

CLINICAL AND SOCIOCLOUDICATIVE PROFILES OF CHILDREN WITH AUTISM SPECTRUM DISORDER: A CROSS-SECTIONAL STUDY IN A SPECIALIZED SERVICE

PERFIS CLÍNICOS E SOCIOCLOUDICATIVOS DE CRIANÇAS COM TRANSTORNO DO ESPECTRO AUTISTA: ESTUDO TRANSVERSAL EM SERVIÇO ESPECIALIZADO

PERFILES CLÍNICOS Y SOCIOCLOUDICATIVOS DE NIÑOS CON TRASTORNO DEL ESPECTRO AUTISTA: UN ESTUDIO TRANSVERSAL EN UN SERVICIO ESPECIALIZADO



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ABSTRACT

Autism Spectrum Disorder (ASD), defined as a neurodevelopmental disorder, is characterized by persistent impairment in reciprocal social communication and social

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interaction, and by restricted and repetitive patterns of behavior, interests, or activities, identified in the first years of life. The objective is to describe the profile of children with ASD in a care center in the city of Montes Claros, Minas Gerais, Brazil. This is a descriptive study with a quantitative and cross-sectional approach. The sample consisted of 38 (thirty-eight) students diagnosed with ASD, aged between 3 and 15 years, of both sexes, in a care clinic in the city of Montes Claros, Minas Gerais, Brazil. The instrument used was medical records with personal and clinical data. All data were entered into a spreadsheet using the Statistical Package for the Social Sciences (SPSS) software, version 29.0 for Windows. A descriptive analysis was performed with minimum, maximum, mean, standard deviation, true and absolute frequency values. The results showed a predominance of males (73.7%) and high school attendance (97.4%). Most presented verbal communication (57.9%) and social interaction ranging from good (44.7%) to limited (50%). Repetitive behaviors were present in 52.6% of the children, and half needed time to adapt to changes. Only 34.2% demonstrated specific skills. The results allow us to conclude that the applied studies provided relevant information for planning, considering that children present great diversity in communicative, social, and behavioral aspects, which indicates the need for individualized monitoring strategies.

Keywords: Autism Spectrum Disorder. Social Inclusion. Social Interaction. Children.

RESUMO

O Transtorno do Espectro Autista – TEA, definido como transtorno do neurodesenvolvimento, é caracterizado por “prejuízo” persistente na comunicação social recíproca e na interação social e por padrões restritos e repetitivos de comportamento, interesses ou atividades, identificados nos primeiros anos de vida. O objetivo é descrever o perfil de crianças com TEA em um centro de atendimento na cidade de Montes Claros–MG. Trata de uma pesquisa descritiva, com abordagem quantitativa e transversal. A amostra foi composta por 38 (trinta e oito) estudantes com diagnóstico de TEA, com idade entre 3 a 15 anos, de ambos sexos, em uma clínica de atendimento na cidade de Montes Claros - MG. O instrumento utilizado foram prontuários com dados pessoais e clínicos. Todos os dados foram inseridos em planilha no software Statistical Package for the Social Sciences – SPSS, versão 29.0 para Windows. Foi feita uma análise descritiva com valores de mínimo, máximo, média, desvio padrão, frequência real e absoluta. Os resultados demonstraram uma predominância do sexo masculino (73,7%) e frequência escolar elevada (97,4%). A maioria apresentava comunicação verbal (57,9%) e interação social variando entre boa (44,7%) e limitada (50%). Comportamentos repetitivos estiveram presentes em 52,6% das crianças, e metade precisou de tempo para adaptar-se a mudanças. Apenas 34,2% demonstraram habilidades específicas. Os resultados permitem concluir que os estudos aplicados forneceram informações relevantes para o planejamento, tendo em vista que as crianças apresentam grande diversidade nos aspectos comunicativos, sociais e comportamentais, o que indica a necessidade de estratégias individualizadas de acompanhamento.

Palavras-chave: Transtorno de Espectro Autista. Inclusão Social. Interação Social. Crianças.

RESUMEN

El Trastorno del Espectro Autista (TEA), definido como un trastorno del neurodesarrollo, se caracteriza por un deterioro persistente en la comunicación social recíproca y la interacción social, y por patrones restringidos y repetitivos de comportamiento, intereses o actividades, identificados en los primeros años de vida. El objetivo es describir el perfil de los niños con TEA en un centro de atención en la ciudad de Montes Claros, Minas Gerais, Brasil. Se trata de un estudio descriptivo con un enfoque cuantitativo y transversal. La muestra estuvo compuesta por 38 (treinta y ocho) estudiantes diagnosticados con TEA, con edades

comprendidas entre 3 y 15 años, de ambos sexos, en una clínica de atención en la ciudad de Montes Claros, Minas Gerais, Brasil. El instrumento utilizado fueron las historias clínicas con datos personales y clínicos. Todos los datos se ingresaron en una hoja de cálculo utilizando el software Statistical Package for the Social Sciences (SPSS), versión 29.0 para Windows. Se realizó un análisis descriptivo con valores mínimos, máximos, media, desviación estándar, frecuencia verdadera y absoluta. Los resultados mostraron un predominio de varones (73,7%) y asistencia a la escuela secundaria (97,4%). La mayoría presentó comunicación verbal (57,9%) e interacción social, que variaron de buena (44,7%) a limitada (50%). El 52,6% de los niños presentó conductas repetitivas, y la mitad necesitó tiempo para adaptarse a los cambios. Solo el 34,2% demostró habilidades específicas. Los resultados permiten concluir que los estudios aplicados proporcionaron información relevante para la planificación, considerando que los niños presentan una gran diversidad en los aspectos comunicativos, sociales y conductuales, lo que indica la necesidad de estrategias de seguimiento individualizadas.

Palabras clave: Trastorno del Espectro Autista. Inclusión Social. Interacción Social. Niños.

1 INTRODUCTION

It has been noticeable that, in recent years, through media, television or social, the subject related to Autism Spectrum Disorder - ASD has been constantly addressed, regarding the concepts and diagnostic processes associated with it. ASD is understood as a neurodevelopmental condition, characterized by deficits in social communication and restricted and repetitive patterns of behavior (Araújo, 2022).

According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), there are some ASD signs that can be noticed mainly in early childhood, through daily activities and social interactions. In recent years, there has been a significant increase in this diagnosis, showing that, in the United States, 01 in 36 children is diagnosed with ASD, and that the prevalence in boys is 4 times higher than in girls. It is relevant to highlight that awareness had a great impact on early discovery and immediate intervention (Posar; Visconti, 2023).

Through the child's behavior, it is possible to observe if he has some factors related to autism and what his level of support is. Although some parents can perceive the characteristics of autism much earlier, the greatest number of discoveries happens approximately from 1 and a half years of age. In general, the diagnosis usually occurs on average at 4 years of age. These behavioral characteristics are manifested in social interactions and behavior patterns. First, there may be losses in speech, language, and social skills or any developmental delays (Sunakozawa et al., 2020).

Level 1 of ASD, known as mild autism, has as one of its characteristics difficulty in social communication and inflexibility. At this level, the child has a certain withdrawal to initiate any interaction, immediate responses and the lack of demonstration of interest or affection. In the point highlighted as behavioral, inflexibility is accompanied by interference in one or more aspects, which generates some difficulties in varying activities and problems in organization and planning. Although the support related to level 1 is little, the lack of action and necessary help results in irreparable damage (APA, 2013; Araújo et al., 2022).

At level 2 of support, the disorder is more noticeable, since the child needs help in his daily routine, has difficulty eating, dressing clothes or bathing, and needs follow-up in therapies. This diagnosis usually occurs in childhood, when speech delay or communication failures and the presence of socialization difficulties are noticed. Restricted and repetitive behaviors present themselves more frequently as well. With the necessary support network, it is possible to acquire a certain independence and achieve regular functioning of life (De Faria; De Souza Borba, 2024).

Finally, there is level 3, known as severe autism. He has a more severe symptomatology, with a significant deficit in communication skills, which generates essential

impairments in functioning. There is minimal response to social openness to third parties, as well as drastic inflexibility and intense resistance to change.

There are other restricted behaviors that substantially interfere in all areas of the subject's life (APA, 2013). In this context, individuals diagnosed with grade 3 have cognitive delays and need a lot of support and support. (Araújo et al., 2022). The etiology is not yet fully determined, but there is a high probability that ASD is related to genetic and environmental interactions (Wan et al., 2022)

Within this context, the present study aimed to analyze the profile of children with ASD in a care clinic in the city of Montes Claros-MG. This study is relevant in the possibility of identifying the characteristics of children with ASD, cared for in clinical and school contexts, with the purpose of expanding knowledge about the spectrum and reinforcing more humanized reception and intervention practices.

2 METHODOLOGY

The present study was approved by the Research Ethics Committee (CEP) of the State University of Montes Claros – Unimontes under Opinion 5.032.555/2021 and CAAE: 52141021.6.0000.5146. This is a descriptive, cross-sectional study with a quantitative approach.

The sample consisted of 38 (thirty-eight) patients diagnosed with ASD, aged between 5 and 15 years, both sexes, in a clinic in the city of Montes Claros - MG. All medical records of patients who were treated with complete data were included, and the medical records of patients with erasures were excluded.

As an instrument, medical records were used, with personal data and clinical data. After the authorization to carry out the research by the institution's management, made official through the signing of the Institution's Term of Agreement - TCI, the Term of Commitment for the Use of the Database - TCBD was delivered to the person responsible for the medical records, which was duly completed and signed by the researchers. All data were collected by the researchers themselves, in a room reserved for this purpose in August 2025 under the supervision of a clinic official.

All data were tabulated in spreadsheets using the Statistical Package for the Social Sciences (SPSS), version 29.0 for Windows. A descriptive analysis was performed with minimum, maximum, mean, standard deviation, real and absolute frequency values.

3 RESULTS

The study included 38 children aged 3 to 15 years (6.7 ± 3.2 years), with a mean BMI of 15.8 (± 5.8).

Table 1

Presentation of the results found in real and absolute frequency (n = 38)

VARIABLE	OPTIONS	N - %
Gender	Women	10 – 26,3
	Male	28 – 73,7
Attends school	Yes	37 – 97,4
	No	1 – 2,6
Communication	Verbal	22 – 57,9
	Non-verbal	5 – 13,2
	Not very verbal	11 – 28,9
Social interaction	Good	17 – 44,7
	Avoids contact	2 – 5,3
	Limited	19 – 50,0
Repetitive behaviors	Yes	20 – 52,6
	No	18 – 47,4
Response to change	Easy	10 – 26,3
	With a while	19 – 50,0
	Difficult	9 – 23,7
Specific skill	Yes	13 – 34,2
	No	25 – 65,8
Starts conversation spontaneously	Always	8 – 21,1
	Sometimes	17 – 44,7
	Rarely	9 – 23,7
	Never	4 – 10,5

Source: Authors, 2025.

According to the table above, it was found that most were male, with a high school attendance (97.4%), which shows a good integration of these children in the educational environment. This facilitates social and cognitive development, in addition to the dominance of verbal communication (57.9%), as it shows that more than half of the children are able to communicate verbally, which facilitates their interaction with their social environment.

Good social interaction was also evident in a large part of the sample (44.7%): almost half of the children have satisfactory ability to interact with other people. Regarding the adaptation to change over time, a significant part (50%), despite the sensitivity, manages to adapt, albeit gradually.

A noteworthy fact was to verify a high prevalence of respondents with a proportion of little verbal or non-verbal communication (42.1%). In this context, the challenges in the area of communication are explicit.

There was still a relevant number of children with difficulties in relating to and in contact with others. In addition, there was a high presence of repetitive behaviors (52.6%), which suggest patterns that can impact autonomy and behavioral flexibility.

Low initiative in conversation was found in 34.2%, rarely or never initiating conversations, revealing a deficit in social communication. For the majority, there is no predominance of specific skills (65.8%), which may indicate fewer areas of prominence compared to other development profiles.

4 DISCUSSIONS

The main focus of this study was to evaluate the profile of children with ASD in a clinic in the city of Montes Claros-MG. According to the analyses, no statistically significant differences were found between genders, who have a diagnosis of ASD. Some indices have been proven, such as speech delay, sensory stimuli, difficulty socializing, among others. ASD is characterized by difficulty in communication, interaction, and repetitive patterns and behaviors of activities. Early identification is related to emotional and behavioral aspects (Almeida et al., 2021).

There is a need for some attention to the time frame for identifying this diagnosis. Some differences were found in the analysis carried out, which show that the non-verbal group is downgraded compared to the verbal group. A perception of these data was supported by the statistics used to assess the development of language and cognitive and socioadaptive skills. Through this analysis, it was possible to identify differences in the areas of imitation, perception, integration, and verbal cognitive ability (Lopes-Herrera et al., 2023).

According to Pontes (2022), early diagnosis makes it possible to understand that it made a difference in the final results of students' behavioral challenges. This brings up the question of the importance of observation and care for children that parents need to have. Children diagnosed early have better development possibilities.

Studies and analyses carried out recently raise the importance of observing the signs given by children with ASD and understanding them for more assertive support and a more efficient diagnosis. This will allow for proper monitoring. However, for an earlier diagnosis, studies related to other details that are not based on signs alone are needed (Faria; Borba, 2024). CBCL is essential for identifying these signs and understanding the need for immediate intervention (Almeida et al., 2021).

According to Lima et al (2023), it is understood that environmental factors and social interaction have directly affected the communication of children with ASD, since one of the difficulties encountered refers to acceptance and social inclusion. Due to the analyses evidenced, the need for playful activities aimed at working with children with ASD is understood. Such activities show a high level of development and tend to hold the attention of these children, since one of the characteristics of the person with ASD is the deviation of attention. Thus, these adapted activities can have a great impact on development in a general context for children (Meira; Of Jesus; Marques, 2023).

According to Oliveira and Dultra (2023), it was found that the participants had the lowest score in the functional profile. The largest number were centered on elusive and sensitive children. Therefore, understanding this sensory profile is essential to plan and design an intervention appropriate to the needs of this group. One of the effective methods that have contributed to the motor and social development of autistic children is psychomotoricity. It makes it possible to develop their motor coordination, the notion of space, balance, laterality and, above all, school and social inclusion (Silva; Venâncio, 2022).

Through this study, the need for a specific look at the particularity of each child is understood, since a reduced motor profile was identified, taking into account what is expected for their chronological age (Farias; Silva, 2024).

According to Melo (2023), it has been proven that physical activity, in addition to the positive impacts on the child's motor development and health, was also essential for social interaction and emotional development. Therefore, with proper monitoring and targeted exercise application, it is possible to change the quality of life of these children so that they develop more safely.

With data obtained in this study, it demonstrates the importance and need for the practice of physical activity and sports in the stimulation of these children, thus contributing to the development of motor, cognitive and social skills of autistic children, facilitating their inclusion. For this, they need to be accompanied by trained professionals, who prioritize their well-being, when carrying out challenges that allow them to overcome their difficulties (Aggio; Jesus, 2022).

However, in addition to motor and social development, physical activity contributes to a more active child with a better quality of life. Our findings showed that a significant part of the respondents were out of the ideal weight, considering BMI. In view of this, it is evident that follow-up with a nutritionist is essential for balance and well-being with a better quality of life (Bezerra; Leal; Ibiapina, 2023).

According to Rodrigues et al (2025), the data collected show that the consumption of adequate foods, adequate body composition and active behavior increase the significant number of healthy children with a better quality of life.

According to our results, a high number of children with ASD were identified with high consumption of ultra-processed foods, high levels of body index, lack of physical activity, and high screen time, which increases the risk of obesity. Part of this result is conditioned by the socioeconomic, demographic, and nutritional profile, leading to a precarious health and development condition of these children (Brandão et al., 2023).

This study is an inherent limitation of cross-sectional research, due to the impossibility of establishing a cause-and-effect relationship.

5 CONCLUSION

It was possible to infer that the results of this study show a broad set of behavioral and communicative profiles, with a predominance of challenges related to social interaction, repetitive behaviors and variations in communication skills.

This study suggests the production of new research for a better understanding of the process and the importance of individualized interventions and strategies, capable of contemplating the specific needs of each child.

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