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Adherence of ASD Children and Adolescents to Language Therapy

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Abstract

The purpose of the present research is to optimize the use of the data available at the Speech-and-Language in Autism Spectrum Disorders Research Laboratory, after 25 years of assessment and intervention with children and adolescents with ASD. The data about over 400 individuals regarding their social demographic characteristics, and adherence to speech-language therapy may provide important data to guarantee the provision of SLP services to children with autism spectrum disorders. The fact that boys seem to get to the service earlier and stay longer than girls must be addressed, in order to guarantee to the female population the same kind of opportunities provided to males.

Introduction

The last 25 years have witnessed important changes regarding language therapy for autism spectrum disorders in the whole word.

The first service to provide language therapy to children and adolescents with psychiatric disorders was created in 1986 and reflects the accompanied these changes. As it is associated to a large and traditional university, the work developed during 27 years has produced results in research, professional education of SLPs and clinical intervention.

The service underwent changes and adapted to new demands and to scientific evolution. But, more than that, it contributed to the scientific development and participated in changing the reality. Several of the children that attended to language therapy are now completely adapted and enjoy an autonomous and productive life. The knowledge produced helps to support the work of SLP in multidisciplinary teams working with ASD.

Contrary to what happens in other broad developmental disorders, in the autism spectrum language disorders are not secondary to other disorders, deficits or impairments, but they are one of the three main diagnostic criteria.

The first studies about language of autistic children just described whether there was any verbal communication, echolalia (immediate or delayed), pronoun reversal or communication and proposed strategies to avoid inadequate behaviors [1,2]. Pragmatic theories contributed to the notion that the central feature of language in ASD is related to its functional use to communication. Therefore language started to be associated with social and cognitive aspects of development and so, to include the fundamental domains for the ASD diagnostic [2-7].

The notion of an autism spectrum suggests that different clinical features, with similar symptoms may be grouped or organized according to the intensity and comprehensiveness of the identified disorders [8-12]. It includes the axles propose by the American Psychiatric Association in the DSM (DSM IV - APA, 1994) and by the World Health Organization in the International Disease Classification [13].

The implications of diagnostic criteria based mainly in clinical observation have been widely discussed, as well as the differential diagnosis among the various features within the spectrum [14-23]. Most of the studies directed towards the description of the different diagnosis included in the autism spectrum reinforce the need for multidisciplinary perspectives [24-26].

The amount of studies involving the assessment of language therapeutic results is also impressive. It includes different propositions and results [27-31]

In Brazil an important part of the research about language in ASD is being carried-out since 1986 by the Research Laboratory in Speech-Language Pathology in ASD (laboratório de Investigação Fonoaudiológica nos Distúrbios do Espectro do Autismo – [LIF-DEA]) of the School of Medicine – Universidade de São Paulo.

The applied research supports evidence based practice and encourages further studies about intervention processes and their results [32-39]. The systematic record of assessment and intervention processes with children and adolescents with ASD resulted in an extensive data-base that, by its turn, also allows other studies. A part of these data was used in the present study.

Objectives

To identify social demographic characteristics of the children and adolescents enrolled in language therapy at LIF-DEA, considering gender and age at intervention onset as variables.

The verify if there are associations between those variables and the adherence to language process

Method

The institution's ethic committee authorized the use of LIF-DEA's bata-base (protocol #228/11). All the data was obtained and recorded with express authorization by a responsible adult and refer to 408 children and adolescents with ASD or autistic characteristics that received language therapy in LIF-DEA from 1998 to 2013.

As this is a longitudinal study and the diagnostic criteria have changed in the last decades, some differences may exist between data, especially regarding the severity of the symptoms. The variables considered were chronological age at first assessment and gender.

Statistical analysis used the t-Student test, with a significance level of 5%.

Results and Discussion

Regarding gender distribution data shows the prevalence of boys (75, 8%) over girls (24, 2%) that have been reported in the literature for several decades [41].

In what refer to chronological age at first assessment, Figure 1 shows that there if a slight tendency to lower adherence by individuals that started language intervention later in life. Considering that these data refer to a temporal cut of a longitudinal process, there is the clear limit posed by the data gathering moment. This way, these gross data do not identify the processes that were interrupted by the patient, those that were referred to other services and the discharged ones. Different results of early intervention processes have also been the object of recent studies [42,43].

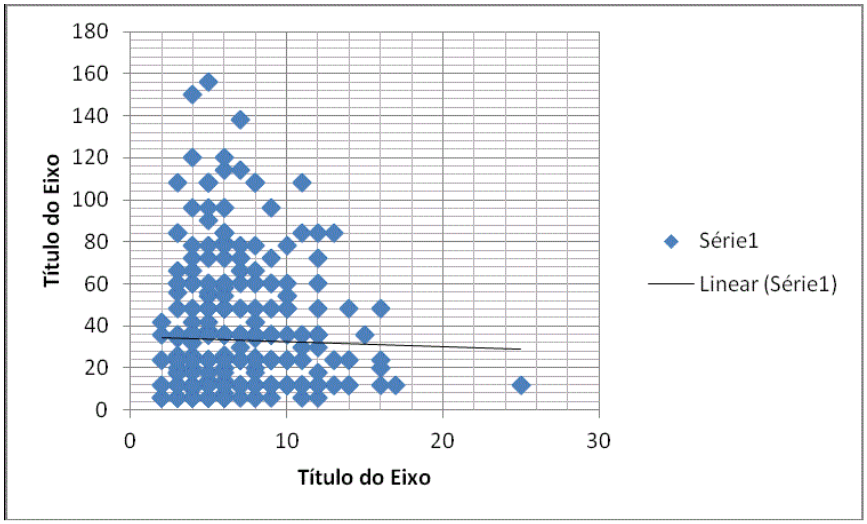

Figure 1: Association between chronological age and time of language intervention of all 408 subjects.

This same information regarding chronological age at first assessment and the time of adherence at the language therapy service was associated to information about gender. Figure 2 shows that girls are brought to language therapy services a little later and tend to maintain the frequency to the therapy sessions for a shorter time than the boys. This same type of information was recently reported by a study conducted in the United Kingdom.

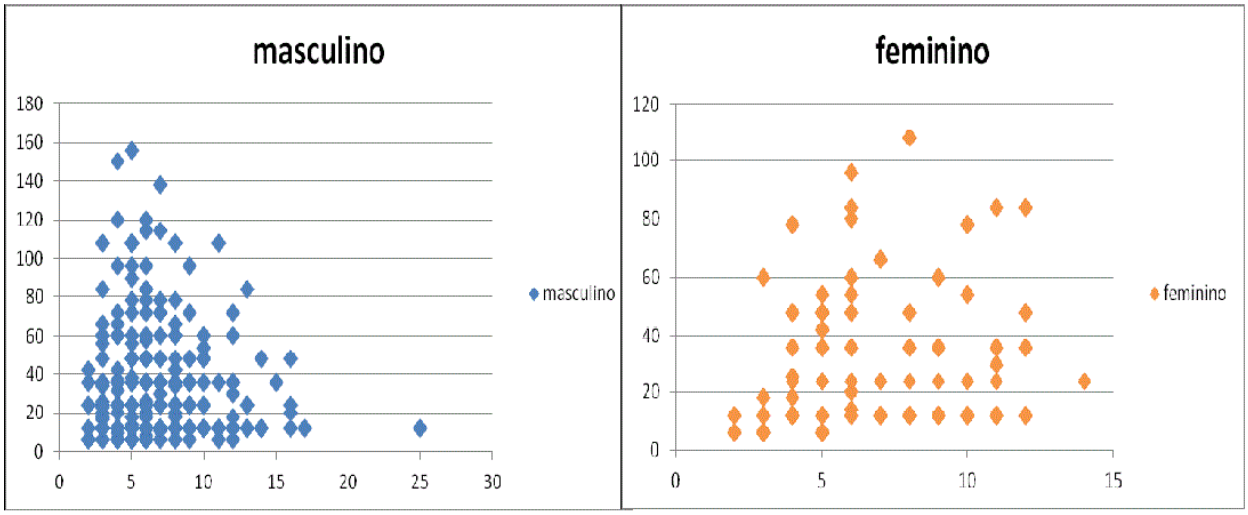

Figure 2: Relationship between chronological age at the beginning of service and length of stay in groups defined by gender

Conclusion

The changes that occured along time, especially regarding the notion of ASD, produced changes in LIF-DEA's functioning. During the 1980's the diagnosis of Infantile Autism was attributed only to a group of children with extremely severe and frequently little response to intervention processes. It becomes clear from the use of DSM-III criteria and the repercussion of Hans Asperger's work's translation to English, in 1989 that suggested a new focus to this group of individuals. Therefore, during the almost three decades since LIF-DEA's beginning the concepts evolved to a broader perspective that includes the different degrees of severity on a more comprehensive approach aiming ti identify was these individuals have in common and not just to describe them. It lead to the concept of autism spectrum that, by its turn, contributed to the changes in the epidemiologic panorama regarding these disorders. In the years 1980s it was considered that Infantile Autism affected one child in 10.000 (or even 50.000); nowadays it is considered that one in every 100 children (or 70 boys) in included in the autism spectrum. These differences in diagnostic criteria certainly demand specific attention when including subjects diagnosed in the last decades of the XX century and in the first years of this century.

However, the present study, regarding over 400 subjects, may provide some insights about the issues that must be addressed when considering access and adherence to language therapy services. The fact that boys seem to get to the service earlier and stay longer than girls must be addressed, in order to guarantee to the female population the same kind of opportunities provided to males.

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