



International Classification of Functioning, Disability and Health (ICF) in undergraduate Speech, Language and Hearing Sciences programs in Brazil

Classificação Internacional de Funcionalidade, Incapacidade e Saúde (CIF) na graduação em Fonoaudiologia no Brasil

Clasificación Internacional del Funcionamiento, de la Discapacidad y de la Salud (CIF) en cursos de pregrado en logopedia en Brasil

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Abstract

Introduction: Health training, especially in Brazil, has incorporated the International Classification of Functioning, Disability and Health (ICF) in order to develop capacities to deal with human life in

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the biopsychosocial model. **Purpose:** Describe and analyze the inclusion of the ICF in undergraduate Speech, Language and Hearing Sciences curricula in Brazil. **Methods:** A descriptive, cross-sectional study, approved by the Research Ethics Committee, conducted between November 2021 and July 2022. A questionnaire comprising 24 open-ended, multiple-choice questions on aspects relating to the presence of the ICF in the curriculum was made available via Google Forms. Brazilian undergraduate courses in Speech, Language and Hearing Sciences were included, and distance learning courses were excluded. Quantitative analysis was carried out using the SPSS program. **Results:** Of the 78 Speech, Language and Hearing Sciences undergraduate courses contacted, 28.2% answered the questionnaire. Of the respondents, 50% were in the southeast region and 59.1% were linked to public institutions. Of the participating courses, 27.3% included the ICF in their pedagogical project. Among the courses in which the ICF is present, 50% focus on theoretical subjects, 33.3% on theoretical and practical subjects and 16.7% on theoretical, practical, and complementary activities. **Conclusion:** The ICF is incipient in Brazilian undergraduate courses in Speech, Language and Hearing Sciences, predominantly in theoretical curricular components. There is a need to broaden the debate about the training of speech therapists about the precepts provided by the ICF, since its inclusion in curricular units, both theoretical and practical, can favor the development of competencies, skills and attitudes focused on the biopsychosocial model.

Keywords: International Classification of Functioning, Disability and Health; Speech, Language and Hearing Sciences; Health Human Resource Training; Curriculum; Education.

Resumo

Introdução: A formação em saúde, especialmente no Brasil, tem incorporado a Classificação Internacional de Funcionalidade, Incapacidade e Saúde (CIF) de modo a desenvolver capacidades para lidar com a vida humana no modelo biopsicossocial. **Objetivo:** Descrever e analisar a inserção da CIF nos currículos de graduação em Fonoaudiologia no Brasil. **Método:** Estudo descritivo e transversal, aprovado pelo Comitê de Ética em Pesquisa, conduzido entre novembro de 2021 e julho de 2022. Um questionário, composto por 24 questões, abertas e de múltipla escolha, com aspectos referentes à presença da CIF na matriz curricular, foi disponibilizado via *Google Forms*. Foram incluídos os cursos de graduação em Fonoaudiologia do Brasil, e excluídos os cursos com educação à distância. Foi realizada análise quantitativa no programa SPSS. **Resultados:** Dos 78 cursos de Fonoaudiologia contactados, 28,2% responderam ao questionário. Dos respondentes, 50% estavam localizados na região sudeste, e 59,1% vinculados a instituições públicas. Nos cursos participantes, 27,3% incluíram a CIF no projeto pedagógico. Dentre os cursos em que a CIF está presente, 50% se concentram em disciplinas teóricas, 33,3% em disciplinas teóricas e práticas e 16,7% em disciplinas teóricas, práticas e atividades complementares. **Conclusão:** A CIF está de modo incipiente nos cursos de graduação em Fonoaudiologia brasileiros, predominantemente em componentes curriculares teóricos. Evidencia-se a necessidade de ampliação do debate acerca da formação do fonoaudiólogo no que tange a preceitos que são oportunizados pela CIF, visto que sua inclusão em unidades curriculares, teóricas e práticas, pode favorecer o desenvolvimento de competências, habilidades e atitudes focadas no modelo biopsicossocial.

Palavras-chave: Classificação Internacional de Funcionalidade, Incapacidade e Saúde; Fonoaudiologia; Capacitação de Recursos Humanos em Saúde; Currículo; Educação; Formação Profissional em Saúde.

Resumen

Introducción: La formación sanitaria, especialmente en Brasil, ha incorporado la Clasificación Internacional del Funcionamiento, de la Discapacidad y de la Salud (CIF) con el fin de desarrollar capacidades para abordar la vida humana en el modelo biopsicossocial. **Objetivo:** Describir y analizar la inclusión de la CIF en los planes de estudio de pregrado de logopedia en Brasil. **Método:** Se trató de un estudio descriptivo, transversal, aprobado por el Comité de Ética de la Investigación y realizado entre noviembre de 2021 y julio de 2022. A través de *Google Forms* se puso a disposición un cuestionario compuesto por 24 preguntas abiertas de opción múltiple sobre aspectos relacionados con la presencia



de la CIF en el plan de estudios. Se incluyeron los cursos de pregrado en Fonoaudiología en Brasil y se excluyeron los cursos a distancia. El análisis cuantitativo se realizó con el programa SPSS. **Resultados:** De los 78 cursos de logopedia contactados, el 28,2% respondió al cuestionario. De los encuestados, el 50% estaban situados en el sureste y el 59,1% estaban vinculados a instituciones públicas. De los cursos participantes, el 27,3% incluía el ICF en su proyecto pedagógico. Entre los cursos en los que el ICF está presente, el 50% se concentra en asignaturas teóricas, el 33,3% en asignaturas teóricas y prácticas y el 16,7% en asignaturas teóricas, prácticas y actividades complementarias. **Conclusión:** La CIF es incipiente en los cursos de logopedia de pregrado brasileños, predominantemente en los componentes curriculares teóricos. Es necesario ampliar el debate sobre la formación de logopedas en relación con los preceptos proporcionados por la CIF, ya que su inclusión en unidades curriculares teóricas y prácticas puede favorecer el desarrollo de competencias, habilidades y actitudes centradas en el modelo biopsicosocial.

Palabras clave: Clasificación Internacional del Funcionamiento, de la Discapacidad y de la Salud; Logopedia; Capacitación de Recursos Humanos en Salud; Currículo; Educación; Capacitación de Recursos Humanos en Salud.

Introduction

The development of competencies from a multidimensional and biopsychosocial perspective¹ has advanced in health education, including the field of Speech-Language Pathology, thus allowing for an integrated approach with the social determinants of health and tailored to individuals' needs. Documents regulating the Unified Health System (SUS) establish an expanded conception of health in Brazil, incorporating health determinants and conditions as elements to be considered in care²⁻³. The determinants are classified by the National Health Pla⁴ as “environmental, biological, behavioral, demographic, social, economic, related to the health care system and provision of health care”⁴.

The International Classification of Functioning, Disability and Health (ICF), which is one of the classifications of the World Health Organization (WHO), converges to this perspective by providing a broad and integrated view of the health context⁵. Furthermore, it ensures the recording and classification of aspects of functioning and disability, relating them to contextual factors. Understood as a reference classification for describing health states, the ICF is based on a biopsychosocial model that addresses the body's functions and structures (physiological and anatomical bodily aspects). Moreover, the ICF assesses activities and participation and the influence of environmental factors (barriers and facilitators to performing actions and tasks in daily life) and personal factors. This assessment includes the perspective of an individual's

functioning as the central axis of professional practice in the health field⁶⁻⁷.

In this context, functionality refers to the positive aspects of body functions and structures, activities and participation. Disability is a comprehensive term referring to deficiencies in body functions and structures, activity limitations and participation restrictions¹. Functioning and disability are influenced by contextual factors.

Systematized into components and branched into chapters and categories, the ICF allows recording through codes to depict the individual's experienced situation. This configuration enables data collection homogeneously for health information systems⁸, policymaking, and furthermore, broadens the healthcare professional's perspective^{6,9-11}. Thus, health states can be recorded by selecting appropriate codes from the categories, which are completed with the addition of a qualifier (generic ordinal scale specifying the extent or magnitude of functioning or disability in that category, or to what extent an environmental factor facilitates or constitutes an obstacle)¹

Given that the aim of the scope of the ICF and its language is to understand the aspects of functioning and disability that facilitate the establishment of therapeutic goals, monitoring the results of processes, and favors communication between areas, its clinical use is recommended¹. Its use has been adopted by the 191 member states of the WHO for the worldwide scientific standardization of health, functioning, and disability data. Brazil is part of this group, and the Resolution of the Brazilian National Health Council (No. 452/2012)



established the use of the ICF in the SUS [*Unified Health System*] and Supplementary Health.

Given the relevance of the ICF, it is essential to incorporate it into the multiple scenarios combining teaching, extension, management, research, and practice in Speech-Language Pathology. Undergraduate courses have developed continuous work of resignifying the conceptions necessary for their work today, aligned with the fundamental principles of the Brazilian Federal Constitution of 1988 and the Organic Health Law No. 8080/1990, impacting the guarantee of its precepts²⁻³.

When considering the curriculum of a higher education course, especially in Brazil, the inclusion of the ICF represents a training of capacities to deal with human life in an expanded concept of health. With respect to Curricular Units (CUs), the ICF emerges as a marker that combines all the units built from the beginning of the journey and encompass knowledge, skills, and attitudes⁵.

Health education, with a focus on developing competencies in the professional, advocates for the student's protagonism and the personal construction of their knowledge through interaction. A curriculum oriented towards the development of student competence can promote health education related to a knowledge present in the economic, political, and cultural structure, permeated by the university and its faculty, involving the community and all players in society⁵.

In light of this scenario, discussions are required in Speech-Language Pathology courses regarding the biopsychosocial model and the complexity of the dynamic relationship between the social subject's health condition and functioning. These precepts are present in the imminent proposal of the National Curriculum Guideline (DCN) for the Undergraduate Course in Speech-Language Pathology, which, according to the proposal of Resolution CNS/MS No. 610/2018¹², includes significant changes integrating this perspective of health education.

Thus, Speech-Language Pathology has been exploring advances in discussions of the current National Curriculum Guideline (DCN) in the transition towards the improvement of health education in Brazil, promulgated by Resolution CNE/CES No. 5/2002 of the MEC [*Ministry of Education*], especially since 2015¹⁴. In 2018, the Brazilian National Health Council (CNS)/Ministry of Health proposed a new DCN through Resolution CNS/MS

No. 610/2018¹², which is still pending approval by the National Council of Education (CNE)/MEC. A committee of the council was created in order to work on the new guideline, representing the final stage of legitimization before it comes into effect and is published.

The term "competence" in education is understood as a set of knowledge, skills, and attitudes necessary to act in the resolution of complex and singular situations or problems, efficiently and effectively. It involves learning by doing, including understanding processes and procedures and the appropriate selection of strategies to perform specific tasks⁵⁻¹⁵⁻¹⁶⁻¹⁷. Therefore, the search for knowledge and understanding regarding the individual, their social, environmental, and health contexts facilitates reflection on disability. In this context, the possibility of having a unified language to describe these findings guides professional and team practice.

Given the need and relevance for the comprehensive education of new generations of health-care professionals, this study aims to describe the disposition of the International Classification of Functioning, Disability, and Health (ICF) and its insertion into undergraduate courses of Speech-Language Pathology in Brazil.

Method

This is a descriptive and cross-sectional study with quantitative analysis. This study was approved by the Research Ethics Committee, under the Decision No. 5020433. The research was carried out by members of the ICF Working Group of the SBFa [*Brazilian Society of Speech-Language Pathology and Audiology*], based on reflections and demands arising from meetings and discussions of the scientific group.

This study included undergraduate Speech-Language Pathology courses in Brazil. On the other hand, Distance Learning (DL) courses were excluded from the study.

Study participants were one faculty member from each higher education institution (HEI) offering undergraduate Speech-Language Pathology courses in Brazil, who were invited to respond to a questionnaire with 24 questions, including open-ended and multiple-choice questions, made available through the Google Forms. The estimated completion time was 20 minutes. The Informed



Consent Form (ICF) was signed on the virtual platform. The questionnaire remained open for nine months, from November 2021 to July 2022, to obtain a greater number of participants. A total of eight invitations were sent to HEIs through: sending emails from the official SBFa address, messages in the coordinators' group via WhatsApp, presentation of the research at the virtual meeting of course coordinators of the SBFa Teaching Commission, individual contacts with each coordinator via email and WhatsApp.

The data recorded in Google Forms were introduced into spreadsheets in Microsoft Excel. Information from multiple-choice questions was analyzed quantitatively using the statistical analysis software named SPSS Statistics for Windows (version 21.0). The findings in the quantitative analysis

were subjected to descriptive statistical analysis, including frequency calculation, standard deviation, minimum, and maximum values.

Results

Out of the 78 Speech-Language Pathology courses contacted, 22 (28.2%) responded to the questionnaire. Table 1 shows the characterization of the undergraduate Speech-Language Pathology courses participating in the study. Among the responding courses, 50.0% were in the Southeast region, 59.1% were affiliated with public institutions, with a duration of eight semesters (68.2%), and the course curriculum was organized by areas (72.7%).

Table 1. Characteristics of participating undergraduate Speech-Language Pathology programs.

	Frequency	%
Institution		
Private	9	40.9
Public	13	59.1
Region		
South	4	18.2
Southeast	11	50.0
Central-West	2	9.1
Northeast	4	18.2
North	1	4.5
Length of the course in semesters		
8	15	68.2
9	2	9.1
10	5	22.7
Course matrix organization		
Fields	16	72.7
Life Cycles	2	9.1
Workload		
	Mean±Standard Deviation	Minimum-Maximum
Total	3810.9 ± 563.21	3080 - 5360
Theoretical	2133.9 ± 725.2	615 - 3476
Practical	951.9 ± 606.7	75 - 3030
Internship	865.3 ± 342.3	100 - 1950
Optional Subjects	130.8 ± 137.7	0 - 570
Additional Activities	152.8 ± 92.7	0 - 454

Regarding the teaching of the ICF in the participating undergraduate Speech-Language Pathology courses, only 27.3% have the ICF in the Course Pedagogical Project (CPP) (as shown in Table 2).

Table 2. Teaching of ICF in participating undergraduate Speech-Language Pathology programs.

	Frequency	%
ICF present in current PPC		
No	16	72.7
Yes	6	27.3
Physical book of ICF available in the library		
No	4	18.2
I don't know	11	50.0
Yes	7	31.8
ICF book listed as basic bibliography		
No	10	45.5
I don't know	3	13.6
Yes	9	40.9
Discussion on the inclusion of ICF in the curriculum by NDE		
No	8	36.4
Yes	14	63.6

Seven curricular components were described among the six courses that included the ICF in the undergraduate program. All components were mandatory. The ICF was present in 28.6% of practical or internship CUs. Among the courses where the ICF is present in subjects, three have the ICF in theoretical subjects (50%), two in theoretical and practical/internship subjects (33.3%), and one in theoretical subjects, practical/internship, and complementary activities. The workload allocated to the ICF content in the subjects varied from 6 to 100 hours, with an average of 28.28 hours per subject.

Subjects on the ICF are present in different periods, semesters, or cycles. The number of subjects addressing the ICF in each undergraduate course varied from one to four or more, with three courses having one ICF subject, two courses with four or more subjects addressing the classification, and one undergraduate course with one subject. In four undergraduate courses, one teacher taught the subjects, and in two courses, the number of teachers responsible for the subjects ranged from two to four. The workload allocated to the ICF content in the subjects varied from six to 100 hours, with an average of 28.28 hours per subject.

Regarding the presence of the ICF in university extension, three courses responded that the classification is the subject of extension courses (50%). Four courses have the ICF in this area (66.7%),

and two courses do not have research including the classification (33.3%).

Regarding the inclusion of the ICF in the curriculum framework, 63.6% of the Structuring Teaching Nuclei (NDE) affirmed discussing the issue, and 36.4% responded that the theme was not being discussed up to the occasion of responding to this research.

Discussion

Out of 78 undergraduate Speech-Language Pathology courses invited to participate in the study, 22 responded to the questionnaire, which indicates a reduced participation in this research. The low response rate may be one of the weaknesses frequently reported in studies using online questionnaires. The low adherence can also be attributed to other factors, such as the study taking place during the COVID-19 pandemic and, consequently, the possible workload burden. Other possibilities include not receiving messages due to outdated addresses or emails being sent to the spam folder¹⁸⁻¹⁹. The fear of higher education courses in Speech-Language Pathology having doubts, or no established definitions on how, and which CUs, the ICF can be developed by the group, may have also contributed to the decreased adherence.



It is emphasized that the invitations clarified that the courses were not required to have the CUs or strategies for the inclusion of the ICF in their syllabus explicitly. The main objective was to identify demands, doubts, and promote self-reflection to support development strategies in conjunction with Higher Education Institution stakeholders.

As for the general characterization of the courses, of the participating HEIs in this study, 9 were private and 13 were public. Most participants in this study were from the Southeast region¹¹. Out of the 22 HEIs, 15 have courses with a duration of 8 semesters, and 16 of them present curricular organization divided by areas. In current discussions of the ICF Working Group in Speech-Language Pathology, it is noteworthy that certain specialty areas have greater difficulties in the applicability of the ICF as a tool that assesses intervening factors in a biopsychosocial context. The challenge for practical components and experiences to occur from the early moments of student training also alerts to the extent of the division between theoretical and practical competencies in current syllabus. Methodologies could be offered in Health Education in which, together with the community and within the established SUS [*Unified Health System*] service network, integration of teaching-service-community is promoted, with activities fostering local knowledge, practices, and commitments of the course to produce knowledge directed towards the needs of the population.

According to this study, the ICF was not present in the majority of Course Pedagogical Projects (CPP) of undergraduate courses in Speech-Language Pathology (72.7%). In line with this data, the ICF was not part of the basic bibliography of the subjects (45.5%), and some respondents were not aware of the existence of the physical ICF book in the institution's library (50%). Comparing with a previous study that analyzed the existence of ICF teaching proposals in physiotherapy courses in the Brazilian Central-West region, the ICF was found in only six courses of the CPP out of 52 existing undergraduate courses. In only four of these CPPs was it possible to identify it in the course objectives and bibliographic references²⁰.

The study found a weakness in the application of the ICF in undergraduate courses in Speech-Language Pathology, despite being a classification of the WHO and Brazil, as a member country, having the responsibility to use it. The ICF was mentioned

and is mainly present in the curriculum framework in theoretical CUs and with less presence in practical/internship CUs and complementary activities, usually associated with more advanced terms of the course. It should be noted that in all CUs in which the ICF was mentioned are mandatory, indicating that graduates from these participating institutions have achieved, at least, knowledge about the ICF tool. It is known that the ICF is a tool with the potential to be introduced in the early stages of the curriculum, in order to provide strategies for agreements with the Health Network and partnerships between HEIs and local managers of the SUS [Unified Health System]⁵⁻¹³.

Among the 22 participating HEIs, 14 (63.2%) responded that the Structuring Teaching Nuclei (NDE) have been discussing strategies for the implementation of the ICF in undergraduate courses. This data suggests that there is mobilization around the importance of didactic-pedagogical strategies in CUs aimed at developing competencies in health education. Integrating the ICF and its biopsychosocial model into the syllabus presumably generates and expands tactics for permanent and/or continued education. These are jointly generated by health service professionals who are linked to students in internship settings with the capacity to attend the installed health service network³⁻⁵⁻⁸.

Most Speech-Language Pathology programs have a curriculum organized into areas, which can lead to reflections on approaches and considerations for integrating competencies throughout a syllabus, especially considering the cross-cutting competencies that integrate different areas of Speech-Language Pathology during undergraduate education. This undergraduate structure, focused on emphasizing specialty areas segregated from CUs, may lead to a disparity regarding the biopsychosocial model, falling contrary to the opportunity that the ICF offers in cataloging and integrating the constitution of a healthcare professional in its expanded concept. This education should address the action in its core specific formation and in its interfaces with different fields of knowledge²⁻⁴⁻⁷. The speech-language pathologist should have a generalist, humanistic, critical, and reflective education, based on ethical and bioethical principles, to act in the health-disease-care process, at its different levels of attention and care networks, with actions aimed at promotion, prevention, recovery, and rehabilitation, from the perspective of com-



prehensive care⁵⁻²¹. In this way, it is recommended to have technical and political competencies, to be sensitive, proactive, and creative, committed to collective responsibility.

The ICF, from the early stages of a syllabus may promote interprofessional interfaces for the development of inclusive and coparticipative management practices. In this way, it would contribute to the establishment of teamwork processes and the construction of networks that benefit both the individual and the collective. The inseparable integration between teaching and extension provides opportunities, strengthens, and solidifies research, as well as activities of continuous and permanent education. These activities promote knowledge, understandings, and practices of the local reality and have a public commitment to the production of knowledge aimed at the needs of the population and the technological development of the region⁸.

The predominance of ICF contents in CUs of theoretical subjects may be associated with the difficulty of articulating and applying interactive learning practices to the curriculum organization from the beginning of the course, following the precept of the biopsychosocial model. Commonly, the syllabus tends not to offer practice and interactive methodologies from the beginning of the course. Faculty members tend to use active teaching methodologies in practices, experiences, and internships in the final stages of the course. However, the introduction of the ICF from the early stages of the course can promote meaningful learning and the autonomy of individuals through reflections on their own practice and the exchange of knowledge among professionals. This allows for the identification and discussion of issues in the healthcare work process¹⁰, as per the organization, structuring, and coordination of enhancing collaboration and healthcare quality. In this context, the precept of the biopsychosocial model turns to the possibilities of attending to the individual, family, and community in social aspects of education and health, respecting the socio-cultural, historical, and regional diversity of the country. Thus, there is a strong emphasis on the development of technical and political competencies, sensitivity, proactivity, and creativity, focused on collective responsibility.

Understanding the role of the ICF in the development of communicative competencies among healthcare professionals is emphasized in Article 22 of Resolution of the CNS/MS No. 610/2018¹²,

in which the ICF must be transversally addressed in the PPC, as recommended by the WHO⁵. The articulation of curriculum units in agreement with the Healthcare Network, from the early terms of the course and intertwined with the ICF, would allow for the cross-cutting integration of the curriculum matrix that each Speech-Language Pathology course offers, especially in line with the provisions of Resolution CNS No. 515/2016²². In this resolution, the CNS opposed the authorization of any undergraduate healthcare courses offered in the distance learning modality, in order to guarantee the safety and resolvability of healthcare services to the Brazilian population and due to the harm, such courses can offer to the quality of professional training. According to the CNS, healthcare training requires the development of skills and attitudes that cannot be obtained through distance learning, requiring inter-relational practices²³.

Although few courses have practical applicability of the ICF, the opportunity for engagement with the biopsychosocial model going forward, sensitized and encouraged by this study, may signify a greater commitment from courses to the strategies of continuous education for teachers and healthcare professionals who receive students in practice settings. This approach encompasses all those involved, with innovative dynamics, cross-cutting, from the early stages of the course, with the ICF as a foundation. The ICF is the cornerstone of this movement, as it can signify awareness about the classification, designating a prolific space in which the course's agreements in/for/by/to SUS and which, inseparably, create, expand, promote channels/mechanisms of social participation that favor a discussion between teachers, students, and society, as well as the interaction of the educational institution with social movements, especially with State and Municipal Health Councils.

The ICF provides students with learning through interactive strategies. It favors the development of Competencies according to the individual's (student's) capacity, mobilizing resources aimed at addressing complex situations, based on the inseparability between knowing (knowledge-K), knowing how to do (skill-S), and knowing how to be, to live together, to make decisions (attitude-A). Based on the previous considerations, by embracing the SUS precepts and its potential for use in management, research, and clinical/assistance, the insertion of



the ICF in different units of the syllabus is highly recommended.

This study shows that, albeit timidly, Speech-Language Pathology is gradually advancing in the appropriation of the ICF in undergraduate courses. The pursuit of innovative teaching methodologies has allowed teachers to become acquainted with the ICF and to expand the provision of continuing education for teachers and healthcare professionals working in SUS services, who receive students in practice settings. In this shared space, knowledge about social and human diversities operates assignments provided for in Law No. 8.080/1990, articulating the educational institution in policies and programs from the perspective of the inseparable integration of teaching-service-management-community. Thus, the results of this study show the engagement of Speech-Language Pathology with the ICF (Resolution 54.21/2001), and, based on these assumptions of/in/by the training of health professionals in Brazil, reflects on the continuous development of Speech-Language Pathology's identity in/for/by our healthcare system.

Final Considerations

This study also shows reveals the fragility of the approach to the International Classification of Functioning, Disability and Health (ICF) in undergraduate Speech-Language Pathology programs in Brazil, since few courses mentioned its applicability in their curricular frameworks. Up to the data collection of this study, the ICF appears to be in a preliminary mode for most programs. However, the study also points to a growing mobilization around the importance of the ICF and didactic-pedagogical strategies aimed at competency development in health education.

The principles of the ICF reach the congregation of inevitable and indispensable pillars for Health Education, especially at this moment when we are looking at the new DCN for Speech-Language Pathology programs. Especially in Brazil and in Health Education, it provides conditions, ways, and strategies for teaching, research, assistance/extension, and management to happen in an integrated manner and aligned with the principles of SUS. The ICF can be a cornerstone for promoting meaningful learning and autonomy for students from the early stages of the course, enabling reflections on their own practice and the exchange of knowledge

among healthcare professionals. Its integration into the curriculum can expand tactics of continuing education, generated together with healthcare professionals and students in internship settings, strengthening health education in the country.

Beyond collecting data on how speech-language pathology competencies are being developed in Brazilian Speech-Language Pathology programs, this study hopes to have sensitized teachers who received the request from this research group in favor of this demand, goals, and strategies in health education with the opportunity of the biopsychosocial model and the ICF. Its inclusion in Speech-Language Pathology undergraduate programs is a challenge to be faced, but it can bring great benefits to the training of future healthcare professionals. We must continue to advance and strengthen this approach, always seeking to improve the quality of health education in the country.

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