

Analysis of scientific production about tinnitus in brazilian speech therapy and audiology journals: a scope review

Análise da produção científica sobre zumbido nas revistas brasileiras de fonoaudiologia: uma revisão de escopo

Análisis de la producción científica sobre acúfeno en revistas brasileñas de fonoaudiología: una revisión de alcance

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Received: 07/13/2024

Accepted: 08/27/2024

Abstract

Introduction: Tinnitus is a multifaceted symptom. For your understanding, different studies are carried out, mainly in Speech Therapy, aiming at diagnostic and therapeutic strategies. This research is fundamental for clinical advances. **Objective:** To map and describe the characteristics of publications present in Brazilian speech therapy journals related to the topic of tinnitus. **Methods:** Scope review study. The research was conducted in the SciELO database and in journals: Audiology - Communication Research, CoDAS, CEFAC and Communication Disorders. Using the terms “Tinnitus”, “Tinnitus” and “Tinnites”. Primary articles in any language related to the central theme were eligible. The eligible articles were screened by title and abstract, reviewed in full text, with disagreements resolved by consensus or additional reviewers. **Results:** The review covered 123 studies, and 37 were considered eligible. The Southeast led in search locations with 51.3%. The years 2017 and 2022 concentrated 32.5% of publications. 62.1% of the studies were observational, 35.2% intervention and 2.7% instrument validation. The total sample was 9,256 individuals, predominantly women (67.5%). Acuphenometry was used in 19% of studies. The Tinnitus Handicap Inventory and the Visual Analogue Scale were the main assessment instruments. Therapeutic strategies were reported in 29.7%, with emphasis on guidance and counseling (10.8%) and adaptation of Electronic Sound Amplification Devices (8.1%). **Conclusion:** A decade-long analysis revealed an increasing body of literature on tinnitus, a predominance of studies in adults, and the need for multidimensional and multidisciplinary approaches using tools like the Tinnitus Handicap Inventory and Visual Analogue Scale.

Keywords: Periodicals as Topic; Speech, Language and Hearing Sciences; Tinnitus; Academic Communication; Scientific Publication Indicators.

Resumo

Introdução: O zumbido é um sintoma multifacetado. Para o seu entendimento, diferentes estudos são realizados, principalmente na Fonoaudiologia, visando estratégias diagnósticas e terapêuticas. Estas pesquisas são fundamentais para avanços clínicos. **Objetivo:** Mapear e descrever as características das publicações presentes nas revistas brasileiras de Fonoaudiologia relacionadas ao tema do zumbido. **Métodos:** Estudo de revisão de escopo. A pesquisa foi conduzida na base de dados da SciELO e em periódicos: Audiology - Communication Research, CoDAS, CEFAC e Distúrbios da Comunicação. Utilizou-se os termos “Zumbido”, “Tinnitus” e “Acúfeno”. Foram elegíveis artigos primários, em qualquer idioma, de relação com a temática central. Os artigos elegíveis foram triados por título e resumo, revisados em texto completo, com discordâncias resolvidas por consenso ou revisores adicionais. **Resultados:** A revisão abordou 123 estudos, e 37 foram considerados elegíveis. O Sudeste liderou em locais de pesquisa com 51,3%. Os anos de 2017 e 2022 concentraram 32,5% das publicações. 62,1% dos estudos foram observacionais, 35,2% de intervenção e 2,7% de validação de instrumentos. A amostra total foi de 9.256 indivíduos, predominantemente mulheres (67,5%). A acufenometria foi usada em 19% dos estudos. O *Tinnitus Handicap Inventory* e a Escala Visual Analógica foram os principais instrumentos de avaliação. Estratégias terapêuticas foram relatadas em 29,7%, com destaque para orientação e aconselhamento (10,8%) e adaptação de Dispositivos Eletrônicos de Amplificação Sonora (8,1%). **Conclusão:** A análise de uma década mostrou crescente produção sobre zumbido, predominância de estudos em adultos e necessidade de abordagens multidimensionais e multidisciplinares com ferramentas como *Tinnitus Handicap Inventory* e Escala Visual Analógica.

Palavras-chave: Publicações Periódicas como Assunto; Fonoaudiologia; Zumbido; Comunicação Acadêmica; Indicadores de Produção Científica.

Resumen

Introducción: El acúfeno es un síntoma multifacético. Para su comprensión, se realizan diferentes estudios, principalmente en Fonoaudiología, encaminados a estrategias diagnósticas y terapéuticas. Esta investigación es fundamental para los avances clínicos. **Objetivo:** Mapear y describir las características

de las publicaciones presentes en revistas brasileñas de logopedia relacionadas con el tema del acúfeno. **Métodos:** Estudio de revisión de alcance. La investigación se realizó en la base de datos SciELO y en las revistas: *Audiology - Communication Research*, *CoDAS*, *CEFAC* y *Distúrbios da Comunicação*. Utilizando los términos «Zumbido», “Tinnitus” y “Acúfeno”. Fueron elegibles los artículos primarios, en cualquier idioma, relacionados con el tema central. Los artículos elegibles fueron seleccionados por título y resumen, revisados en texto completo, y las discrepancias se resolvieron por consenso o revisores adicionales. **Resultados:** La revisión abarcó 123 estudios y 37 se consideraron elegibles. El Sudeste lideró la búsqueda de localidades con un 51,3%. Los años 2017 y 2022 concentraron el 32,5% de las publicaciones. El 62,1% de los estudios fueron observacionales, el 35,2% de intervención y el 2,7% de validación de instrumentos. La muestra total fue de 9.256 personas, predominantemente mujeres (67,5%). La acufenometría se utilizó en el 19% de los estudios. El Tinnitus Handicap Inventory y la Escala Visual Analógica fueron los principales instrumentos de evaluación. Las estrategias terapéuticas fueron reportadas en el 29,7%, con énfasis en orientación y asesoramiento (10,8%) y adaptación de Dispositivos Electrónicos de Amplificación del Sonido (8,1%). **Conclusión:** Un análisis de una década mostró un aumento en la producción sobre el tinnitus, una predominancia de estudios en adultos, y la necesidad de enfoques multidimensionales y multidisciplinarios utilizando herramientas como el Tinnitus Handicap Inventory y la Escala Visual Analógica.

Palabras clave: Publicaciones periódicas como materia; Terapia del lenguaje; Acúfeno; Comunicación Académica; Indicadores de Producción Científica.

Introduction

Tinnitus can be defined as an auditory illusion based on the sensation of sound without external sources of stimulation^{1,2}. When it persists beyond three months, it is considered chronic and classified as a disorder when it causes distress to the individual³. Some authors justify its origin by the imbalance of three phenomenological pathways: the sound perception pathway, the distress pathway, and the noise cancellation pathway. When included in the triple network model, these pathways explain its chronicity and causal and symptomatological diversity^{3,4}. Tinnitus is a recurring symptom in the population. A study conducted in 2022 with individuals aged 18 years or older from 12 European Union countries (Bulgaria, England, France, Germany, Greece, Ireland, Italy, Latvia, Poland, Portugal, Romania, and Spain) found that 14.7% of the studied population reported the symptom, indicating that one in seven adults in the European Union experiences tinnitus². In Brazil, a study conducted in 2020 with a sample of 1,569 residents of a city in the state of São Paulo, aged 18 or older and users of the Sistema Único de Saúde (SUS), observed that 31.6% of them had tinnitus¹.

The diagnosis and treatment of this symptom present a challenge due to its multiple characteristics. Therefore, it should follow specific procedures and protocols aimed at improving follow-up and

prognosis, with support from a multidisciplinary team, including otolaryngologists and audiologists^{5,6}. However, there are difficulties in professional training for monitoring and managing these patients, resulting in inappropriate conduct. Part of this problem in Brazil is due to the lack of guidelines and specific protocols, leading to untreated, undertreated, overtreated, or dissatisfied patients^{4,7}.

Despite the growing concern with tinnitus and its clinical relevance, publications on this topic in Brazilian speech-language pathology and audiology journals may be limited in quantity and show a heterogeneous distribution regarding topics covered, research methods employed, and therapeutic focus. Therefore, investigating Brazilian studies is essential to provide an overview of the current scientific landscape, guide future studies and treatment methods, contribute to knowledge dissemination, and promote evidence-based practice. Thus, it is crucial to develop and foster studies in this area so that speech-language pathology and audiology in Brazil can demonstrate its importance in the treatment and assessment of patients with tinnitus and promote practice increasingly based on science.

The present study aims to map and describe the characteristics of publications in Brazilian speech-language pathology and audiology journals related to the topic of tinnitus.

Methods

This is a scoping review study. The scoping review followed the guidelines recommended by the Joanna Briggs Institute Manual for Evidence Synthesis for Scoping Reviews and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews - PRISMA-ScR⁸. The protocol for this scoping review was registered on the Open Science Framework (doi:10.17605/OSF.IO/3CHVF).

The PICO⁹ model was used to formulate the guiding questions of this study, where the following were outlined: (P) studies considering tinnitus as the main topic, (I) studies where the primary objective was to perform or describe instruments, methods, assessments, and/or interventions for tinnitus, (C) studies with or without a control group, (O) studies reporting the development and results of interventions, assessments, methods, or instruments in the short, medium, and long term. Studies conducted up to June 2023 were included in this review if they met the PICO criteria.

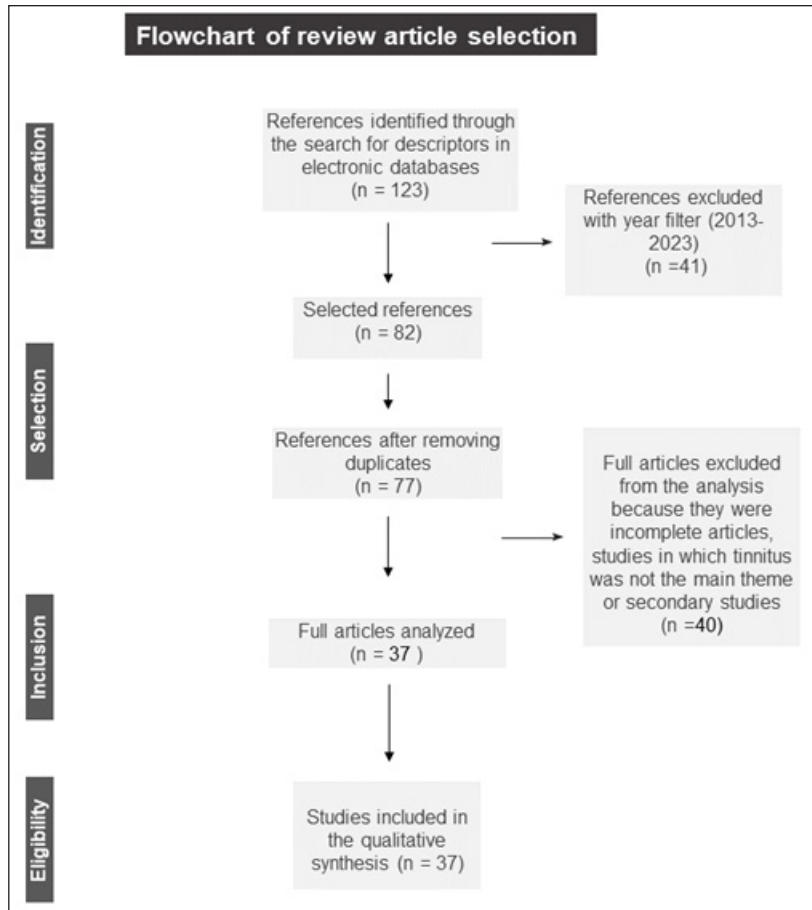
The search was conducted in the SciELO databases and the journal portal: Audiology - Communication Research (ACR) - ISSN 2317-6431; CoDAS - ISSN 2317-1782; CEFAC - ISSN 1982-0216; and Communication Disorders - ISSN 2176-2724, to identify articles related to tinnitus in Brazilian speech-language pathology journals. The search was performed using the terms “Zumbido”

OR “Tinnitus” OR “Acúfeno”. The terms were used in a combined manner, following the previously mentioned order. The terms are based on descriptors present in the Descritores em Ciências da Saúde- DECS.

Primary articles, in any language, were considered if they were related to the central theme. The exclusion criteria were publications in journals from fields related to speech-language pathology, unpublished reports, literature reviews, articles published before 2013, and studies without a full-text version.

Articles that met the eligibility criteria were selected by title and abstract by Reviewer 1, and articles that did not meet the inclusion criteria were excluded. After screening by title and abstract, the studies were submitted to a public reference manager (Mendeley v.1.17.9) to eliminate duplicates. The result of this selection can be seen in Figure 1.

Subsequently, the remaining full-text articles were examined by Reviewer 2. Any disagreement was resolved through discussion until a consensus was reached, or with the involvement of Reviewer 3 and Reviewer 4. Next, the following points were extracted from each study, when available: authorship, year of publication, country, study type, area of focus, journal, sample size, protocols and instruments used, therapeutic strategies, population, gender, and age. These data were presented in tables in Microsoft Word 2016 for the final inclusion analysis.



Source: Adapted from Tricco, et al. (2018)⁽⁸⁾

Figure 1. Flowchart of review article selection

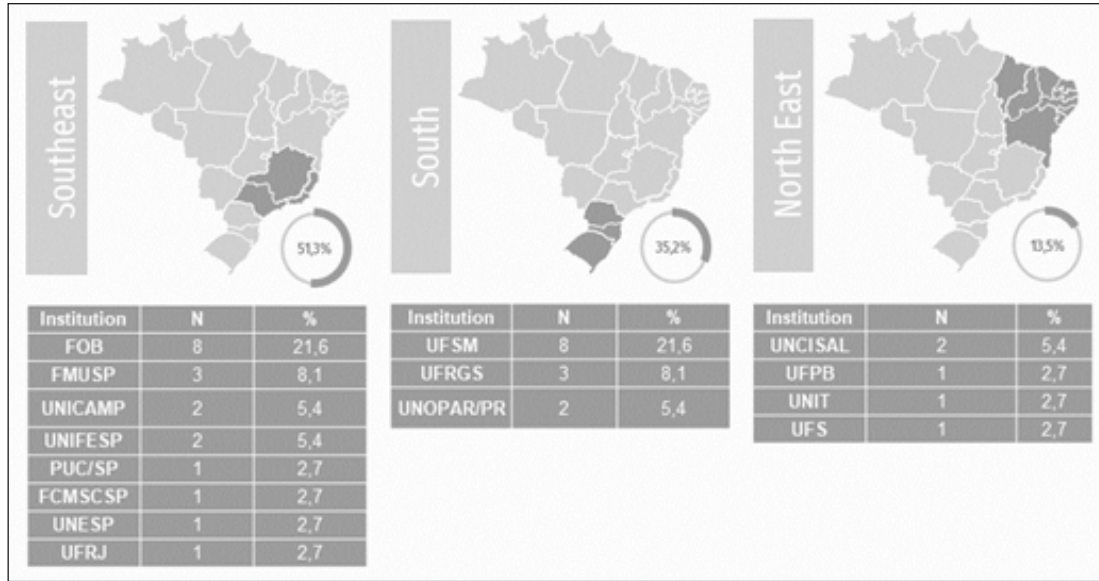
Results

The initial bibliographic search found 123 studies, 97 of which were located through SciELO, and the rest on the journals' websites. After selection by title and abstract, 82 articles were processed in Mendeley to eliminate duplicates. The remaining 77 full-text articles were reviewed to determine if they met the inclusion criteria, and of these, 37^{1,5,10-44} were deemed eligible, as detailed in Figure 1.

Of the 37 articles eligible for this review, 100% (n=37) were in the subfield of clinical audiology and are of Brazilian production. 27.1% (n=10) of

the articles^{14,23-25,27-29,33,36,43} were published in the *Distúrbios da Comunicação*, while 24.3% (n=9) were published in *ACR*^{11,18,21,22,26,31,37,42,44}, 24.3% (n=9) in *CODAS*^{1,5,12,13,17,30,35,40,41} and 24.3% (n=9) in *CEFAC*^{10,15,16,19,20,32,34,38,39}.

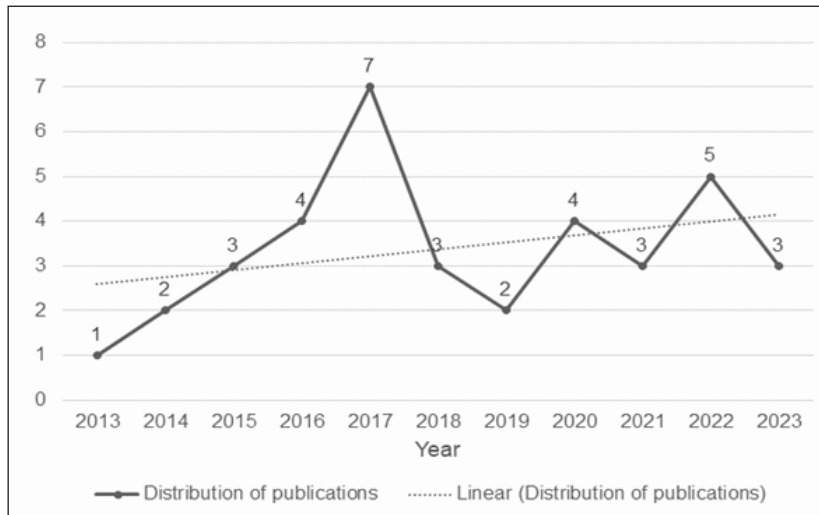
By regional distribution, 51.3% (n=19) of the studies were developed in the southeastern region, with the Faculdade de Odontologia de Bauru (FOB) at the Universidade de São Paulo (USP) leading publications on tinnitus in this region, with 42.1% (n=8) of the southeast's output and 21.6% (n=8) of national output. Figure 2 presents the distribution of studies by region and main development institutions.



Legend: N- Absolute frequency; %- Relative frequency percentage; FOB/USP- Faculdade de Odontologia de Bauru da Universidade de São Paulo; FMUSP- Faculdade de Medicina da Universidade de São Paulo; UNICAMP- Universidade Estadual de Campinas; UNIFESP- Universidade Federal de São Paulo; PUC/SP- Pontifícia Universidade Católica de São Paulo; FCMSCSP- Faculdade de Ciências Médicas da Santa Casa de São Paulo; UNESP- Universidade Estadual Paulista; UFRJ- Universidade Federal do Rio de Janeiro; UFMS- Universidade Federal de Santa Maria; UFRGS- Universidade Federal do Rio Grande do Sul; UNOPAR/PR- Universidade Norte do Paraná; UNCISAL- Universidade Estadual de Ciências da Saúde de Alagoas; UFPB- Universidade Federal da Paraíba; UNIT- Universidade Tiradentes; UFS- Universidade Federal de Sergipe. Source: Authors of the study.

Figure 2. Distribution of productions by region and institution

Regarding distribution by year of publication, the year 2017 led with 19% (n=7) of tinnitus publications, followed by 2022 with 13.5% (n=5), as shown in Figure 3.



Source: Authors of the study

Figure 3. Distribution of productions by year of publication

Concerning the methodological design, the studies were mostly categorized as observational in 62.1% (n=23), followed by intervention studies with 35.2% (n=13), and 2.7% (n=1) were categorized as studies of translation, cross-cultural adaptation, and/or validation of instruments. The overall population size of the studies was 9,256

participants. As shown in Table 1, there was a predominance of female participants in the general population (55.4%, n=5,133) and in studies (67.5%, n=25). It was found that the most frequent study sample was in the age group of 18-59 years, representing 51.3% (n=19) of the studies.

Table 1. Population and sample characteristics of the studies

Variables and categories	N	%
Predominance of sex in the population (n=9,256)		
Male	4,024	43,4
Female	5,133	55,4
Not informed	99	1,2
Sex predominance by study (n=37)		
Male	8	21,7
Female	25	67,5
Not provided/not applicable	4	10,8
Age range (n=37)		
<18 years	1	2,7
18-59 years	19	51,3
60-90 years	11	29,7
Not provided/not applicable	6	16,3

Legend: N- Absolute frequency; %- Relative frequency percentage. Source: Authors of the study

Tinnitus pitch matching was used for tinnitus characterization in 19% (n=7) of the studies. Regarding the tinnitus assessment instruments reported in the studies, the Tinnitus Handicap Inventory (THI) and the Visual Analogue Scale (VAS) were the most mentioned, with 54% (n=20)

and 21.6% (n=8), respectively. Table 2 also shows that other protocols and instruments were used in the analyzed studies, mostly instruments for assessing psychobehavioral aspects and quality of life, present in 19% (n=7) of the studies.

Table 2. Assessment instruments and protocols presented in the studies

Variables and categories	N	%
Tinnitus assessment protocols/instruments (n=37)		
THI	20	54
VAS	8	21,6
THS	1	2,7
TQ	1	2,7
Protocols/instruments for characterizing psychobehavioral aspects and quality of life related to tinnitus (n=37)		
Beck Anxiety Inventory	2	5,4
Beck Depression Inventory	1	2,7
MMSE	1	2,7
WHOQOL	1	2,7
HADS	1	2,7
Protocols/instruments for characterizing auditory aspects related to tinnitus (n=37)		
IOI-HA	1	2,7
RGDT	1	2,7

Legend: N- Absolute frequency; %- Relative frequency percentage; THI- Tinnitus Handicap Inventory; VAS- Visual Analogue Scale; THS- Tinnitus and Hearing Survey; TQ- Tinnitus Questionnaire; MMSE - Mini Mental State Examination; WHOQOL- World Health Organization Quality of Life; HADS- Hospital Anxiety and Depression Scale; IOI-HA- International Outcome Inventory for Hearing Aid; RGDT- Random Gap Detection Test. Source: Authors of the study.

Therapeutic and management alternatives for tinnitus were reported in 29.7% (n=11) of the studies, with guidance and counseling having the

highest prevalence at 10.8% (n=4), followed by the adaptation of Hearing Amplification Devices (HAD) at 8.1% (n=3), as presented in Table 3.

Table 3. Therapeutic and management strategies for tinnitus

Strategies	N (n=37)	%
Counseling and guidance	4	10,8
Hearing aid adaptation	3	8,1
Auditory training	2	5,4
Cochlear implant	1	2,7
Acai supplementation	1	2,7

Legend: N- Absolute frequency; %- Relative frequency percentage; Source: Authors of the study

Discussion

In recent years, there has been a notable increase in interest and research related to tinnitus. Over the past decade (2013-2023), Brazilian speech-language pathology journals have published approximately 37 primary studies focusing on tinnitus, resulting in an average of 3.7 studies per year. This growing trend in scientific interest is also reflected globally, as highlighted by Zhou et al. (2022)⁴⁵. The mentioned study reports a substantial increase in the number of publications on tinnitus over the past two decades, particularly after 2010.

Among the presented results, it is noteworthy that Brazilian scientific production on tinnitus over the past decade reached its highest concentration in 2017, accounting for 19% of the total, followed by 2022, with 13.5%. This pattern of production peaks in certain years was also identified by Zhou et al.⁴⁵, who pointed out that from 2015 onwards, there was a sharp increase in the number of articles addressing tinnitus, with more than three times the number of publications in 2020 compared to 2001. This significant growth indicates an intensification of academic focus in this area over time in different global settings.

Although Brazil had 15 prominent centers of scientific production on tinnitus in the present research, it is important to note that this analysis considered only publications in national speech-language pathology and audiology journals. This choice may be a limitation as it excludes publications in other international speech-language pathology and audiology journals, and journals from

other fields. According to Zhou et al.⁴⁵, Brazil is not among the top ten global producers of publications in the field, with the United States having the highest number of publications. This highlights the complexity and diversity of research trends on tinnitus, emphasizing the importance of considering both regional dynamics and international trends and scientific value when exploring the field of tinnitus⁷.

Among the 15 main centers of scientific production on tinnitus in Brazil, 51.3% of these centers are concentrated in the southeastern region of the country. In this context, the Bauru School of Dentistry (FOB) at the University of São Paulo (USP) stands out, playing a notable leading role by contributing 42.1% of the publications on tinnitus from the southeastern region and, additionally, with a significant 21.6% of the total scientific production on tinnitus throughout the national territory. This unequal geographical distribution can be analyzed considering scientific and institutional factors that provide a favorable environment for the development of tinnitus research in the southeast region⁴⁶. Moreover, the concentration of renowned universities and research institutions in this region provides a fertile academic ecosystem, characterized by good infrastructure, international collaborations, and access to research resources^{46,47}. Additionally, the history of academic excellence and investment in research in these centers may have contributed to the region's leadership in tinnitus-related publications⁴⁷.

The analysis of the demographic profile of tinnitus studies offered significant insights into

the composition of the involved population and its implications for understanding this phenomenon. Notably, there is a predominance of females in the studies, representing 55.4% of the general population and 67.5% of the study participants. This inclination may indicate a greater demand for healthcare by women and a higher willingness to participate in research on auditory health issues. Additionally, when exploring the predominance of female participants in tinnitus studies, it is essential to consider potential genetic contributions to this characteristic. Authors⁴⁸ have emphasized the influence of genetic factors in the development of tinnitus, particularly in its severe form. This study conducted familial aggregation analyses and found that severe tinnitus has a higher susceptibility in women compared to men, indicating that the severity of tinnitus may be the characteristic most strongly influenced genetically and, in a gender-specific manner. These findings provide important evidence for understanding variations in the demographic profile of tinnitus studies, highlighting that the predominance of female participants may reflect both genetic influences and psychosocial factors.

The connection between gender and tinnitus perception is also addressed by studies such as Basso et al. (2020)⁴⁹, which revealed specific differences between men and women with bothersome tinnitus. These differences included specific associations between tinnitus discomfort and certain health conditions in each gender. Women with bothersome tinnitus, for example, showed higher rates of cardiovascular disease and epilepsy, while men with bothersome tinnitus reported a higher incidence of anxiety syndrome and alcohol consumption. These results underline the complex interaction between biological, psychological, and social factors in the perception and experience of tinnitus, influencing how each gender may react to and cope with this condition.

The preference for addressing the age group between 18 and 59 years in more than half (51.3%) of the tinnitus studies analyzed in this review reveals a focused direction on the economically and socially active population. This methodological choice reflects the recognition of the specific challenges faced by this demographic group, including stress, environmental noise, and other factors that may trigger or worsen tinnitus. The increasing prevalence of tinnitus in young people and young adults in recent years also

draws attention, as revealed by studies like that of Ramage-Morin et al. (2019)⁵⁰, which indicated that a substantial proportion of Canadian adults aged 19 to 29 (46%) reported having experienced tinnitus in the past year.

However, focusing on more active age groups may also result in gaps in our overall understanding of tinnitus, especially considering the impact of this condition on different age groups. Authors⁵¹ highlight that the perception of tinnitus severity is linked to personality traits, such as neuroticism, and that tinnitus prevalence increases with age, demonstrating a more complex picture. Indeed, Ramage-Morin et al.⁵⁰ indicated that tinnitus is associated with self-reported mental health problems, mood disorders, and sleep quality, highlighting the comprehensive impacts of this condition across different ages. Therefore, the use of validated instruments is necessary to achieve a broader assessment and understanding of the individual.

The predominance of acuphenometry as a method of characterizing tinnitus in 19% of studies underscores the pursuit of a precise and objective understanding of this auditory condition. However, the widely reported use of the Tinnitus Handicap Inventory (THI) and the Visual Analog Scale (VAS) as assessment tools demonstrates the recognition of the importance of assessing not only the physical characterization of tinnitus but also its psychosocial impact. The study by Figueiredo, Azevedo e Oliveira (2009)⁵², which validates the correlation between VAS and THI scores in patients with tinnitus, supports the use of these instruments as reliable tools for measuring both the intensity and impact of tinnitus on quality of life.

The THI approach gains additional support through the findings of Gos et al. (2020)⁵³, who recommend its use to assess tinnitus severity and propose refinements to improve its psychometric quality. Furthermore, the research by Skarżyński et al. (2020)⁵⁴ highlights the importance of considering factors such as gender and hearing loss when interpreting THI scores, emphasizing the need for more personalized and differentiated assessment approaches.

However, the diversity of assessment instruments, including those aimed at psychobehavioral aspects and quality of life, indicates the effort to gain a holistic understanding of tinnitus. Findings by Trevis, McLachlan and Wilson (2017)⁵⁵ emphasize the association between chronic tinnitus and

emotional well-being, cognitive functioning, and even symptoms of depression and anxiety. These results underscore the importance of adopting approaches that consider the psychosocial aspects of tinnitus, emphasizing the need for interventions that address both the physical and emotional aspects of this condition.

Of the 29.7% of studies that reported therapeutic alternatives, counseling and guidance stood out as the most prevalent strategy (10.8%), followed by hearing aid adaptation (8.1%). However, the effectiveness and feasibility of these strategies need to be examined from different perspectives. The research by Cima et al. (2014)⁵⁶, which endorses cognitive-behavioral therapy (CBT) as an evidence-based treatment option for tinnitus management, highlights the importance of a multidisciplinary and stepped approach. The possibility of adapting treatment strategies to different patient profiles allows for a more personalized approach, especially considering the variability in manifestations and needs of individuals with tinnitus.

The studies by Henry et al. (2015)⁵⁷ and Brennan-Jones et al. (2020)⁵⁸ enrich the discussion by highlighting the role of hearing aids and sound generators as promising strategies in alleviating the effects of tinnitus. The research by Henry et al.⁵⁷ suggests that the use of hearing aids alone or in combination with sound generators can bring significant benefits to patients with tinnitus. Meanwhile, the Cochrane review conducted by Brennan-Jones et al.⁵⁸ emphasizes that both hearing aids and sound generators can be beneficial in reducing the severity of tinnitus in some patients, although there is insufficient evidence to recommend one device over the other or compared to placebo treatment.

In summary, the discussion on the various aspects related to tinnitus reveals a complexity that transcends its merely physical nature. The growing research on the subject reflects the recognition of the need to understand both the physiological mechanisms and the psychosocial impacts of this condition. The data highlight the importance of therapeutic and management strategies that address the interaction between the physical manifestations and the emotional dimensions of tinnitus. This emphasizes the importance of an integrative and collaborative approach among different disciplines and professionals, aiming to offer solutions that truly improve the quality of life of individuals af-

ected by tinnitus, considering both physical and emotional aspects.

Conclusion

Upon analyzing a decade of studies, notable findings emerged highlighting the increasing attention to tinnitus, evidenced by the rise in the number of publications in recent years, yet still with a relatively modest presence in Brazilian speech-language pathology journals. The emphasis on the predominance of studies in adults aged 18 to 59 and the consideration of gender differences also demonstrate the need for personalized management. Moreover, the variety of assessment methods and the inclusion of tools such as the THI and VAS reinforce the multidimensional approach and the need for multidisciplinary approaches that consider both physical and psychosocial aspects. However, for speech-language pathology to gain worldwide prominence in tinnitus research, greater investment in studies and publications in national journals is essential. This will enable speech-language pathologists to be more actively involved in developing effective therapeutic and assessment strategies, allowing for the advancement of knowledge in this field and contributing to improving the quality of life for individuals affected by tinnitus.

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