




Knowledge on aphasia held by health professionals of a public hospital

Conhecimento dos profissionais da saúde de um hospital público em relação à afasia

Conocimiento de los profesionales sanitarios de un hospital público sobre la afasia

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Abstract

Introduction: Understanding aphasia is crucial for healthcare professionals providing care to stroke patients. However, there is a need to enhance and refine the information available about aphasia for practical application. It is imperative to assess the knowledge of healthcare professionals regarding aphasia to facilitate effective care planning for patients and their families. **Objective:** This study aims to evaluate the level of knowledge among healthcare professionals in a public hospital concerning aphasia and their approach to patients with aphasia during their hospitalization. **Method:** An online questionnaire was administered to healthcare professionals to assess their understanding of aphasia and their caregiving strategies. **Results:** The findings indicate that healthcare professionals with higher education levels tend to have a better understanding of aphasia. Nevertheless, knowledge gaps persist in various aspects of aphasia. While most professionals feel adequately prepared to interact with patients experiencing aphasia, they acknowledge the challenges involved and express a desire for guidance to enhance their communication skills. **Conclusion:** This study underscores the necessity for comprehensive training of healthcare professionals in the realm of aphasia and effective communication strategies. The development of training programs and guidelines is crucial to better serve patients with aphasia, ensuring the provision of high-quality care.

Keywords: Stroke; Aphasia; Awareness; Public health; Health personnel

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Resumo

Introdução: A compreensão da afasia é fundamental para os profissionais de saúde que prestam assistência a pacientes com AVC. No entanto, a informação disponível sobre a afasia ainda é limitada e insuficiente para uma abordagem eficaz. É de suma importância identificar o conhecimento dos profissionais de saúde a respeito da afasia, a fim de planejar o atendimento aos pacientes e suas famílias.

Objetivo: Avaliar o nível de conhecimento dos profissionais de saúde de um hospital público em relação à afasia e analisar como eles lidam com pacientes com afasia durante o período de hospitalização. **Método:** Realizamos uma pesquisa com profissionais de saúde por meio de um questionário online para avaliar seu conhecimento sobre a afasia e suas estratégias de atendimento. **Resultados:** Os resultados indicam que profissionais de saúde com níveis de educação mais elevados tendem a possuir um entendimento mais sólido da afasia. No entanto, persistem lacunas de conhecimento em diversos aspectos da afasia. Embora a maioria dos profissionais se sinta adequadamente preparado para lidar com pacientes com afasia, eles reconhecem os desafios envolvidos e expressam o desejo de receber orientações para aprimorar suas habilidades de comunicação. **Conclusão:** Este estudo ressalta a necessidade de uma formação mais abrangente para os profissionais de saúde no que diz respeito à afasia e suas estratégias de comunicação. É fundamental o desenvolvimento de programas de treinamento e a elaboração de diretrizes específicas para os profissionais que atuam com esses pacientes, visando proporcionar um atendimento de alta qualidade.

Palavras-chave: Acidente vascular cerebral; Afasia; Conscientização; Saúde pública; Pessoal de saúde

Resumen

Introducción: La comprensión de la afasia es importante para los profesionales de la salud que atienden a pacientes con ACV. Sin embargo, la información sobre la afasia sigue siendo limitada e insuficiente para un enfoque efectivo. Es importante identificar el conocimiento de los profesionales de la salud sobre la afasia para planificar la atención a los pacientes y sus familias. **Objetivo:** Evaluar el conocimiento de los profesionales de la salud de un hospital público sobre la afasia y cómo manejan a los pacientes con afasia durante el período de hospitalización. **Método:** Se realizó una encuesta a profesionales de la salud a través de un cuestionario en línea para evaluar su conocimiento sobre la afasia y sus tácticas de atención. **Resultados:** Se señala un mayor conocimiento sobre la afasia entre los profesionales de nivel superior, pero aún existen lagunas de conocimiento en varios aspectos de la afasia. La mayoría de los profesionales se sienten preparados para manejar a pacientes con afasia, pero reconocen que la atención es desafiante y les gustaría recibir orientación para mejorar sus habilidades de comunicación. **Conclusión:** Este estudio destaca la necesidad de una formación más amplia y completa para los profesionales de la salud sobre la afasia y su comunicación. Es fundamental desarrollar programas de capacitación y guías para atender mejor a estos pacientes y garantizar una atención de calidad.

Palabras clave: Accidente cerebrovascular; Afasia; Conciencia; Salud pública; Personal sanitario

Introduction

Stroke is one of the main cardiovascular complications worldwide and a major concern in Brazil, particularly in the city of Joinville (SC)^{1,2}. The incidence of stroke in this region is 156.2 cases per 100,000 population, comparable to rates in developed countries². Aphasia is one of the most common complications induced by stroke, affecting around a third of post-stroke patients^{3,4}. Aphasia impacts aspects of language, both expressive and receptive, depending on the site and extent of the brain lesion⁵. The condition significantly impacts the interpersonal relationships, social participation and quality of life of people with aphasia (PWA), as well as their significant others⁶.

Raising awareness of the public on aphasia alone does not bring about major changes. However, improving the knowledge of health professionals that regularly treat PWA and examining the way they communicate and interact with these patients is paramount⁷. This understanding is critical to developing multidisciplinary guidelines and devising intra-hospital approaches aimed at both health professionals and family members of PWA. In all countries, the level of awareness about aphasia is generally low, and knowledge held on the condition is lower still^{8,9,10,11}. This low understanding might be due to the lack of a convincing unified message on the disease, poor coordination among organizations and campaigns, the tendency of reaching audiences already familiar with aphasia, or failure to involve people with PWA, their family members and health professionals⁹.

Fostering greater understanding about aphasia among health professionals is of critical importance, given evidence showing that this group often face major challenges interacting with PWA. These challenges might be attributable to lack of knowledge, education or proper training in communication skills^{12,13,14}. In this context, identifying and understanding the most common strategies is important, most notably, the practice of reinforcing the message when it is not understood, simplifying sentence structure, and conveying one idea at a time. These strategies are designed to improve the effectiveness of delivering healthcare to patients with aphasia¹⁵. A study conducted in the city of Melbourne, Australia, revealed that health professionals found it hard to communicate with PWA. Communicating was found to be a negative

experience because of its time-consuming nature, the noisy environment, and lack of time available, particularly on the nursing ward. In addition, this lack of skills and ability to communicate with PWA may be attributed to poor training, despite wanting to help patients and do a good job¹⁴.

A good level of knowledge on aphasia of health professionals is critical for ensuring quality effective care for stroke patients. Therefore, the objective of the present study was to assess the knowledge on aphasia held by health professionals engaged in an inpatient stroke service of a public hospital and to determine how they manage patients with aphasia.

Method

Study design and sampling

A cross-sectional, observational, descriptive analytical study with a quantitative approach was conducted. The study was carried out in July 2020 through the application of an online questionnaire. The online method was chosen to minimize contact and the need to travel to the hospital amid the COVID-19 pandemic. A non-probabilistic, convenience sample was used that included health professionals (Psychologists, Nutritionists, Occupational Therapists, Nurses, Physical Therapists, Nursing Technicians and Resident Physicians) that worked at the São José Municipal Hospital within the inpatient unit for stroke patients. The hospital where the study was performed is a referral center for stroke cases in the Joinville region. The site has a multidisciplinary team including resident physicians and neurologists and a dedicated stroke inpatient unit. The professionals invited to take part in the study had been working in this service for at least one year. Exclusion criteria were professionals that had received the questionnaire but were not part of the stroke inpatient service and those whose responses were incomplete. The study was approved by the local Research Ethics Committee under permit no.4.097.739, and all participants signed the Free and Informed Consent Form online.

Data Collection and Variables Gathered

The data gathered by online questionnaire were previously defined by the authors and probed the knowledge held by the health professionals about aphasia and the care strategies used. The questions devised were based on previous surveys, such as

that by Marcella Carragher *et al.* (2020), which highlighted that health professionals find aphasia time consuming, do not know how to help, limit conversations with PWA, want to know how to help, and feel good after successful communication with patients with aphasia. The questionnaire also included questions addressing knowledge about aphasia, based on the study by Welsh¹⁶. Thus, the questionnaire comprised Charts 1, 2 and 3. The Google Forms online platform was employed to collect responses. In addition, sociodemographic data and characteristics regarding level of professional qualifications were collected for each participant. All participants were sent an electronic link to the online questionnaire by email for completion.

Statistical Analysis

The variables age, gender, area of expertise, length of training and time working with aphasia patients were described in tables. Quantitative variables were expressed as means and standard deviation or median and interquartile range (IQR), whereas qualitative variables were expressed as absolute number and percentage. Responses to questions on speech-language therapy and knowledge about aphasia were compared according to level of professional qualification: technical (nursing technicians) versus higher (resident physicians, nurses, nutritionists, occupational therapists and physical therapists). The Chi-square and/or Fisher's exact test was employed to compare responses according to level of qualification. The responses to questions

on knowledge of aphasia were also assessed for correctness, where the mean of correct responses were compared for the two groups according to level of qualification using the Mann-Whitney test. A p -value <0.05 was considered significant. All data collected were tabulated in a Microsoft Excel spreadsheet and later analyzed using the statistical software package SPSS version 23.

Results

The study involved a total of 33 health professionals with a mean age of 40.6 years (range, 24-59 years). The gender profile of the sample revealed a predominance of females (78.8%, $n=26$). Regarding professional status, 48.5% of participants were nursing technicians and 51.5% higher level practitioners, including 6 resident physicians, 7 nurses, 2 physical therapists, 1 nutritionist, 1 occupational therapist and no psychologists. Median length of training of the hospital personnel was 9 years (IQR, 5-15 years). In response to the question on the first time participants heard the term "aphasia", 54.5% reported hearing this at university; 42.4% at the hospital and 3% knew someone with aphasia in the family. Of the group ($n=14$) stating they had heard the term in the hospital, 36.3% ($n=12$) were technical level personnel. Thus, only 2 higher-level practitioners had not learned of the condition at university but instead in the hospital setting. Median time working with PWA was 3 years (IQR, 2-6 years) (Table 1).

Table 1. General characteristics of sample ($n=33$)

Variables	Overall ($n= 33$)	
	Mean or Frequency	% or Standard Deviation
Gender		
Female	26	78.8%
Age	40.6	10.4
Profession		
Nursing technician	16	48.5%
Resident physician	6	18.2
Nurse	7	21.2
Physical therapist	2	6
Nutritionist	1	3
Length of training in years (median; interquartile range)	9	5/15
First heard of aphasia		
Hospital	14	42.4%
University	18	54.5%
Acquaintance with aphasia	1	3%
Number of years working with people with aphasia (median; interquartile range)	3	2/6

Source: data from survey

Line 1 – knowledge held by professionals about aphasia

The first line of questioning probed knowledge held by respondents on aphasia (Chart 1). The results for mean number of correct responses

according to professional level (higher versus technical) are presented in Table 2. Higher-level professionals had a greater mean number of correct answers for this line of questions than technical-level practitioners ($p=0.005$).

Table 2. Knowledge on aphasia held by health professionals and level of professional qualification

Variable	Professional level				p-value*
	Higher (n=17)		Technical (n=16)		
	Mean	SD	Mean	SD	
Number of correct responses	9.3	0.9	8.1	1.2	0.005

Chart 1. Knowledge about aphasia

Questions regarding knowledge about aphasia	Yes	No	NS*
1) Can aphasia patients have difficulty writing, reading, understanding and speaking?			
2) Is the only way of communicating with aphasia patients by speaking very loudly?			
3) Is the only way of communicating with aphasia patients by speaking/conversing?			
4) Do more anterior brain lesions affect the oral expression (non-fluent) of aphasia patients more?			
5) Is language situated, in most cases, in the right hemisphere?			
6) Is stroke the only cause of aphasia in patients?			
7) Can aphasia patients have dysarthria?			
8) Do all aphasia patients have dysphagia (difficulty swallowing)?			
9) Is intelligence affected in aphasia?			
10) Do people with aphasia always have motor complications?			

*NS= Not sure

More specifically, one of the questions on knowledge about aphasia, asking whether aphasia patients can have dysarthria, proved significant ($p= 0.038$) for mean number of correct answers according to level of qualification, where higher-level respondents had a greater number of correct responses than technical-level professionals. Along this same line, another question probed whether aphasia patients have dysphagia (difficulty swallowing), with 100% of respondents stating they believed all patients with aphasia have dysphagia.

When asked whether more anterior brain lesions affect oral expression of aphasia patients, 54.5% (n=18) of respondents stated “Yes”, while 45.5% (n=15) stated “No” or “Not sure”. Of the 15 participants stating “No” or “Not sure”, 5 were higher-level and 10 technical-level practitioners.

One of the questions in this line probed whether language is generally located in the right hemisphere, to which 39.4% (n=13) of respondents stated “No”, and 60.6% (n=20) “Yes” or “Not sure”. Of this latter group, 8 were higher-level and 12 technical level professionals

Line 2 – Speech-language pathology role and care management of aphasia patients

One series of questions was posed, covering both speech-language pathology practice (Chart 2) and interactions with aphasia patients (Chart 3). Analysis of responses was performed for the overall sample of 33 professionals, including frequency of responses and corresponding percentages, as well as their correlation with professional level of participants.

Regarding the questions on speech-language pathology (Table 3). 78.8% (n=26) of professionals acknowledged that speech-language pathologists have a greater ability to communicate with aphasia patients. The level of recognition of this role was the same for both professional levels (technical and higher), with 13 respondents for each category. Additionally, 90.9% of participants advised family

members to seek a speech pathologist to treat aphasia patients. The survey also revealed that, while 90.9% (n=30) of professionals provide families with explanations on what aphasia is and how best to communicate with these patients, 97% (n=32) expressed the desire to receive guidance to improve their care management of aphasia patients and/or advise families more effectively.

Table 3. Questions regarding speech-language pathology role

Variables	Overall (n=33)		Professional level				p-value*
			Technical (n=17)		Higher (n=16)		
	Yes n(%)	No n(%)	Yes n(%)	No n(%)	Yes n(%)	No n(%)	
S1	26 (78.8%)	7 (21.2%)	13 (81.3%)	3 (18.8%)	13 (76.5%)	4 (23.5%)	1.000
S2	30 (90.9%)	3 (9.1%)	13 (81.3%)	3 (18.8%)	17 (100%)	0 (0%)	0.103
S3	32 (97%)	1 (3%)	15 (93.8%)	1 (6.3%)	17 (100%)	0 (0%)	0.485
S4	30 (90.9%)	3 (9.1%)	14 (87.5%)	2 (12.5%)	16 (94.1%)	1 (5.9%)	0.601
S5	30 (90.9%)	3 (9.1%)	14 (87.5%)	2 (12.5%)	16 (94.1%)	1 (5.9%)	0.601
S6	30 (90.9%)	3 (9.1%)	14 (87.5%)	2 (12.5%)	16 (94.1%)	1 (5.9%)	0.601

Notes: S1 = Do you think speech pathologists have a greater ability to communicate with aphasia patients?; S2 = Do you think it would be helpful to have some orientation, drawings, yes or no signs, produced by the speech pathologist to communicate with aphasia patients?; S3 = Would you like to receive guidance on how to improve your care with aphasic patients and/or how to advise family members?; S4 = Do you advise family members to seek a speech pathologist to treat aphasia patients?; S5 = Do you explain to family members what aphasia is?; S6 = Do you explain to family members how to communicate with aphasia patients?
* Chi-squared or Fisher test

Chart 2. Speech- language pathology role

Questions regarding speech-language pathology role	Number
S1 = Do you think the speech-language pathologists have a greater ability to communicate with aphasia patients?	
S2 = Do you think it would be helpful to have some orientation, drawings, yes or no signs, produced by the speech pathologist to communicate with aphasia patients?	
S3 = Would you like to receive guidance on how to improve your care with aphasia patients and/or how to advise family members?	
S4 = Do you advise family members to seek a speech pathologist to treat aphasia patients?	
S5 = Do you explain to family members what aphasia is?	
S6 = Do you explain to family members how to communicate with aphasia patients?	

1. totally disagree; 2. partially disagree; 3. partially agree. 4. totally agree

The results showed that 84.8% (n=28) of professionals felt prepared to manage aphasia patients. However, 63.6% (n=21) of this same group felt that managing patients with the condition was more challenging (Table 4).

Table 4. Questions regarding management of aphasia patients

Variables	Overall (n=33)		Professional qualification				p-value*
	Yes n(%)	No n(%)	Technical (n=16)		Higher (n=16)		
			Yes n(%)	No n(%)	Yes n(%)	No n(%)	
M1	28 (84.8%)	5 (15.2%)	13 (81.3%)	3 (18.8%)	15 (88.2%)	2 (11.8%)	0.656
M2	21 (63.6%)	12 (36.4%)	10 (62.5%)	6 (37.5%)	11 (64.7%)	6 (35.3%)	1.000
M3	17 (51.5%)	16 (48.5%)	8 (50.0%)	8 (50.0%)	9 (52.9%)	8 (47.1%)	1.000
M4	24 (72.7%)	9 (27.3%)	14 (87.5%)	2 (12.5%)	10 (58.8%)	7 (41.2%)	0.118
M5	23 (69.7%)	10 (30.3%)	9 (56.3%)	7 (43.8%)	14 (82.4%)	3 (17.6%)	0.141
M6	12 (36.4%)	21 (63.6%)	7 (43.8%)	9 (56.3%)	5 (29.4%)	12 (70.6%)	0.481
M7	25 (75.8%)	8 (24.2%)	12 (75%)	4 (25%)	13 (76.5%)	4 (23.5%)	1.000

Notes: M1 = Do you feel prepared to manage patients with aphasia?; M2 = Communication with aphasia patients can be hard. When you need permission to perform a procedure or treatment in aphasia patients, before talking to the caregiver or family member, do you seek consent directly from the patient?; M3 = Do you think patients with aphasia, during the hospital stay, fully understand all of their treatment and situations involved in hospitalization, compared with other patients without aphasia? ; M4 = Do you think that aphasia patients understand the way in which you explain the care, procedures or information?; M5 = Do you feel more confident when the family is present?; M6 = Do you think it is easier to see a patient with aphasia than with another condition?; M7 = Compared with other consultations, do you usually set aside extra time for aphasia patients due to language demands?

* Chi-squared or Fisher test

Chart 3. Management of aphasia patients

Questions regarding management of aphasia patients	Number
M1 = Do you feel prepared to manage patients with aphasia?	
M2 = Communication with aphasia patients can be hard. When you need permission to perform a procedure or treatment in aphasia patients, before talking to the caregiver or family member, do you seek this consent directly from the patient?	
M3 = Do you think patients with aphasia, during the hospital stay, fully understand all of their treatment and situations involved in hospitalization, compared with other patients without aphasia?	
M4 = Do you think that aphasia patients understand the way in which you explain the care, procedures or information?	
M5 = - Do you feel more confident when the family is present?	
M6 = Do you think it is easier to see a patient with aphasia than with another condition?	
M7 = Compared with other consultations, do you usually set aside extra time for aphasia patients due to language demands?	

1. totally disagree; 2. partially disagree; 3. partially agree. 4. totally agree

Discussion

In the present study, the results revealed that higher-level professionals held greater knowledge on aphasia, irrespective of length of training or time working with aphasia patients. According to the survey, the health professionals acknowledged that speech-language pathologists had greater ability to communicate with aphasia patients, and that it would be helpful to have guidance and resources prepared by the speech pathologist to improve patient care or advise family members. The majority of degree-qualified health professionals first heard the term “aphasia” during their university course. This is an important point, given that nursing technicians are the professionals with greatest contact time with patients, and the lack of knowledge, education and training of skills to resolve communication problems may lead to doubts when treating patients with aphasia^{12,13,14}.

Regarding the questions addressing knowledge about aphasia, 84.4% of professionals stated that aphasia patients can present dysarthria, where this differed according to professional qualifications, with a greater rate in the higher-level group than the technical level. In the study by Lima *et al.* (2019) carried out at the same hospital, results showed that PWA had a higher prevalence of dysarthria compared to stroke patients without aphasia, where presence of dysarthria predicted the occurrence of aphasia on the univariate analysis⁽⁴⁾. The results of the present survey revealed that 100% of respondents believed aphasia patients have dysphagia, a view possibly attributed to individual experience, since the literature reports a 55% chance of developing dysphagia after stroke in the acute phase¹⁷, and a 17% chance of co-occurrence of dysphagia and aphasia¹⁸.

The study results highlight the importance of having a sound understanding of the aspects involving aphasia. More anteriorly-located lesions impair language expression and are thus associated with non-fluent cases⁽¹⁹⁾. Moreover, the left-hemisphere tends to exhibit dominance for language⁽²⁰⁾. However, the survey showed that professionals were unsure about these aspects, with 45.5% answering the question on impact of anterior lesions on oral expression in aphasia patients incorrectly, and over half failing to correctly answer the item about the cortical region responsible for language. These findings point to the need for broader training on

knowledge about aphasia, emphasizing that the left-hemisphere is dominant for language²⁰, a pertinent fact for management of and communication with right-sided hemiplegia patients²¹.

However, speech-language pathologists, during clinical training, typically receive no additional training on practical techniques for communicating effectively with PWA²². Nevertheless, there is greater focus and knowledge of language, favoring a different perspective in practice involving aphasia patients. For example, the role of speech-language pathologists in the hospital setting is to restore language abilities, promoting independence for functioning and communication in these patients²³. In other health areas, including medicine and nursing, students report a lack of preparation to handle the basic requirements of communication and interaction inherent to contact with the client²⁴. Virtually all respondents felt it would be helpful to have some guidance, drawings, or yes/no signs produced by the speech-language pathologist to aid communication with aphasia patients. Aphasia communication training is effective and strategies for promoting communication can improve patient involvement in their own treatment²⁵. A study of speech-language pathologists in Brazil identified and classified the 10 most commonly adopted communication strategies by these professionals when working with aphasia patients. The strategies identified included reformulating the message when this is not understood, simplifying sentence structure, and conveying only one idea at a time. Also, speech-language pathologists showed a tendency to tolerate silences on the part of the interlocutor, establish a relationship of equality recognizing the lead, positions and opinions of aphasia patients, to offer encouraging prompts, and interpret both the patient’s body language and eye-contact, together with speech. Further, the strategies included the promotion of shared experiences such as conversation points, the use of visual aids, besides the deployment of written materials and other resources supporting communication¹⁵. Strategies such as use of images, written information, gestures and lower speech rate have been previously reported in literature as valid techniques for facilitating communication with PWA²⁶. Moreover, the ability of professionals to create a bond with patients through conversations can improve health care aspects¹².

Additionally, the study by Queirós *et al.* (2022) demonstrated the utility of developing specific



communication skills for physical therapist interventions involving older adults with aphasia. In this respect, 4 skills, namely, knowledge, empathy, relationship/alliance, active listening and accessible/comprehensible language, attained a score of 100% consensus among the experts, and were deemed highly important to develop. The most critical communication skills for physical therapists engaged in interventions with older adults with aphasia was positive language, tactile contact, and support for autonomy²⁷.

Health professionals need support which may include ongoing education, on-the-job training, and a change in culture with a focus on PWA-centered care^{14,28}. Running training programs on communication with aphasia patients is vital to instill health professionals with greater confidence and control during consultations²⁷.

Most respondents felt prepared to manage patients with aphasia, but perceived difficulties communicating and felt more confident when family was present. Health information is only provided to PWA in the presence of a family member or caregiver²⁹, and health professionals feel that communication with PWA is not adequately resourced^{14,29}. Therefore, it is critical that patients, family members and health professionals have access to tailored resources which facilitate communication during the rehabilitation process of PWA³⁰.

The complexity of communication requires a responsive approach on the part of health professionals to involve patients in discussions and decision-making on their own health^{14,31}. The present survey found that 63.6% of professionals seek permission directly from the aphasia patient first, before talking to the caregiver or family, when consent is needed to perform a procedure or treatment. However, PWA report challenges in participating in deeper conversations and end up being placed in a passive role, where one factor influencing this issue is a lack of knowledge about aphasia, both on the part of communication partners and health professionals^{32,33}. Thus, promoting the active involvement of PWA in discussions about their clinical picture and rehabilitation is essential, although the importance of the presence of family members and a party responsible for key decisions should be recognized.

Also, regarding care delivery, half of the health professionals surveyed in the current study believed that aphasia patients, during the hospital stay, have

an adequate understanding of their treatment and situations involved in hospitalization relative to patients without aphasia. Nonetheless, studies reveal that individuals with aphasia and their family members report dissatisfaction in the information received from health services^{14,31}. Few health providers voice concerns over their own abilities and skills, where lack of training and support is clearly a problem for health professionals to effectively manage aphasia patients³⁴. This scenario heightens the need for communication training aimed at health professionals who work directly with aphasia patients.

The study by Wallace (2023) identified best practice recommendations in aphasia by incorporating the perspective of PWA and their significant others. The study found that the most highly ranked theme for people with aphasia was, "Increased awareness about: what aphasia is, the impacts of aphasia, and how to communicate with a person with aphasia". The theme ranked most highly by significant others was, "Aphasia services should be person and family centered"³⁰.

Building on these results, future studies could investigate the confidence and communication skills of health professionals in other disciplines, such as physical therapy, occupational therapy, nursing and medicine. These efforts can help reduce some of the potential barriers faced by health professionals and PWA in the health setting, and prompt reflection on including the perspective of PWA in devising clinical practice recommendations and guidelines to improve aphasia services and offer more patient and family-centered care.

This study has some limitations, the first of which is the relatively low number of professionals who answered the survey, warranting further investigations involving a larger sample and other sites to better gauge the knowledge held by these professionals on aphasia. A second limitation was the fact the study was applied through an online form, where this may have led to unresolved queries at the time of the survey, with in-person application being more recommended.

Study strengths include the fact that this is one of only few investigations analyzing the knowledge of health professionals on aphasia and their approach to managing patients with aphasia during care delivery. The same study approach involving this relevant theme can be applied in other settings and larger samples. Future research could explore



multidisciplinary recommendations for planning intra-hospital approaches for both professionals and family of PWA.

The results of the present study can be of clinical value to any service, informing the implementation of training programs on communication with PWA tailored according to area of expertise, care setting and experience.. In addition, hospital policies and procedures can be devised to screen for patients with more severe communication difficulties on admission and provide them with a more humanized patient-centered care service. Lastly, these results underscore the need to run training programs for health professionals and to produce materials that aid communication with patients who have communication disabilities.

Final considerations

The results of this study underscore the importance of comprehensive training and education on aphasia and communication with patients with communication disabilities. The implementation of training programs during clinical training of health professionals, with an emphasis on the patient-centered approach, is pivotal to improving communication and offering more humanized care to aphasia patients. The speech-language pathologist is the best-placed professional to develop such training and guidance programs within their sphere of practice. Lastly, raising awareness of health professionals about aphasia will allow the provision of information and guidance to patients and their family members, promoting greater understanding and acceptance of aphasia.

References

1. WORLD HEALTH ORGANIZATION [Internet]. The top 10 causes of death. [citado em 2018 e atualizado em 2020 Dez 9]. Disponível em: <https://www.who.int/news-room/fact-sheets/detail/the-top-10-causes-of-death>.
2. Cabral NL, Longo AL, Moro CHC, Amaral CH, Kiss HC. Epidemiologia dos Acidentes Cerebrovasculares em Joinville, Brasil. *Arq Neuropsiquiatr*. 1997; 55(3-A): 357-63. DOI:10.1590/S0004-282X1997000300002
3. Engelter ST, Gostynski M, Papa S, FREI M, Nascimento C, Ajdacic-gross V et al. Epidemiology of aphasia attributable to first ischemic stroke: incidence, severity, fluency, etiology, and thrombolysis. *Stroke*. 2006; 37(6): 1379 -84. DOI: 10.1161/01.STR.0000221815.64093.8c
4. Lima RR, Rose ML, Lima HN, Cabral NL, Silveira NC, Massi GA. Prevalence of aphasia after stroke in a hospital population in southern Brazil: a retrospective cohort study. *Top Stroke Rehabil*. 2019; 27(3): 215-23. DOI:10.1080/10749357.2019.1673593
5. Damasio AR. APHASIA. *N Engl J Med Overseas Ed*. 1992; 326: 531-9. DOI: 10.1056/NEJM199202203260806
6. Cruice M., Worrall L., Hickson L., & Murison R. (2003). Finding a focus for quality of life with aphasia: Social and emotional health, and psychological well-being. *Aphasiology*, 17(4),333-53. DOI: 10.1080/02687030244000707
7. Worrall L. The seven habits of highly effective aphasia therapists. *Aphasiology*. 2018; 32(sup1): 248. DOI: 10.1080/02687038.2018.1487022
8. Code C. The Implications of Public Awareness and Knowledge of Aphasia around the World. *Ann Indian Acad Neurol*. 2020 Sep; 23(Suppl 2): S95-S101. DOI: 10.4103/aian.AIAN_460_20
9. Simmons-Mackie N, Worrall L, Shiggins C, Isaksen J, Memenamin R, Rose T et al. Beyond the statistic: a research agenda in aphasia awareness. *Aphasiology*. 2020,34(4): 458-71. DOI:10.1080/02687038.1702847
10. Aljenaie K, Simmons-Mackie N. Public awareness of aphasia in Kuwait, *Aphasiology*, 2021. DOI: 10.1080/02687038.2021.1942773
11. Nascimento D et al. Consciência sobre Afasia: Inquérito realizado no município de Florianópolis.TCC (graduação) - Universidade Federal de Santa Catarina. Centro de Ciências da Saúde. Fonoaudiologia,2015. Disponível em: <https://repositorio.ufsc.br/xmlui/handle/123456789/133450>
12. Legg C, Young L, Brye A. Training sixth-year medical students in obtaining case-history information from adults with aphasia. *Aphasiology*. 2005; 19(6): 559-75. DOI: 10.1080/02687030544000029
13. Murphy J. Perceptions of communication between people with communication disability and general practice staff. *Health Expect*. 2006; 9(1): 49-59. DOI: 10.1111/j.1369-7625.2006.00366.x
14. Carragher M, Steel G, O'halloran R, Torabi T, Johnson H, Taylor NF et al. Aphasia disrupts usual care: the stroke team's perceptions of delivering healthcare to patients with aphasia. *Disabil Rehabil*. 2020; 43(21)3003-14. DOI: 10.1080/09638288.2020.1722264
15. Chiu E. Estratégias de comunicação utilizadas por fonoaudiólogos de indivíduos com alterações adquiridas de linguagem.TCC (graduação) - UNIFESP, 2022. Disponível em: <https://repositorio.unifesp.br/handle/11600/65966>
16. Welsh J, Szabo GB. Teaching Nursing Assistant Students about and Communication. Thieme Medical Publishers. *Semin Speech Lang* 2011; 32(3): 243-255. DOI: 10.1055/s-0031-1286178
17. Guyomard V, Fulcher RA, Redmayne O, Metcalf AK, Potter JF, Myint PK. Effect of dysphasia and dysphagia on inpatient mortality and hospital length of stay: a database study. *J Am Geriatr Soc*. 2009; 57(11): 2101-6. DOI: 10.1111/j.1532-5415.2009.02526.x

18. Flowers HL, Silver F, Fang J, Rochon E, Martino R. The incidence, co-occurrence, and predictors of dysphagia, dysarthria, and aphasia after first-ever acute ischemic stroke. *J Commun Disord.* 2013; 46(3): 238-48. DOI: 10.1016/j.jcomdis.2013.04.001
19. Vieira ACC, Roazzi A, Queiroga BM, Asfora R, Valença MM. Afasia e Áreas Cerebrais: Argumentos Prós e Contras à Perspectiva Localizacionista. *Psicol Reflex Crit.* 2011; 24(3): 588-96. DOI:10.1590/S0102-79722011000300020
20. Springer JA, Binder JR, Hammeke TA, Swanson SJ, Frost JA, BELLGOWAN PSF et al. Language dominance in neurologically normal and epilepsy subjects: a functional MRI study. *Brain.* 1999; 122(11): 2033-46. DOI: 10.1093/brain/122.11.2033
21. Hillis AE. Aphasia: Progress in the last quarter of a century. *Neurology.* 2007; 69(2): 200-13. DOI: 10.1212/01.wnl.0000265600.69385.6f
22. Finch E, Fleming J, Brown K, Lethlean J, Cameron A, Mcphail SM. The confidence of speech-language pathology students regarding communicating with people with aphasia. *BMC Med Educ.* 2013; 13: 92. DOI: 10.1186/1472-6920-13-92.
23. Goulart BNG, Almeida CPB, Silva MW, Oenning NSX, Lagni VB. Caracterização de acidente vascular cerebral com enfoque em distúrbios da comunicação oral em pacientes de um hospital regional. *Audiol Commun Res.* 2016; 21: 1-6. DOI: 10.1590/2317-6431-2015-1603
24. Hill AE, Davidson BJ, Theodoros DG. A review of standardized patients in clinical education: Implications for speech-language pathology programs. *Int J Speech Lang Pathol.* 2010; 12(3): 259-70. DOI:10.3109/17549500903082445
25. Cameron A, Mcphail S, Hudson K, Fleming J, Lethlean J, Tan Ju N et al. The confidence and knowledge of health practitioners when interacting with people with aphasia in a hospital setting. *Disabil Rehabil.* 2018; 40(11): 1288-93. DOI: 10.1080/09638288.2017.1294626
26. Shelton C, Shryock M. Effectiveness of communication/interaction strategies with patients who have neurological injuries in a rehabilitation setting. *Brain Inj.* 2007; 21(12): 1259-66. DOI: 10.1080/02699050701716935
27. Queirós SCM, Santos LDA, Couto GR, d'Amaral RFMMP. As competências de comunicação dos fisioterapeutas na intervenção com idosos com afasia: Estudo Delphi. *Com. Ciências Saúde.* 2022; 33(01): 163-174. DOI: <https://doi.org/10.51723/ccs.v33i01.919>
28. Forsgren E, Hartelius L, Saldert C. Improving medical students' knowledge and skill in communicating with people with acquired communication disorders. *International journal of speech-language pathology*, v. 19, n. 6, p. 541-50, 2017. DOI:10.1080/17549507.2016.1216602
29. Knight K, Worrall L, Rose T. The Provision of Health Information to Stroke Patients Within an Acute Hospital Setting: What Actually Happens and How Do Patients Feel About It?. *Top Stroke Rehabil.* 2006; 13(1): 78-97. DOI:10.1310/FC6M-P7L0-W3XD-4WAE
30. Wallace SJ, Anemaat L, Attard M, Baker C, Berg K, Carragher M, Isaksen J, Ryan B, Simmons-Mackie N, Wang E, Worrall L & Shrubsole k. Best Practice in Post-Stroke Aphasia Services According to People with Lived Experience. A Modified Nominal Group Technique Study. *Aphasiology*, 2023: 1-23. DOI: 10.1080/02687038.2023.2262693
31. Tomkins B, Siyambalapatiya S, Worrall L. What do people with aphasia think about their health care? Factors influencing satisfaction and dissatisfaction. *Aphasiology.* 2013; 27(8): 972-91. DOI:10.1080/02687038.2013.811211
32. Clancy L, Povey R, Rodham K. "Living in a foreign country": experiences of staff-patient communication in inpatient stroke settings for people with post-stroke aphasia and those supporting them. *Disabil Rehabil.* 2018; 42(3): 324-34. DOI: 10.1080/09638288.2018.1497716
33. Johansson MB, Carlsson M, Sonnader K. Communication difficulties and the use of communication strategies: From the perspective of individuals with aphasia. *Int J Lang Commun Disord.* 2012; 47(2): 144-55. DOI:10.1111/j.1460-6984.2011.00089.x
34. Parr S. Living with severe aphasia: Tracking social exclusion. *Afasiologia.* 2007; 21: (1), 98-123. DOI: 10.1080/02687030600798337



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