



EDITORIAL

Autism Spectrum Disorder: general aspects and concerns about Brazilian politics

Marco Aurelio M. Freire¹ , Stanley Bittar² 

¹University of the State of Rio Grande do Norte, Mossoró, Brazil.

²Stanley's Edu, São Paulo, Brazil.

Published 19 Jun 2023.

Autism Spectrum Disorder (ASD) encompasses a highly variable set of neurodevelopmental disorders with early-onset and nondegenerative patterns. According to the World Health Organization's International Classification of Diseases (11th Revision), ICD-11, ASD is characterized as "persistent deficits in the ability to initiate and to sustain reciprocal social interaction and social communication, and by a range of restricted, repetitive, and inflexible patterns of behavior, interests or activities that are clearly atypical or excessive for the individual's age and sociocultural context"¹.

Behavioral manifestations in ASD include deficits in social interaction, disturbances in communication skills, both verbal and nonverbal, difficulties in changing routine, motor stereotypies, and a very restricted repertoire of activities or interests², which interfere with the individual's personal, educational, and professional, social, and affective interactions³, with such abnormalities presenting variable impacts on different individuals and causing a severe burden to relatives and healthcare systems⁴.

ASD etiology is still not entirely characterized, and an interplay of genetic, epigenetic, and environmental factors seems to be involved⁵. Genetic basis points out that sex-differential genetic and

hormonal factors confer protective status to females, which could explain the higher incidence of ASD in males⁶.

The current prevalence of ASD in the worldwide population is about 1%, with a median male-to-female ratio of 4.2, with a significant increase in recent years⁷. However, such data are not homogeneous worldwide since there is high variability among methodologies in the obtention of data and where they are collected, as data originating from low-income countries are scarce compared to those from high-income countries⁸. In Brazil, unfortunately, data on ASD prevalence are rare⁹.

Notwithstanding, Brazil has adopted a policy to protect the rights of people with ASD since 2012¹⁰. Nevertheless, despite being contemplated in the text of the law, Brazil is, effectively, one of the nations that least contribute to a better characterization of the prevalence of autistic individuals in the world⁹, with such a lack of information significantly impacting the diagnosis and generating considerable burden on relatives and health systems.

Considering the above, government campaigns must be effectively implemented to properly clarify to the population the importance of an early diagnosis for ASD and increase investment in scientific studies focused

*Correspondence:

Programa de Pós-graduação em Saúde e Sociedade, Universidade do Estado do Rio Grande do Norte.
Addr.: Av. Miguel Antônio da Silva Neto, s/n - Bairro: Aeroporto. Mossoró, RN, Brasil | CEP 59.607-360
Phone: +55 (84) 99612-9104
E-mail: freire.m@gmail.com (Freire MAM)

<https://doi.org/10.21876/rcshci.v13i2.1441>

How to cite this article: Freire MAM, Bittar S. Autism Spectrum Disorder: general aspects and concerns about Brazilian politics. Rev Cienc Saude. 2023;13(2):1-2. <https://doi.org/10.21876/rcshci.v13i2.1441>
2236-3785/© 2023 Revista Ciências em Saúde. This is an open-access article distributed under a CC BY-NC-SA license (<https://creativecommons.org/licenses/by-nc-sa/4.0/deed/en>)



on this subject, with more research groups working on the issue. Such efforts would contribute to better inserting individuals with ASD into society, generating social and economic benefits for the country.

DEDICATION

Dedicated to all autistic persons and their relatives.

REFERENCES

1. WHO. World Health Organization. ICD-11: International classification of diseases (11th revision); 2022. Available from: <https://icd.who.int/en>.
2. American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. Arlington County: American Psychiatric Association. Fifth edition; 2013. <https://doi.org/10.1176/appi.books.9780890425596>.
3. Lai MC, Lombardo MV, Baron-Cohen S. Autism. *Lancet*. 2014;383(9920):896-910. [https://doi.org/10.1016/S0140-6736\(13\)61539-1](https://doi.org/10.1016/S0140-6736(13)61539-1).
4. Salari N, Rasoulpoor S, Rasoulpoor S, Shohaimi S, Jafapou S, Abdoli N, et al. The global prevalence of autism spectrum disorder: a comprehensive systematic review and meta-analysis. *Ital J Pediatr*. 2022;48:112. <https://doi.org/10.1186/s13052-022-01310-w>.
5. Zeidan J, Fombonne E, Scora J, Ibrahim A, Durkin MS, Saxena S, et al. Global prevalence of autism: A systematic review update. *Autism Res*. 2022;15(5):778-790. <https://doi.org/10.1002/aur.2696>.
6. Bhandari R, Paliwal JK, Kuhad A. Neuropsychopathology of Autism Spectrum Disorder: Complex interplay of genetic, epigenetic, and environmental factors. *Adv Neurobiol*. 2020;24:97-141. https://doi.org/10.1007/978-3-030-30402-7_4.
7. Werlin DM, Geschwind DH. Sex differences in autism spectrum disorders. *Curr Opin Neurol*. 2013;26(2):146-153. <https://doi.org/10.1097/WCO.0b013e32835ee548>.
8. Chiarotti F, Venerosi A. Epidemiology of Autism Spectrum Disorders: A review of worldwide prevalence estimates since 2014. *Brain Sci*. 2020;10(5):274. <https://doi.org/10.3390/brainsci1005027>.
9. Brentani H, Polanczyk GV, Miguel EC. Brazil and Autism. In: Volkmar FR (ed) *Encyclopedia of Autism Spectrum Disorders*. 2nd ed. Cham: Springer Nature Switzerland AG; 2021. p.734-44. https://doi.org/10.1007/978-3-319-91280-6_102021.
10. Brasil. Lei n. 12.764, de 27 de dezembro de 2012. Política Nacional de Proteção dos Direitos da Pessoa com Transtorno do Espectro Autista. *Diário Oficial [da] República Federativa do Brasil*; 2012 Dez 27. [acessado em 11 Jun 2023]. Available from: http://www.planalto.gov.br/ccivil_03/_ato2011-2014/2012/lei/l12764.htm