Occupational Health: what is the role of the speech therapist?

 Saúde do Trabalhador: qual o papel do fonoaudiólogo?

Salud Laboral: ¿cuál es el papel del logopeda?

Bruna Gabriela Mechi da Silva*
Camila Lima Nascimento*
Helenice Yemi Nakamura*

Abstract

Introduction: Speech therapy has been inserted in Worker’s Health mainly through care practices related to hearing and voice. It is necessary for speech therapy practices to expand in this field, proposing health promotion actions and care for work-related communication disorders, aiming at comprehensive care for workers’ health, and thus detaching from essentially care and rehabilitative actions. Objective: The present study proposes to understand the formation of the Speech-Language Pathologist in Occupational Health. Method: This is a quantitative study, an electronic questionnaire was applied to Speech-Language Pathologists who work in Occupational Health Reference Centers (CERESTs) seeking to describe the profile of these professionals, their relationship with work and the practices performed. Results: The study reached 33 speech therapists working in Workers’ Health Reference Centers (CERESTs) from 14 Brazilian states. The study found a group of mostly female professionals, but heterogeneous as to year of graduation, age, year of entry in CEREST and years of service, it was identified that the weekly workloads vary from six to 44 hours and also that speech therapists perform specific nucleus actions, but also internal and external collective activities, intersectional and vigilance actions. Conclusion: It was possible to characterize the profile of speech therapists who work in CERESTs, and also to identify the actions and activities performed, contributing to the understanding of the current state of Occupational Health in Speech Therapy and to the proposition of expanding work in the area.

Keywords: Occupational Health; Health Promotion; Health Policy; Speech, Language and Hearing Sciences

* Universidade Estadual de Campinas - UNICAMP, Campinas, SP, Brazil.

Authors’ contributions:
BGM: Study conception; data collection and analysis; and article writing;
CLN: Data analysis, critical review and organization of the article;
HYN: Study conception and monitoring, data analysis and critical review.

E-mail for correspondence: Bruna Gabriela Mechi da Silva - brunagmechi@gmail.com
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**Resumo**

**Introdução:** A fonoaudiologia teve inserção na Saúde do trabalhador principalmente por práticas de cuidados relacionados a audição e voz. Para a oferta de um cuidado mais aderente às necessidades dos trabalhadores, é necessário que as práticas fonoaudiológicas se ampliem nesse campo, propondo ações de promoção em saúde e cuidados em distúrbios da comunicação relacionados ao trabalho, visando a atenção integral à saúde dos trabalhadores e, assim, desapegando-se das ações essencialmente assistenciais e reabilitadoras. **Objetivo:** O presente estudo se propõe a compreender a formação do Fonoaudiólogo em Saúde do Trabalhador. **Método:** Trata-se de um estudo quantitativo, aplicou-se questionário eletrônico aos Fonoaudiólogos que atuam em Centros de Referência em Saúde do Trabalhador (CERESTs) buscando descrever o perfil desses profissionais, sua relação com o trabalho e as práticas realizadas. **Resultados:** Foram alcançados 33 fonoaudiólogos que atuam em Centros de Referência em Saúde do Trabalhador (CERESTs) do país em 14 estados brasileiros. O estudo verificou um grupo de profissionais majoritariamente feminino, porém heterogêneo quanto ao ano de formação, faixa etária, ano de entrada no CEREST e tempo de serviço. Verificou-se que as cargas horárias semanais variam de seis a 44 horas e, ainda, que as fonoaudiólogas realizam além das ações de núcleo específicas, atividades coletivas internas, externas, intersetoriais e ações de vigilância. **Conclusão:** Foi possível caracterizar o perfil das fonoaudiólogas que atuam nos CERESTs, além de levantar as ações e atividades realizadas, contribuindo para o entendimento do atual estado da Saúde do Trabalhador na Fonoaudiologia e para a proposição de ampliação da atuação na área. **Palavras-chave:** Saúde do Trabalhador; Promoção da Saúde; Política de Saúde; Fonoaudiologia.

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**Resumen**

**Introducción:** La logopedia se ha insertado en la Salud del Trabajador principalmente a través de prácticas asistenciales relacionadas con la audición y la voz. Es necesario que las prácticas fonoaudiológicas se expandan en este campo, proponiendo acciones de promoción de la salud y atención a los trastornos de la comunicación relacionados con el trabajo, visando la atención integral a la salud de los trabajadores, y despegándose así de acciones esencialmente asistenciales y rehabilitadoras. **Objetivo:** El presente estudio se propone comprender la formación del Fonoaudiólogo en Salud Ocupacional. **Método:** Se trata de un estudio cuantitativo, se aplicó un cuestionario electrónico a los fonoaudiólogos que actúan en los Centros de Referencia en Salud del Trabajo (CERESTs) buscando describir el perfil de estos profesionales, su relación con el trabajo y las prácticas realizadas. **Resultados:** Llegamos a 33 logopedas que trabajan en los Centros de Referencia de Salud de los Trabajadores (CEREST) de 14 estados brasileños. El estudio encontró un grupo de profesionales mayoritariamente femenino, pero heterogéneo en cuanto al año de graduación, la edad, el año de incorporación al CEREST y la antigüedad, las cargas de trabajo semanales que varían de seis a 44 horas y también que los logopedas realizan, además de las acciones básicas específicas, actividades colectivas internas y externas, acciones intersectoriales y de vigilancia. **Conclusión:** Fue posible caracterizar el perfil de las fonoaudiólogas que acuden a los CEREST, además de levantar las acciones y actividades realizadas contribuyendo así a la comprensión del estado actual de la Salud del Trabajador en la Fonoaudiología y a la propuesta de ampliación de la enseñanza en el área. **Palabras clave:** Salud del Trabajador; Promoción de la Salud; Política de Salud; Fonoaudiología.
Introduction

The concept of work is not limited to a means of subsistence and financial return, but it goes beyond, being part of the construction and organization of the human sociability network, and of the constitution of a person and its subjectivities. Thus, work is seen as a determinant for living and health conditions.

In this sense, Occupational Health aims to intervene in the health-illness-care process, to guarantee comprehensive health care, in addition to analyzing work processes, making it possible to identify necessary changes, in order to improve working conditions. However, this can only be achieved through an interdisciplinary look, enabling the understanding of social relationships and production techniques, taking into consideration the subjectivity of the various subjects involved in the processes.

Work, in its broadest sense, is seen as fundamental and necessary for the social being, once it implies constitutive characteristics such as self-fulfillment, entertainment and a way of maintaining a person’s dignity. The look at both work and worker is rooted as an important starting point for understanding human subjectivity, sociability and identity.

Anticipating the inclusion of occupational health actions in primary care, the Occupational Health Care Network – RENAST was established, with the implementation of assistance actions, health promotion and surveillance of the workers’ health, organizing the Occupational Health Reference Centers – CERESTs into a network.

Aiming to define principles, guidelines and strategies for health actions focused on workers at different complexity levels, the National Male and Female Occupational Health Policy – PNSTT was created, seeking to leverage support actions and the reduction of morbimortality, moreover, to recommend actions aimed at preventing and protecting workers’ health aligned with the health policies, taking into consideration, the transversality of occupational health actions and working as one of the pillars of the health-disease process.

It is attributed as the role of the state, the ordering of actions and services for the needs of the SUS, thus, in the context of the public health system, the defense, acquisition and protection of rights are crucial parts for the recognition and appreciation of workers and their health. It is possible to observe some important historical milestones in Figure 1.

**Figure 1.** Timeline of legislation, public policies and achievements of rights in occupational health (Mechi-Silva, 2022).
In 2018, with Resolution n.603\(^9\), the CEREST’s minimum team composition was updated. However, it is noteworthy that the speech therapist remained a non-mandatory professional, despite the high levels of noise exposure in work environments.

The speech therapist has a professional role in multidisciplinary actions and occupies an important place regarding the humanization of work relationships and the promotion of workers’ health, by working with people as a communicative being, once it is a social interaction factor and, therefore, an aspect that improves quality of life. Thus, there is a range of possibilities for speech therapy in the occupational health arena\(^{10}\).

Marking, then, a births’ encounter: the profession, regulated in 1981\(^1^1\), as well as the regulation and the final steps towards the creation of a public and universal health system in Brazil\(^1^2\).

In 2013, in the Brazilian occupation classification (CBO)\(^1^3\), happened the inclusion of the speech therapist’s job description in the public health system. According to this description, the professional acts in treatment, prevention perspective, habilitation and rehabilitation. He/she also works in diagnosis. In addition, he/she can take part in prevention programs, health promotion, research development, other specific tasks and in scientific events organization.

The resolution nº 428/2013\(^1^4\) considers that every speech therapist, regardless of specialty, is responsible for ensuring the promotion, prevention and recovery of collective and individual workers’ health, and yet, in all the actions carried out, be concerned and attentive in evaluating if injuries can possibly be related to work\(^1^4\).

The hearing area is presented as the most consolidated area in occupational speech therapy, either because of the numerous studies in the field over the years, or because of the legislation that regulates occupational exposure and tolerance limits for noise, and yet because of the need for notification in case of noise-induced hearing loss (NIHL)\(^1^5\), as specified on the DRT list.

It is also observed that after an extensive amount of research, struggles and clinical practices, the speech area has been increasingly included in work-related issues and has been reaching achievements, such as the work-related speech voice disorders notification protocol (DVRT)\(^1^6\).

Despite all, it is still necessary for the areas and speech therapy practices to get consolidated in this field, seeking to propose care in work-related voice disorders\(^1^6\). The study aims to distinguish the profile and activities performed by speech therapists who work at CEREST throughout the country.

**Materials and methods**

This is a quantitative study, approved by the Ethics Committee under the ordinance 4.076.676/2020, which is part of the master’s thesis “Speech therapy in Occupational Health: state of the art in Reference Centers of Occupational Health” (Mechi-Silva, 2022)\(^8\). The study included speech therapists working in the field of Occupational Health within regional or state CERESTs who answered the electronic questionnaire, with enclosed questions, sent by Google Forms, and agreed with the Free and Informed Consent Term - TCLE.

Occupational health, as a specific area in speech-language pathologies, acknowledges the quantitative limitation of professionals as well as the dependence on acceptance in order to participate in research, therefore, a sample calculation was not proposed.

The questionnaires were sent directly to the professionals with whom contact was possible, from August to November 2020, and the link was sent via email or WhatsApp.

To compose the group, the Ministry of Health’s Occupational Health General Coordination - CGSAT/MS shared data on state and regional CERESTs’ coordinators, who were contacted by telephone and via email in order to reach the speech therapists of their departments. In addition, due to a low adherence, it was necessary to make use of informal means, such as the researchers’ personal contacts.

The data from the questionnaires were submitted to a statistic treatment with descriptive measures, and the Kruskal-Wallis statistical test was applied, using a significance level of 5%.
Results

We reached 102 speech therapists who worked in CERESTs in 2017 and, in the same year, 214 CERESTs were active in the Brazilian territory, according to the database of the health information system. The research sample consists of 33 professionals (32%) who filled out the questionnaire in 2020, from 14 Brazilian states and, for the most part, women (96.9%). For this reason and the predominance of women in speech therapy, in this study, the terms to designate the participants will be used in the feminine.

Regarding the age, it was identified that most professionals are in the range between 40-50 years old, with seven (21.2%) born between 1961 and 1970; 16 (48.4%) between 1971 and 1980; eight (24.4%) between 1981 and 1990 and two (6%) participants between 1991 and 2000. Working time at CEREST ranged from 30 to 1 year in the job, with an average of 11.5 years.

The year of the participating speech therapists’ graduation showed a variation of 36 years, with the earliest one in 1985, and the most recent, 4 years after the graduation year, that is, she graduated in 2016.

It was also found that 9 (27.3%) speech therapists graduated between 1985 and 1995, 12 (36.4%) between 1996 and 2005, 11 (33.3%) between 2006 and 2015 and only one (3%) in 2016. Of the total samples, 22 (66.6%) studied in private higher education institutions (HEIs) and 11 (33.3%) in public institutions.

Participants reported a weekly workload average of 26.5. Most of them reported working 30 to 36 hours a week and only four (12.1%) professionals reported working 6 to 10 hours a week at CEREST. The questionnaire had a question related to the workload satisfaction, where, the majority, 26 (78.8%) reported as satisfactory, regardless of the workload performed.

Regarding the activities carried out at CEREST, more than 90% of the participants reported being involved in team meetings (32), external meetings (31), occupational health surveillance actions (29) and training and qualifications (29), as shown in Figure 2.

From 70% to 80% also affirm to perform health surveillance (23), intersectoral activities (25), educational activities in the area (28), injury notification (25), matrix support (26) and reports or opinions issuing. And less than 50% report interdisciplinary (15) and group (12) care. The other actions are shown in Figure 2.

Figure 2. Chart of activities carried out in cerests by the participating professionals, n=32.
Historically, due to the origin of the area, voice and audiology tasks are known to be widely performed. Although they are not the focus, they are expected to take place as core activities in speech therapy. In this study, 51.5% (17) of the speech therapists surveyed reported audiological assessment and 33.3% (11) individual voice care as routine activities.

Crossing the information with the CEREST’s speech therapists’ profile, the audiological assessment and the matrix support were associated with the entry decade (Figure 3), and the intersection between the notification and the training decade indicates a relationship with the speech therapist training that has been taking place in the recent decades, that is, more recently, with the notification of cases, as can be seen in Figure 3.

<table>
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<th>Tasks</th>
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<th>P value</th>
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<td>Workload</td>
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**Figure 3.** Association between tasks performed at the cerests and professional profile variables.

**Discussion**

CEREST is a service focused on specialized care in Occupational Health, with the main objective of offering health promotion, prevention, surveillance, diagnosis, treatment and rehabilitation actions to workers.

The work carried out by Geraldi and his collaborators outlines, as general skills for Occupational Health, comprehensive care, understanding of the social determinants of health, teamwork, health management and permanent education, which are considered general for any health professionals. Other abilities pointed out by the authors, such as ensuring effective communication, qualified listening and conflict management, are referred with higher appreciation to the speech therapists’ training, who can contribute a lot with issues of oral, written, alternative and mediated by other meanings communication. In other words, “despite the clarity traps of clinical work, the disease and its care is an area of potential intersubjective contact” (Charon, 2015, p. 21).

The speech therapist, as the health professional responsible for human communication and
whose precepts are to ensure the promotion, prevention and recovery of collective and individual worker’s health\(^1\), when considering the performance in the TS, is expected to be established the health-work-disease relationship between speech disorders and the worker’s activities.

There are specific challenges that the speech-language pathology faces as one of the newest professions in the health area, for being historically of rehabilitative approach\(^9\). In addition to the specific challenges, there is the fact that the health area comprehends care work, which are social performed jobs that, compared to production work, seem to represent less social value; It is also noteworthy the fact that the care professions are mostly done by women, as observed in the sample composition of this study, with 96.9% CIS or transgender female participants.

When analyzing the data on age group and working time, it was noticed the entry of young professionals in the area, but also identified a long-term permanence, representing that many speech therapists remain for a long time at CEREST. This professional long-term permanence may be related to what is called enthusiasm.

In the study by Gusmão et al (2018)\(^2\), when investigating the presence of speech therapists in CERESTs, the authors identified that 70% of the speech therapists who composed the CEREST’s team were effective public servants but found that the turnover of professionals in the team was a reality that made difficult the continuity in the performance of tasks, different from what was identified in this study.

Some speech therapists interviewed mentioned carrying out their activities with a workload of six hours per week on duty, raising the discussion about the way and chances for interaction between speech therapists and the other professionals of the team. The care development depends on interdisciplinary work so that the team’s professionals share responsibility, the care lines are discussed, and the solving capacity is enhanced\(^3\). Thus, in addition to professional experience and training, being present, experiencing the job routine and participating in activities and discussions can make the creation of bonds within the team easier.

Returning to the discussion about workloads, it appears that 54.5% of the participants divide their working time between CEREST and other jobs. As this study came across the limitation of not having the information collected in-locos, it remains the question about the ways that speech therapists find to organize themselves. It is known that being present at the workplace is not a fundamental condition for carrying out actions, but it does provide better possibilities to participate in different activities, which may not happen when they are not at work every day of the week.

In this study, more than half of the speech therapists surveyed reported performing audiological assessments and 33.3% reported individual voice assistance as part of their routine activities. More than 90% point to surveillance as one of their tasks. The study carried out in 2014\(^4\) identified that 76.3% of professionals practiced health surveillance tasks. So, although core care practices continue to exist, a possible growth in worker’s health surveillance in speech therapy can be observed.

The questionnaire also addressed the characteristics of the work environment. When asked if they were satisfied with their work, 23 (69.7%) answered that they always were; 8 (24.2%) sometimes and two (6.2%) revealed rarely satisfied. Satisfaction is generally used when referring to happiness at work, and may be related to aspects of the company, the role, personal relationships and even individual factors\(^5\).

The risk a person takes when performing a job without motivation and without meaning is that alienated work may occur, that is, a work that is of the worker, but at the same time does not belong to the worker. According to Antunes (2018) if work is alienated, the workers are lost when they should find their identity, do not know themselves when they should be known and destroy themselves when they should be building themselves up\(^6\).

The ability to reflect on their practices and know-how require workers to have their skills expanded, so they can perform this abstract task. For the health professional to have this profile, for example, it must involve the ability to solve problems and face situations that are constantly changing\(^7\).

In this study, regional inequalities regarding the supply and distribution of speech therapists throughout the country were not considered. Knowing that different local realities can also influence the work provided, it is important to have this relationship addressed in future studies. In addition, it must also be considered an increase in the sample’s participants number, since the reduced
number of professionals in the area, added to the political context of dismantling the public sector in the country plus the carrying out of this study during the Covid-19 pandemic impacted on the approach to a larger number of speech therapists.

**Conclusion**

The study identified that, out of the 214 active CERESTs in the country, it was possible to analyze services from 14 Brazilian states, through contact with the 33 research participants who answered the questionnaires. The profile of speech therapists at CERESTs was characterized as the vast majority being female, with a predominant age group between 40-50 years old, with working career at CEREST ranging from 1 to 30 years and participating speech therapists graduated between 1985 and 2016.

The relationship between Speech Therapy and occupational health presents several paths to be explored, but discussions on the subject are necessary in different scenarios: training, continued education as well as participation and social control, in order to improve the performance of speech therapists towards generalist, humanized practices and focused on the needs of the population and the public health system. Thus, studies are still needed in order to understand and correlate the needs of speech therapists who work with occupational health, offering solutions and proposals to this group of professionals.

**References**

3. Nobre, MT et al. (org.). Vozes, imagens e resistências nas ruas: a vida pode mais! Natal: EDUFERN, 2019
7. Garbin, AC; Pintor, EAS. Estratégias de intra e intersetorialidade para transversalizar a saúde do trabalhador em todos os níveis de atenção à saúde. Revista Brasileira de Saúde Ocupacional. [online]. 2019
9. Brasil. Resolução CNS nº. 603, de 08 de novembro de 2018 do CNS – Aprova o Relatório da Câmara Técnica da Comissão Intersetorial de Saúde do Trabalhador e da Trabalhadora (CISTT/CNS) o qual apresenta a proposta de reorganização da Atenção Integral à Saúde dos Trabalhadores no SUS, 2018
11. Brasil. Lei n. 6.965, de 9 de dezembro de 1981
14. Conselho Federal de Fonoaudiologia. Resolução CFFa n. 428, de 2 março de 2013
17. Geraldi, L; Miranda, FM de; Silva, JAM da; Appenzeller, S; Mininel, VA. Competências profissionais para a atenção à saúde do trabalhador. Rev Bras educ med [Internet]. 2022
20. Gusmão, AC; Meira, TC; Santos, FCCN; Ferrite, S. A Fonoaudiologia nos Centros de Referência em Saúde do Trabalhador no Brasil. Rev. CEFAC. 2018
21. Lazarino, MSA, Silva TL; Dias, EC. Apoio matricial como estratégia para o fortalecimento da saúde do trabalhador na atenção básica. Rev Bras Saúde Ocup, 2019

Bruna Gabriela Mechi da Silva, Camila Lima Nascimento, Helenice Yemi Nakamura


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