

TIME OF SPEECH-LANGUAGE THERAPY IN A PUBLIC SERVICE VERSUS RECOMMENDED PARAMETERS

Speech-language therapy versus parameters

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ABSTRACT

Purpose: to verify the time of speech-language therapy of a city public facility in agreement to the proposed therapy and compare it with the time parameters of speech-language therapy proposed by the Federal Board of Speech, Language and Hearing Sciences. **Methods:** transversal retrospective observational analysis of medical records of individuals from age 0 to 14 years treated by the Speech, Language and Hearing Sciences department of a public facility from 2007 until 2012. **Results:** among the findings, the prevalence of male gender (66.9%), teenagers cycle of live (47.0%), most common complaint is language (86.5%), referrals done by physician professionals (49.1%), followed by educators (22.7%) and speech-language therapist (20.4%). Female gender has presented a significantly higher percentage compared to the male gender, regarding the time and duration parameter, and in the frequency parameter no differences were found. The time parameter presented the best results, however distant of recommended values; the non-conformity was higher for the audiology complaints, orofacial motor skills and voice. The worst results were for the frequency parameters, whereas the voice complaint presented 50% of adaptation. **Conclusions:** it is considered important investment in planning actions in this speech-language therapy, focused primarily on the frequency of sessions and language complaints, prioritizing the quality of life of the population served.

KEYWORDS: Health Services; Child; Adolescent; Speech, Language and Hearing Sciences; Health

■ INTRODUCTION

Speech-language disorders constitute an important segment of the childhood-juvenile health problems, and it is necessary to structure preventive and curative speech-language programs. In its precarious state, the Brazilian health system leaves much to desire in the supporting network of care for individuals with disturbances in communication, and there are only isolated efforts in some health units¹.

The Speech-language therapist is a health and education professional who works in an autonomous and independent manner in public and private institutions. The work of speech-language therapy in Public Health is extensive, covering the Primary Health Care Units for cases of medium and

high complexity, in addition to working in schools, day care centers, consulting rooms, clinics, home care, care homes and health clinics, and higher learning institutions, among others. The recognized specialties of work in speech-language therapy are Audiology, Language, Orofacial Motricity, Collective health, Voice, Dysphagia and Educational Speech-language therapy².

It is relevant to know the profile and time of treatment of patients attended by the Speech-Language therapy service, in endeavor to identify the demands of the population for speech-language therapy work, in order to enable planning and organization of actions that will cope with the needs of the clientele, intervening on behalf of the population³.

In 2013, the Federal Board of Speech, Language and Hearing Sciences published the time parameters, instrument idealized to meet the requirements as regards time of speech and language therapy assistance in health-related problems, by means

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of an in-depth study of the relationships and interactions existent between the disease, bodily functions, bodily structures, the state of limitations of activities, presence of restrictions on social participation and interaction of the environment, resulting in different indicator tables of the duration of treatment for each health problem. As a principle, the Time Parameter Instrument (TPI) takes into consideration the aspects of human functionality relative to speech-language therapy. The instrument categories were selected to justify the duration of treatment for more common problems in the area of speech-language therapy. In addition, it also guides the weekly frequency of attendances, and duration in minutes of each speech-language therapy consultation.

To quantify the results of therapy is an important strategy for clinical practice. Knowing the mean time of speech-language therapy contributes to the construction of positive results in each change worked on, enabling the speech-language therapist to improve his/her techniques and reduce the time of therapy. When the patient and his/her family know the time of treatment, they will participate more actively in the process⁴.

Some studies^{3,5-9} that characterized the demand and speech-language therapy services were found, and not one study was published up to now, comparing the time of speech-language therapy treatment with the recently published parameters. Therefore, it is necessary to know the profile and demand of the child-juvenile population that uses the municipal public service of Speech-language therapy, and by means of the data investigated, make it possible to direct the type of service provided, with a view to better promotion, protection and rehabilitation of health, offering contributions to future researches in Speech Therapy within the scope of public services, which is the reason that justifies this study.

In view of the foregoing, the aim of this research was to verify whether the time, frequency and duration parameters of speech and language services at a public health service in the municipality of the Balneário Camboriú (SC), are in agreement with the parameters proposed by the Federal Board of Speech and Language therapy, since the majority of the professionals with the scope of our area have no knowledge of how to operationalize this instrument.

■ METHODS

The research project was approved by the Research Ethics Committee of the Institution, Protocol No. 479,294/13.

This was a transversal, retrospective observational study conducted in the Speech-Language therapy sector of a public service in the municipality of Balneário Camboriú, located in the State of Santa Catarina. The city has 120,926 inhabitants and a child-juvenile population (of 0-14 years) of 19,451 inhabitants¹⁰.

The health sector where the research was conducted, was founded in 2003 and is denominated "Posto de Atenção Infantil" (Child Care Unit). The study population consisted of children (<10 years) and adolescents (10-14 years) who concluded their treatment in the period from 2007 to 2012. The exclusion criterion was determined by the number of consecutive absences (two). The inclusion criterion was the child or adolescent (age-range between 0-14 years) being a patient, and having been discharged by the service in the studied period.

The Speech-Language Therapy service of this city performs approximately two thousand speech-language therapy attendances per year considering new and return consultations.

For characterization of the speech-language therapy treatment, the following were observed:

Distribution of diseases according to the diagnostic hypothesis. Communication disturbances were considered in accordance with the respective International Classification of Diseases (ICD) referred to in the instrument with regard to the parameters of treatment time in Speech-Language therapy² divided into five groups: Audiology, Language, Orofacial Motricity, Dysphagia and Voice.

Treatment time parameter: record of months of attendance.

Frequency of treatment parameter: record of number of weekly consultations.

Duration of consultation parameter: records of minutes each consultation lasted.

Origin of referrals: the type of professional mention was recorded and grouped as follows: physicians, speech-language therapists, psychologists, dentists, professionals from the area of education and others.

The parameters of time, frequency and duration of treatment in speech-language therapy assistance were used, recommended by the Federal Board of Speech, Language and Hearing Sciences², by means of the Instrument with regard to Parameter of Speech-Language Therapy Treatment Time, according to the different areas of specialties (Figure 1).

Specialties	Time of Treatment	Frequency of attendance	Duration of Consultation
Audiology	< 6 months	2x/week	30 minutes
	between 6 -12 months 24 months		
Language	6 months to >1year	2x/week	45 minutes
Orofacial motricity	3 months	2x/week	30 minutes
	6 months		
	< 6 months		
	< 12 months >12 months		
Dysphagia	< 6 months	2x/week	30 minutes
Voice	2 to 3 months	1 to 2x/week	30 minutes
	2 to 4 months	1x or 2 to 3x/week	30 minutes
	4 to 6 months	1 to 2x/week	45 minutes
	6 months	1 to 2x/week or 2 to 3x/week	30 minutes

Source: Federal Council of Speech-Language Pathology and Audiology, 2013.

Figure 1 – Parameters of time, frequency and duration of speech-language therapy. Balneário Camboriú, 2007-2012.

The following steps were necessary for using the Parameter Instrument:

- Identification of the main ICD-10 code in Speech-Language Therapy;
- Location of the category in one of the five parameters, divided into Audiology, Language, Orofacial Motricity, Voice and Dysphagia;
- Access to information relative to treatment time, in accordance with the description, in months, frequency of attendance and duration of consultation.

The results of this research were forwarded to the Secretary of Health and to the coordinators of the Health Unit where the study was conducted.

The possible associations of the complaint and sex com with the results of the time, frequency and duration parameters were examined by means of the Chi-square test and later comparison, in order to identify significant differences between the percentages. The level of significance adopted was 5%. The descriptions in the form of tables, graphs and inferential analyses were performed with the aid of the STATISTICA, version 10 and Microsoft EXCEL applications.

■ RESULTS

The present study contemplated investigation of 423 attendance record charts in Speech-Language Therapy. Table 1 presents the characteristics of the

users. Predominance was observed of the male sex (69.9%), adolescents (47.0%), predominant complaint of language (86.5%) and referrals by physician professionals (49.1%).

Table 1 – Users’ Characteristics Balneário Camboriú, 2007-2012

Users	N(%)
Sex	
Male	283 (66.9)
Female	140 (33.1)
Cycle of life	
Child (up to 10 years)	199 (47.0)
Adolescents (10-14 years)	224 (53,0)
Complaint	
Language	366 (86.5)
Orofacial motricity	26 (6.1)
Audiology	17 (4.1)
Voice	8 (1.9)
Dysphagia	6 (1.4)
Origin of referrals	
Doctor	207 (49.1)
Educator	96 (22.7)
Speech Therapy	86 (20.4)
Psychology	19 (4.5)
Dentist	4 (0.9)
Others	11 (2.4)

In the present study, the parameter that presented the best results was time, however, far from the values recommended. Adequacy was observed to be significantly lower in the complaints of Audiology, Orofacial Motricity and Voice when compared with the complaints of Language and Dysphagia. The parameter frequency presented the worst results. Only the compliant Voice was observed to present values of over 50% adequacy.

With regard to the parameter duration, the group of Language and Voice presented the greatest adequacy (Table 2).

Table 3 shows the association of the parameters time, frequency and duration with sex. With reference to the parameter time, girls presented a significantly higher percentage when compared with boys, a result opposite to that found in the parameter duration. Boys and girls presented no differences in the parameter frequency.

Table 2 – Distribution of absolute and percentage values of adequacy of service to time, frequency and duration parameters in relation to the area of complaint. Balneário Camboriú, 2007-2012

Queixa (n)	Adequacy according to the parameter		
	Time*	Frequency**	Duration**
	% (n)	% (n)	% (n)
Audiology (n=17)	23.5 ^a (4)	0 ^a (0)	0(0.0) ^a
Language (n=366)	52.2 ^b (191)	0.8 ^a (3)	99.7(365) ^b
Orofacial motricity (n=26)	34.6 ^a (9)	15.4 ^b (4)	7.7(2) ^a
Dysphagia (n=6)	66.7 ^b (4)	0.0 ^{ab} (0)	16.7(1) ^a
Voice (n=8)	25.0 ^a (2)	87.5 ^c (7)	100.0 (8) ^b

*p=0.03182

**p<0.00001

Chi-square Test. Equal letters next to the percentage of agreement corresponds to equal proportions in the test of proportions at the level of 5%.

Table 3 – Distribution of absolute and percentage values of adequacy of service in comparison with the parameters of speech-language therapy treatment time with the time, frequency and duration according to sex, Balneário Camboriú, 2007- 2012.

SEX	Adequacy according to the parameter		
	Time*	Frequency**	Duration***
	% (n)	% (n)	% (n)
Male (n=283)	(45.6)129	(3.2) 9	(91.2) 258
Female (n=140)	(57.9) 81	(3.6) 5	(84.3) 118
General Total	(49.6) 210	(3.3) 14	(88.9) 376

*p<0.00001

**p=0.83238

***p=0.03410

Chi square test at the level of 5%

■ DISCUSSION

Realization of the Brazilian national health system, "Sistema Único de Saúde" (SUS) as the new health policy at the end of the 1980s, enabled

some changes to be made in redimensioning the concept of health. This generated reorganization of the services, and change in the model of health care and education of professionals, thereby opening space to hire personnel for jobs in public services,

including speech-language therapists, among other professionals¹.

Researches that have related Speech-Language Therapy and Public Health^{7,11-12} have reported that knowledge of the profile of persons who use Speech-Language Therapy services, have contributed significantly to the development of health promotion programs, and implementation of practices directed towards full health care by means of individual actions and collective access to these services(?). Therefore, the goal of epidemiological studies is to make resources available, capable of expanding the efficacy of the care provided at all levels of health care, particularly those linked to prevention¹³.

The results of the present study showed the predominance of boys, adolescents, predominant complaint of language and referrals by physician professionals. Similar data were found in the Northeast region, in the municipality of Recife (PE)⁶ and Salvador (BA)¹⁴, Brazil, in which 239 and 210 patients, respectively were evaluated, with 61% and 51.4% of the male sex and 28% and 49% of referrals performed by health professionals, respectively.

In the Southeastern region, evaluating 161 child-juvenile users of a municipal Speech-Language Therapy public service, predominance of the male sex (66%) and origin of referrals performed by physician professionals (41%) was also found⁵. A survey of the prevalence of communication disturbances in 1103 schoolchildren from 15 municipal schools in Barra Velha (ES)¹⁵ showed results opposite to those of the present study, with predominance of oral motricity, followed by speech, audition, alteration in voice and in language.

A study conducted in the Southern region, in the municipality of Porto Alegre (RS)⁷, in which 243 record charts were analyzed, 65% of the individuals were of the male sex, with predominance of children younger than 13 years of age, the larger portion of the referrals were made by pediatricians (35%), followed by professionals connected with the School Health Program (15%) and by otorhinolaryngologists (15%). The most frequent reasons for consultations were alterations in speech (67%) and language delay (7%)⁸. In Curitiba (PR), 208 record charts were evaluated in a clinic-school of the Speech-Language Therapy course, and 53% of the individuals were observed to be of the male sex, with a mean age of 21 years. Of the referrals, 48.8% were found to be made by health professionals. The the highest incidence of complaints were oral language alterations (48%), and auditory problems (17%). With

regard to the Speech-Language Therapy report, 35% of the record charts showed difficulties with oral language and 19.9% manifested deafness³.

In the service studied, inadequacy was verified in the frequency parameter, followed by duration and time in the majority of the specialties evaluated. With reference to sex, girls presented higher values in the time parameter, and boys in the duration parameter, with no difference between the sexes in the frequency parameter.

Only one study was found comparing the mean time for discharge from speech-language therapy treatment, amongst the severities of speech-language deviations in children¹⁶. In a review of the literature about discharge from speech-language therapy treatment in children with ?DF?, the author observed the total number of sessions and hours of therapy necessary to obtain discharge from speech-language therapy treatment varied considerably among the children, depending on the different approaches to speech-language therapy intervention, the criteria adopted for discharge, and the duration and number of sessions per week¹⁷. These studies justify the importance of using the instrument parameter of time of speech-language therapy treatment in the specialties, and allow parents to plan the time of treatment.

One of the limitations of this study was the absence of published studies about the parameters of speech-language therapy treatment, making it impossible to perform comparison of the results obtained, with those in the literature.

■ CONCLUSION

The intention of this study was to offer a contribution to researches in the area of collective health with regard to the parameters in speech-language therapy treatment. The results indicated the greatest deficit in the parameter frequency, followed by the parameters duration and time. As regards speech-language complaints, the most frequent was with regard to language.

Investment in planning health actions in speech-language therapy treatment in this service, mainly directed towards the frequency of sessions and the complaint of language is considered important, thus prioritizing the quality of life of the population attended.

RESUMO

Objetivo: verificar a adequação do tratamento fonoaudiológico quanto ao tempo, à duração e à frequência em um serviço público municipal de acordo com os balizadores propostos pelo Conselho Federal de Fonoaudiologia. **Métodos:** trata-se de um estudo transversal observacional retrospectivo com análise dos prontuários dos indivíduos de 0 a 14 anos atendidos pelo setor de Fonoaudiologia de um serviço público municipal no período de 2007 a 2012. **Resultados:** destaca-se, entre seus achados, a prevalência do sexo masculino (66,9%); adolescentes (47,0%); queixa mais frequente: a de Linguagem (86,5%) e encaminhamentos realizados por profissionais médicos (49,1%), seguido por educadores (22,7%) e fonoaudiólogos (20,4%). Com relação à adequação dos balizadores tempo e duração, o sexo feminino apresentou percentual significativamente superior, quando comparado ao masculino; porém, não se encontraram diferenças em relação ao balizador frequência. O balizador tempo apresentou melhores resultados, porém distantes dos valores preconizados; a não conformidade foi maior para as queixas de audiologia, motricidade orofacial e voz. Os piores resultados foram para o balizador frequência, sendo que a queixa de voz apresentou 50% de adequação. **Conclusões:** considera-se importante o investimento no planejamento de ações em saúde fonoaudiológica neste serviço, voltado principalmente para a frequência das sessões e para a queixa de linguagem, priorizando a qualidade de vida da população atendida.

DESCRIPTORIOS: Serviços de Saúde; Criança; Adolescente; Fonoaudiologia; Saúde

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