Perception of students on training for the care for the hearing impaired people

RESUMO | Objetivo: identificar a percepção dos discentes de cursos técnicos e de graduação da área da saúde sobre o atendimento às pessoas com deficiência auditiva nos serviços de saúde e sua capacitação para realizar esse atendimento. Método: Foi realizada uma pesquisa quantitativa, exploratória e descritiva, entre novembro e dezembro de 2021, por meio de questionário online. Resultados: Participaram 198 discentes de uma instituição de ensino de São Paulo.67,68% dos discentes declararam não ter conhecimento em Libras,74,24% discordaram de que foram preparados, durante a formação, para assistir integralmente o paciente com deficiência auditiva. Para 87,88% Libras deveria ser uma matéria obrigatória nos cursos da área da saúde e 80,30% não consideram suficiente o conteúdo que foi abordado sobre o atendimento aos deficientes auditivo. Conclusão: Evidenciou-se a necessidade de capacitação dos discentes da área de saúdepara que o atendimento às pessoas com deficiência auditiva possa ser realizado de maneira qualificada. Descritores: Pessoas com deficiência auditiva; Língua de sinais; Ensino; Capacitação profissional.

ABSTRACT | Objective: to identify the perception of students of technical and undergraduate courses in the health area about the care for people with hearing impairment in health services and their training to perform this care. Method: A quantitative, exploratory and descriptive research was carried out between November and December 2021, using an online questionnaire. Results: 198 students from an educational institution in São Paulo participated. 67.68% of the students declared not having knowledge in Libras; 74.24% disagreed that they were prepared, during training, to fully assist the patient with hearing impairment. For 87.88% Libras should be a mandatory subject in courses in the health area and 80.30% do not consider the content that was addressed on the care of the hearing impaired to be sufficient. Conclusion: There is a need to train students in the health area so that the care for people with hearing impairment can be carried out in a qualified manner.

RESUMEN | Objetivo: identificar la percepción de estudiantes de carreras técnicas y de pregrado en el área de la salud sobre la atención a las personas con deficiencia auditiva en los servicios de salud y su formación para realizar esa atención. Método: Se realizó una investigación cuantitativa, exploratoria y descriptiva entre noviembre y diciembre de 2021, mediante un cuestionario en línea. Resultados: Participaron 198 estudiantes de una institución educativa de São Paulo, el 67,68% de los estudiantes declararon no tener conocimiento en Libras, el 74,24% no estuvo de acuerdo con que estuvieran preparados, durante la formación, para asistir integralmente al paciente con deficiencia auditiva. Para el 87,88% Libras debería ser materia obligatoria en los cursos del área de la salud y el 80,30% no considera suficiente el contenido que se abordó sobre la atención al sordo. Conclusión: Existe la necesidad de formar a los estudiantes del área de la salud para que la atención a las personas con deficiencia auditiva pueda ser realizada de forma calificada.

Palabras claves: Personas con discapacidad auditiva; Lenguaje de señas; Enseñando; Capacitación profesional.

Keywords: Hearing impaired people; Sign language; Teaching; Professional training.

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INTRODUCTION

ommunication is understood as one of the structural bases of society and an essential tool in all types of relationships between people. However, it is only considered effective when the message is received with the same meaning with which it was transmitted. 1 In view of this, in the health area, effective communication is essential to assist the service user in a welcoming, qualified and safe manner.

Some principles of the Unified Health System (SUS) deal with the universality of access to health services and the equality of health care, without prejudice or privileges of any kind. 2 However, the hearing impaired may have their care impaired in relation to hearing patients due to the unpreparedness of health professionals, since communication and information difficulties between professionals and users of health services can compromise care, due to the difficulty of mutual understanding, which makes humanized and inclusive care difficult. 3

Hearing impairment is understood as bilateral, partial or total loss of at least forty-one (41) decibels (dB), measured by audiogram at frequencies of 500Hz, 1,000Hz, 2,000Hz and 3,000Hz. 4

The World Health Organization (WHO) launched the 1st World Report on Hearing, in which there is an estimate that almost 2.5 billion people worldwide, or one in four people will live with some degree of hearing loss by 20505. On the national scene, according to the Brazilian Institute of Geography and Statistics (IBGE), in 2010, the population with hearing impairment totaled 9,717,318, equivalent to almost 6% of the total number of Brazilian people. 6

The assistance to these people in the SUS service network, as well as in companies that hold a concession or permission for public health care services, must be carried out by professionals trained in the use of Libras. 7 Libras is recognized as a legal means of communication and expression, coming from hearing impaired communities in Brazil. The public power in general must guarantee institutionalized forms of supporting the use and dissemination of Libras as an objective means of communication and in current use in the national territory. 8

In this context, there is also a discussion about offering the Libras discipline in training courses for health professionals on a mandatory basis, as well as the training of health professionals so that patients with hearing impairments have effective health care. 5

Given this scenario, this study raised the hypothesis that the education provided in courses in the health area does not have a specific approach to qualify and encourage students to provide effective and inclusive assistance to the population with hearing impairment.

Therefore, the development of this study is justified by considering the data

of the world and Brazilian population, added to the problem of the lack of inclusion of the population with hearing impairment in the health services, ineffective communication and non-adherence to Libras as a facilitator for communication by health professionals since their formation.

Thus, the objective of this research was to identify the perception of students of technical nursing and radiology courses and undergraduate courses in Biomedicine, Nursing, Pharmacy, Physiotherapy, Medicine, Nutrition and Psychology on the care of people with hearing impairment in health services and their training to carry out this service.

METHOD

This is an exploratory and descriptive quantitative research, whose population consisted of students of technical courses in nursing and radiology and undergraduate courses in Nursing, Medicine, Physiotherapy, Nutrition, Biomedicine, Pharmacy and Psychology, from the fifth semester, in the graduation or second module in the technical course, on two campuses of an educational institution.

After approval by the Research Ethics Committee (COEP Opinion No. 5,056,575), the participants were informed about the objective and purpose of the research, they were assured of anonymity and the freedom to accept to participate in the study, without coercion, responding to an online questionnaire of their own free will.

Data collection took place in November and December 2021, through an electronic questionnaire consisting of two parts: the first part deals with sociodemographic data and the second, consisting of statements elaborated with a Likert scale with five levels of agreement, which varied between "totally disagree" and "totally agree".

Data were stored in an electronic spreadsheet for descriptive statistical analysis and relevant associations betwe-

en categorical and numerical variables, based on Pearson's Chi-squared test, considering a 95% security level.

The total number of students who answered the questionnaire was 199, and one did not agree to participate in the research. Thus, the database was composed of the responses of 198 students.

RESULTS

According to the sociodemographic data of the participants, ages ranged between 17 and 44 years, with a mean and median of 24, 4 and 23 years, respectively. Regarding gender, 80.81% (160) of the participants identified themselves as female. As for the shift, 11.62% (23) studied full time, 52.53% (104) in the morning shift, 3.54% (7) in the afternoon shift and 32.32% (64) in the evening shift.

About knowledge in Libras 67.68% (134) of the participants declared having no knowledge, 27.78% (55) declared having basic knowledge, 4.04% (8) intermediate knowledge and 0.51% (1) advanced knowledge. It was highlighted that 56.52% of the students of the Medicine course answered that they had basic knowledge, while in all other courses the students answered, for the most part, that they had no knowledge. The only participant who answered to have advanced knowledge is a student of the technical nursing course.

Most of the answers to the statements focused on totally and partially disagree, with the exception of statements 6 and 7, which focused on totally and partially agree. Table 2 below shows the distribution of response values in relation to the course variable.

Table 2 presents the participants' responses according to the course variable, in which it was possible to observe that there was a statistically significant difference, mainly in the statements "2. My course has prepared me to fully care for all patients, including people with disabilities, taking into account their individualities as health determinants"; "3. My

curriculum includes subjects that address health care for people with hearing impairment"; "4. During my course, I attended Libras classes as a mandatory or optional subject at my educational institution" and; "8. I consider the content that has been addressed so far in my academic training to be sufficient, on the care of people with hearing impairment", since the representativeness of the p value was less than 0.001.

In statement 2, 121 students (61.11%) disagreed totally or partially about the preparation that the course offers to provide comprehensive care, including people with disabilities, taking into account their individualities as health determinants.

Table 01 - Distribution of values in percentage of answers about knowledge in Libras in relation to the variable course, 2021. Course Advanced Intermediary None **Basic** Bachelor's Degree in Biomedicine 0,00% 41,67% 0,00% 58,33% 0,00% Bachelor's Degree in Nursing 19,30% 7,02% 73,68% Bachelor's Degree in Pharmacy 0,00% 7,69% 0,00% 92,31% Bachelor's Degree in Physiotherapy 0,00% 23,53% 5,88% 70,59% 0,00% 4,35% Bachelor's Degree in Medicine 56,52% 39,13% 0,00% 75.00% Bachelor's Degree in Nutrition 25.00% 0.00% Bachelor's Degree in Psychology 0,00% 20,00% 0,00% 80,00% 2,86% 5,71% 57,14% Nursing Technician 34,29% 0,00% 20,00% 0,00% 80,00% Radiology Technician 0,51% 27,78% 4,04% 67,68% Grand total Source: author 's data, 2021.

Table 02 – Distribution of statements response values in relation to the course variable, 2021.										
Statement		Bio	Nur	Phar	Phys	Med	Nutri	Psych	Nur Tec	Téc Radio
During my academic activities, I came across situations in which I needed to communicate with a hearing impaired patient	TD	8	27	7	13	11	9	9	12	5
	PD	1	4	2	1	3	0	0	2	2
	NAND	0	5	2	2	1	2	1	6	6
	PA	3	4	1	1	3	3	0	6	0
	TA	0	17	1	0	5	2	0	9	2
									р	* < 0,026
2. My course has been preparing me to fully care for all patients, including people with disabilities, taking into account their individualities as health determinants	TD	6	27	5	5	7	8	1	4	5
	PD	4	20	4	3	12	2	4	2	2
	NAND	0	1	2	3	1	1	1	5	2
	PA	0	9	2	4	3	3	2	12	3
	TA	2	0	0	2	0	2	2	12	3
									р	* < 0,001
3. My curriculum includes subjects that address heal- th care for people with hearing impairments.	TD	9	40	8	12	6	12	4	2	8
	PD	1	11	4	5	9	2	3	1	1
	NAND	2	2	0	0	2	0	0	5	2
	PA	0	4	1	0	6	0	1	11	4
	TA	0	0	0	0	0	2	2	16	0
									р	* < 0,001
4. I was prepared, during my training, to fully assist the patient with hearing impairment.	TD	10	40	8	14	18	12	3	6	8
	PD	1	14	2	1	2	0	5	1	2
	NAND	1	1	1	1	0	2	0	8	4
	PA	0	2	2	1	3	1	2	14	1
	TA	0	0	0	0	0	1	0	6	0
									р	* < 0,001

5. I learned, during my training, that there are health actions specifically aimed at the hearing-impaired population and their needs	TD	5	22	3	4	3	8	3	2	5	
	PD	0	12	1	0	5	2	1	3	3	
	NAND	2	5	3	4	3	0	1	8	2	
	PA	4	13	5	6	9	3	3	5	2	
	TA	1	5	1	3	3	3	2	17	3	
								p* < 0,003			
Statement		Bio	Nur	Phar	Phys	Med	Nutri	Psych	Nur Tec	Téc Radio	
6. I believe that Libras should be a mandatory subject in all courses in the health area.	TD	0	0	0	0	0	1	2	0	0	
	PD	0	2	1	0	1	0	0	0	2	
	NAND	1	3	0	0	4	2	1	2	2	
	PA	3	8	5	5	4	6	0	5	3	
	TA	8	44	7	12	14	7	7	28	8	
									F	o* < 0,008	
7. I believe that Libras should be an optional subject in all courses in the health area.	TD	3	12	3	3	3	4	1	15	0	
	PD	1	7	2	1	3	1	0	2	3	
	NAND	3	4	1	1	2	3	1	3	1	
	PA	1	15	2	4	2	1	2	4	2	
	TA	4	19	5	8	13	7	6	11	9	
										p* <0,374	
8. I consider the content covered so far in my training on caring for people with hearing impairments to be sufficient.	TD	7	48	10	13	15	13	4	7	4	
	PD	3	6	3	3	6	2	5	7	3	
	NAND	0	0	0	1	2	1	1	11	8	
	PA	2	2	0	0	0	0	0	6	0	
	TA	0	1	0	0	0	0	0	4	0	
									Ŗ	o* < 0.001	

Considering the answers to statement 3, 138 participants (69.70%) totally or partially disagreed that the curriculum includes disciplines that address health care for people with hearing impairment according to the answers to statement 4, 147 participants (74.24%) totally or partially disagreed that they attended mandatory or optional Libras classes offered by the institution. However, most students of the Nursing Technician course totally or partially agreed with statements 2, 3 and 4.

It was observed in statement 8 that

159 students (80.30%) totally or partially disagreed about the content regarding the assistance to people with hearing impairment being sufficiently addressed during professional training.

DISCUSSION

Among all the courses in the health area that made up the research population of this study, according to the results of Table 1, 67.68% of the students answered that they had no knowledge about Libras. However, 60.87% of the students of the Medicine course answered that they had basic or intermediate knowledge and 42.86% of the students of the Technical Nursing course answered that they had advanced, intermediate or basic knowledge. These differences between the courses can be attributed to greater adherence to the optional Libras subject offered by the educational institution or to a personal interest that made them seek knowledge.

Currently, in Brazil, the inclusion of Libras as a curricular subject, according to Decree No. 5626, of December 22nd, 2005, does not occur on a mandatory basis, except in undergraduate and speech therapy courses. 7 It is relevant to consider

 $p^*\ descriptive\ level\ of\ the\ chi-square\ test.$ TD: Totally disagree; PD: Partially disagree; NAND: neither agree nor disagree; PA: Partially agree; TA: Totally agree

Bio: Biomedicine; Nur: Nursing; Phar: Pharmacy; Physio: Physiotherapy; Med: Medicine; Nutri: Nutrition; Psych: Psychology; NurTec: Nursing Technician; Radio Tec: Radio Technician. Source: authors' data, 2021.

offering the Libras subject in courses in the health area on a mandatory basis and that professionals receive specific training to adequately assist patients with hearing impairments. 9

Statement 2 evaluated whether students feel prepared to fully care for all patients, including people with disabilities, most respondents, 61.11%, totally or partially disagreed. The statements "3. My curriculum includes subjects that address health care for people with hearing impairment" and "4. I was prepared, during my training, to fully assist the patient with hearing impairment" presented respectively 68.70% and 74.24% of total and partial disagreement, which denotes the perception of the lack of exposure of the students to the contents and experiences related to the assistance of the patient with hearing impairment, with p<0.001 in the correlation of statements with the variable of each course.

A study carried out with hearing-impaired patients demonstrated that the lack of preparation of professionals impacts on health care, since these patients fail to seek care due to the fear of not being understood. The main consequence is the compromise of the care process, as this patient only seeks assistance as a last resort, when the health problem is already advanced, making a situation that is easy to treat, evolve into complications and irreversible injuries. 10

From the perspective of health professionals who went through situations in which they had to provide assistance to a patient with a hearing impairment, the care provided was difficult due to the communication process, which was mainly attributed to their lack of preparation. 11 Therefore, the lack of training to care for this type of patient transcends the academic training phase and is perpetuated in professional practice. 11

Another survey that offered students in the health area awareness actions, in which simulations of care for hearing impaired patients took place, noticed that before the simulation, 63.6% of students

did not feel capable of efficiently assisting patients, and the others stated that they might be able to do it. After the simulation, more than 98% of these students declared that they were not able to perform such a service. *12 The students' lack of exposure to care situations for people with hearing impairment can limit their perception of the difficulty in establishing effective communication, as well as their perception of their knowledge and preparation for this type of situation.

In the statement "6. I believe that Libras should be a mandatory subject in all courses in the health area", there was total or partial agreement by 87.88% of the students. These results corroborate a study that emphasized the importance of including Libras as a mandatory subject in undergraduate courses in the health area and suggested the implementation of continuing Libras education for professionals working in health services. *13

In the statement "8. I consider the content that has been addressed so far in my training on caring for people with hearing impairment to be sufficient", 80.30% of the students totally or partially disagreed. Thus, the perception of the lack of preparation of future health professionals to work with hearing impaired patients was evident.

Law No. 10,436, of April 24, 2002, which provides for the Brazilian Sign Language and other measures, ensures that institutionalized forms of supporting the use and dissemination of Libras as an objective means of communication must be guaranteed, by public authorities in general and public service concessionaires. It also provides that such organizations must ensure adequate care and treatment for the hearing impaired, in accordance with the legal norms in force. 8

In Brazil, there are a large number of people with hearing impairment and the tendency, according to the 1st World Report on Hearing, is that there are almost 2.5 billion people around the world, or one in four people with some degree of hearing loss by 2050. 5 In this sense, cou-

rses in the health area should train future professionals to assist hearing-impaired patients.

Therefore, it is considered essential to pay close attention to new public policies that reinforce and encourage the training of students and professionals who already work in health services for effective communication and adequate care for patients with hearing impairment. Teaching institutions can also collaborate, through the creation of student fronts focused on this theme, such as the creation of academic leagues, extension courses, promotion of lectures, among other strategies.

CONCLUSION

This study made it possible to identify the perception of students of Technical Nursing and Radiology courses and undergraduate courses in Biomedicine, Nursing, Pharmacy, Physiotherapy, Medicine, Nutrition and Psychology on care for people with hearing impairment in health services and their training to carry out this care, evidenced by the responses to statements in which most students reported not having knowledge in Libras, that they were not prepared to fully assist patients with this disability and that the courses do not offer disciplines that include health care for these people.

The fact that most students have not gone through situations in which they needed to communicate with hearing impaired people can be considered as a limiting factor for their own perceptions about their knowledge on the subject. The students also considered the learning and the content addressed regarding the care of these patients to be insufficient, which reverberates in the lack of training to provide comprehensive assistance to patients with hearing impairment.

The results showed fragility in teaching and training for qualified and safe care for this public. In addition, it made it possible to verify that there is a discussion in the literature of guidelines such as the insertion of disciplines aimed at health and the inclusion of patients with hearing impairment and the mandatory use of Libras in the curricular matrices of courses in the health area. Therefore, the need for training of students in the health area was evidenced so that the assistance to people

with hearing impairment can be carried out in a qualified manner.

This study had as a limitation the low adherence of the students of some courses, because even in the case of an online data collection instrument, the pandemic scenario that lasted during the research, in which face-to-face activities were limited to clinical and laboratory practices, made it difficult to approach and engage the participants.

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