

# Content analysis of judgments in compensation labor proceedings and the relevance of speech therapy skills in court decisions

Análise de conteúdo das sentenças de processos trabalhistas indenizatórios e a relevância das competências fonoaudiológicas nas decisões judiciais

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# **ABSTRACT**

Purpose: to analyze the content of the court sentences that judged claims for damages by PAIR, in order to identify the relevance of the activities of the speech therapist in the formation of the conviction of the magistrates in the taking of judicial decisions. Methods: descriptive study on the formation of the conviction of judges in sentences rendered, therefore, of the documentary type by public research with the portals of the TRTs in the country, with a qualitative approach, between January/2015 and December/2020, analysis content of the judgments that judged claims for damages by PAIR. The sentences analyzed were those handed down by first-degree magistrates in digital and public judicial proceedings, on the respective TRT websites. Results: of the 24 Brazilian TRTs, it was possible to find cases in 20 of them, with a total of 91 labor lawsuits being analyzed. When analyzing the causal nexus in 88 of the 91 cases, 47 sentences show that the causal nexus is correlated with the audiological tests and other documents prior to the process joined by the parties. Also in 47 cases, an attempt was made to face the characterization of NIHL in the worker, approaching its concept based on the literature, expert conclusions and combined exams. Conclusion: the examinations and documents produced by the speech therapists in their activities, when presented in the process, are fundamental to convince the judges in the search for the causal nexus between the PAIR and the worker's activities.

**Keywords:** Noise-induced hearing loss; Workers; Audiology; Indemnity; Brazilian labor law

# **RESUMO**

Objetivo: analisar o conteúdo das sentenças judiciais que julgaram pedidos indenizatórios por perda auditiva induzida por ruído, no intuito de identificar a relevância das atividades de competência do fonoaudiólogo na formação do convencimento dos magistrados na tomada de decisões judiciais. Métodos: estudo descritivo sobre a formação do convencimento dos magistrados em sentenças proferidas, portanto, do tipo documental, realizado mediante pesquisa pública junto aos portais dos Tribunais Regionais do Trabalho do país, com abordagem qualitativa, entre janeiro de 2015 e dezembro de 2020, por meio da análise de conteúdo das sentenças que julgaram pedidos de indenização por PAIR. As sentenças analisadas foram aquelas proferidas por magistrados de primeiro grau em processos judiciais digitais e públicos, nos respectivos sites dos TRTs. Resultados: dos 24 TRTs brasileiros, foi possível encontrar processos em 20, sendo analisadas, no total, 91 ações trabalhistas. Ao analisar o nexo causal em 88 dos 91 processos, 47 sentenças mostraram que o nexo causal possuía correlação com os exames audiológicos e outros documentos anteriores ao processo, juntados pelas partes. Também em 47 processos se buscou a caracterização da PAIR no trabalhador, abordando o seu conceito a partir da literatura, das conclusões periciais e exames juntados. Conclusão: os exames e documentos produzidos pelos fonoaudiólogos em suas atividades, quando apresentados no processo, são fundamentais para o convencimento dos juízes na busca do nexo causal entre a PAIR e as atividades do trabalhador.

Palavras-chave: Perda auditiva induzida por ruído; Trabalhadores; Audiologia; Indenização; Legislação trabalhista

Study carried out at Universidade Tuiuti do Paraná – UTP – Curitiba (PR), Brasil.

Conflict of interests: No.

Authors' contribution: TMS, CGOG and DL participated in the study design and in the article writing; DL participated as the advisor; CGOG participated as the co-advisor.

Funding: None.

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Received: May 23, 2023; Accepted: September 11, 2024



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# **INTRODUCTION**

In Brazil, there has been comprehensive legal protection for labor as well as for workers, granted since the enactment of the Federal Constitution in 1988. Although workers face many health and safety hazards in their workplace, they have the right to claim the defense of their legally warranted rights to the Justice, in this case, the Labor Court<sup>(1)</sup>.

Thus, along the years, a high number of labor lawsuits have been filed, not only to grant and keep those rights, but also to compensate probable damages to workers' health<sup>(2)</sup>. In 2020, for example, 2.3 million new labor lawsuits were filed all over the country, added to other 4.5 million pending for trial<sup>(3)</sup>. Even though these figures look high, there has been a falling trend in the number of lawsuits since the reform of the labor legislation in 2017, by means of the Federal Law number 13,467<sup>(4)</sup>. Therefore, in the year of the labor reform, 3.5 million labor lawsuits were filed, and since 2018, after the reform came into effect, those numbers have been steadily decreasing: 2.93 million in 2018, and 2.9 million in 2019<sup>(2,5)</sup>.

Despite the clear decrease in the number of new labor lawsuits, compensatory lawsuits for occupational accidents and diseases have still been observed<sup>(5)</sup>. This means that the increased flexibility of several rights by means of the labor reform in 2017 has not reached the compensatory demands and the compensatory lawsuits filed by employees against their employers or ex-employers.

In that context, the search for legal expertise related to labor lawsuits has increased and has demanded greater and more specialized number of legal experts. According to Section 145, subsections 1 and 2 from the Brazilian Code of Civil Procedure (2015), legal experts are those "college-graduated professionals, duly registered in their corresponding professional associations", who "shall prove their expertise in the issue that they must provide their opinion", and help judges interpret technical evidence, the so-called expert evidence<sup>(6)</sup>. Thus, it is understood that every professional with technical and/or scientific expertise on the claimed theme by the parties, object of the lawsuit, is capable of providing an expert opinion, thus helping the Court as a legal expert.

In the Speech-Language Therapy area, it is also possible for its professionals to help the judiciary by means of their expert opinion. This expertise, implemented in 2020 by the Federal Council of Speech-Language Therapy (Conselho Federal de Fonoaudiologia – CFFa, in Portuguese), states that the professional can render services as a technical assistant, legal expert or auditor in situations that involve aspects covered by the Speech-Language Therapy<sup>(7)</sup>.

Despite the specialization in Speech-Language Therapy Expertise having been implemented by the Federal Council of Speech-Language Therapy in 2020, formerly in 2016, Section 3, subsection V from the CFFa Resolution 493 stated the professional competence of the Speech-Language Therapist as a legal expert, considering the auditory assessment to establish the causal connection between injury and environment, or injury and the work procedure<sup>(8)</sup>. Therefore, the Speech-Language therapist can work as a legal expert in the analysis of workers' hearing loss.

In 2013, the CFFa, by means of Resolution 428, recognized the competency of Speech-Language therapists to issue reports on occupational diseases or resulting occupational impairments, affecting workers' skills in the communication area, in order to establish the connection health-work-disease, between Speech-Language disorders and workers' activities<sup>(9)</sup>.

Therefore, the objective of this research study is to review the content of court rulings on compensatory lawsuits for noise-induced hearing loss (NIHL) between 2015 and 2020.

### **METHODS**

It is a descriptive study on the establishment of judges' conviction in delivered court rulings, as well as a documentary qualitative study, developed by means of the accessed portals of Regional Labor Courts (Tribunais Regionais do Trabalho - TRT in Portuguese). It was approved by the Ethics Committee in Research, Tuiuti University of Paraná, opinion number 4.721.901, being dismissed the Infrastructure Statement, as the research was conducted in the portals of the respective Labor Courts, which made information available to all citizens. Similarly, in relation to the Free Informed Consent as the portals of the Labor Courts also release information.

Labor lawsuits demanding compensatory requests for noise-induced hearing loss (NIHL) between January 2015 and December 2020 were also included in the search of the Regional Labor Courts, as well as the digital labor lawsuits, accessible by means of public consultations in the respective sites of 24 Regional Labor Courts, with free, unrestricted access, which enabled the reading of court rulings published in the Justice journals.

The study developed its objective in two steps. The first step comprised the search for electronically filed labor lawsuits, which demanded compensatory requests for NIHL. In order to locate such rulings, a research criterion that respected the public domain of such lawsuits, thus enabling their public consultation.

Initially, in order to locate those court rulings, a common procedure to access the databases of each court was established, usually released by links as "jurisprudence". Thus, by accessing the site and link of the rulings database of each TRT, the search was for rulings including the words "NIHL" and "hearing loss" in their summaries, delimited by the timespan proposed in this study.

By means of that procedure of public consultation, the entire lawsuit could be accessed since its distribution, which enabled to access and download the first-degree rulings, that is, the magistrates' decisions, who judged the compensatory requests in the origin. Based on these accesses, all rulings were organized by each Court of Justice. With the organization of the court rulings, their qualitative analyses were held.

Subsequently, the reading of those rulings began, methodologically organized by the content analysis, which is a set of techniques to analyze the communications in order to obtain, by means of systematic and objective procedures of description of the message content, indicators that enable the inference of knowledge regarding the conditions of production/perception of these messages<sup>10</sup>. The methodologies are summarized in the flowchart displayed in Figure 1.

The use of the content analysis contemplates three distinctive steps: (a) pre-analysis; (b) material exploration and (c) treatment of the results by means of inferences and interpretation. The pre-analysis is the step of material organization, objectifying the systematization of the early ideas. It usually entails the free-floating reading to establish contact with the documents, formulation of the hypotheses and objectives, and elaboration of

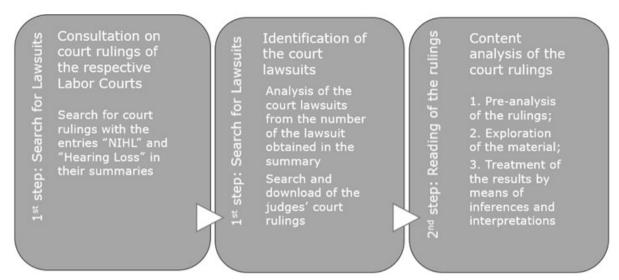


Figure 1. Flowchart of the methodological procedures Source: Elaborated by the authors, 2021

indicators grounding the interpretation. In this step, documents are selected and analyzed by the researcher<sup>(10)</sup>.

In the current study, the analyzed documents were previously established: court rulings constituting the research corpus, that is, "the set of documents to be submitted to analytical procedures" (11).

After the free-floating reading, it follows the second step of the content analysis, where the material coding and categorization are held. In coding, excerpts from court rulings were made, where magistrates mentioned hearing-loss related themes, complementary testing, expert designation, use of personal protective equipment (PPE), unhealthy work conditions and causal connection. Those excerpts were necessary because, in the same ruling, there could be other compensatory requests that were not related to the objective of the current study. Subsequently, the categorization began, which emerged from the guiding questions (what the judge searched to reach his decision), and its theme organization.

The categorization criterion can be syntactic, lexical, phrasal or semantic. In this study, semantic categorization was conducted, that is, categories distributed by themes were created, including hearing loss, complementary testing, relevant legal expertise, PPE/rules, unhealthy work conditions and causal connection.

Categorization may use two inverse processes: categorization with a priori categories, suggested by the theoretical framework, or categorization with a posteriori categories that emerge after the material analysis, which occurred in the current study<sup>(10)</sup>.

Finally, the third step, which corresponds to the treatment of the results, inferences and interpretation. In this step, grounded in the raw results, the researcher aims to make them significant and valid. In other words, the categories, which are used as analysis units are submitted to simple or complex statistical operations, in a way that enables to highlight the obtained data. Thus, inferences and interpretations are subsequently made<sup>(10)</sup>.

Therefore, the categories to be examined should specifically address NIHL, the reasons that convinced the judge leading to his/her decision for convicting or acquitting the defendant company, and finally, verify the speech therapist's role in the judge's decision. Additionally, as court rulings are formal documents,

magistrates' decisions must be necessarily grounded. Therefore, the search for categories considered the semantic category as the way to select them, that is to say, content classification in categories taking linguistic rules in account, which aim not only at the meaning of words, but also at the interpretation of sentences and enunciates<sup>(10)</sup>.

Having the categories been identified, the excerpts were highlighted and placed in their corresponding categories, which enabled to make quantitative and qualitative inferences, such as the number of occurrences in each category and the correlation between them. In addition, filtering uncovered how the categories related to each other and led to magistrates' decision.

#### **RESULTS**

Among 24 Regional Labor Courts in Brazil, lawsuits were found in 20 Labor Courts, with 91 analyzed court rulings (Table 1). Rio Grande do Sul State presented high number of court ruling summaries (1123) addressing the NIHL theme, considerably standing out of the other Labor Courts. Once public search in court portals does not allow to analyze the reasons why Rio Grande do Sul State had such a significant amount of cases in relation to the other Brazilian states, and considering that the analysis of all the cases from Rio Grande do Sul State could hinder the intended national approach, it was opted for not analyzing the rulings from this labor court.

Specifically about that decision, it is important to justify that this is a qualitative research study, essentially a descriptive one, thus the researchers are allowed to choose for not considering certain data as long as they justify their decision. In a qualitative approach, researchers' concern is not only about the result, but mainly about the investigation process.

In the Labor Courts from the Federal District, Tocantins, Piaui and Mato Grosso States, search only for the entries "NIHL" and "hearing loss" in the summaries of the rulings did not retrieve any results. Labor Court 15, corresponding to the interior of São Paulo State, did not allow to search for rulings from their summaries. Thus, it was dismissed from the

research. Finally, in case of the Regional Labor Court from Maranhão State, despite the search for the ruling summaries retrieved three rulings, only the first-degree ruling was possible to be accessed from two lawsuits. That happened because the initial processing in the Court occurred by means of paperwork, being further digitalized for the Court proceedings. Thus, it was disregarded as its court ruling was not publicly available, and also due to the proposed exclusion criteria.

Regarding the emergence of the categories and the reasons why they emerged, data are displayed in Chart 1.

The data were complemented by the results of the content analyses, mainly from the six categories of analysis described.

Importantly, however, based on the reading of the 91 rulings, the categories were often identified repeatedly in the same ruling, which justifies a statistical inference in relation to the number of occurrences for each category.

In absolute figures, the widely identified category in the rulings was "causal connection" with 112 occurrences. In this sense, it was not identified in only 3 court rulings, in 2 of them because the core of discussion was the expired statute of limitations of the lawsuits, after the legal term of two years from the contract termination. In the third case, the judge only attributed the responsibility for the argument of unhealthy work conditions, as it was not proved to be provided the PPE

Table 1. Distribution of the lawsuits by the Regional Labor Courts (TRTs in Portuguese)

Court	State	Cases	Accessed Court Rulings
TRT1	RJ	13	13
TRT2	SP(CAPITAL)	4	4
TRT3	MG	8	8
TRT5	BA	5	5
TRT6	PE	2	2
TRT7	CE	6	6
TRT8	PA/AP	2	2
TRT9	PR	1	1
TRT11	RR/AM	6	6
TRT12	SC	4	4
TRT13	PB	2	2
TRT14	AC/RO	3	3
TRT16	MA	3	2
TRT17	ES	2	2
TRT18	GO	3	3
TRT19	AL	11	11
TRT20	SE	8	8
TRT21	RN	7	7
TRT24	MS	2	2
TOTAL		92	91

Subtitle: TRT = Regional Labor Court (Tribunal Regional do Trabalho)

Source: Elaborated by the authors, 2021

Chart 1. Procedures for the elaboration of the analysis categories

Categories	Elaboration Procedure		
NIHL	It emerged not only for addressing the general objective of the research, but also for the mention and/or definition of hearing loss which occurred significantly in the rulings, clearly evolving from the compensatory requests.		
Tests	It emerged from the frequent highlights of the rulings to the existing documents in the lawsuits (documental evidence presented by the parties), which indicated that admission and dismissal audiometric testing, for example, had been held. All evidence was considered by the magistrates in their respective rulings.		
Relevant expertise	Uncovered from the groundings of the ruling, in which the magistrates not only mentioned, but also pointed out the importance and/or relevance of the expert report held in the respective lawsuits, proved to be fundamental for judgement purposes.		
PPE/regulation	It emerged from highlights that rulings provided for the magistrates' decision making the existence or absence of personal protective equipment and/or the strict compliance to the labor regulation related to the theme. Those highlights proved to be essential for the eventual breach in the company liability due to the evident concern about the themes.		
Unhealthy work conditions	They were evidenced when, beyond the characterization of hearing loss, court rulings highlighted the plaintiffs' workplace as healthy or unhealthy.		
Causal connection	It was identified when the judges, in their decisions, discussed the cause and effect relation between NIHL and the omissive or commissive action of the claimed company, which proved to be essential for accepting the request or not.		

Subtitle: NIHL = Noise-induced hearing loss; PPE = Personal Protective Equipment

Source: Elaborated by the authors, 2021

to the worker. Thus, the cause and effect of the NIHL was not grounded for compensatory requests.

Similarly, from the quantitative point of view, the numeric analysis of the category occurrences evidenced that, in order to support their rulings and respective decisions, the magistrates used an average of 2.75 categories per court ruling. When considering that in 88 out of 91 rulings there was the identification of the "causal connection" category, which was complemented by more 1.75 categories, unveiling a similar behavior on the part of magistrates to seek a category or more in order to ground the causal connection. That is evident in the fact that, in only

2 lawsuits, the magistrate supported his decision in only one category.

In Chart 2, the categories and their occurrences are described, which not only support the results, but also they exemplify the semantic rules that grounded the respective categorization.

Although the categorization has objective and clear criteria, its discussion beyond merely statistical inference cannot consider the categories in disconnected ways. Thus, the development of magistrates' decisions, as observed, is a consequence of a joint analysis of the categories, which correlated, show how judges developed their decisions, unveiling the importance of

Chart 2. Demonstrative of the rulings excerpts and number of occurrences

Category	Number of occurrences	Excerpts of the rulings
Hearing loss	49	"The plaintiff was diagnosed with hearing loss in 1996 ()"
		Lawsuit 0001415-45.2016.5.12.0051
		"The Author's hearing loss complies with all the necessary characteristics of NIHL – Occupational Noise-Induced Hearing Loss, according to the concepts of the Noise Committee and Hearing Conservation, <i>American</i> College of Occupational Medicine, and the National Noise and Hearing Conservation Committee, in addition to the analysis of the enclosed documents, attesting noise exposure."  Lawsuit 0001803-86.2016.5.11.0014
Testing	55	"The curves verified in your audiometry test are characteristically neurosensory curves, essential condition for hearing loss classified as noise-induced hearing loss."
		Lawsuit 0002578-28.2013.5.01.0421
		"The mentioned report was held after the medical exam, analysis of the documents regarding the medical records, tests and audiological assessments ()."  Lawsuit 1000232-34.2016.5.02.0331
		According to the expert report, after the analysis of the clinical occupational history, the general and special physical exam, the complementary exams enclosed in the lawsuit, and workplace inspection
		Lawsuit 1001899-18.2014.5.02.0463
Relevant Expertise	10	"Medical expert opinion has to be praised, fully corroborating the expert report as an integrating part of this decision."
		Lawsuit 0000274-65.2014.5.01.0342
		"The expert report entails comprehensive analysis of the plaintiff's medical condition, activities performed in the claimed company, as well as, the pertinent documentation. By means of the medical exam, it was verified the study of the worker's physical condition and his alleged condition, and the expert report provides, in a clear and concise way, the considerations on the theme."
		Lawsuit 1000232-34.2016.5.02.0331
PPE/ Regulation	42	"It is understood that the plaintiff suffered exposure to occupational noise greater than 85dB(A), not properly protected., in a frequent and usual way, along several years,"  Lawsuit 0000274-65.2014.5.01.0342
		"The expert report shows that the workplace that the Author was submitted while performing his job had
		intolerable noise levels, contradicting the established in Annex 1 of the Regulatory Norm 15, Ordinance number 3,214/78, Labor Ministry." () "The Defendant did not prove proper delivery of hearing protective equipment to the Plaintiff."
		Lawsuit 0001388-70.2013.5.01.0343
Unhealthy work	9	"() not neutralized physical noise agent, therefore, medium-degree unhealthy workplace during the mentioned timespan.
conditions		Lawsuit 0000947-81.2019.5.13.0008
		"In the past 5 years, CHARACTERIZED AS HEALTHY, the work activities developed by the plaintiff as Painte of Metallic Structures, because the noise levels found are below the tolerance limits."
		Lawsuit 0000931-53.2014.5.19.0003
Causal 112 Connection		"Concluded that it had been proved, in the current report, that the plaintiff developed the disease named neurosensory hypoacusia, that there is causal connection between the disease and the job activities developed in the claimed company."
		Lawsuit 0010163-46.2014.5.01.0341
		"The expert showed that such a disease is straight correlated to the work developed in the company, which indicates the positive causal connection."
		Lawsuit 0100246-06.2017.5.01.0341

**Subtitle:** PPE = Personal Protective Equipment **Source:** Elaborated by the authors, 2021

the expert evidence and, consequently, the importance of the speech therapist as the (probable) expert.

That understanding was proved by the analysis of the causal connection in 88 out of 91 lawsuits, in which their court rulings showed that, in 47 of them, the causal connection was correlated with the audiological testing, as well as with other documents enclosed with the lawsuits by the parties. Moreover, in 47 lawsuits, NIHL characterization in workers was also supported by approaching its concept in the literature, in the expert reports and enclosed testing. In these 88 rulings that verified the causal connection, 10 of them specially pointed out and considered the expert reports as relevant (relevant expertise opinion category), and in no cases, that relevance was disconnected from another category. Finally, 8 out of 91 court rulings addressed NIHL as a disease evolving from unhealthy work conditions but, in general, it was related to other themes.

#### **DISCUSSION**

The current study analyzed 91 court rulings that examined compensatory requests for noise-induced hearing loss, number considered relatively low when compared to the high amount of lawsuits, pointed by the Justice website in numbers in its last survey<sup>(3)</sup>. Maybe, this fact is justified by the relevance given to the Superior Labor Court (TST, in Portuguese) verifying the most recurrent issues in the Labor Court in the last five years. According to data from the TST, lawsuits regarding payment of the notice period, fine for overdue termination payments, granted by Section 477 in the Consolidated Labor Laws (Consolidação das Leis do Trabalho – CLT, in Portuguese) and withdrawal of the Severance Indemnity Fund (Fundo de Garantia por Tempo de Serviço – FGTS, in Portuguese) are rated in the three main positions<sup>(11)</sup>.

However, even with the general fall in the number of new lawsuits<sup>(3)</sup>, themes related to the additional pay for unhealthy work conditions and compensatory requests for moral and material damages, regarding to the NIHL analysis, have continued as the 20 most recurrent issues, although they do not stand out in the general representation of the legal actions<sup>(11)</sup>.

Even though hearing loss is considered a highly prevalent disease, its occurrence is not the main motivation for workers to seek Labor Justice. One of the hypotheses is that, for the Ministry of Social Security, NIHL does not cause labor impairment most of the time. Even if it causes communication impairment, it does not prevent professional activity<sup>(12)</sup>. Although that hypothesis does not straightforwardly address court cases, but it refers to the social security legislation, its relation to the NIHL theme seems to be considerable once magistrates use that comparison in certain decisions.

Regarding the categorization, Chart 1 shows that the causal connection was the category with the highest number of occurrences, 112 times, not discussed in only three rulings. That analysis corroborates juridical literature in which the search for the causal connection is the factor to be considered when seeking occupational cause in accidents, and the resulting injury or functional disorder, in particular, the reduction in labor capacity, work inability or death<sup>(13)</sup>.

Occupational diseases, also known as 'atypical occupational diseases' or "mesopathies", are the ones which emerge from special conditions where work is held, and straightforwardly related to it, but they may also occur from accumulated micro-

traumas. However, they demand the evidence of the causal connection between them and the occupation once they are atypical diseases. The unhealthy conditions in the workplace, such as excessive noise, leading to the NIHL, is one example of special condition where an occupational disease may evolve. Thus, evidence is necessary, that is to say, confirmation of the existence of the causal connection between the activity and the disease affecting the worker<sup>(14)</sup>.

Research grounded in scientific reading and survey of 103 labor lawsuits involving hearing loss evidenced limitations in the expert reports, thus affecting court rulings, as well as the identification of the causal connection<sup>(15)</sup>, which corroborates the relevance in establishing the causal connection in the court ruling, as verified in the occurrences of this category in the current research.

Regarding the "testing" category, it was found in 55 occurrences, evidencing its importance for the establishment of the causal connection and, consequently, for convincing the magistrate. This category was set up due to the number of references of audiometry, whether the testing held by the legal expert, or in admissional and/or dismissal tests, enclosed by the parties with the respective lawsuits, for example. That stresses the importance of the testing not only to verify the causal connection, but also shows the possibility of the speech therapist's effective participation in magistrates' decision making.

Objective testing, able to determine the quietest sound levels detectable by the patient, the audiometry – also competency of the speech therapist – enables the identification of probable hearing disorders<sup>(16)</sup>. In this aspect, it proves essential to reinforce the requirement of the pure-tone audiometry test once a year or in shorter intervals for workers exposed to occupational hazards identified and classified in the Program of Risk Management (Programa de Gerenciamento de Risco – PGR, in Portuguese), and people with chronic diseases which increase their susceptibility to such hazards (Regulatory Norm 7 – NR 7 in Portuguese). That shows the importance of the speech therapist in-court and out-of-court for the establishment of the causal connection in the occurrence of NIHL, and in an eventual court litigation<sup>(17)</sup>.

The category "PPE/Regulation", mentioned in 48 lawsuits, corroborated the relevance evidenced in the labor legislation regarding personal protective equipment to prevent noise-induced hearing loss, which proved determinant to settle out the causal connection in the current research, whenever required in the examined court rulings. The reason is clear because the PPE aims at the protection from occupational safety and health hazards. Therefore, its use is mandatory and regulated by the NR6<sup>(18)</sup>.

On the other hand, the category named "relevant legal expertise" was verified in ten court rulings. Straight correlated to the expert report, it is an essential document to the extent that judges usually ground their decisions in it. Its quality is closely related to the professional's level of expertise on the examined issue<sup>(19)</sup>. These characteristics were identified in the aforementioned rulings, particularly when the reports focused not only on the testing that was effectively carried out, but also on its comparison with tests enclosed with the lawsuits, and NIHL being duly diagnosed, with technical accuracy.

As for the "unhealthy work conditions" category, mentioned in nine lawsuits, it uncovered the importance to verify the plaintiff's work conditions as unhealthy agents affect workers' health, and may impact several spheres of their lives. Noise is one of the most common unhealthy agents in the workplace, and as formerly observed, may be harmful depending on its level and time of exposure<sup>(20)</sup>.

Regulatory norms 9 and 15 rule over that theme. NR9 sets up the action level for exposure to occupational noise, and NR15 addresses the two types of unhealthy noise<sup>(21,22)</sup>. Study conducted at a plastic recycling company, when investigating one of the employees, observed that he was exposed to unacceptable noise levels, indicating unhealthy work conditions. However, by wearing earmuffs, the worker was exposed to noise levels within the acceptable limit, which shows that noise – an unhealthy agent- and earmuffs (PPE) are straight correlated<sup>(23-25)</sup>.

Even though NIHL is considered one of the most prevalent occupational diseases, occurs in a widely variety of workplaces, and stands out as one of the main global occupational diseases, it can be prevented<sup>(26,27)</sup>. This fact is corroborated by the speech therapists' straightforward work while implementing actions for hearing preservation and occupational health promotion, which comprise the development of educational actions providing knowledge and awareness on how to preserve hearing in the workplace<sup>(28,29)</sup>. Studies evidence that educational actions can contribute to increase knowledge on hearing health in the workplace<sup>(30)</sup>. Therefore, possibly, if the aforementioned actions for hearing health promotions were implemented in companies where noise levels are a risk to health and hearing, lawsuits involving this theme would be scarcer and scarcer if employers and employees were informed and aware of safe exposure to noise.

# **Study limitations**

The occurrence of studies addressing this theme is scarce, particularly on labor demands, a specialized Justice field, and intrinsically related to the hearing health promotion in this important cycle which is the professional life. This ends up affecting the deepest discussions on the theme. Another limitation in the study was the analysis exclusion of the Regional Labor Court (TRT) from Rio Grande do Sul State due to the high number of summaries related to the noise-induced hearing loss (NIHL) (established as an exclusion criterion in the study), which could overload the analysis. Although this exclusion had been necessary to grant the research feasibility, it may have affected the representativity of the results, particularly considering the expressiveness of that court in NIHL-related lawsuits when compared to the rest of the country.

# **Perspectives for further research**

Further studies are fundamental, including the refinement of the current study, showing the evolution of this participation, whether in the awareness of the juridical community and among the speech therapists in this activity, or in the implementation of policies to disseminate this functional competency by their professional entity.

Similarly, further research is suggested to consider the high number of lawsuits found in the Regional Labor Court from Rio Grande do Sul State, in order to obtain a regional scenario on speech therapists' participation in compensatory labor requests for NIHL.

# **CONCLUSION**

Professional competencies of speech therapists are recognized in an indirect way, that is to say, by valuing them in court rulings due to testing typically performed by those professionals, such as audiometry, repeatedly considered by medical experts while conducting the expert evidence in order to verify the occurrence of hearing loss or not. Thus, it can be said that speech therapists' participation in magistrates' decision making is fundamental to the extent that their job is recognized in expert evidence obtained by other professionals, and consequently, considered in the court rulings.

#### **REFERENCES**

- Brasil. Constituição Federal de 1988. Promulgada em 5 de outubro de 1988. Diário Oficial da União [Internet]; Brasília; 1988 [citado em 2021 Jan 7]. Disponível em: https://www.planalto.gov.br/ccivil\_03/ constituicao/constituicao.htm
- Brasil. Conselho Nacional de Justiça. Justiça em números [Internet]. Brasília: CNJ; 2019 [citado em 2021 Jan 7]. Disponível em: https://www.cnj.jus.br/wp-content/uploads/conteudo/arquivo/2019/08/justica\_em\_numeros20190919.pdf
- Brasil. Conselho Nacional de Justiça. Justiça em números [Internet]. Brasília: CNJ; 2021 [citado em 2021 Jan 7]. Disponível em: https://www.cnj.jus.br/wp-content/uploads/2021/09/relatorio-justica-emnumeros2021-12.pdf
- 4. Brasil. Lei nº 13.467, de 13 de julho de 2017. Altera a Consolidação das Leis do Trabalho (CLT), aprovada pelo Decreto-Lei nº 5.452, de 1º de maio de 1943, e as Leis nº 6.019, de 3 de janeiro de 1974, 8.036, de 11 de maio de 1990, e 8.212, de 24 de julho de 1991, a fim de adequar a legislação às novas relações de trabalho. Diário Oficial da União [Internet]; Brasília; 2017 [citado em 2021 Jan 7]. Disponível em: http://www.planalto.gov.br/ccivil\_03/\_ato2015-2018/2017/lei/113467.htm
- Brasil. Conselho Nacional de Justiça. Justiça em números [Internet]. Brasília: CNJ; 2020 [citado em 2021 Jan 7]. Disponível em: https://www.cnj.jus.br/wp-content/uploads/2020/08/WEB-V3-Justi%C3%A7a-em-N%C3%BAmeros-2020-atualizado-em-25-08-2020.pdf
- Brasil. Lei nº 13.105, de 16 de março de 2015. Código de Processo Civil. Diário Oficial da União [Internet]; Brasília; 2015 [citado em 2021 Jan 7]. Disponível em: http://www.planalto.gov.br/ccivil\_03/\_ato2015-2018/2015/lei/l13105.htm.
- 7. Brasil. Conselho Federal de Fonoaudiologia. Resolução CFFa nº 584, de 22 de outubro de 2020. Dispõe a criação da Especialidade em Perícia Fonoaudiológica, define as atribuições e competências relativas ao profissional fonoaudiólogo Especialista, e dá outras providências. Diário Oficial da União [Internet]; Brasília; 2020 [citado em 2021 Jan 7]. Disponível em: https://www.fonoaudiologia.org.br/pericia-fonoaudiologica-e-a-nova-especialidade-da-fonoaudiologia/
- Brasil. Conselho Federal de Fonoaudiologia. Resolução nº 493, de 7 de abril de 2016. Dispõe sobre perícia em Fonoaudiologia e dá outras providências [Internet]; Brasília; 2016 [citado em 2021 Jan 7]. Disponível em: https://www.legisweb.com.br/legislacao/?id=31906
- Brasil. Conselho Federal de Fonoaudiologia. Resolução CFFa nº 428, de 2 de março de 2013. Dispõe sobre a atuação do fonoaudiólogo na saúde do trabalhador e dá outras providências [Internet]; Brasília; 2013

- [citado em 2021 Jan 7]. Disponível em: https://www.fonoaudiologia.org.br/resolucoes/resolucoes html/CFFa N 428 13.htm
- 10. Bardin L. Análise de conteúdo. 5. ed. Lisboa: Edições 70; 2010.
- Brasil. Tribunal Superior do Trabalho. Relatório estatístico de 2020 [Internet]. Brasília: TST; 2020 [citado em 2021 Jan 7]. Disponível em: https://tst.jus.br/documents/18640430/27418815/RGJT+2020. pdf/a2c27563-1357-a3e7-6bce-e5d8b949aa5f?t=1624912269807
- 12. Brasil. Ministério da Previdência. Norma Técnica para Revisão de Deficiência – PAIR, 05 de agosto de 1998. Aprova Norma Técnica sobre perda auditiva neurossensorial por exposição contínua a altos níveis de pressão sonora. Ordem de Serviço INSS/DSS nº. 608. Diário Oficial da União; Brasília; 1998.
- Nascimento TMC. Curso de Direito infortunístico. 3. ed. Porto Alegre: Fabris; 1992.
- 14. Silva JARO. A COVID-19 como doença ocupacional: nexo causal e concausal. Rev LTR [Internet]. 2020 [citado em 2021 Jan 7];85(11):2017-32. Disponível em: https://books.google.com.br/books?hl=pt-BR&lr=&id=4sMrEAAAQBAJ&oi=fnd&pg=PA2017&dq=nexo+causal+e m+doen%C3%A7as+ocupacionais+pair&ots=vc9X6cQkgL&sig=kE c4q0uvOfk4amwO0XTe6TwG9K4#v=onepage&q&f=false
- Bittencourt POST, Cunha IA. A perda auditiva ocupacional produzida coletivamente e os aspectos técnicos relevantes nas decisões judiciais trabalhistas para identificação do nexo causal. Rev Trib Reg Trab. 2019 Dec;65(100):117-37.
- Bickley L. Propedêutica médica. Rio de Janeiro: Guanabara Koogan; 2018.
- 17. Brasil. Ministério do Trabalho. NR-7: Programa de Controle Médico de Saúde Ocupacional [Internet]. Brasília; 1994 [citado em 2021 Jan 7]. Disponível em: https://www.gov.br/trabalho-e-emprego/pt-br/acesso-a-informacao/participacao-social/conselhos-e-orgaos-colegiados/comissao-tripartite-partitaria-permanente/arquivos/normas-regulamentadoras/nr-07-atualizada-2022-1.pdf
- 18. Brasil. Ministério do Trabalho. NR-6: Programa de Controle Médico de Saúde Ocupacional [Internet]. Brasília; 1994 [citado em 2021 Jan 7]. Disponível em: https://www.gov.br/trabalho-e-emprego/ pt-br/acesso-a-informacao/participacao-social/conselhos-e-orgaoscolegiados/comissao-tripartite-partitaria-permanente/arquivos/ normas-regulamentadoras/nr-06-atualizada-2022-1.pdf
- 19. Sá AL. Perícia contábil. 10. ed. São Paulo: Atlas; 2011.
- Concha-barrientos M, Campbell-lendrum D, Steenland K. Occupational noise: assessing the burden of disease from work-related hearing

- impairment at national and local levels. Geneva: World Health Organization; 2004. (WHO Environmental Burden of Disease Series, n. 9).
- Brasil. Ministério do Trabalho. NR-9: Programa de Prevenção de Riscos Ambientais [Internet]. Brasília; 1994 [citado em 2021 Jan 7]. Disponível em: https://www.gov.br/trabalho-e-emprego/pt-br/acesso-a-informacao/participacao-social/conselhos-e-orgaos-colegiados/comissao-tripartite-partitaria-permanente/arquivos/normas-regulamentadoras/nr-09-atualizada-2019.pdf
- 22. Brasil. Ministério do Trabalho. NR-15: Atividades e operações insalubres [Internet]. Brasília; 1998 [citado em 2021 Jan 7]. Disponível em: https://www.gov.br/trabalho-e-emprego/pt-br/acesso-a-informacao/participacao-social/conselhos-e-orgaos-colegiados/comissao-tripartite-partitaria-permanente/normas-regulamentadora/normas-regulamentadora-no-15-nr-15
- Campos RFF, Tessaro AP. Avaliação e caracterização de insalubridade pro exposição á ruído em uma empresa de reciclagem de plástico. Saúde & Meio Ambiente. 2019;8:137-47. http://doi.org/10.24302/ sma.v8i0.2041.
- Tikka C, Verbeek JH, Kateman E, Morata TC, Dreschler WA, Ferrite S. Interventions to prevent occupational noise-induced hearing loss. Cochrane Database Syst Rev. 2017 Jul 7;7(7):CD006396. http://doi. org/10.1002/14651858.CD006396.pub4. PMid:28685503.
- Kim HJ, Oh SY, Won SY, Kim HJ, Kim TK, Ko BC, et al. Associations between earplug use and hearing loss in ROK military personnel. BMJ Mil Health. 2021 Dec;167(6):398-401. http://doi.org/10.1136/ jramc-2019-001378 PMid:32139412.
- Mirza R, Kirchner DB, Dobie RA, Crawford J. Occupational noiseinduced hearing loss. J Occup Environ Med. 2018 Set;60(9):e498-501. http://doi.org/10.1097/JOM.000000000001423. PMid:30095587.
- WHO: World Health Organization. World report on hearing. Geneva: WHO; 2021.
- Gonçalves CGO. Saúde do trabalhador: da estruturação à avaliação de programas de preservação auditiva. São Paulo: Roca; 2009.
- Gonçalves CGO, Lüders D, Guirado DS, Albizu EJ, Marques JM. A percepção sobre protetores auriculares por trabalhadores participantes de programas de preservação auditiva: estudo preliminar. CoDAS. 2015;27(4):309-18. PMid:26398252.
- Fontoura FP, Gonçalves CGO, Willig MH, Lüders D. Educational intervention assessment aiming the hearing preservation of workers at a hospital laundry. CoDAS. 2018;30(1):e20170080. PMid:29466510.