

# Are PA students ready to work with patients with a common mental health condition?

## *PA student competencies to work with children with autism spectrum disorder*

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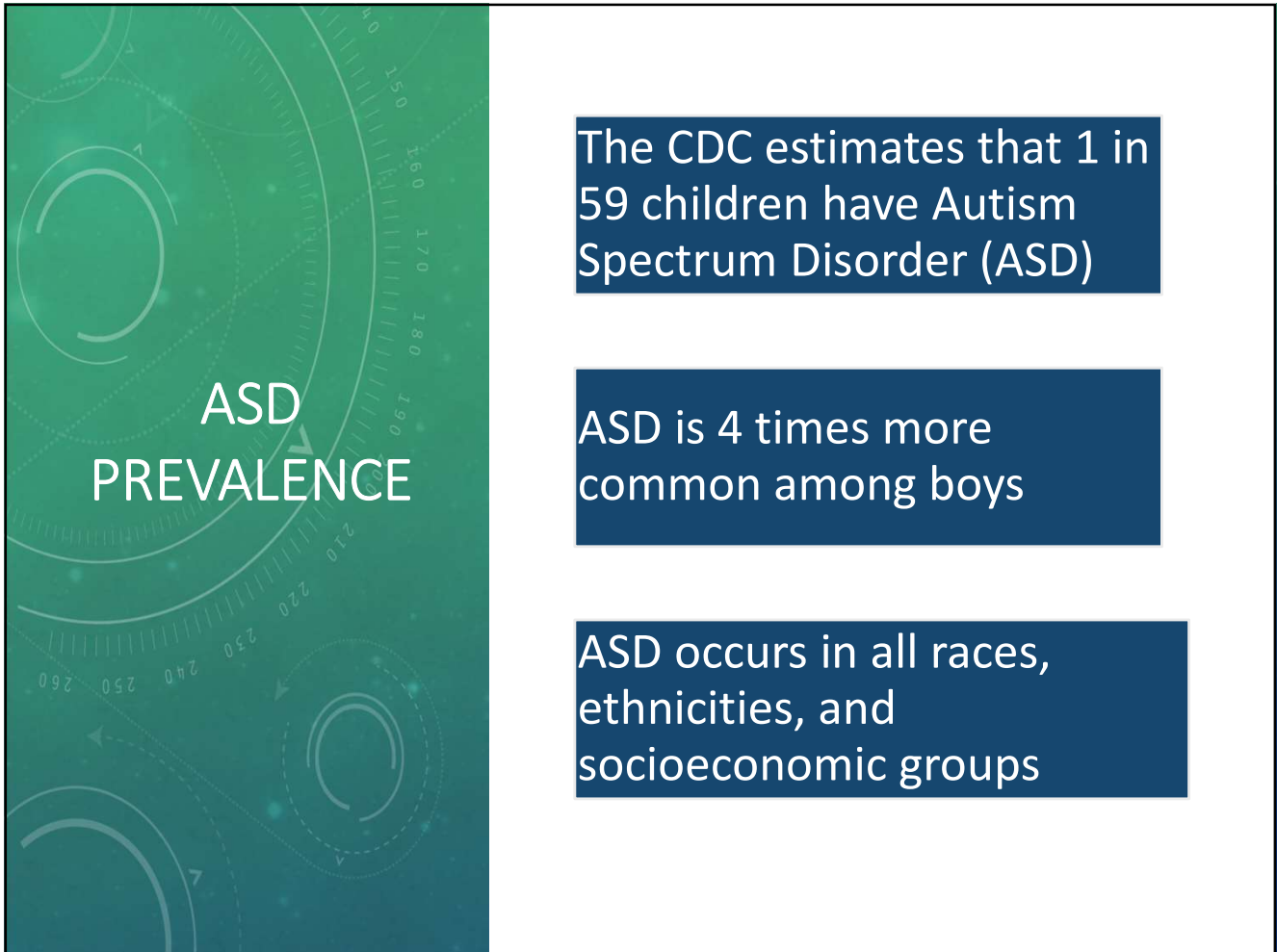
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## BY THE END OF THE SESSION, ATTENDEES SHOULD BE ABLE TO:

- Explain why PA students, should be trained to work with patients with Autism Spectrum Disorder.
- Determine which areas of training PA students would like to be more competent in with regards to ASD and other mental health disorders.
- Summarize areas where additional training may be needed for PA students working with patients with Autism Spectrum Disorder.



The infographic features a vertical green-to-teal gradient background on the left side, overlaid with faint, semi-transparent circular patterns and numerical scales. The text 'ASD PREVALENCE' is centered in white. To the right, three dark blue rectangular boxes contain white text. The first box states that the CDC estimates 1 in 59 children have ASD. The second box notes that ASD is 4 times more common among boys. The third box states that ASD occurs in all races, ethnicities, and socioeconomic groups.

**ASD  
PREVALENCE**

The CDC estimates that 1 in 59 children have Autism Spectrum Disorder (ASD)

ASD is 4 times more common among boys

ASD occurs in all races, ethnicities, and socioeconomic groups

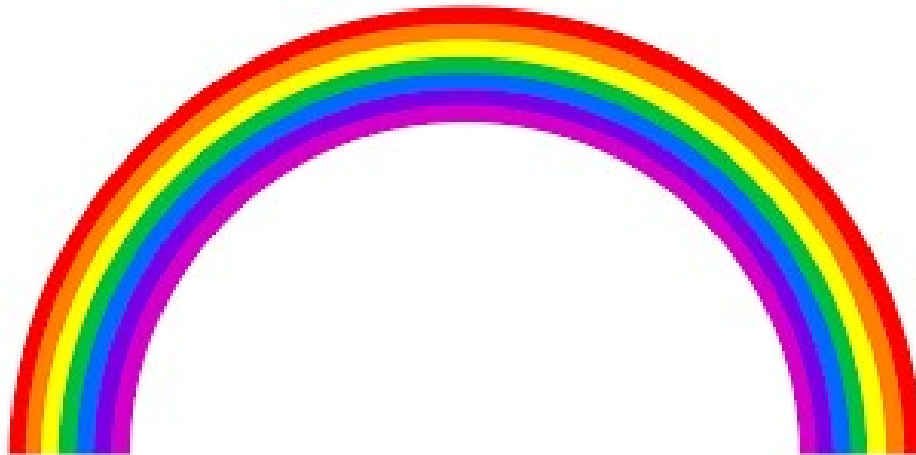
## Common Red Flags

- Speech
- Eye contact
- Reciprocity/Joint Attention
- Pointing/Gestures
- Play
- Imitation
- Relationships



DSM 5

# Autism Spectrum Disorders



Level 1  
Requiring Support

Level 2  
Requiring substantial  
support

Level 3  
Requiring very  
substantial support

## WHEN SHOULD A CHILD BE SCREENED FOR ASD?



- According to the American Academy of Pediatrics all children should be screened for ASD at 18 months and 24 months



# BARRIERS

- Lack of pre-professional and professional training
- Lack of comfort to have conversations with parents of children who may have mental health concerns





## THE NEED FOR RESEARCH



Studies have demonstrated a lack of comfort and training for clinicians to address ASD, it prompted the need for this research project

To evaluate PA students training in ASD

To conduct a gap analysis on the current versus desired skills in those same areas

**PURPOSE!**

## METHODS

PA students were asked to participate in a survey administered by the AAPA

341 PA students (PA-S) indicated an interest

213 PA students consented and responded (RR 62.4%)

## SURVEY QUESTIONS




Knowledge and perceptions related to ASD





Perceptions of preparation to discuss ASD with patients and caregivers



ASD training



## ANALYSIS



The data was analyzed using descriptive statistics

Parametric and nonparametric inferential statistical tests were also used for the gap analysis

# RESULTS

## Training on Identification of ASD Red Flags by PA Students

Are You Adequately Trained To	Yes (%)
Administer the M-CHAT) R/F	41.8
Provide care to patients with ASD	45.1
Identify red flags for ASD?	71.2
Understand ped. developmental milestones	87.3

# RESULTS

## Percent of Student PAs Who Feel Prepared to Talk to Caregivers by Condition and Perceptions of Vaccination-ASD Link

Conditions	Yes, with all (%)	Yes, with those for whom there is a concern (%)	No (%)
Depression	50.8	35.4	13.8
Anxiety Disorders	45.2	36.7	18.1
ADHD	33.9	41.3	24.9
Autism Spectrum Disorder	25.9	36	38.1
Conduct Disorder/ODD	26.1	33.5	40.4

Link between vaccines and ASD (94.7% say there is not; 0.5% say there is, and 4.8% say they do not know).



# RESULTS

## Gap Analysis - Knowledge of ASD Among PA Student Respondents

Knowledge, Skill, or Ability	N	Current Mean	Desired Mean	Gap (Difference)	Effect Size <i>d</i>
<b>Understanding ...</b>					
- All pediatric developmental milestones	171	2.60	4.28	1.68	1.47
- The early signs, or red flags, of ASD	170	2.44	4.23	1.79	1.53
- The DSM-5 criteria for diagnosing ASD	169	2.22	4.05	1.82	1.46
<b>Administering the MCHAT R/F</b>	171	1.46	3.88	2.42	1.82
<b>Understanding where to make a referral for ...in the event you needed to refer a child to their services</b>					
- Early intervention	168	2.00	4.14	2.14	1.75
- Audiologic evaluation	171	1.98	4.14	2.16	1.74
- Further evaluation.	180	2.08	4.15	2.08	1.70



# CONCLUSIONS

PA-S DID NOT RECEIVE ADEQUATE TRAINING ON THE FOLLOWING:

- Administration of the M-CHAT-R/F (41.8% yes)
- Providing care to patients with ASD (45.7% yes)
- Red flags of ASD (71.2% yes)

PA-S DO NOT FEEL COMFORTABLE TALKING TO CAREGIVERS ABOUT THE FOLLOWING:

- ASD (61.9% yes)
- ADHD (75.1 % yes)
- Anxiety (71.9% yes)

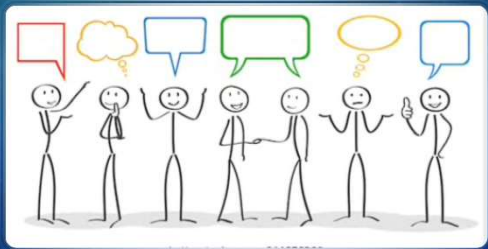
CONTINUOUS,  
CLEAR  
COMMUNICATION  
IS  
KEY

Studies have demonstrated that families of patients with ASD often report that medical visits are a challenge

Families reported that a common complaint during medical visits was the lack of clear communication

Experts in the field encourage providers to use simple and direct communication and they should always explain what they are doing in order to put the patient and family at ease

However, clear communication should always remain a priority even outside the exam room. Providers should continue open communication and follow-ups even in the form of phone calls



## THE LARGEST SKILL GAPS WERE AS FOLLOWS:



- Administering the M-CHAT-R/F (2.42 points)
- Understanding where to make referrals for follow-ups
  - Early intervention (2.14 points)
  - Audiological evaluation (2.16 points)
  - Further evaluation (2.08 points)
- Understanding the DSM-5 criteria for ASD (1.82 points)

## ASD SERVICES

- No two patients with ASD will be alike as deficits can vary case by case. Therefore, clinicians need to be familiar and comfortable with recognizing red flags and making referrals to organizations such as Early Intervention (EI).
- However, the results have demonstrated that clinicians are not well-versed with what EI entails.





## EARLY INTERVENTION

- Early Intervention (EI) is a national program for infants and toddlers under the age of 3 with developmental disabilities.
- Each program varies state to state, but includes therapeutic services such as:
  - Speech Pathology and Audiology
  - Occupational Therapy
  - Physical Therapy
  - Psychosocial Services
  - Nutrition Services
  - Psychological Services
  - Family Education and Counseling





## HOW TO REFER

- Every state has a municipal Early Intervention Official (EIO) who should be contacted in order to refer a patient for an evaluation
- Additionally, you can visit your state's Department of Health, Bureau of Early Intervention website

## LIMITATIONS

- Self reported survey.
- Gap analysis may differ among students.

## BRIDGING THE GAP



Given the increasing prevalence of ASD, PAs will likely encounter and treat a patient with ASD and therefore, should be equipped with the necessary skillset to address this disorder



In order to overcome the lack of PA-S comfort and training with relation to ASD, PAs should seek additional training after graduation



PAs also need to work on effective communication since clear communication is the key to overcome the many barriers families and clinicians experience during treatment



A photograph of the letters 'ASD' in large, colorful, 3D block letters (A is orange, S is orange, D is yellow) on a light blue background. Surrounding the letters are various colorful pencils and small, colorful letter tiles. The background of the slide transitions from light blue to dark blue with faint circular patterns.

## EXPAND YOUR ASD KNOWLEDGE

- Attend workshops
- Attend conferences
- Check the CDC for webinars
- Autism Society offers a free online course
- Never stop looking to expand your ASD knowledge as early intervention is the best thing we can do as providers!

## LEARN MORE

- Rizzolo D, McCall TM, Smith NS. Towards Earlier Identification: Clinicians' Perceptions of their Ability to Identify, Diagnose, and Refer Patients with Autism Spectrum Disorder. *J Allied Health*. 2019;48(4):287-292.
- Rizzolo D, Smith NE, McCall TC, Roberts A, Porta K. Physician assistant students' competency to identify and diagnose Autism Spectrum Disorder. *J Physician Assist Educ*. 2020; 31(2).



THANK YOU FOR ATTENDING!