

Medical Student Attitudes towards Autism



WAYNE STATE
School of Medicine

Laial Baltaji, Erin Miller, Jason Booza

INTRODUCTION

Autism Spectrum Disorder (ASD) encompasses a wide range of neurological and developmental conditions that are commonly characterized by difficulties with social communication, developmental delays, and repetitive behaviors. ⁽¹⁾ ASD is commonly diagnosed in childhood, however the severity and presentation of autism can vary greatly between individuals and diagnosis may not occur until adulthood. ⁽²⁾ Over the past few decades, the prevalence of autism in the United States has been continuously rising, with 1 in 44 children now having some degree of autism. ⁽³⁾ Whether it is in medical school or later on in their own clinical practice, medical students are almost certain to come across a patient with autism at some point in their career.

According to self-reported data, people with ASD have poorer overall health outcomes and inferior quality of healthcare than people without ASD. ⁽²⁾ This may be attributable in part to the difficulties that healthcare practitioners face in terms of effective communication, which impacts medical diagnosis and treatment. ⁽⁴⁾ Healthcare workers that have positive, open-minded, and supportive attitudes are better able to communicate and collaborate to provide patients with autism with better care. ⁽²⁾

To effectively and equitably serve future patients, we must adapt medical students' training to reflect changes in the patient population. This study aims to evaluate medical students' implicit attitudes of people with autism. In order to enhance Wayne State University School of Medicine's curriculum for treating patients with autism, students will also be surveyed to identify what educational interventions should be implemented. This preliminary assessment of pre-clinical students' perceptions of individuals with autism will serve as the foundation for future curriculum changes.

METHODS

Participants: medical students in pre-clerkship phase from WSUSOM (years one and two)

Method of data collection: online survey via qualtrics

Measures

- ❖ **Demographics:** age, gender, current year at WSUSOM, exposure to autistic persons
- ❖ Societal Attitudes Towards Autism (SATA) Scale (5)
 - ❖ 16 statements
 - ❖ Randomized
- ❖ Additions to WSUSOM Curriculum
 - ❖ Clinical skills session, P4 session, separate workshop, online canvas module, other

Responses to SATA Scale measured using likert scale

- ❖ Strongly disagree (1) to Strongly agree (4)
 - ❖ No median answer of neither available
 - ❖ Maximum score of 60 possible
- ❖ Answers of strongly disagree or disagree disfavor the statement
- ❖ Answers of strongly agree or agree favor the statement

EXAMPLE SATA SCALE STATEMENTS(6)

- Individuals with autism are incapable of living on their own
- Children with autism should be fully integrated into mainstream classes*
- A person with autism is a financial burden to his or her family

* = Reverse scored statement

EXPECTED RESULTS

- ❖ SATA scale is scored out of 60 (6)
 - ❖ 15 or less indicates a strong negative attitude
 - ❖ 16–30 indicates a negative attitude
 - ❖ 31–45 indicates a positive attitude
 - ❖ 46–60 indicates a strong positive attitude
- ❖ Students with prior exposure to people with ASD are more likely to score higher
- ❖ Overall assessment of MS1 and MS2 attitudes
 - ❖ Students further along in medical school may have higher scores.
- ❖ Potential significance between demographics and attitudes
 - ❖ Gender
 - ❖ Age
- ❖ Ranking of preferred educational interventions

CONCLUSION

Using the SATA survey to assess medical students in the pre-clerkship phase provides a baseline of attitudes prior to a great deal of patient exposure during the clerkship phase.

This opens the door for future research into the attitudes of MS3 and MS4 students during the clerkship phase. This allows for trend comparisons and determining whether increased clinical exposure has a positive impact on attitudes toward people with ASD.

The attitudes of the majority of medical student will be useful in determining next steps. If the majority of medical student attitudes are positive, a second study will be conducted to assess medical students' general knowledge and diagnosis of autism. If the majority of student attitudes are negative, a workshop based on student preferences may be developed.

REFERENCES

1. Signs and symptoms of autism spectrum disorders. Centers for Disease Control and Prevention. <https://www.cdc.gov/ncbddd/autism/signs.html>. Published March 28, 2022. Accessed November 3, 2022.
2. Corden K, Brewer R, Cage E. A systematic review of healthcare professionals' knowledge, self-efficacy and attitudes towards working with autistic people. *Review Journal of Autism and Developmental Disorders*. 2021;9(3):386-399. doi:10.1007/s40489-021-00263-w
3. Data & statistics on autism spectrum disorder. Centers for Disease Control and Prevention. <https://www.cdc.gov/ncbddd/autism/data.html>. Published March 2, 2022. Accessed November 3, 2022.
4. Weir E, Allison C, Baron-Cohen S. Autistic adults have poorer quality healthcare and worse health based on self-report data. *Molecular Autism*. 2022;13(1). doi:10.1186/s13229-022-00501-w
5. Flood LN, Bulgrin A, Morgan BL. Piecing together the puzzle: Development of the Societal Attitudes Towards Autism (SATA) scale. *Journal of Research in Special Educational Needs*. 2012;13(2):121-128. doi:10.1111/j.1471-3802.2011.01224.x
6. Kuzminski R, Netto J, Wilson J, Falkmer T, Chamberlain A, Falkmer M. Linking knowledge and attitudes: Determining neurotypical knowledge about and attitudes towards autism. *PLOS ONE*. 2019;14(7). doi:10.1371/journal.pone.0220197