# Epidemiological characterization of a phoniatric clinical practice

# Caracterização epidemiológica de uma clinica foniátrica

# Caracterización epidemiológica de una clínica foniátrica

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## Abstract

Introduction: Child development disorders invite people from different fields of knowledge to reflect on their roles. Within this context, the practice of speech therapy causes continuous reflections based on the singularity of treated cases and their riddles. As a path, the possibility of a dialogue with other areas can respond to clinical possibilities in this field, in order to think about the direction of treatment. Epidemiologic data can also contribute to clinical information for patients' management. **Objective:** To characterize epidemiologically a phoniatric clinical practice considering the processes of diagnosis and management. Method: Retrospective study of historical cohort with cross-sections. A total of 879 records of patients with difficulties in communicating complaints submitted to phoniatric evaluation at a private clinic. Results: The male gender was prevalent (64.5%), the language disorder of multifactorial etiology was the most frequent (44%) and the treatment commonly adopted was speech therapy. Interdisciplinary work was the discussion of diagnosis and treatment. Conclusion: Speech therapist stands out as a professional that directs more patients to phoniatric evaluation and is the one which most receives indications of patients from the conduct of the Phoniatrist, stating that the partnership between these specialties, Speech Therapy and Phoniatrics, can contribute to the development of treatments for these patients. We also highlight the importance of the psychologist in the composition of the interdisciplinary team in serving patients with communication disorders, because the results show that it was the second specialty that received more referrals from the Phoniatrist, considering that changes and mental suffering are directly related to language problems.

*Keywords:* Interdisciplinary communication; Language disorders; Language; Speech, language and hearing sciences; Diagnosis; Child language.

# Resumo

Introdução: Os distúrbios de linguagem convocam profissionais de diferentes campos de conhecimento a refletirem sobre os casos atendidos e seus enigmas. Neste contexto, a possibilidade de diálogo com outras áreas pode responder sobre o atendimento clínico nesse campo, com a finalidade de pensar a

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direção do tratamento. Dados epidemiológicos também podem contribuir com informações clínicas para a condução dos pacientes. Objetivo: Caracterizar epidemiologicamente uma clínica foniátrica considerando os processos de diagnóstico e conduta. Método: Estudo retrospectivo de coorte histórica com corte transversal. De um total de 879 prontuários de pacientes com queixa de dificuldades na comunicação submetidos à avaliação foniátrica, em uma clínica particular. Resultados: O gênero masculino foi prevalente (64,5%), o distúrbio de linguagem de etiologia multifatorial foi o mais frequente (44%) e a conduta comumente adotada foi a terapia fonoaudiológica. Conclusão: O Fonoaudiólogo destaca-se como o profissional que mais encaminha pacientes para avaliação foniátrica e é o que mais recebe indicações de pacientes a partir da conduta do foniatra, declarando que a parceria entre essas especialidades, a Fonoaudiologia e a Foniatria, pode contribuir para a evolução dos tratamentos desses pacientes. Destacamos, ainda, a importância do psicólogo na composição da equipe interdisciplinar no atendimento aos pacientes com distúrbios da comunicação, pois nos resultados esta foi a segunda especialidade que recebeu mais encaminhamentos do foniatra, considerando que alterações e sofrimentos psíquicos estão diretamente relacionados com os problemas de linguagem.

Palavras-chave: Comunicação interdisciplinar; Transtornos da linguagem; Linguagem; Fonoaudiologia; Diagnóstico; Linguagem infantil.

#### Resumen

Introducción: Los trastornos del lenguaje convocan profesionales de diferentes campos del conocimiento para reflexionar sobre los casos atendidos y sus enigmas. En ese contexto, la posibilidad de diálogo con otras áreas puede responder sobre el atendimineto clínico en este campo, para pensar sobre la dirección del tratamiento. Los datos epidemiológicos también pueden contribuir con informaciones clinicas para el tratamiento de los pacientes. Objetivo: Caracterizar epidemiológicamente una clínica foniátrica considerando los procesos de diagnóstico y conduta. Método: Estudio retrospectivo de cohorte histórica con secciones transversales. Un total de 879 archivos de pacientes con quejas de dificultades en la comunicación sometidos a la evaluación foniátrica en una clínica privada. Resultados: El género masculino fué prevalente (64,5%), el distúrbio de lenguaje de etiología multifactorial fue la más fercuente (44%) y la conducta comúnmente adoptada fue la terapia fonoaudiológica. Conclusión: el fonoaudiologo se destaca como profesional que dirige más pacientes a la evaluación foniátrica y es el que mas recibe indicaciones de pacientes del médico foniatra. La asociación entre estas especialidades, Fonoaudiología y Foniatría, puede contribuir para el desarrollo del tratamientos de los para estos pacientes. También destacamos la importancia del psicólogo en la composición del equipo interdisciplinario en el servicio a los pacientes con trastornos de la comunicación, ya que en los resultados fue la segunda especialidad que recibió más referencias foniatra teniendo en cuenta que los cambios y el sufrimiento mental están directamente relacionados con problemas de lenguaje.

Palabras clave: Comunicatión interdisciplinaria; Trastornos del lenguaje; Lenguaje; Fonoaudiología; Diagnóstico; Lenguaje infantil.

#### Introduction

Speech-Language Pathology historically held the first partnerships with Phoniatry for both belong to fields that deals with issues related to communication disorders, and because Phoniatry was the area that supported the beginning of Speech-Language Therapy in Brazil. During the 80s, based on the medical model, Phoniatry guided the training and the practice of speech language pathologists<sup>1,2</sup>.

Along the trajectory of Speech-Language Pathology, phoniatric doctors played a distinguished role in training speech therapists and fostering clinical dialogue. Thus, Professor Dr. Mauro Spinelli, a Brazilian phoniatrist, Speech-Language Pathology course founder, and professor at the Pontificia Universidade Católica de São Paulo (PUC-SP), was one with whom we had the opportunity to work for many years in an interdisciplinary team.

The area of Speech-Language Pathology receives patients with communication problems, mostly children, who are in fact the core work, while in the process of acquisitions. Clinical practice with children with language complaints incites professionals to constantly think every case and every story, because it deals with subjects in the process of constitution<sup>3</sup>.



Both Speech-Language Pathology and Phoniatry consider the subject in organic, psychic and social terms, and this concept enables to understand there is a need for dialogue, especially in cases with language disorders. Such cases may have a physical impairment, however, it is necessary to consider that, "Taken as a whole, language is multiform and heteroclite; supported by different physical, physiological and psychological realms, it still belongs to the individual and the social domains"<sup>4</sup>. In this sense, the study of a clinical collection can provide information in the field of clinical epidemiology and may contribute with answers to clinical questions taken from the evidence available, so more accurate decisions can be made in the treatment of patients<sup>5,6</sup>.

Taking into account the complexity of these cases and the different possibilities of diagnosis to clinical status of language disorders and language delays - such as, language acquisition delay, articulation disorders, and specific language impairment, among others - epidemiological studies can help on clinical considerations toward the best care for the patient.

## Objective

The aim is to characterize epidemiologically a phoniatric clinical approach individualizing the processes of diagnosis and management.

## Methods

The research project was approved by the Ethics Committee of the institution as declaration number 06919712.6.0000.5482 (Brazil Platform).

A retrospective cohort study with cross section of 879 records of patients who reported difficulties in communicating was carried out. Patients were referred to phoniatric evaluation at a private clinic in São Paulo and were assisted from June 1976 to January 2005 (the year of Doctor Mauro Spinelli's death). The following variables were considered: the origin of referral, gender, average age, origin, clinical features, diagnosis and management for treatment.

- Exclusion criteria: duplicated records (more than one envelope per patient), incomplete or unreadable.

The records were organized in line with classification criteria aiming at selecting and deepening the analysis of selected sets. Some criteria have been pre-established and others have been added according to the collection inspection.

Classification criteria were:

Complaint, classified in the areas of:

•Oralfacial motricity: cases in which the complaint was related to breathing problems, swallowing, malocclusion;

•Hearing: cases in which the complaint was related to hearing deficits and tinnitus, among others;

•Voice: cases in which the complaint was related to the loss of voice, hoarseness, problems with vocal intensity, among others;

•Reading/writing/learning: cases in which the complaint consisted of problems to read and write, literacy difficulties, cognitive deficits or learning as a whole because of language issues;

•Speech/language/fluency: cases in which the complaint referred to problems of fluency, articulation of speech sounds, delayed language acquisition, deficits in language disorders, syndromes with language disorders, hearing and oral practice difficulties, among others;

•Others: specific cases of the ENT area (such as sore throat or ear pain, cough, allergies) and behavior problems (Complaints coming from people related to the child: "The child does not socialize with other children, fights at school, seems autist").

Diagnosis, classified as:

•Oral motor disorders: symptoms of mouth breathing, atypical swallowing, malocclussion, hypotony of phonoarticulatory organs, dysarthria, among others;

•Hearing disorders: symptoms of hearing loss disorders, congenital or acquired hearing loss, tinnitus, auditory neuropathy, among others;

•Voice disorders: dysphonia, aphonia, other speech disorders;

•Reading/writing/learning disorders: dyslexia symptoms (SLI), dysgraphia, among others;

•Speech/language/fluency disorders: symptoms of articulation disorders, phonological disorders, delay in language acquisition, syndromes with speech problems, SLI, dyspraxia, aphasia, stuttering, among others;

•Others: specific clinical conditions of the ENT area (e.g. laryngitis, pharyngitis, otitis, rhinitis) and clinical conditions of emotional disorders (e.g. autism, psychosis, obsessive neurosis, depression).



Monitored or not by speech language therapists.

Duration of the phoniatrist follow-up and/or the speech language pathologist.

For the analysis of the results, records of the full collection were characterized from the peculiarities raised in the inspection thereof. A descriptive analysis was performed establishing connection with the information found.

# Results

At first, the collection, which consisted of eight hundred and seventy-nine (879) records altogether, was inspected, and, applying the exclusion criteria, seventy-seven (77) were discarded. This resulted in eight hundred and seventy-two (802) records to be used in the characterization of the material. It is important to clarify that both the phoniatrist and the speech language pathologist attended many other cases during this period, although, such work was carried out in partnership with other professionals.

Descriptive analysis of the complete collection was carried out in the period 1976 - 2005.

The data were collected from 802 patients treated between the years 1976 - 2005. The sample was composed mostly by men (64.5%). The average age of children studied was 6.1 years old (SD=2.6), whereas for adolescents, it was 13.7 years old (SD=1.5). As for the adults, the average age was 39.5 years old (SD=19.1), highlighting that the magnitude of this group ranged from 18 to 87 years old (Table 1). Other characteristics of the sample are found in Table 2.

It is noteworthy that 78.6% of patients were children and 64.0% were originally from the city of São Paulo (Table 2).

Table 1- Patients statistical age descriptive, by group.

GROUPS	N	AVERAGE	(SD)	MEDIAN	MINIMUM	MAXIMUM
Children	630	6.1	(2.6)	5.9	0.1	11.9
Adolescents	81	13.7	(1.5)	13.2	12.0	17.9
Adults	91	39.5	(19.1	) 34.0	18.0	87.0

Fonte: Elaborado pela autora com a análise da estatística Drª Stela Verzinhasse Peres.

Table 2. Number and	percentage of	patients, by	demographic	characteristics.

		TECODY		(0/)
VARIABLE		TEGORY	N	(%)
Gender	Male	517	(64.5)	
	Female	285	(35.5)	
Age	children	(0 - 11.11)	)630	(78.6)
(Years)	adolesce	ents(12 – 1	7.11)	81
	(10.1)			
	adults (≥	≥ 18)	91	(11.3)
Origin	SP – Cap	oital	513	(64.0)
	SP – Stat	te	217	(27.1)
	Other st	ates	72	(9.0)
Year of d	iagnosis*	1976 - 1	985	46
	(5.7)			
	1986 – 1	.990	145	(18.1)
	1991 – 1	.995	140	(17.5)
	1996 – 2	2000	276	(34.5)
	2001 – 2	2005	195	(24.2)
Total		802	(100.0)	

\*The line for the first year of diagnosis took into account ten years due to the small number of patients/year. Source: Elaborated by the author with the analysis of statistician Dr. Stela Verzinhasse Peres

Table 3 shows the percentage of referrals. The speech language pathologist is responsible for 36.6% of the total, followed by 20.7% of referrals issued by physicians; and spontaneous demand at 20.7%. In the category "other professionals",

professions such as dentists, nurses, physiotherapists, occupational therapists and maxillofacial therapists are included.

Regarding complaints, speech disorders show the highest rate (31.4%). As for cases of problems



in the ENT area, two patients had ear pain; and one case registered for each of the following complaints: sore throat; nasal obstruction; loss of the sense of smell; airway obstruction; nosebleeds; and

dry cough associated with the flu.

VARIABLE	CATEGORY	Ν	(%)
Referral	Speech Language Pathologis	st 294	(36.7)
	Doctor	166	(20.7)
	Spontaneous Demand	166	(20.7)
	School	65	(8.1)
	Acquaintance/Relative	64	(8.0)
	Psychologist	22	(2.7)
	Health Institution	8	(1.0)
	Teacher	6	(0,7)
	Orthodontist	5	(0.6)
	Other professionals	6	(0.7)
Complaint	Speech Disorder	252	(31.4)
	Learning	139	(17.3)
	Language Delay	109	(13.6)
	Hearing	63	(7.9)
	Speech Fluency	49	(6.1)
	Orofacial Motricity	41	(5.1)
	Voice	41	(5.1)
	Behavior	18	(2.2)
	Global Development	12	(1.5)
	ENT Disorders	8	(0.8)
	Therapeutic Approach	6	(0.7)
	More than one complaint	64	(8.0)
Total		802	(100.0)

Table 3. Number	and percentage	of patients by	v clinical	caracteristics
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Fonte: Elaborado pela autora com a análise da estatística Drª Stela Verzinhasse Peres.

Table 3 shows that 64 out of 802 (8.0%) patients had more than one such claim. Accordingly, Table 4 displays the total complaints registered in the records collected, an average of 1.06, that is, more than one claim per patient.

VARIABLE	CATEGORY	N	(%)
Complaint	Speech Disorder	291	(34.2)
	Learning	163	(19.2)
	Language Delay	123	(14.4)
	Hearing	74	(8.7)
	Speech Fluency	53	(6.2)
	Orofacial Motricity	46	(5.4)
	Voice	45	(5.3)
	Others	36	(6.3)
Total		851	(100.0

Table 4. Number and percentage of complaints.

\*Absolute number of complaints = 851. Some patients had more than one complaint.

Source: Elaborated by the author with the analysis of statistician Dr. Stela Verzinhasse

Table 5 shows that 44.0% of the cases presented the diagnosis of speech/ language/fluency disorders; 12.7% of cases were reading/writing/ learning disorders; 12.3% were oral motor disorders; and 11.0% of cases were hearing disorders.

Table 5. Number and percentage of patients, by diagnosis

VARIABLE	CATEGORY	N	(%)
Diagnosis	Speech/language/fluency Disorder	353	(44.0)
-	Reading/writing/learning Disorders	102	(12.7)
	Oral Motor Disorder	99	(12.3)
	Hearing Disorder	88	(11.0)
	Emotional Disorder	75	(9.4)
	Voice Disorder	35	(4.4)
	ENT Disorders	25	(3.1)
	Neurologic Disorder	17	(2.1)
	Syndromic Conditions	4	(0.5)
	No information	4	(0.5)
Total		802	(100.0)

Source: Elaborated by the author with the analysis of statistician Dr. Stela Verzinhasse Peres



Table 6 shows clinical approaches raised in the<br/>records. In this Table, the first column represents<br/>the single clinical approach, and the second column<br/>indicates that, for these patients, besides the single<br/>clinical approach, there was an interdisciplinary<br/>approach. For example, it is observed that 358(48.6%<br/>therapy<br/>guage to<br/>psychop

(48.6%) patients received only speech language therapy and that 29 (3.9%) received speech language therapy, together with psychological and psychopedagogic therapies.

It is noteworthy that 8.2% of the records had no information on such interventions.

Table 6. Number and percentage of	patients, by clinical caracteristics
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SINGLE	INTERDISCIPLINAR APPROACH	N	(%)
APPROACH *			
Speech Language Path	ologist	358	(48.6)
	Psychologist/Psychopedagogist	29	(3.9)
	Phoniatric monitoring	3	(0.4)
	School	2	(0.2)
	Medication	4	(0.5)
	HA	3	(0.4)
	Ortodontist	3	(0.4)
	Examination	3	(0.4)
	ENT	1	(0.1)
	Psychologist and Neurologist	1	(0.1)
Physician		100	(13.6)
	Psychologist/Psychopedagogist	130	(17.7)
	Physician	2	(0.3)
	Medication	1	(0.1)
Phoniatrist		17	(2.3)
	Examination	3	(0.4)
	Medication	1	(0.1)
	ENT	1	(0.1)
Examination		4	(0.5)
	Medication and ENT	1	(1.0)
Return to school		29	(3.9)
	Change of school	2	(0.3)
Hearing aids		8	(1.1)
Medication		7	(1.0)
Audiologic Evaluation		7	(0.1)
Return to institution	of referral	6	(0.8)
ENT		6	(0.8)
Orthodontist		2	(0.3)
Orthoptist		1	(0.1)
Nasopharingoscopy		1	(0.1)
Total		736	(100.0

\* There are 66 cases whose management is not registered in the records, corresponding to 8.2% of the total.Source: Elaborated by the author with the analysis of statistician Dr. Stela Verzinhasse Peres

The analyses of factors associated with the diagnosis were grouped under the categories of "neurological, syndromic and genetic clinical symptoms" due to the low number of cases. Four cases without information on diagnosis were also removed from this analysis.

It is noticed in Table 7 that there was a significant association between diagnosis and gender

(s=0.046). The diagnosis of disorders regarding reading, writing and learning presents a greater proportion (15.1%) in boys compared to girls (8.5%). On the other hand, hearing disorders presents a higher percentage in girls (13.8% versus 9.5%). It should be considered that this percentage refers to a specific clinical setting and does not represent the population at large.

Table 7. Number and	nercentage of	natients/diagnosi	s by gender
Table 7. Number and	percentage of	patients/utagnosi	s, by genuer

DIAGNÓSIS*	GENRE				
	MALE			IALE	SD
	N	(%)	Ν	(%)	
Speech/language/fluency					
Disorder	232	(45.0)	121	(42.8)	0.046
Reading/writing/learning Disorder	78	(15.1)	24	(8.5)	
Oral Motor Disorder	65	(12.6)	34	(12.0)	
Hearing Disorder	49	(9.5)	39	(13.8)	
Emotional Disorder	48	(9.3)	27	(9.5)	
Voice Disorder	19	(3.7)	16	(5.7)	
ENT Disorders	13	(2.5)	12	(4.2)	
Other Clinical Symptoms	11	(2.1)	10	(3.5)	
Total	515	(100.0)	283	(100.0)	

\*Four records without information on the variable diagnosis were excluded.

Source: Elaborated by the author with the analysis of statistician Dr. Stela Verzinhasse Peres.

In Table 8, there was a statistically significant association between diagnosis and age (s<0.0001) regarding the diagnosis of speech/language/fluency

disorders, in which children manifest this in greater proportion compared to adolescents and adults, respectively, 48.6%, 25.9% and 30.8%.



		AGE (AGE IN YEARS)						
DIAGNOSIS	СНІ	LDRE	ADOLESCENT		ADULTS		SD	
	N		5	5	(≥ 18)			
	(0 –	11.11)	(12 –	17.11)				
	N	(%)	Z	(%)	N	<b>(%)</b>		
Speech/language/fluency								
Disorder	304	(48.6)	21	(25.9)	28	(30.8)<	0.001	
Reading/writing/learning								
Disorder	71	(11.3)	26	(32.1)	5	(5.5)		
Oral Motor Disorder	81	(12.9)	12	(14.8)	6	(6.6)		
Hearing Disorder	60	(9.6)	6	(7.4)	22	(24.2)		
Emotional Disorder	67	(10.7)	6	(7.4)	2	(2.2)		
Voice Disorder	14	(2.2)	4	(4.9)	17	(18.7)		
ENT Disorders	11	(1.8)	3	(3.7)	11	(12.1)		
Other Clinical Symptoms	18	(2.9)	3	(3.7)	0	(0.0)		
Total	626	(100.0)	81	(100.0)	91	(100.0)	_	
*4 records with missing information on variable diagnosis were excluded.								

Table 8. Number and percentage of patients, by age

Source: Elaborated by the author with the analysis of statistician Dr. Stela Verzinhasse Peres

#### Discussion

As in this research the clinical work with children predominates, we propose a discussion from the main results, which were related to what the literature points out on childhood possible problems, considering the importance of the analysis on the effects. Such analysis is necessary to be able to understand what concerns the therapy to children.

At the intersection of the data found in the 802 records, the largest number is children (Table 1) and males (Table 2), confirming the hypothesis that this gender is also prevalent in the occurrence of speech/language/fluency disorders (Table 7) as found in the literature. Complaints of delays, swaps and disfluencies in speech are emphasized (Table 4)<sup>7</sup>. This could be explained by changes in brain maturity and hormonal issues in males, as well as the social demand that they suffer, as they are under pressure to speak correctly within the cultural environment, according to some research. This male predominance is explained by different authors in several ways. There is not a final consensus<sup>8,9,10</sup>.

The average age of the children at the moment of phoniatric evaluation was six years and one month old (Table 1), datum that coincided with the child entering elementary school. The child who was specially protected within the family environment was faced with new relationships and social life, where flaws of language frequently emerged. In this context, the child is placed in the group, and, therefore, interacts with other children and teachers, having a greater demand for communication in relationships. This may explain the difference in this group, as two authors<sup>11,12</sup> in different moments, pointed to the difficulty faced by little children. This may precipitate either the clinical referral or it may lead to a search for a phoniatrist or a speech language pathologist evaluation. On the other hand, seeking for diagnosis or treatment as late as at the age of six years old can have negative consequences for the child development, since good communication is essential for him or her, not only to express and develop physically and mentally healthy, but also to develop a sense of belonging to the social group . The persistence of symptoms leads to several effects on learning, behavior, social skills and mental health in adulthood. These effects should not be neglected, as the author remarks<sup>14</sup>.

Table 8 shows how speech and language delays can last through childhood, which is shown in Table 5, where this is the most frequent diagnosis up to the age of eleven years old, followed by reading, writing and learning disorders after the age of twelve years old. It is reckoned by this observation that a child who begins his literacy with language difficulties, if not treated in time, could carry these issues along childhood and adolescence, since during this time, some basic language proficiency will be required for schooling in order to cultivate literacy and an appropriation of the written language. Such account promotes discussion on the understanding of the process of children language construction, which is not only limited to orality, but relates to unfolding further effects in what is fundamental to the child's path in learning written language<sup>12</sup>.

From the presentation of the results, we noticed that language difficulties signalize the need for intervention by professionals involved in the understanding of the language acquisition process.

When forming the team that preconize language issues, the partnership between the phoniatrist and the speech language pathologist is highlighted, whether in the approach of clinical cases of greater complexities or in the longitudinal follow up, in order to think about the diagnosis and about the contribution of specific data of language evaluation, as found in Table 3.

Some points to highlight: the speech language pathologist stood out as a professional who often directs patients to phoniatric evaluation (Table 3); also the speech language pathologist is the professional who received the most patients from the phoniatrist referrals (Table 6); making clear that the partnership between these two specialties – Speech-Language Pathology and Phoniatry - may contribute to the evolution of treatment of children with speech and language disorders. I emphasize here that authors in different publications discuss the importance of dialogue between disciplines, favoring treatment in the clinic of childhood<sup>15,16</sup>.

Still in Table 6, it can be noticed that almost half of the cases did not result in a new referral at the time of the treatment. Those were cases from other professionals and, therefore, the phoniatrist responded to this flow leading the patient back to the specialist where the patient had come from, continuing the medical or therapeutic treatment that the child had already been receiving.

We believe that the interdisciplinary care in the Phoniatric Clinic is essential for a good prognosis in cases of human communication disorder. The data in Table 6 depict the proposition of interdisciplinarity, mainly, emphasizing the training of the team, since most patients, after phoniatric evaluation, returned to the original professionals for further treatment, according to the data found in the records.

On the setting of the interdisciplinary team for assisting communication disorders, the importance of the psychologist is remarkable. In the case-by--case study, 11.8% of patients were referred by the phoniatrist for a psychological evaluation (Table 6). Psychic alterations and psychic suffering are directly related to the language disorder previously mentioned, and they often can be the main cause of such disorder. An intervention that takes the psychic constitution and the child's language into consideration provides more specific therapeutic outcomes discussed in the approach of some authors<sup>17,18</sup>.

A significant difference between what is reported in the complaint and the diagnosis was noticed, specially, in cases where there are problems of speech and language. In other words, different diagnoses were based on the same complaint<sup>19</sup>. For instance, the complaint of speech delay, which results in the diagnosis of hearing loss, or the very same complaint may even refer to a diagnosis of autism, among others. Therefore the complaint points out the problem, but the outcome can lead to different diagnoses based on the evaluation.

In addition to the findings on phoniatric diagnosis, some data of psychic impairment have been registered directly related to language problems, such as inhibition, psychosis, autism, psychic instability and depression. At the same time, according to what is described by the author6 in his studies on the relationship between emotion and learning, the literature shows the complexity of the pathologies of human communication, since they involve organic, psychological and social disorders (interwoven in the disorder and in the process of constitution of the subject). Language flaws and language delays can be related to other disorders, thus, identifying a speaking problem can often lead to important data in order to develop the reasoning in the differential diagnosis and to more appropriate directions towards the treatment.

A psychoanalyst<sup>20</sup>, in a remarkable publication on early intervention, reveals that, in developing countries, there is a prevalence of 12% to 29% of mental disorders in childhood. Still, only 10% to 22% of the cases reach the service in primary health care. This reveals that 80% to 90% of children's mental health problems are not diagnosed in primary care, SUS (Brazilian Unified Health System) gateway. The author believes this is due to lack of professional preparation of people who work with children, who are not able to recognize the psychological distress that the little ones can undergo.

The findings regarding the second referral, which was more carried out by the phoniatrist, are also related to the further results. Such referral was proceeded to psycotherapy, the specialty recommended as a necessary approach after the phoniatric evaluation. On that matter, the phoniatrist holds a defense in a publication on the area of child and adolescent psychiatry,<sup>15</sup> specially for cases in which language manifests itself as a symptom of psychic difficulties. The child, in constant development, requires attention in many areas and needs an intervention that takes into consideration his/her psychic and linguistic constitution. Thus, within an interdisciplinary vision, a qualified professional may evaluate which approach is the most appropriate<sup>21</sup>.



The data presented may also be the result of the joint evaluation of the phoniatrist and the speech language pathologist, since, given the complexity of some clinical cases, a longitudinal follow-up is needed in order to reach a diagnosis. For this reason, we often worked with a hypothetical diagnosis, especially, in the case of children, considering that they are still in the process of constitution. At that time, the speech language pathologist took part in a team with the doctor for a common purpose.

Evidence of the partnership between the speech language pathologist and the phoniatrist can be complementary and cases found in the collection describe such work.

#### Conclusion

In this study, male gender was prevalent (64.5%) and the language disorder of multifactorial etiology was the most frequent (44.0%). The most frequent clinical approach was the speech-language pathology therapy.

The speech language pathologist stands out as a professional that recommends more patients to the phoniatric evaluation and is the one that most receives indications of patients coming from the phoniatrist doctor, which can be considered as an evidence of partnership, and of how joint actions between these specialties – Speech-Language Pathology and Phoniatry - can contribute to the development of patient treatments with speech and language disorder.

We also highlight the importance of the psychologist in the composition of the interdisciplinary team assisting patients with communication disorders, since, in the results, it was the second specialty that received more referrals from the phoniatrist doctor. As changes and mental suffering are directly related to language problems<sup>15, 16, 17</sup> and often, they are the primary cause of this delay, an intervention that considers the psychic and linguistic constitution of the patient provides more effective results.

The data indicate the important role of the phoniatrist doctor and his relationship with the speech language pathologist, considering their interclinical/interdisciplinary education, decisive in the intercommunication and in the differential diagnosis that the phoniatrist carried out together with different specialties and professionals in the treatment of these patients<sup>22</sup>.

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