

Are the criteria for diagnosing and treating autism effective? A short review on application of artificial intelligence in autism spectrum disorder

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ABSTRACT

Background and aims: Autism Spectrum Disorder (ASD) is a neurodevelopmental disorder which according to the gold standard, diagnostic criteria of ASD are based on behavioral observations. While studies show that the validity and reliability of these criteria are questioned when accounting for subjectivity, this is while artificial intelligence is able to process data that is not visible to the human eye in behavioral observations, and can lead to providing more accurate data.

Method: This study summarizes 18 articles in PubMed data center that examine the performance of artificial intelligence in ASD in the form of a short review.

Results: In this paper, some of the research works in the field of application AL(Artificial Intelligence) and ML(Machine Learning) The results show that adjusting models based on genetics, neuroimaging, and VR glasses are more accurate, valid, and reliable.

Conclusion: In this review, we examined the diagnostic and treatment criteria used in autism. The use of artificial intelligence in diagnosis and treatment shows a bright future in this field, and the use of artificial intelligence along with expert doctors can increase accuracy and speed in the diagnosis and treatment of patients. Also, by reviewing the studies, it is suggested to conduct more studies in the field of artificial intelligence tools in the treatment of autistic people.

Keywords: Artificial intelligence, Autistic Disorder, Autism Spectrum Disorder