Brazilian Journals of Speech Therapy: most accessed and cited articles

Periódicos brasileiros da Fonoaudiologia: artigos mais acessados e citados

Revistas brasileñas de Fonoaudiogía: artículos más consultados y citados

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Abstract

Introduction: research has been carried out to identify the scientific production of a given area, with a view to reflecting on its own future. **Objective:** to identify which articles are most accessed and cited in Brazilian journals of Speech Therapy, analyzing the theme, type of research and area in which they are cited. **Method:** the selected journals were Audiology Communication Research (ACR), Communication Disorders, Audiology and Swallowing (CoDAS) and CEFAC-Speech, Language, Hearing Sciences and Education Journal, accessed on March 14, 2019, in the Scientific Electronic Library Online (Scielo). Ten most accessed articles were classified according to content and type of research. The most cited were also analyzed according to areas that mentioned them. Descriptive analysis was performed and for comparison between the types of research and thematic, Kruskal-Wallis non-parametric test was applied (p <0.05). **Results:** 765,718 hits were recorded, 21-70% of the type of observational study and on Orofacial Motricity-OM (13-43.3%). In the analysis of the most cited articles (n = 34), most were observational

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(29-85.3%), and as for the theme, OM (10-29.4%) and Language (9-26.5%), with no statistical difference (p = 0.834). One of the journals analyzed, in its beginning, was specific for publication of OM, a fact that may justify the greater registration. The most frequent citation percentages were in magazines (560-82.0%), in the field of Speech Therapy (308-45.1%). **Conclusion**: observational studies related to Orofacial Motricity and Language are the most accessed and cited. Most were cited in sources of Speech Therapy, explaining that the area needs to make a move to be more recognized.

Keywords: Speech, Language and Hearing Sciences; Research; Scientific Publication Indicators

Resumo

Introdução: pesquisas têm sido realizadas para identificar a produção científica de determinada área, com vistas a refletir sobre o seu próprio futuro. **Objetivo:** identificar quais os artigos mais acessados e citados em revistas brasileiras da Fonoaudiologia analisando a temática, tipo de pesquisa e área em que são citados. **Método:** os periódicos selecionados foram *Audiology Communication Research* (ACR), *Communication Disorders, Audiology and Swallowing* (CoDAS) e Revista CEFAC-*Speech, Language, Hearing Sciences and Education Journal*, acessados em 14 de março de 2019, na *Scientific Electronic Library Online* (Scielo). Dez artigos mais acessados foram classificados segundo temática do conteúdo e tipo de pesquisa. Os mais citados foram também analisados segundo áreas que os mencionaram. Foi realizada análise descritiva para comparação entre os tipos de pesquisa e temática, aplicou-se teste não paramétrico de *Kruskal-Wallis* (p<0.05). **Resultados:** foram registrados 765.718 acessos, 21-70% do tipo de estudo observacional e sobre Motricidade Orofacial-MO (13-43.3%). Na análise dos artigos mais citados (n= 34), a maioria foi observacional (29-85.3%), e quanto à temática, MO (10-29.4%) e Linguagem (9-26.5%), sem diferença estatística (p=0,834). Um dos periódicos analisados, em seu início, era específico para publicação de MO, fato que pode justificar o maior registro. Os percentuais de citação mais frequentes foram em revistas (560-82,0%), da própria área da Fonoaudiologia (308-45,1%). **Conclusão:** estudos observacionais, relacionados à Motricidade Orofacial e Linguagem, são os mais acessados e citados. A maioria foi citada em fontes da própria Fonoaudiologia, explicitando que a área necessita fazer um movimento para ser mais reconhecida.

Palavras-chave: Fonoaudiologia; Pesquisa; Indicadores de Produção Científica.

Resumen

Introducción: han sido realizadas investigaciones con el propósito de identificar la producción científica de una determinada área, con miras a reflexionar sobre su propio futuro. **Objetivo:** identificar cuáles son los artículos más accedidos y citados en periódicos brasileños de la Fonoaudiología analizando la temática, tipo de investigación y área en que son citados. **Método:** los periódicos seleccionados fueron *Audiology Communication Research* (ACR), *Communication Disorders, Audiology and Swallowing* (CoDAS) y Revista CEFAC-*Speech, Language, Hearing Sciences and Education Journal*, accedidos en 14 de marzo de 2019, en la *Scientific Electronic Library Online* (Scielo), considerando el periodo registrado en la plataforma. Diez artículos más accedidos fueron clasificados según la temática del contenido y tipo de investigación. Han sido clasificados también los más citados, según áreas en que el artículo fue mencionado. Fueran realizadas análisis descriptivas para comparación entre los tipos de investigación y temática, se aplicó un test en el paramétrico de *Kruskal-Wallis* (p<0.05). **Resultados:** han sido registrados 765.718 accesos (diez primeros artículos), siendo 21-70% del tipo de estudio observacional y sobre Motricidad Orofacial-MO (13-43.3%). En el análisis de los artículos más citados (n= 33), la mayoría fue observacional (28-84.8%), sin embargo, con mayor media para los estudios de revisión; con respecto a la temática fue encontrada mayor porcentaje para MO (10-30.3%) y Lenguaje (9-27.9%), aunque sin diferencia estadística (p=0,820). Los porcentajes de citación más frecuentes fueron en revistas (558-82,0%), de la propia área de la Fonoaudiología (307-45,0%). **Conclusión:** dos periódicos tuvieron cambio de nombre, hecho que compromete el análisis real de las citaciones. Los artículos fueron más citados en fuentes de la propia Fonoaudiología, explicitando que el área necesita hacer un movimiento para ser más reconocida.

Palabras clave: Fonoaudiolgía; Investigación; Indicadores de Producción Científica

Introduction

Scientific journals started to be published in the 17th century and started to play an important role in the process of science communication. Initially, they constituted a private communication system, replacing letters, minutes or memories of scientific meetings that were exchanged between researchers [1].

In 1665, the first journals began to appear, the French Journal *des Sçavants*, published experiments and observation reports in physics, chemistry, anatomy and meteorology; and the English Philosophical Transactions of the Royal Society of London, considered the prototype of scientific journals which started as a personal initiative by one of the Society secretaries, to disseminate, in a broader way, the original observations and researches of the institution members.

Some authors have conducted research in order to reflect on the areas of knowledge[2-4], and identify the growth of production, pointing out that journals, electronic or printed, are now considered a quick and economical way for researchers to make public the findings of their searches. It is through scientific publication that society becomes aware of the results of a research work and what it represents for the community [5]. Nowadays, most journals can be accessed online, mainly through the initiative of the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - CAPES, which makes thousands of them available in the Portal de Periódicos[5]. Emerging in the 20th century, Speech, Language and Hearing Sciences has as the oldest international journal in the area, the Folia Phoniatrica et Logopaedica, which, since 1947, has published researches on anatomy, physiology and pathology of the structures of speech, language and hearing mechanisms, with reports of new discoveries about basic function, assessment, management and test development in communication sciences and their disorders[6].

Especially in Brazil, some journals in this area appeared in 1980, and four of these should be highlighted today (in alphabetical order):

ACR - Audiology Communication Research

http://www.scielo.br/revistas/acr/iaboutj.htm - published since 2013 by Associação Brasileira de Audiologia (ABA). Previously called Revista da Sociedade Brasileira de Fonoaudiologia, published since 1997 by Sociedade Brasileira de Fonoaudiologia;

CoDAS – Communication Disorders, Audiology and Swallowing

http://www.scielo.br/revistas/codas/paboutj.htm - published by Sociedade Brasileira de Fonoaudiologia (SBFa), since 2012, when Jornal da Sociedade Brasileira de Fonoaudiologia (JSBFa) circulated, which was released in 2010, untill it changed its name. It should be noted that this journal followed the previously publication of Revista de Atualização Científica Pró-Fono, which had its firsts volume published in 1989;

DIC- Distúrbios da Comunicação

https://revistas.pucsp.br/dic/about the pioneer among this four, available since 1986 and published by Pontifícia Universidade Católica de São Paulo (Programa de Estudos Pós-Graduados em Fonoaudiologia, Curso de Fonoaudiologia e Divisão de Educação e Reabilitação dos Distúrbios da Comunicação-Derdic);

Revista CEFAC – Speech, Language, Hearing Sciences and Education Journal

(http://www.scielo.br/revistas/rcefac/paboutj.htm), published currently by Associação Brasileira de Motricidade Orofacial, following the journal with the same name published by Centro de Especialização em Fonoaudiologia Clínica, initiated in 1999.

When a particular article in a scientific journal is accessed, there can be different motivations on the part of the reader. These can help the professional daily life in providing a solution that can improve the assistance to patients/users, stimulate new researches or confront the findings of those in development, to discuss the results.

At the time when an article is cited, researchers can use it to confirm or refute their findings, providing readers with a discussion that advances in the direction of new scientific discoveries.

In the last few years the h-index, suggested in 2015 by Jorge Hirsch, from University of California, gained importance. It is possible to quantify the productivity and impact of researchers based on their most cited articles. This index was incorporated by Google Scholar as a bibliometric index

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that simultaneously measures the quality (depending on the number of citations received) and the amount of scientific production of a researcher or a journal, always applied to the previously mentioned database. Thus, the h5-index is equivalent to five publications that have been cited at least five times each, considering the last five years of work of a researcher or of an article in a given journal. Another index is the h5-median of a publication that consists of the average citations for the articles that make up its h5-index[7].

The interest in developing this research was to identify which articles were most accessed and cited in Brazilian Speech Therapy journals, analyzing the theme, type of research and area in which they are cited.

Method

As this research used information available on scientific journal platforms, it did not require Ethics Committee referral.

To standardize data gathering, a single periodic platform was considered, the *Scientific Electronic Library Online* - SCIELO. Thus, for this research three of the four periodic mentioned before were pointed out: ACR, CoDAS and Revista CEFAC (DIC is not located in this platform yet).

According to collected data on the platform, the following volumes were considered for analysis: ACR from 2013 to 2018, respectively volumes 18 to 24; CODAS from 2013 to 2019, respectively volumes 25 to 31, being only number 1 of the last one; and Revista CEFAC from 2006 to 2019, volumes 8, respectively, only number 4, to 21, only number 1

Data were surveyed from the referred platform on March 14, 2019.Each journal was sought on the home page separately. To collect the most accessed articles from each periodic, after entering its own page, it was sought for "metrics" session followed by "Scielo" and, at least, reports on use of the website or link ¨Accesses to articles¨. The platform offers the possibility to choose by periods and the ¨all¨ function was chosen, thus bringing the most accessed since the beginning of the acceptance of the journal analyzed on Scielo platform. This presents the 100 most accessed articles and, for this research, we chose to collect the first 10 (top 10).

To collect these articles (most cited), the same home page of the journal was used, accessing below the item ¨more details¨ located below the record of the h5-index and h5 median indicators, referring to 2018.

The data entered in an Excel sheet with register of the article's title, year of publication, number of citations and accesses. Then, after accessing the article, each one was classified according to the theme and type of research. In the first category, themes related to Hearing and Balance, Language, Orofacial Motricity (including dysphagia issues) were considered, Collective Health (when they specified work developed in institutions of the Sistema Único de Saúde) and voice. As for the type of research, review/letter to the editor (literature, integrative and systematic and letter to the editor), observational (application of tests, questionnaires, interviews, among others) and intervention, when some type of procedure is understood as therapeutic.

In the ten most cited articles (top10), analysis of the area which the article was cited was also carried out, considering whether the registration occurred in a journal, undergraduate thesis/master's dissertation/doctoral thesis or a book with book/chapter. Then, areas in which the articles were cited were analyzed, namely: Speech, Language and Hearing Sciences, Psychology, Education, Medicine, Art (music, theater etc.), Nursing and Physiotherapy. Two categories were created: one to include other areas than the previously presented (Others), and another (Non Identified- NI) when it wasn't possible to access the article. Then, duplicated records (same article presented in two different languages, for example) were dismissed.

In particular, in the CEFAC journals we excluded the citation registered in the first place, since it was an Editorial, which opened a link with numerous other editorials, mostly unrelated (total of 237 citations)

Data were analyzed descriptively, using absolute and relative frequencies, measure of central tendency (mean and median) and dispersion (standard deviation, minimum and maximum values).

For comparison between the types of research and thematic, according to the number of accesses and citations, the *Kruskal-Wallis* non-parametric test was applied, since the data did not show

normal distribution by the *Komolgorov-Smirnov* test. Dunn's post hoc test was used for multiple comparisons.

A descriptive level of 5% (p<0.05) was assumed for statistical significance. The data, as explained previously using Excel, were analyzed in the SPSS version 23 for Windows.

Results

Table 1 registers the total access to the ten most viewed articles (sum of 765.718) and the H-index and H5-median proposed by Google Scholar, for the three analyzed journals.

Table 1. Register of total accesses, H5-index and H5-mean of the analyzed journals

Periodical	access to top10 articles	H5-index	H5-median
ACR	108.373	5	5
CoDAS	205.425	14	20
CEFAC	451.920	16	21

As for the theme of the 30 most assessed articles (Top10 of each journal), the one referring to Orofacial Motricity (OM) registered the highest number (13-43.3%) and as for the type of research, the observational type (21-70%) (Table 2).

Table 2. Number and percentage of the 30 most accessed articles (top10 of each journal analyzed) according to theme and type of research.

Variables		n	%
Thematic/Theme	Hearing and balance	6	20.0
	Language	10	33.3
	OM	13	43.3
	Voice	1	3.3
Research type	Intervention	5	16.7
	Observational	21	70.0
	Review/letter to the editor	4	13.3
	Total	30	100.0

Table 3 shows that there was a statistically significant difference between the themes for the number of accesses (p=0.008). When performing the multiple comparisons test (Table 4), it was identified that the differences were present between the themes Hearing and Balance versus Language (p=0.041) and versus OM (p=0.001), in other words, the difference in Language and OM are similar in relation to access, and different in relation to Hearing and Balance.

Table 3 also shows that there was no statistical difference between the number of accesses according to the type of research (p=0,238).

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Table 3. Comparison between number of access, according to theme and type of research.

Theme	n	mean	sd	Q25%	median	Q75%	minimum	maximus	p
Hearing and balance	6	10256.5	3903.8	7522.5	8349.0	12595.0	7512.0	17212.0	0,008
Language	10	27606.1	18048.4	15863.0	21757.0	36199.0	9923.0	69309.0	
Orofacial Motricity	13	31959.5	15239.7	16354.0	37494.0	45131.0	8505.0	50900.0	
Intervention	5	28562.6	12019.2	18881.0	26694.0	37410.0	15795.0	44033.0	0,238
Observational	21	26555.4	17927.0	12294.0	16820.0	42037.0	7512.0	69309.0	
Review/ Letter to the editor	4	16310.3	13262.0	8336.5	10550.0	24284.0	8168.0	35973.0	

Q = quartil

Table 4. Multiple comparisons test.

Multiple comparisons		p
Hearing and balance	Language	0.041
	OM	0.001
Language	Hearing and Balance	0.041
	OM	0.901
OM	Hearing and Balance	0.001
	Language	0.901

Regarding the 34 most cited articles, it appears that 2013 was the year with the highest number of citations (26 - 76.5). As for the theme, articles referring to OM (10-29.4%) and Language (9-26.5%) were the most cited, and regarding the type of research, most were observational (29-83.3%) (Table 5).

Table 5. Descriptive analysis of type of research and thematic variables, according to the year of publication of the most cited articles (n = 33).

	Variables	Publication date/year								Total	
		2013		2014		2015		2016			
		n	%	n	%	n	%	n	%	n	%
Thematic	Hearing and Balance	5	19.2	0	0.0	1	100.0	0	0.0	6	17.6
	Language	7	26.5	2	33.3	0	0.0	0	0.0	9	26.5
	MO	5	19.2	4	66.7	0	0.0	1	100.0	10	29.4
	Collective health	2	7.7	0	0.0	0	0.0	0	0.0	2	5.9
	Voice	7	26.9	0	0.0	0	0.0	0	0.0	7	20.6
Research type	Intervention	1	3.8	1	16.7	0	0.0	0	0.0	2	5.9
	Observational	22	84.6	5	83.3	1	100.0	1	100.0	29	85.3
	Review/Letter to the editor	3	12.0	0	0.0	0	0.0	0	0.0	3	8.8

Table 6 shows that the theme does not show statically significant difference on the average number of citations (p=0,834), that is, the themes are similar to the mean of citations.

In Table 7, the analysis of the type of research demonstrates that in the period analyzed, the record of the highest mean of citations per article was for the review studies/letter to the editor. The three articles on the same subject stand out for the mean of 8,3 citations per article.

Table 6. Comparison between thematic according to the number of citation.

Thematic	n	mean	sd	Q25%	median	Q75%	minimum	maximus	p
Hearing and Balance	6	16.7	9.4	7.0	18.0	22.0	5.0	30.0	0,834
Language	9	23.2	11.2	17.0	23.2	30.0	5.0	42.0	
MO	10	18.0	8.0	17.0	19.0	21.0	5.0	30.0	
Collective health*	2	23.0	11.3	15.0	23.0	31.0	15.0	31.0	
Voice	7	21.0	6.1	17.5	19.0	21.5	16.0	34.0	

* not used for the Kruskal-Wallis test. Q=quartil

Table 7. Distribution of the number of citations, according to type of research.
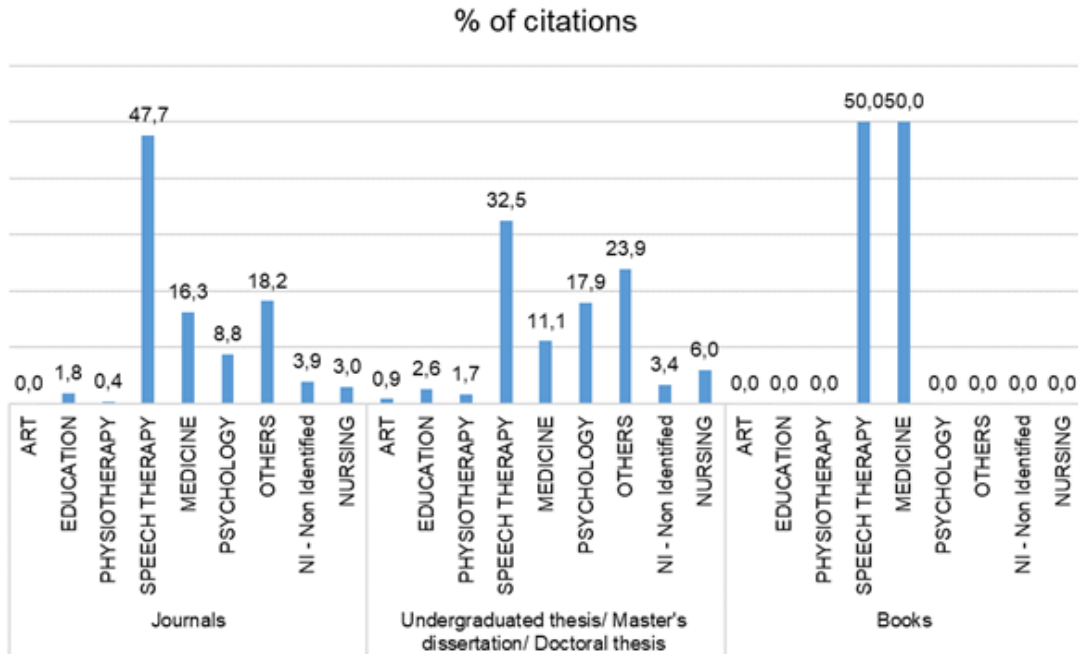
Research type	n	mean	sd	mean	minimum	maximum
Intervention	2	19.0	2.8	19.0	17.0	21.0
Observational	29	19.6	8.6	20.0	5.0	34.0
Review /Letter to the editor	3	25.3	14.5	18.0	16.0	42.0

In Table 8 and Figure 1, it is observed that the most frequent percentage of citations were in journals (560- 82,0%-%), followed by undergraduate thesis/master's dissertation/doctoral thesis (117- 17,1%) and books (6-0,9%). Most of these citations were from the Speech, Language and Hearing Sciences field (308-45,1%).

Table 8. Record of the sources in which the 34 analyzed articles were cited

Sources where the 34 analyzed articles were cited		n
	Art	0
	Education	10
	Physiotherapy	2
	Speech therapy	267
Periodic	Medicine	91
	Psychology	49
	Nursing	17
	Others	102
	Not identified	22
Total		560 (82,0%)
	Art	1
	Education	3
	Physiotherapy	2
	Speech therapy	38
Undergraduate thesis, Dissertation e Thesis	Medicine	13
	Psychology	21
	Nursing	7
	Others	28
	Not identified	4
Total		117 (17,1%)
	Art	0
	Education	0
	Physiotherapy	0
	Speech therapy	3
Books	Medicine	3
	Psychology	0
	Nursing	0
	Others	0
	Non identified	0
Total		6 (0,9%)

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Figure 1. Percentage of citations in journals, undergraduate thesis / dissertation / thesis and books / book chapters, according to area of knowledge

Discussion

Four journals are recognized in the area of Speech, Language and Hearing Sciences, in order of publication: Distúrbios da Comunicação - DIC (1986), CoDAS (1989), ACR (1997) and CEFAC (1999). However, it is worth noting that the last three were considered for this study, since these are inserted in the same platform (Scielo), a fact that makes it possible to standardize the analyses of the metrics proposed in this study.

Important to note that there was a change in the name of two journals (CoDAS and ACR), and this certainly constitute a bias in this research, and consequently in results, but without the possibility of control, since the analyzed data were presented on the platform.

The number of access to the first 30 articles in the analyzed period (ten from each journal), at first appears to be high. However, an analysis of two other journals in areas of knowledge that belongs to the area 21 of the Coordenação de Aperfeiçoamento de Pessoal de Nível Superior- CAPES, to which Speech, Language and Hearing Sciences belongs, shows that it is still necessary to encourage speech therapists in search for articles to support research-

ers and therapists. To exemplify, two journals were analyzed considering the first ten most accessed articles (registered on June 15, 2019). In the Brazilian Journal of Physical Education and Sport published by Escola de Educação Física e Esporte da Universidade de São Paulo, 403.672 accesses were registered, while the Brazilian Journal of Physical Therapy, published by Associação Brasileira de Pesquisa e Pós-Graduação em Fisioterapia, had 562.836 accesses. In the analyses of the H5 and H5-median index of theses, two journals, it can be seen that the Physical Education field has 14 and 18, respectively, and the Physiotherapy 26 and 30 (registered on June 15, 2019).

Two other aspects may justify this lower number of accesses, both of which are better detailed later: the lower number of qualified professionals in our country and still the little knowledge/appreciation of the speech therapist by other professionals.

It is clear that it is necessary to consider that Physiotherapy, despite having traced a history very similar to that of Speech Therapy[9-11], today registers a greater number of professionals: 71.432 physiotherapists are enrolled in the state of São Paulo[12] compared to 44.347 speech therapists in Brazil[13].

In analysis of the 10 most accessed articles from the three journals, it is noticed that only the four most traditional areas of Speech Therapy (Hearing, Language, Orofacial Motricity and Voice) appear, with emphasis on the themes of OM and Language. The registration related to the Language area can be justified, certainly, because this area has been part of Speech, Language and Hearing Sciences since its beginning. In regard to OM, there are several aspects to be raised: first, the fact that CEFAC journal was initially part of an institution for training specialists in the OM area and had the monographs of the professionals who completed the course, published almost exclusively in this journal. This certainly explains the greater number of accesses on this topic. Especially because the tradition seems to be maintained and today it is edited and published by Associação Brasileira de Motricidade Orofacial, although articles from other sub-areas of Speech, Language and Hearing Sciences may be submitted; second because it has been present since its creation with the same title, a fact that favors the analysis of the metrics used here; and finally, the analysis allowed by the Scielo Platform, considered the beginning of the period to be the year 2006, when the CEFAC journal was included in this platform, while the other two journals were included only in 2013.

It is important to note that of the three journals analyzed, as presented in the Introduction, each one is edited and published by a scientific association, a fact that may, in the medium term, determine a particular sub-area. Of those three, only CoDAS, as it belongs to the Sociedade Brasileira de Fonoaudiologia, can better register the outstanding issue regarding a certain sub-area (ACR = audiology and CEFAC = OM).

Regarding the type of research among the most accessed articles (Top10), this study also recorded a series of observational studies (21-70%), a fact that corroborates an analysis of 739 dissertations and thesis defended in the Post-Graduate Studies Program of Graduates in Speech, Language and Hearing Sciences at PUC-SP, when the authors found 50.5% of this type. Speech therapy, to be more recognized in these areas and for researchers who develop research with more elaborate epidemiological designs, with population samples for records of disorders that affect people, and also, clinical tests, since these tests are used in the form of evaluation may include highlighting in a specific area. Observational studies are important, but they are often not robust enough in their results to demonstrate the importance of what is being analyzed.

Regarding the analysis of the most cited articles, considering the metric presented by Scielo (H5-index and H5-median), a total of 33 articles were registered. Although the period of analysis considered for each journal is different, depending on the year in which each one was included in the Scielo Platform, 2013 (year of insertion in the Scielo Platform of ACR and CoDAS) appears as the initial year of citations, with emphasis also for having more articles.

As for the theme, among the most cited articles, in addition to the four most traditional areas, there was a record of Collective Health. Although with a different number for each area, the average number of citations did not register a statistically significant difference when compared to each other. It is important to highlight that, despite not being the objective of this study, a quarter of the most cited articles deal with issues related to childhood, an age group that has been privileged by the speech therapist since its beginnings.

Once again, observational studies were the most recorded among the most cited articles, although in more detailed analysis, two reviews[15,16] and a letter to the editor[17] stand out with the highest average of citations, namely 8.3 each. In particular, the letter to the editor with characteristics of literature review found in this analysis received 42 citations. This fact alerts the speech therapist to the importance of this modality - Letter to the Editor - since it constitutes a correspondence between several authors and readers, through the editors of the magazines, which can bring opinions and comments on a specific article recently published in the journal or serve as a space for authors to present preliminary results of their own research, or on topics of scientific relevance of interest to the community[18].

The literature, in other areas related to health, shows that systematic review is an important resource for a given area to highlight its practice, since it brings synthetically results of studies related to a given question. Most of the time, these reviews support the introduction of other articles because they bring in a summarized way proven evidence data, a fact that makes it possible to quote a given article. This data is confirmed by article authors who present information on bibliometric

instruments and their importance in assessing the quality of scientific journals, researchers and professors.

In the analysis of citations, to understand which sources are citing the articles of Speech, Language and Hearing Sciences published in the three analyzed journals, it is noticed that a greater number is concentrated in other journals, that is, the articles published by speech therapists are subsidizing other scientific articles. However, when the analysis falls on what the area would be, to which this journal is inserted, most of them are from Speech, Language and Hearing Sciences that is, speech therapists are publishing their research to be read and cited predominantly by other speech therapists, without advancing for its recognition in other areas. At first, the categorized areas were those that, since the beginning of Speech, Language and Hearing Sciences, had some kind of relationship (Medicine, Education, and Psychology, among others). Afterwards, a category called Others was created to contain those that at the beginning of the analysis had not been considered. Articles were found in journals from different areas, showing the possibility of the relationship between Speech-Language Pathology and Audiology and many other fields of knowledge[19-21].

It is known that the publication of a scientific article, in general, is an opportunity for the authors of the academy to get to know the different themes that are being researched and the main reason for publishing it is to publicize their discovery to the academic community, and thus contributing to the expansion of knowledge[22].

In the specific case of Speech, Language and Hearing Sciences, three alerts can be highlighted at the end of this analysis: the speech therapist as a professional or researcher has to access more articles in his area, to update himself and improve his performance; there is a need for a greater citation of articles written by Brazilian speech therapists in order for our production to be recognized; and, finally, the submission of articles must provide journals from other areas so that we can be better known for the themes we research.

Conclusion

Observational studies related to Orofacial Motricity and Language are the most accessed and cited. Literature review shows a higher mean of citations when compared to other types of research. Most were cited in sources of Speech, Language and Hearing Sciences, explaining that the area needs to make a move to be more recognized.

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