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Life cycles: analysis of publications in Communication Disorders Journal from 2016 to 2020

Ciclos de vida: análise das publicações na revista Distúrbios da Comunicação no período de 2016 a 2020

Ciclos de vida: análisis de las publicaciones en la revista Disturbios de la Comunicación de 2016 a 2020

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Abstract

Introduction: life cycle is currently considered an essential element for the formulation and implementation of public policies based on comprehensive health care. **Objective**: to analyze the scientific production of Communication Disorders Journal from 2016 to 2020, having as an object of discussion publications in the field of Speech Therapy by life cycles. **Method**: a retrospective study, with

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a bibliometric methodological approach, analyzed 297 articles considering the following variables: year of publication, registration of the geographic region (of the first author), descriptors, thematic areas, type of study and sample size, according to age groups (0 -6; 7-11; 12-18; 19-59 and >60). Data analysis was descriptive, numerical and percentage. **Results**: of the 297 studies, 258 referred to one or more age groups and 39 did not mention any age. Among the 258, the most frequent studies were children (138; 46.2%), followed by adults (122; 41.1%). The sample ranged in terms of median from 27 (adult) to 38 (children: 0-6 years) subjects. The Southeast region recorded the highest number of articles related to all cycles, as well as observational studies, especially those carried out with adults (98; 33.9%). Little mention was made of descriptors that identify life cycles (75; 6%), being elderly (25; 38%) and children (23; 35%) the most registered. **Conclusion**: the data show the urgency of aligning research with public health policies, as well as highlighting the importance of using appropriate descriptors for greater circulation of knowledge produced by the area.

Keywords: Health Research Evaluation; Life Cycle Stages; Speech, Language and Hearing Sciences; Bibliometric Indicators; Periodical, Education

Resumo

Introdução: ciclo de vida é atualmente considerado elemento essencial à formulação e implantação de políticas públicas pautadas no cuidado integral à saúde. **Objetivo**: analisar a produção científica da Revista Distúrbios da Comunicação no período de 2016 a 2020, tendo como objeto de discussão as publicações da área da Fonoaudiologia por ciclos de vida. **Método**: estudo retrospectivo, de abordagem metodológica bibliométrica, analisou 297 artigos considerando as seguintes variáveis: ano de publicação, registro da região geográfica (do primeiro autor), descritores, áreas temáticas, tipo de estudo e tamanho da amostra, segundo faixas etárias (0-6; 7-11; 12-18;19-59 e >60). A análise dos dados foi descritiva, numérica e percentual. **Resultados**: dos 297, estudos, 258 fizeram referência a uma ou mais faixas etárias e 39 não mencionaram qualquer idade. Dentre os 258, os estudos mais frequentes foram de criança (138; 46,2%), seguido pelos de adultos (122; 41,1%). A amostra variou quanto à mediana entre 27 (adulto) a 38 (crianças: 0-6 anos) sujeitos. A região Sudeste registrou maior número de artigos relacionados a todos os ciclos, assim como os estudos do tipo observacional, com destaque para os realizados com adultos (98; 33,9%). Pouca menção foi feita a descritores que identificam os ciclos de vida (75; 6%), sendo idoso (25; 38%) e criança (23; 35%) os mais registrados. **Conclusão:** os dados evidenciam a premência de alinhamento das pesquisas às políticas públicas de saúde, bem como ressalta a importância do uso de descritores adequados para maior circulação do conhecimento produzido pela área.

Palavras-chave: Avaliação da pesquisa em saúde; Estágios do ciclo de vida; Fonoaudiologia; Indicadores bibliométricos; Publicação periódica; Educação.

Resumen

I**ntroducción**: el ciclo de vida es considerado en la actualidad un elemento esencial para la formulación e implementación de políticas públicas basadas en la atención integral de la salud. **Objetivo**: analizar la producción científica de la Disturbios de la Comunicación de 2016 a 2020, teniendo como objeto de discusión publicaciones en el campo de la Logopedia por ciclos de vida. **Método**: estudio retrospectivo, con enfoque metodológico bibliométrico, se analizaron 297 artículos considerando las siguientes variables: año de publicación, registro de la región geográfica (del primer autor), descriptores, áreas temáticas, tipo de estudio y tamaño de la muestra, según grupos de edad (0-6; 7-11; 12-18; 19-59 y >60). El análisis de los datos fue descriptivo, numérico y porcentual. **Resultados**: de los 297 estudios, 258 se refirieron a uno o más grupos de edad y 39 no mencionaron ninguna edad. Entre los 258, los estudios más frecuentes fueron los niños (138; 46,2%), seguidos de los adultos (122; 41,1%). La muestra osciló en términos de mediana de 27 (adultos) a 38 (niños: 0-6 años) sujetos. La región Sudeste registró el mayor número de artículos relacionados con todos los ciclos, además de estudios observacionales, en especial los realizados con adultos (98; 33,9%). Se hizo poca mención de descriptores que identifican ciclos de vida (75; 6%), siendo ancianos (25; 38%) y niños (23; 35%) los más registrados. **Conclusión**: los datos muestran la

urgencia de alinear la investigación con las políticas públicas de salud, además de resaltar la importancia de utilizar descriptores apropiados para una mayor circulación del conocimiento producido por el área.

Palabras clave: Evaluación de la Investigación en Salud; Estádios del Ciclo de Vida; Phonoaudiologia; Indicadores bibliométricos; Publicacion Periódica; Educación

Introduction

Since it began to be published in 1986, the Revista Distúrbios da Comunicação (DIC) journal has proposed to disseminate theoretical and methodological knowledge produced by the area of Speech-Language Pathology and related areas, becoming an important tool for the promotion of scientific and technological production from national and international authors and institutions. The magazine's editors have systematically published bibliographic analyses that make it possible to characterize the nature of the productions, providing information that may be useful and of interest to its readers[1, 2].

The collection of the journal's scientific production from 2016 to 2020 allowed the conduction of different analyses, such as a comparative study of publications from this period with a previous period[2] and another with a focus on production in the field of Collective Health (submitted article). This study aims to analyze publications in the area of Speech-Language Pathology by life cycles. This approach has currently been understood as a way to integrate health actions in the various stages of human development, being a relevant tool for the formulation and implementation of public policies and health programs based on comprehensive care.

The comprehensive care model present in the policies implemented for the Brazilian Unified Health System (SUS) is based on health care aimed at the needs of a population. These policies are focused on the health of contextualized subjects, who may experience illness, such as an event, but who also need continuous and integrated actions for health promotion, prevention of injuries or damage, recovery of health and rehabilitation throughout their lives[3].

Especially since the implementation of the Family Health Strategy[4] and the Support Center for Family Health[5] (NASF), the SUS has formulated and implemented health policies based on life cycles.

The 2020-2023 National Health Plan (PNS) determines that "care focused on different moments of life and throughout development reflects a vision that adapts policies, actions and services to the singularities of each stage of life"[6]. (p. 80).

Being structured in an integral and longitudinal way under the coordination of Primary Health Care, health care is based on health actions for the family and the community that will take place in different services of the Health Care Network (RAS). The way these services are used in this context provides greater proximity if the strategies used in care consider important changes that occur at each stage of life.

It should be noted that the term "life cycle" refers to the transformation process of the human being from the beginning to the end of life. Subdivided into specific cycles, life cycles express the interaction between the biological and psychosocial dimensions that condition the health and disease process[7].

By using as a reference the changes that occur in the different stages of life (child, adolescent, adult and elderly) in a life cycle approach, it is possible to understand the needs, demands, morbidities of the population served, as well as the strategies of specific approach to care in each of them[6].

Care management for a given population focused on life cycles is based on the work of multidisciplinary teams, which act in an interdisciplinary or transdisciplinary manner, aiming to provide an expanded view of the population's health needs and achieve the production of actions based on the integrality of the care, allowing improvement in conditions and quality of life in its different cycles[8].

The professional skills required by the health model of the SUS go beyond the training core that provides theoretical and practical references for professional practice. These references are generally aimed at resolving established illnesses or dysfunctions. The perspective of comprehensive and continuous care, based on the expanded concept of health, requires other skills, knowledge and skills typical of teamwork, which includes sharing responsibilities and decisions and the use of con-

cepts that contribute to the institutionalization of knowledge and practices professionals[8,9].

The perspective related to the work of speech-language pathologists in public health services became more effective and consistent with the creation of the SUS, in 1988, and the implementation of public policies that took place over the last decades to guarantee the principles of universality, completeness and equity. These policies in the construction of Health Care Networks created services, establishing multidisciplinary teams and including several professionals, such as the speech-language pathologist, at different levels of health care, especially in primary care[10].

The health of children, adolescents, adults and the elderly, considering different variables ranging from gender issues to situations of vulnerability, according to their specificities and diversity, are addressed based on the various policies implemented by the Ministry of Health in recent years in different levels of health and social control[11,12,13]

In this context, the Brazilian National Health Council (CNS) created the Intersectoral Commission for Health Care in Life Cycles (CIASCV) in 2016 to support the plan of the CNS on debating issues related to Policies to promote comprehensive care for people in their different life cycles and considering situations of vulnerability, specificity and diversity[14]. In this sense, it is also worth highlighting Decree No. 9,795, of May 17, 201915, which gave Primary Care in the Ministry of Health the status of Secretariat and Department of Strategic Programmatic Actions. Among other attributions, this department began to coordinate the process of formulating, implementing and evaluating health policies related to life cycles, in an integrated and continuous manner[15].

Although approaches based on life cycles are not frequent in the field of Speech-Language Pathology, this study considered that the analysis of scientific production that works with the age variable can promote reflection. Thus, the study intends to identify the main themes studied and the descriptors used to make accessible the area's contribution to the multiple dimensions of life in each cycle. Therefore, this study aimed to analyze the scientific production of Revista Distúrbios da Comunicação, from 2016 to 2020, focusing on life cycles.

Method

This is a retrospective study, with a bibliometric methodological approach, which did not involve human beings, and which included the use of secondary data collected in previous research[2].

The methodological procedures were developed in three stages, namely: theoretical and methodological preparation; selection of previously collected data; and, the systematization and analysis of the results.

Data collection assessed articles from Revista Distúrbios da Comunicação, which are available to the general public (at https://revistas.pucsp.br/index.php/dic/login), between January 2016 and December 2020. The initial collection recorded the following data: volume, title, abstract, institution of the authors with respective registration of the geographical region of the first author; descriptors; topic, considering the seven areas established by the Brazilian Society of Speech-Language Pathology and Audiology (Hearing and Balance, Dysphagia, Educational Speech-Language Pathology, Language, Orofacial Motricity, Public Health and Voice), adding the category of Professional Training; Study design (observational, interventional or review); number of study centers involved (single or multicenter); and, finally, size and age range of the sample.

This study considered the following analysis variables: year of publication of the articles, geographic region of the first author, registered descriptors, thematic area, type of study, number of participants in the sample and age groups, defined as: 0-6 years old; 7-11 years old; 12-18 years old, 19-59 years old and >60 years old. This division followed the legal frameworks proposed by the Ministry of Health, which is guided by the convention of the World Health Organization (WHO), which defines children as subjects between 0-11 years old. Then, following the National Policy for Comprehensive Child Health Care (PNAISC-Brasil 2015)[11], this cycle was subdivided into first (0-6 years old) and second childhood (7-11 years old). In addition, the Statute of the Elderly (2003)[16] was also used, which defines the elderly as a person aged 60 or over, in accordance with the stipulations for developing countries.

It should be noted that a given study may have been computed more than once, when the studied population consisted of more than one age group,

for example: if the sample consisted of subjects from 0 to 19 years old, the article was computed in both life cycles, namely childhood and adolescence.

Although the journal uses the term "keywords" in its publications, at the time of article submission, authors are instructed to use only words included in the list of descriptors published on the Bireme website (https://decs.bvsalud.org/). Only the use of descriptors that evidenced the life cycle was considered in the analysis of this variable.

Data were subjected to descriptive data analysis using the SPSS v.23 for Windows, which prioritized description by means of absolute (n) and relative (%) frequency, in addition to central tendency (mean and median) and dispersion (standard deviation, minimum and maximum) measures.

Results

A total of 297 articles were analyzed during the period studied (from 2016 to 2020). Of these selected articles, 258 made reference to one or more age groups surveyed, while 39 did not mention the age group. The most frequent age group reported in the publications refers to children (127; 49.2%), with emphasis on early childhood (0 to 6 years old) with 72 articles (27.9%), and second childhood (7 to 11 years old), with 55 studies (21.3%) (Table 1). The age group corresponding to adults was the third with the most studies found (117; 45.3%), noting once again that an article may have been computed more than once.

Table 1. Sample size distribution: number, percentage and median of articles, according to age group and corresponding life cycle

Life Cycles	Age Range	n	%
Absent	Absent	39	12.5
Child	0-6 years old	72	27.9
	7-11 years old	55	21.3
Adolescent	12-18 years old	55	21.3
Adult	19-59 years old	117	45.3
Elderly	≥60 years	61	23.6

Regarding the sample size, the median for each life cycle ranged from 27 (adult) to 38 (children: 0-6 years) subjects. (Table 2). The article with the largest number of participants included the analysis of 879 medical records.

Table 2. Sample size distribution, according to age group and corresponding life cycle.

Life Cycles	Age Range	Median
Child	0-6 years old	38.0
	7-11 years old	31.5
Adolescent	12-18 years old	36.5
Adult	19-59 years old	27.0
Elderly	≥60 years	30.0

Table 3 shows the age group corresponding to adults, with a greater number of articles published in 2016 and 2017, and the age group corresponding to children (0 to 11 years), with an increase over 2018, 2019, 2020, while the number of articles in relation to the elderly (≥ 60 years old) gradually decreased. As for the regions, there was a higher percentage of articles from the Southeast region of the country, with a prevalence in the adult age group, followed by children.

Table 3. Numerical and percentage distribution of age groups and corresponding life cycles, according to year and region where the study took place.

Variables			Life Cycles				
			Children		Adolescents	Adults	Elderly
			0 to 6	7 to 11	12 to 18	19 to 59	≥60
Year	2016	n	13	12	12	31	19
		%	16.5	20.3	20.0	25.4	28.4
	2017	n	11	7	11	27	16
		%	13.9	11.9	18.3	22.1	23.9
	2018	n	15	11	15	23	11
		%	19.0	18.6	25.0	18.9	16.4
	2019	n	23	11	11	22	12
		%	29.1	18.6	18.3	18.0	17.9
	2020	n	17	18	11	19	9
		%	21.5	30.5	18.3	15.6	13.4
Region	Central-West	n	0	0	1	4	0
		%	0.0	0.0	1.7	3.3	0.0
	Northeast	n	18	10	11	23	10
		%	23.1	17.2	19.0	19.2	14.9
	Southeast	n	32	29	30	67	34
		%	41.0	50.0	51.7	55.8	50.7
	South	n	28	19	16	26	23
		%	35.9	32.8	27.6	21.7	34.3

As for the topics investigated, Table 4 shows that Language and Hearing and Balance had a higher percentage in the age group corresponding to children, especially in early childhood (from 0 to 6 years), and Collective Health, among adults. Hearing and Balance is a topic that has a better distribution of research by cycles.

Table 4. Numerical and percentage distribution of age groups and corresponding life cycles, according to the topic of the article.

Variables		Life Cycles				
		Children		Adolescents	Adults	Elderly
		0 to 6	7 to 11	12 to 18	19 to 59	≥60
Voice	n	4	4	9	26	9
Language	%	3.8	5.3	11	16.5	10.6
	n	34	22	14	27	14
	%	33.0	29.4	17.1	17.1	16.5
Hearing and Balance	n	25	21	29	28	27
	%	24.2	28	35.4	17.9	31.8
Orofacial Motricity	n	15	9	6	11	3
	%	14.6	12	7.3	7	3.5
Dysphagia	n	6	5	6	14	19
	%	5.8	6.7	7.3	9	22.3
Educational SLP	n	10	10	4	11	2
	%	9.8	13.3	4.8	7	2.4
Collective Health	n	9	4	12	32	11
	%	8.8	5.3	14.7	20.4	12.9
Professional Training	n	0	0	2	8	0
	%	0.0	0.0	2.4	5.1	0.0
Total	n	103	75	82	157	85
	%	100	100	100	100	10

As for Table 5, observational studies are recorded in greater numbers for all life cycles, with emphasis on those carried out with adults (98-33.9%). Interventional studies are carried out in greater numbers with children (0-11 years old), in a total of 34 (47.8%) when considering the first and second childhood.

Table 5. Distribution of age groups and corresponding life cycle, according to the type of research.

Variables		Life Cycles				
		Children		Adolescents	Adults	Elderly
		0 to 6	7 to 11	12 to 18	19 to 59	>60
Observational	n	52	41	47	98	51
	%	72.2	74.5	85.5	83.8	83.6
Interventional	n	20	14	8	19	10
	%	27.8	25.5	14.5	16.2	16.4
Total	n	72	55	55	117	61
	%	100	100	100	100	100

As for the use of descriptors, the researchers counted 1238 descriptors in the articles analyzed, and only 75 (6.0%) alluded to descriptors corresponding to life cycles, with elderly (25; 38.0%) and children (23; 35.0%) with the highest occurrences (adults 12; 19.0%, and adolescents 5; 8.0%).

Discussion

As presented in the introduction to this study, the division of life cycles by age group is a useful abstract framework for defining health policies and strategies. However, the limits between these cycles are not given in a homogeneous way, considering the diversity of the population groups included in each of the cycles. These cycle boundaries may differ according to cultural context and degree of development. People aged 60 in developing countries generally fit into the elderly group, while in developed countries, these people are included in the adult cycle, which extends until the person turns 65[17] In some African cultures, individuals over the age of 13 are considered adults. Oliveira[18] reports that the analysis of production by life cycle is always more promising when focused on understanding the phenomenon of development or aging, which is not restricted to the idea of natural stages, but a path historically contextualized, and determined by life conditions or particular non-generalizable experiences. The focus on life cycles in SUS public policies is based on a broader view of health, which emphasizes not only biological aspects, but also psychological and sociocultural aspects related to the individual history of subjects, seeking to contemplate the multiplicity of possibilities for human development.

In Brazil, policies were implemented based on SUS guidelines that aim to address the health needs of each life cycle, considering the social determinants and conditions of health. These policies aim to go beyond the conception of cycles with (natural or universal)[18] stages of human development, conceiving them as processes of transformation determined by historical-cultural circumstances and the peculiarities of the history and experiences of each subject.

Although research in the field of speech-language pathology is not conducted exclusively from the perspective of policies implemented by the SUS, we emphasize its relevance as a social, historical and political context.

The most studied life cycle in the articles analyzed referred to children, especially those related to early childhood. Since the beginning of the profession in our country, speech-language pathologists have always taken on the leading role in monitoring the development of children, either by the family or by the school. Due to the prevalence of communication disorders among preschool and school children, the international literature recommends speech-language screening in the first years of life, since the timely identification and stimulation increase the chances of a good prognosis, avoiding possible alterations in other important developmental milestones, such as reading and writing[19]. There is also an increase in the number of articles in this life cycle between 2018 and 2020, when comparing the first and last year analyzed.

There was also a highlight for the age group corresponding to adults, with a greater number of articles published in 2016 and 2017, when compared to children, but with a regular number of articles in other years. These data may be related to a possible prevalence of speech-language disorders in this age group. Although population-based epidemiological studies are scarce in the area, a Brazilian study (the only) found in the indexed literature carried out a survey with residents of the city of Porto Alegre and estimated a prevalence of 30.8% of speech-language disorders in the adult population[20].

The studies with the participation of adolescents were studies with a broader age group analyzed (namely, children and adolescents or adolescents and adults), with only seven studies using the term "adolescent" in their title, explaining the exclusive concern of analyzing this life cycle. Although there are important public policies at the national level aimed at facing the vulnerabilities of the population if this cycle, health practices still remain very centered on diseases or specific actions when compared to other cycles[21]. Adherence to actions seems to be affected by different reasons, especially those related to the weaknesses of the health network and the unpreparedness of professionals for a biopsychosocial, interdisciplinary and intersectoral approach and the lack of more discussed actions to face the real demands of this population.

Another important warning sign is the little consideration observed for the cycle corresponding to the elderly. The United Nations highlights the significant increase observed worldwide, with the expectation that by 2050 there will be twice as many people over 60 years old and three times over 80 years old[22]. According to the IBGE *[Brazilian Institute of Geography and Statistics]* forecast, in 2025, Brazil will be the sixth largest country in the world in terms of the number of elderly people[23].

These data alone should stimulate further research with the participation of this life cycle in the disciplinary field of Speech-Language Pathology and its interdisciplinary action. Despite knowing that specific attention should be given in the care of each life cycle, in the case of the elderly, due to physical decline, presence of comorbidities, often represented by established chronic diseases, and aspects related to psychosocial issues, the complexity is greater, requiring an interdisciplinary work that guarantees attention to these different aspects in order to be successful. This can serve as a warning for Speech-Language Pathology with a view to drawing up future plans regarding its inclusion in care for the elderly, prioritizing not only issues of dysphagia and loss of hearing and balance, but also communication in general, with emphasis on alterations in language, cognition and voice. The National Health Policy for the Elderly[13] considers, among others, cognitive and communication skills as important indicators of functionality and, therefore, of health.

Regarding the distribution of life cycles in terms of topics, the most recurrent ones refer to Language and Hearing and Balance studies. This finding was expected, since other authors have shown this prevalence[24], due to the beginnings of Speech-Language Pathology.

Continuing with the analysis of topics, according to life cycles, Hearing and Balance was highlighted in the analysis of articles including adolescents (12 to 18 years) as subjects, although as explained above, this cycle is reported in research with expanded population (sometimes with children, sometimes with adults). Regarding Voice and Dysphagia, studies carried out with adults prevail in the first one, and in the second, with elderly people (≥ 60 years old). This prevalence is explained by the need for specific interventions demanded in these stages of life, in the first one regarding the specific work activity of this stage, and in the second one related to aging. It also highlights the still significant trend of knowledge production and Speech-Language Pathology activities to be predominantly focused on its specific core or specialty. In this sense, it is worth emphasizing the importance of speech-language pathology practice in line with public policies of the SUS. The area makes a relevant contribution and the exchange of multidisciplinary, interdisciplinary, and even intersectoral knowledge and practices are in line with comprehensive care[25] structured from the health needs of the population in their different life cycles.

It is known that the definition of the sample is one of the most important questions for the planning of a research and, therefore, some steps must be considered, preferably under the guidance of a biostatistician[26]. Only few of the articles studied make reference to this planning and in the analysis it is noticed that the median registered in the different studies, is around 30 subjects, a number recommended in a generalized and wrong way, when it is necessary to define the size of a sample.

It was found that the article with the largest number of subjects, proposing to analyze 879 medical records, was carried out at the clinic named after Prof. Mauro Spinelli. In 2022, when celebrating the 60th anniversary of the speech-language pathology Course (1962), 50th anniversary of the Graduate Program in Human Communication and Health (1984) and 35th anniversary of the Revista Distúrbios da Comunicação (1986), it is worth remembering that the professor, who died in 2005, was one of the main responsible for the consolidation of Speech-Language Pathology and Hearing Sciences at PUC-SP, as well as a leader in the training of Brazilian speech therapists. In this way, this data also allows us to honor him and thank him for his role.

Regarding the geographic location in which the studies were carried out, as discussed in a previous article[2], it is observed that there is a concentration in the Southeast region of studies on all cycles, with emphasis on adults followed by children. This result can certainly be explained because this region is a significant hub of universities and colleges, as well as Graduate Programs in Speech Therapy[28]. On the other hand, there is a substantial increase in production in the Northeast region, especially due to recent incentives for investment in higher education in this region. A more detailed discussion was carried out in a previous article[2].

Regarding the type of research used in the different life cycles, a larger number was registered referring to observational studies. This type of study allows understanding different phenomena, generally considering more natural conditions and with a more representative sample of the population, with important implications for the planning of health actions[29]. However, it can be said that intervention studies that allow the researcher, in addition to observing, to carry out a study and

put his/her work into practice and analysis, with a view to verifying its effects[29]. The record of a greater number of articles with intervention research being found in the life cycle corresponding to childhood may be related to the urgency of early intervention, so as not to generate alterations in the development of children. On the other hand, some aspects must be considered: experimental research with representative samples depends on the existence of favorable clinical conditions; and such+ research also depends on human and material resources, which is not always granted by public notices for the field of speech-language pathology. Even in the face of these unfavorable conditions, researchers must reflect and mobilize in order to expand research based on intervention, to consolidate evidence and consequent scientific advances in the area.

As for the use of keywords and descriptors, it should be noted that the total referring to life cycles (75) shows that few articles mention terms referring to the cycles (child, adolescent, adult and elderly) analyzed in this study. The studies found also do not use the framework of generational theories, such as childhood, youth, maturity and old age. Furthermore, little emphasis is given to public policies and programs aimed at health care by life cycles[11,12,13]. The use of the descriptor in this case is very relevant, since it identifies the population researched by the authors. Terms related to the life cycle or age group are commonly called secondary descriptors, pre-coded by the indexing system, delimit the target population of the study, describe or qualify the subject addressed, further detailing the main descriptor of the study, and providing the user with a multidisciplinary and interdisciplinary view of the researched aspects[2].

Although highlighted in a previous research[2], it is worth noting once again the mistaken use of the term Speech-Language Pathology: 114 (9.2%) occurrences were found in the analyzed material, which is a higher record than the descriptors referring to life cycle. Although this choice apparently seeks to give greater visibility to the area, this impairs access to scientific production from the point of view of the specific function of the keyword, in addition to not allowing the use of this production as a reference by other areas of knowledge. One more warning should be given to the use of the descriptor Speech-Language Pathology, which should only be used when the article refers to issues related to professional training or scientific production in the area. This misunderstanding harms the process of searching for the researched subject, as it identifies all the researches in the area, making it difficult to quickly access the researched topic. As an article needs to be indexed in order to be easily located, it is important to consider key word terms, which in the Revista Distúrbios da Comunicação must correspond to descriptors, directly related to the research content, so that readers interested in the specific subject addressed in the manuscript can access it easily and objectively, without barriers.

In addition, most studies are exclusively authored by speech-language pathologists, who address professional core issues (specific to speech-language pathology), without major investments in working in multidisciplinary teams and in an interdisciplinary perspective, highlighted as a perspective of action that generates comprehensiveness and quality of health care[9].

Conclusion

The analysis of the scientific production of Revista Distúrbios da Comunicação over five years (2016 to 2020) showed that the age group of children was the most researched life cycle, predominating the age group related to early childhood, followed by the adult cycle. Most studies were carried out in the Southeast region. There is a prevalence of observational studies and samples with a median between 27 and 38 subjects. Among the most studied topics, Language was prioritized in the age group corresponding to children and Collective Health in relation to adults. With regard to the descriptors, there is very little mention of the life cycle focused on the studies, which makes it difficult to search for studies as a bibliographic reference for studies and work carried out in a multidisciplinary and interdisciplinary context.

The health policies implemented by the Ministry of Health that are focused on life cycles change the perspective, which is traditionally directed to the biological aspect (which focus on similarities or abnormality of human development) towards the understanding and expanded intervention on biopsychosocial aspects that determine the health-disease processes in each life cycle. This makes evident the urgency of aligning studies in the area of Speech-Language Pathology with this approach that values the specificities of child, adolescent,

adult or elderly health, always considering socio-cultural and environmental contexts, also observed in generational studies.

This alignment requires professionals to have a broader discussion, of an interdisciplinary nature, discussing the effective scientific and professional contribution of Speech-Language Pathology to comprehensive care (in promotion, prevention and rehabilitation) and as a way of qualifying life in the face of such diverse (economic-cultural) scenarios in our country.

Although the analysis of this study was based on publications of a single scientific journal and for a period of five years, the findings provide a perspective of structuring databases of research carried out in various specialties of Speech-Language Pathology, thus providing visibility to the scientific evidence produced by the area as benchmarks for professional performance in different life cycles, as well as reflection on the area's contributions to public policies and health programs aimed at comprehensive health care.

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