# MARKET PROFILE OF THE PHONOAUDIOLOGIST IN THE AREA OF CLINICAL AUDIOLOGY

# Perfil mercadológico do fonoaudiólogo atuante na área de audiologia clínica

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## **ABSTRACT**

Purpose: to investigate the market profile of speech therapist professional working in the area of clinical audiology in Fortaleza, identifying the postgraduate level, professional salary range, the level of satisfaction, working hours and employment contract of this professional. Method: a crosssectional study was conducted from February to April 2010. A questionnaire about the professional's performance in the area of Clinical Audiology was applied in 30 speech and hearing therapists, 29 (96.7%) females and one (3.3%) male, with average age of 31.4 years, ranging between 24 and 44 year old, in the city of Fortaleza, Ceará. The questionnaire consisted of the following items: academic history, salary range, acting area, acting department, working hours per week, employment contract and professional level of satisfaction. Data were organized and statistically analyzed by the test of equality of two proportions. Results: thirteen (43.3%) of the clinical speech and hearing therapists earn between 4 to 6 minimum wages. Twenty-four (80%) interviewees working in the area of Clinical Audiology are self-employed four (13.3%) have formal contract and two (6.7%) are corporate entities. Sixteen (53.3%) of the speech and hearing therapists are satisfied with their job. **Conclusion:** the professional working in the area of Clinical Audiology in the city of Fortaleza presents, predominantly, specialization course, salary range from 4 to 6 minimum wages and 10 to 20 working hours per week. Most speech and hearing therapists are self-employed and are satisfied with their career.

**KEYWORDS:** Professional Practice Location; Audiology; Professional Training; Speech, Language and Hearing Sciences; Job Market

# INTRODUCTION

The Phonoaudiology is a recent profession in Brazil, regulated by Law No. 6965 on December 9, 1981. The phonoaudiologist works in the evaluation, intervention and health promotion in the

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Conflict of interest: non-existent

areas of speech, language, orofacial, public health, speech therapy school/educational, dysphagia and audiology<sup>1,2</sup>.

The area of Audiology refers to the science of hearing, auditory processing and body balance. The phonoaudiologist, who is a specialist in audiology, identifies, evaluates, and rehabilitate individuals who have peripheral or central hearing, which influence the appearance of disorders of human communication, as well as balance disorders<sup>3,4</sup>.

In about half a century, Audiology achieved a major breakthrough, because phonoaudiologists work in private clinics and public services, as well as schools, colleges and universities. Observing the development of the area of audiology in Brazil, it can be noted that there is a growing number of audiological procedures <sup>4-7</sup>.

Phonoaudiologist graduated from the University of Fortaleza – UNIFOR, Fortaleza, Ceará, Brazil.

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The Clinical Audiology has an important development in relation to new diagnostic techniques, due to the advancement of technology. Because of this fact, new opportunities in the labor market are disputed and conquered. Currently, there is provision for a series of tests that enable the scanning of the entire auditory system, from the external ear to the auditory cortex8.

In addition to the guidance and rehabilitation of hearing and balance, the performance of the Clinical Audiology presents techniques and diagnostic methods for hearing and balance through objective and subjective tests7.8. Among the subjective tests, are: hearing screening in preschoolers and school children; audiometry, visual reinforcement audiometry (VRA) or conditioned; audiometry in open field, with research of functional gain; behavioral hearing evaluation, auditory processing, and speech audiometry8-10.

In regards to objective tests, there are: acoustic impedance; tubal function test; transient evoked otoacoustic emissions and distortion product; potential auditory brainstem response (ABR) and electrocochleography8-10.

The phonoaudiologist who works in Clinical Audiology conducts these examinations in offices and clinics, also performing hearing and balance treatment in patients, children, adults and elderly with hearing problems and balence9.

There is no evidence from studies on the profile of the active phonoaudiologist specifically in the area of Clinical Audiology. Considering this, this research becomes a pioneer in studying the market profile of the members of the profession of Phonoaudiology.

The present study aims to investigate the market profile of the active phonoaudiologist in the area of Clinical Audiology in the city of Fortaleza, in order to identify the educational level at post-graduate, quantify salary, analyze the level of professional satisfaction and evaluate the work journey and employment of this professional.

## METHOD

We conducted a transversal study, in the period from February to April 2010, in Fortaleza, Ceará, with the use of a questionnaire.

The questionnaire was answered by 30 phonoaudiologists, 29 (96.7%) being female, with an average age of 31.4 years old, ranging between 24 and 44 years old, working in the area of Clinical Audiology, in Fortaleza, Ceará. It was considered as inclusion criteria the professionals involved in Clinical Audiology and as exclusion criteria those who are not working at clinics in Fortaleza or refused to sign the Consent Form.

The research instrument was a questionnaire consisting of 19 objective questions with closed answers, developed by the authors for this work. Such items covered issues related to academic data, salary data, area, sector of activity, working hours in weekly hours, nature of the clinic where, employment, level of satisfaction with the area, investments, postgraduate planning, planning updates, frequency they had an upgrade, need for labor market, difficulties encountered in professional practice, target audience attended and examinations.

From the collection of data, it was analyzed the following variables: salary, working hours, employment, frequency of upgrades and level of satisfaction with the field of clinical audiology.

This survey was conducted after approval by the Ethics Committee in Research of the University of Fortaleza (UNIFOR) under the number 033/2010 in accordance with Law 196/96 of the National Health Council - CNS. All participants signed an informed consent form.

The data were organized in tables and analyzed descriptively and statistically, by testing for equality of two proportions in SPSS v.16.0 software, adopting a significance level of p-value <0:05.

# RESULTS

Out of the 30 interviewed phonoaudiologists, twenty nine (96.7%) graduated from the University of Fortaleza (UNIFOR) and only one (3.3%), received the degree from the Catholic University of Pernambuco (UNICAP). The graduation time varied from 1987 to 2009, 12 (40%) from 1987 to 1999 and 18 (60%) from 2000 to 2009.

As for their educational background, fourteen (46.7%) phonoaudiologists have especialization, followed by seven (23.3%) with master degree and one (3.3%) with post-doctoral. Eight (26.7%) have only graduation.

According to the realization of further training, fourteen (46.6%) phonoaudiologists who work with Clinical Audiology look for upgrades every year, ten (33.4%) every six months, three (10%) in a biennial cycle and three (10%) whenever possible.

Table 1 presents the distribution of salary data or payment in professional practice of 30 phonoaudiologists working in the field of Clinical Audiology in the city of Fortaleza, in the period from February to April 2010. It was found that thirteen (43.3%) of the subjects receive from four to six times the minimum wage, a value considered statistically significant (p <0.004) compared to the wage income of the phonoaudiologist who works in the area of Clinical Audiology.

Table 1 – Salary data of 30 clinical phonoaudiologists in the city of Fortaleza, in the period from February to April 2010

Salary data	Yes (%)	No (%)	p-value
From 0 to 3 minimum wages	8 (26.7)	22 (73.3)	0.095
From 4 to 6 minimum wages	13 (43.3)	17 (56.7)	0.004*
From 7 to 9 minimum wages	6 (20.0)	24 (80.0)	0.052
> 9 minimum wages	3 (10.0)	27 (90.0)	0.278

Legend:

\* = Statistically significant p-value Equality of two proportions test

It was observed that 24 (80%) phonoaudiologists in the area of Clinical Audiology are autonomous, four (13.3%) are employed by formal contract (CLT)

and two (6.7%) are legal entities. Table 2 compares the employment of the phonoaudiologist in the field of Clinical Audiology with wage data.

Table 2 – Salary data and employment contract of 30 clinical phonoaudiologists in the city of Fortaleza, in the period from February to April 2010

			Employme	nt Contract		
Salary data	Independe	nt Worker	C	LT	Legal Entities	
	N (%)	p-value	N (%)	p-value	N (%)	p-value
From 0 to 3 minimum wages	7 (23.3)	0.519	0 (0.0)	- x -	0 (0.0)	- X -
From 4 to 6 minimum wages	11 (36.7)	0.260	0 (0.0)	- x -	2 (6.7)	0.150
From 7 to 9 minimum wages	5 (16.7)	0.080	1 (3.3)	0.313	0 (0.0)	- x -
> 9 minimum wages	1 (3.3)	0.023*	3 (10.0)	0.076	0 (0.0)	- x -

Legend:

Equality of two proportions test

Table 3 lists the value of wage income with the weekly working hours of 30 studied subjects in the period from February to April 2010, which was observed in the descriptive analysis of the percentage, that the phonoaudiologist who works from 10 to 20 hours presents a weekly wage income from zero to three minimum wages. Statistical analysis revealed that the phonoaudiologist who has

a working hours from 30 to 40 hours per week has a wage income from four to six times the minimum wage (p = 0.038).

Table 4 shows the level of satisfaction of 30 phonoaudiologists from the Clinical Audiology in the city of Fortaleza, where it was found that 16 (53.3%) of the professionals are satisfied with the profession (p < 0.007).

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<sup>\* =</sup> Statistically significant p-value

<sup>-</sup>x - = lack of p-value

Table 3 – Salary data and working hours of 30 clinical phonoaudiologists in the city of Fortaleza, in the period from February to April 2010

	Working Hours											
Salary data	< 10 h		10 to 20 h		20 to 30 h		30 to 40 h		40 to 50 h		> 50 h	
	N (%)	p-value	N (%)	p-value	N (%)	p-value	N (%)	p-value	N (%)	p-value	N (%)	p-value
From 0 to 3 minimum wages	1 (3.3)	0.313	5 (16.7)	0.313	1 (3.3)	0.313	1 (3.3)	0.313	0 (0.0)	- x -	0 (0.0)	- x -
From 4 to 6 minimum wages	0 (0.0)	- x -	3 (10.0)	0.448	3 (10.0)	0.301	4 (13.3)	0.038*	2 (6.7)	0.150	1 (3.3)	0.313
From 7 to 9 minimum wages	0 (0.0)	- x -	0 (0.0)	- x -	1 (3.3)	0.301	2 (6.7)	0.389	2 (6.7)	0.150	1 (3.3)	1.000
> 9 minimum wages	0 (0.0)	- x -	1 (3.3)	0.085	1 (3.3)	1.000	0 (0.0)	- x -	1 (3.3)	0.313	0 (0.0)	- x -

Legend:

Equality of two proportions test

Table 4 – Distribution of the satisfaction level of 30 clinical phonoaudiologists in the city of Fortaleza, in the period from February to April 2010

Salary data	Yes (%)	No (%)	p-value
Regular	6 (20.0)	24 (80.0)	0.542
Good	16 (53.3)	14 (46.7)	0.007*
Great	8 (26.7)	22 (73.3)	0.035*

Legend:

# DISCUSSION

The job market for the phonoaudiologist is growing, as well as in all areas of health. However, it becomes increasingly competitive, especially given the large number of undergraduate courses in the country of graduated professionals<sup>10</sup>. The Federal Board of Phonoaudiology (CFFa)11 reveals that in 2010, in Brazil, there were 33.468 registered phonoaudiologists, 929 located in the state of Ceará<sup>11</sup>.

The base salary established for the phonoaudiologist varies according to region and place<sup>11, 12</sup>. During the term of the Collective Convention Agreement in the State of Ceará, it was stipulated the amount of R\$ 2,000.00 (two thousand reais) as base salary for phonoaudiologists who work 40 hours per week, R\$ 1,500.00 (one thousand five hundred reais) for 30 hours, R\$ 1,000.00 (one thousand reais) for 20 hours and R\$ 10.00 (ten reais) per hour<sup>12</sup>.

According to Table 3, the active phonoaudiologist in Clinical Audiology presents a working day from 10 to 20 hours per week, while seven (23.3%) work from 30 to 40 hours per week. It was observed in this study that the phonoaudiologist working in Clinical Audiology in Fortaleza earn from R\$ 2,040.00 (two thousand forty reais) to R\$ 3,060.00 (three thousand sixty reais) working from 30 to 40 hours weekly (p = 0.038).

According to the Association of Phonoaudiologists in the State of São Paulo, in 2007, the value of the minimum wage was R\$ 1,280.00 (one thousand two hundred and eighty reais) when working 20 hours weekly<sup>13</sup>. In 2009, the Union of Phonoaudiologists from Minas Gerais (SINFEMG) stated the minimum wage of R\$ 1,886.00 (one thousand eight hundred and eighty-six reais) for 20 hours and R\$ 2,829.00 (two thousand eight hundred and twenty nine reais) for 30 hours weekly<sup>14</sup>. However, this base salary relates to phonoaudiology in general and not just in the area of Clinical Audiology.

It was noted that the phonoaudiologists of Clinical Audiology in Fortaleza are predominantly autonomous and have a wage income above R\$ 4,590.00 (four thousand five hundred and ninety reais), being a statistically significant data (p = 0.023) compared to the base salary or remuneration.

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<sup>\* =</sup> Statistically significant p-value

<sup>-</sup> x - = lack of p-value

<sup>\* =</sup> Statistically significant p-value Equality of two proportions test

Thirteen professionals (43.3%) had wage income from four to six times the minimum wage, while three (10%) had incomes above nine minimum wages. These being the ones with a longer working time more than ten years in the market, although other professionals with the same time of working didn't have the same remuneration.

After verifying the working hours, wage data and the types of employment, there was the satisfaction level the active phonoaudiologist in the area of Clinical Audiology has regarding his profession, where it achieved satisfactory results, 53.3% of these phonoaudiologists showed a good level of satisfaction both in the descriptive analysis of the percentage and statistically p = 0.007.

Recent research, which interviewed phonoaudiologists recently graduated, found that the practitioners consider they met their expectations. feeling safe in relation to theoretical and practical knowledge and acquired remunaration 15.16.

The Clinical Audiology gradually increases its field in Brazil, suggesting the professionals to expand their knowledge. With this new perspective of the fields, the Clinical Audiology grows within the curricula of universities. There was an increased in the course load and in the theoretical and practical content in all areas of Audiology<sup>10</sup>.

Despite these changes, it is still necessary the upgrading of the professional in postgraduate courses. In this study, 46.6% reported seeking professional upgrades annually, from them 14 (46.6%) are specialists in audiology, a positive fact in the research, as it agrees with the view that the phonoaudiologist should always be trying to improve, from the point of view of technological advancement and scientific17, 18. Furthermore, the search for specialization is the desire of 52% of the professionals, agreeing to earlier studies<sup>19-22</sup>, which investigated the search for professional upgrades from phonoaudiologists in Brazil.

Thus, it can be stressed that the active phonoaudiologist in Clinical Audiology from Fortaleza, displays conditions to grow professionally, and may act in various fields of Audiology, being necessary the scientific improvement to achieve good results.

## CONCLUSION

Most professionals have only especialization.

The salary range of the majority of these professionals is up to four to six times the minimum wage, working hours from 10 to 20 hours per week, and 80% are independent professionals.

Phonoaudiologists feel satisfied with their performance in the area of Clinical Audiology and seek professional courses and training from the theoretical and practical standpoint.

#### **RESUMO**

Objetivo: investigar o perfil mercadológico do fonoaudiólogo atuante na área de audiologia clínica da cidade de Fortaleza, buscando identificar a formação em nível de pós-graduação, quantificar a faixa salarial, analisar o nível de satisfação do profissional e avaliar a jornada de trabalho e o vínculo empregatício desse profissional. Método: estudo transversal, realizado no período de fevereiro a abril de 2010, tendo-se aplicado um questionário acerca da atuação fonoaudiológica na área de Audiologia Clínica em 30 fonoaudiólogos, 29 (96,7%) do gênero feminino e um (3,3%) do gênero masculino, com idade média de 31,4 anos, variando entre 24 e 44 anos de idade, na cidade de Fortaleza, Ceará. O questionário abrangeu os seguintes itens: dados de formação acadêmica, remuneração, área de atuação, setor de atuação, jornada de trabalho em horas semanais, vínculo empregatício e nível de satisfação com a área de atuação. Os dados foram organizados e analisados estatisticamente por meio do teste de igualdade de duas proporções. Resultados: treze (43,3%) dos fonoaudiólogos que atuam com Audiologia Clínica recebem entre quatro a seis salários mínimos. Vinte e quatro (80%) fonoaudiólogos atuantes na área da Audiologia Clínica são autônomos, quatro (13,3%) tem Carteira de Trabalho assinada e dois (6,7%) são pessoas jurídicas. Dezesseis (53,3%) dos fonoaudiólogos estão satisfeitos com a sua profissão. Conclusão: o fonoaudiólogo atuante na área de Audiologia Clínica na cidade de Fortaleza apresenta, predominantemente, curso de especialização, renda salarial entre quatro e seis salários mínimos, com jornada de trabalho de 10 a 20 horas semanais. A maioria são profissionais autônomos e sentem-se satisfeitos com sua atuação profissional.

**DESCRITORES:** Área de Atuação Profissional; Audiologia; Capacitação Profissional; Fonoaudiologia; Mercado de Trabalho

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