference of health professionals who, like society, classify the deaf as incapable, debilitated and sick due to their hearing loss. This fact reveals

the lack of knowledge and preparation of health workers to deal with deaf users and the inequality and obstacles faced by this population in the pursuit of health care<sup>(7)</sup>.

The lack of knowledge of professionals about deafness also affects assistance. Health workers have reported feeling embarrassed, underqualified and incapable of attending users in a satisfactory manner and providing care according to the needs of the deaf community due to inefficient communication<sup>(18)</sup>.

A study showed that nursing professionals do not use successful communication strategies with deaf people in health care because they lack relevant knowledge and skills and may feel fear, impotence, frustration, shame and denial. This fact interferes with the quality of the care provided and leads to misunderstandings, errors in decision making and mistrust on the part of users and their families<sup>(9)</sup>.

Communication in health care is the main means of creating bonds and identifying the needs that bring the person to the service. Thus, the lack of professionals with knowledge of LIBRAS can lead to the distancing of users with HI since information regarding their health condition will be passed on to a companion rather than directly to those who need and seek the service, thus neglecting other principles of ethics, such as patient autonomy and individualized treatment<sup>(19)</sup>.

The deaf community does not use health services in the same way as non-deaf people because their health-related knowledge is acquired by other means due to communication barriers, thus compromising the comprehensiveness and humanization of care and favoring social exclusion<sup>(19)</sup>.

Nursing professionals often lack the knowledge or tools needed to provide care to deaf people. Therefore, they should be trained in communication strategies, such as the use of sign language, to adequately provide care to this population. This would preserve the right of HI users to confidentiality, reduce the stress caused by the presence of third parties during consultations and ensure their full and satisfactory inclusion. The lack of training and awareness on the part of health workers when providing care to hearing-impaired or visually-impaired patients affects assistance to the point that these users avoid seeking health care and prefer not to participate in health promotion activities<sup>(9)</sup>.

Thus, it is extremely important to include such an indispensable communication tool as LIBRAS in undergraduate health care programs and train health workers to interact appropriately so they may give priority to quality dialogue and humanized care and meet the demands of the hearing-impaired population<sup>(20)</sup>.

Universal and comprehensive care, access to information and equity are rights, according to the guidelines of the SUS, that are also violated by the inability of most health workers to communicate with hearing-impaired users. In this perspective, humanizing care is extremely important to ensure the needs of users are understood and to reduce obstacles during assistance, limitations in dialogue and the stigmatization of care for the deaf population<sup>(21)</sup>.

Providing a LIBRAS interpreter significantly improves the execution of care; similarly, professionals who have learned this sign language would enhance performance when exchanging information with deaf users<sup>(22)</sup>. In addition to adolescents, all people with HI should be observed, without generalizations, since impairment is individualized and manifests itself in the emotional, psychological, social and physical dimensions of people's lives<sup>(23)</sup>.

#### CONCLUSION

The results of the present study show hearing-impaired users are confronted with prejudice when using the health services, as well as health workers who are unprepared to provide care to this population. Deaf adolescents encounter the same difficulties when using the health care services as those encountered by the general population, such as long waiting times, difficulty in scheduling consultations, reduced number of available appointment slots and shortage of health care staff. In addition, these users and health workers have difficulties communicating, revealing the social inclusion of the hearing-impaired, as established by law, is not yet a reality.

The lack of preparation and confidence of health workers significantly hinder the quality and humanization of care since communication is the basis for human understanding. The presence of a sign language interpreter can facilitate dialogue and ensure satisfactory care. Moreover, care provided by health workers who have minimal knowledge in LIBRAS is considered satisfactory.

Therefore, it is necessary to reflect on the quality of services provided to deaf adolescents and on the importance of including special needs in health care education in order to construct a practice that includes the study of LIBRAS and aims to humanize care and ensure effective communication. A proposal to reorganize the health service would be the implementation of an on-call sign language interpreter by area of coverage, who can assist during consultations and enable efficient dialogue. Furthermore, the creation of practical manuals with LIBRAS signs for health care workers may also help.

The limitation of this study was the population, composed of the caregivers of hearing-impaired adolescents; a study on the perspective of the adolescents with HI would provide additional insight into the studied subject. In addition, investigating the health workers who provide care for this population would support the creation of strategies to cope with the involved difficulties.

## REFERENCES

- 1. World Health Orgazination. Grades of hearing impairment [Internet]. 2014 [access at: Mar. 28, 2018]. Available at: <a href="http://www.who.int/pbd/deafness/hearing\_impairment\_grades/en/">http://www.who.int/pbd/deafness/hearing\_impairment\_grades/en/</a>.
- World Health Orgazination. Deafness and hearing loss.
   Fact Sheet No 300, Updated March [Internet]. 2015
   [access at: Mar. 28, 2018]. Available at: <a href="http://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss">http://www.who.int/news-room/fact-sheets/detail/deafness-and-hearing-loss</a>.
- 3. Instituto Brasileiro de Geografia e Estatística. Censo demográfico 2010. Rio de Janeiro: Instituto Brasileiro de Geografia e Estatística [Internet]. 2010 [access at: May 19, 2018]. Available at: <a href="https://www.ibge.gov.br/estatisticas/sociais/populacao/9662-censo-demografico-2010.html?edicao=9749&t=destaques">https://www.ibge.gov.br/estatisticas/sociais/populacao/9662-censo-demografico-2010.html?edicao=9749&t=destaques</a>.
- 4. Brasil. Ministério da Saúde. 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. [Internet]. 2002 [access at: Mar. 28, 2018]. Available at: <a href="http://webcache.googleusercontent.com/search?q=cache:http://www.planalto.gov.br/ccivil-03/leis/2002/110436.htm">http://www.planalto.gov.br/ccivil-03/leis/2002/110436.htm</a>.
- Ferreira M, Nelas PB. Adolescências... Adolescentes... Millenium [Internet]. 2016 [access at: Mar. 28, 2018];11(32):141-62. Available at: <a href="https://revistas.rcaap.pt/millenium/article/view/8399">https://revistas.rcaap.pt/millenium/article/view/8399</a>.
- Trecossi MO, Ortigara EPF. Importância e eficácia das consultas de enfermagem ao paciente surdo. Revista de Enfermagem [Internet]. 2013 [access at: Mar. 28, 2018];9(9):60-3. Available at: <a href="http://revistas.fw.uri.br/index.php/revistadeenfermagem/article/view/938/1661">http://revistas.fw.uri.br/index.php/revistadeenfermagem/article/view/938/1661</a>.
- 7. Neves DB, Felipe IMA, Nunes SPH. Care to the deaf patients in the health services: accessibility and obstacles. Infarma [Internet]. 2016 [access at: Feb. 13, 2018]; 28(03):157-65. Available at: <a href="http://revistas.cff.org.br/?journal=infarma&page=article&op=view&path%5B%5D=1713&path%5B%5D=pdf.https://doi.org/10.14450/2318-9312.v28.e3.a2016.pp157-165">https://doi.org/10.14450/2318-9312.v28.e3.a2016.pp157-165</a>.
- 8. Sousa EM, Almeida MAPT. Attention to the deaf in basic care: perspective of the multidisciplinary team. Id on Line Revista Multidisciplinar e de Psicologia [Internet]. 2017 [access at: Feb. 13, 2018];10(33):72-82. Available at: <a href="https://idonline.emnuvens.com.br/id/article/view/589/874">https://idonline.emnuvens.com.br/id/article/view/589/874</a>. <a href="https://doi.org/10.14295/idonline.v10i33.589">https://doi.org/10.14295/idonline.v10i33.589</a>.
- 9. Morente SB, Puertos PEV, Carvajal PC. Estrategias de comunicación de los profesionales de enfermería con personas sordas o ciegas. Index Enferm [Internet] 2016 [access at: Feb. 13, 2018];25(4):253-7. Available

- at: http://scielo.isciii.es/scielo.php?script=sciarttext&pid=S1132-12962016000300007.
- Lobo MC. Deaf adolescent and age conflicts: the look of Psychology. Revista NEP [Internet]. 2016 [access at: Feb. 13, 2018];02(05):132-43. Available at: <a href="https://revistas.ufpr.br/nep/article/view/49565/29655">https://revistas.ufpr.br/nep/article/view/49565/29655</a>. <a href="https://dx.doi.org/10.5380/nep.v2i5.49565">http://dx.doi.org/10.5380/nep.v2i5.49565</a>.
- 11. Braun V, Clarke V. Using thematic analysis in psychology. Qual Res Psychol [Internet]. 2006 [access at: Mar. 28, 2018];3(2)77-101. Available at: <a href="http://eprints.uwe.ac.uk/11735/2/thematic analysis revised">http://eprints.uwe.ac.uk/11735/2/thematic analysis revised</a>.
- 12. Barbiani R, Junques JR, Nova CRD, Asquidamini F. The scientific literature on access within the Brazilian National Health System in Brazil: advances, limitations, and challenge. Saúde Soc [Internet]. 2014 [access at: Mar. 28, 2018];23(03):855-68. Available at: <a href="http://www.scielo.br/pdf/sausoc/v23n3/0104-1290-sausoc-23-3-0855.pdf">https://doi.org/10.1590/S0104-1290-sausoc-23-3-0855.pdf</a>. <a href="https://doi.org/10.1590/S0104-12902014000300010">https://doi.org/10.1590/S0104-12902014000300010</a>.
- 13. Silva TF, Romano VF. About the reception: discourse and practice in the Basic Health Units in the city of Rio de Janeiro. Saúde Debate [Internet]. 2015 [access at: Feb. 13, 2018];39(105):363-74. Available at: <a href="http://www.scielo.br/pdf/sdeb/v39n105/0103-1104-sdeb-39-105-00363.pdf">http://www.scielo.br/pdf/sdeb/v39n105/0103-1104-sdeb-39-105-00363.pdf</a>. <a href="http://dx.doi.org/10.1590/0103-110420151050002005">http://dx.doi.org/10.1590/0103-110420151050002005</a>.
- 14. Arruda CAM, Bosi MLM. User's satisfaction of primary health care: a qualitative study in the Northeast of Brazil. Interface (Botucatu) [Internet]. 2017 [access at: Feb. 13, 2018];21(61):321-32. Available at: <a href="http://www.scielo.br/pdf/icse/v21n61/1807-5762-icse-1807-576220150479.pdf">http://www.scielo.br/pdf/icse/v21n61/1807-5762-icse-1807-576220150479.pdf</a>. <a href="http://dx.doi.org/10.1590/1807-57622015.0479">http://dx.doi.org/10.1590/1807-57622015.0479</a>.
- 15. Viegas APB, Carmo RF, Luz ZMP. Factors associated to the access to health services from the point of view of professionals and users of basic reference unit. Saúde Soc [Internet]. 2015 [access at: Mar. 28, 2018];24(1):100-12. Available at: <a href="http://www.scielo.br/pdf/sausoc/v24n1/0104-1290-sausoc-24-1-0100.pdf">http://www.scielo.br/pdf/sausoc/v24n1/0104-1290-sausoc-24-1-0100.pdf</a>. <a href="http://dx.doi.org/10.1590/S0104-129020150001000008">http://dx.doi.org/10.1590/S0104-129020150001000008</a>.
- 16. McKee MM, Winters PC, Sen A, Zazove P, Fiscella K. Emergency department utilization among deaf American sign language users. Disabil Health J [Internet]. 2015 [access at: Marc. 28, 2018];8(4):573-8. Available at: <a href="https://www.disabilityandhealthjnl.com/article/S1936-6574(15)00084-9/fulltext">https://www.disabilityandhealthjnl.com/article/S1936-6574(15)00084-9/fulltext</a>. <a href="https://doi.org/10.1016/j.dhjo.2015.05.004">https://doi.org/10.1016/j.dhjo.2015.05.004</a>.
- 17. Araújo CCJ, Coura AS, França ISX, Araújo AKF, Medeiros KKAS. Nursing consultation to deaf people: a contextual analysis. ABCS Health Sci [Internet]. 2015 [access at: Feb. 13, 2018];40(1):38-44. Available at: <a href="https://www.portalnepas.org.br/abcshs/article/view/702/667">https://doi.org/10.7322/abcshs.v40i1.702</a>.

- 18. Francisqueti V, Teston EF, Costa MAR, Souza VS. Sentimentos da equipe de enfermagem ao atender um paciente com deficiência auditiva: desafios do cuidado. Revista Educação, Artes e Inclusão [Internet]. 2017 [access at: Mar. 28, 2018];13(3): 31-51. Available at: <a href="http://www.revistas.udesc.br/index.php/arteinclusao/article/view/9529/pdf">http://dx.doi.org/10.5965/198</a> 4317813032017031.
- 19. Souza MFNS, Araújo AMB, Sandes LFF, Freitas DA, Soares WD, Vianna RSM, et al. Main difficulties and obstacles faced by the deaf community in health access: an integrative literature review. Rev CEFAC [Internet]. 2017 [access at: Feb. 13, 2018];19(3):395-405. Available at: <a href="http://www.scielo.br/pdf/rcefac/v19n3/en-1982-0216-rcefac-19-03-00395.pdf">http://www.scielo.br/pdf/rcefac/v19n3/en-1982-0216-rcefac-19-03-00395.pdf</a>. <a href="http://dx.doi.org/10.1590/1982-0216201719317116">http://dx.doi.org/10.1590/1982-0216201719317116</a>.
- Saraiva FJC, Moura RS, Tavares NVS, Júnior BL, Santos IS, Santos RFM. O silêncio das mãos na assistência aos surdos nos serviços de saúde brasileiros.

- Olhares Plurais [Internet]. 2017 [access at: Mar. 28, 2018];02(17):94-104. Available at: <a href="https://revista.seune.edu.br/index.php/op/article/view/283/219">https://revista.seune.edu.br/index.php/op/article/view/283/219</a>.
- Oliveira IG, Poletto M. Vivências emocionais de máes e pais de filhos com deficiência. Rev SPAGESP [Internet].
   2015 [access at: Feb. 13, 2018];16(2):102-19. Available at: <a href="http://pepsic.bvsalud.org/pdf/rspagesp/v16n2/v16n2a09.pdf">http://pepsic.bvsalud.org/pdf/rspagesp/v16n2/v16n2a09.pdf</a>.
- 22. Pires HF, Almeida MAPT. The perception of deaf patients regarding health care services. REC [Internet]; 2016 [access at: Mar. 28, 2018];5(1):68-77. Available at: <a href="https://www5.bahiana.edu.br/index.php/enfermagem/article/view/912/650">https://www5.bahiana.edu.br/index.php/enfermagem/article/view/912/650</a>. <a href="https://dx.doi.org/10.17267/2317-3378rec.v5i1.912">http://dx.doi.org/10.17267/2317-3378rec.v5i1.912</a>.
- 23. Sporek P. Improving the experience of pregnancy and childbirth for deaf people and their families. Pract Midwife [Internet]. 2014 [access at: Mar. 28, 2018];17(4):12-4. Available at: <a href="https://www.ncbi.nlm.nih.gov/pubmed/24804417">https://www.ncbi.nlm.nih.gov/pubmed/24804417</a>.