



Prevalence of Attention Deficit Hyperactivity Disorder among PA Students



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► INTRODUCTION AND PURPOSE

The prevalence of Attention Deficit/Hyperactivity Disorder (ADHD) is estimated to be up to 5% in adults ages 18 and older in the United States.^{1,2} While the literature supports a higher prevalence of ADHD among medical students, there are no published studies to affirm similar findings among physician associate/assistant (PA) students.³ The purpose of this study was two-fold: to determine the prevalence of ADHD in currently enrolled PA students, and to quantitatively describe factors intersecting ADHD and PA school.

► METHODS

IRB approval was obtained. A 20-item original survey was emailed to the Program Directors of all PA programs affiliated with the Physician Assistant Education Association. Thirty-seven out of 335 Program Directors distributed the survey to their students and 510 students responded. Responses were de-identified and data was analyzed in SAS 9.4. Respondents were asked to self-report an ADHD diagnosis as well as information regarding the following:

- age of symptom onset
- symptoms experienced after matriculation
- academic accommodations
- medication for ADHD
- receipt of diagnosis before or after matriculation.

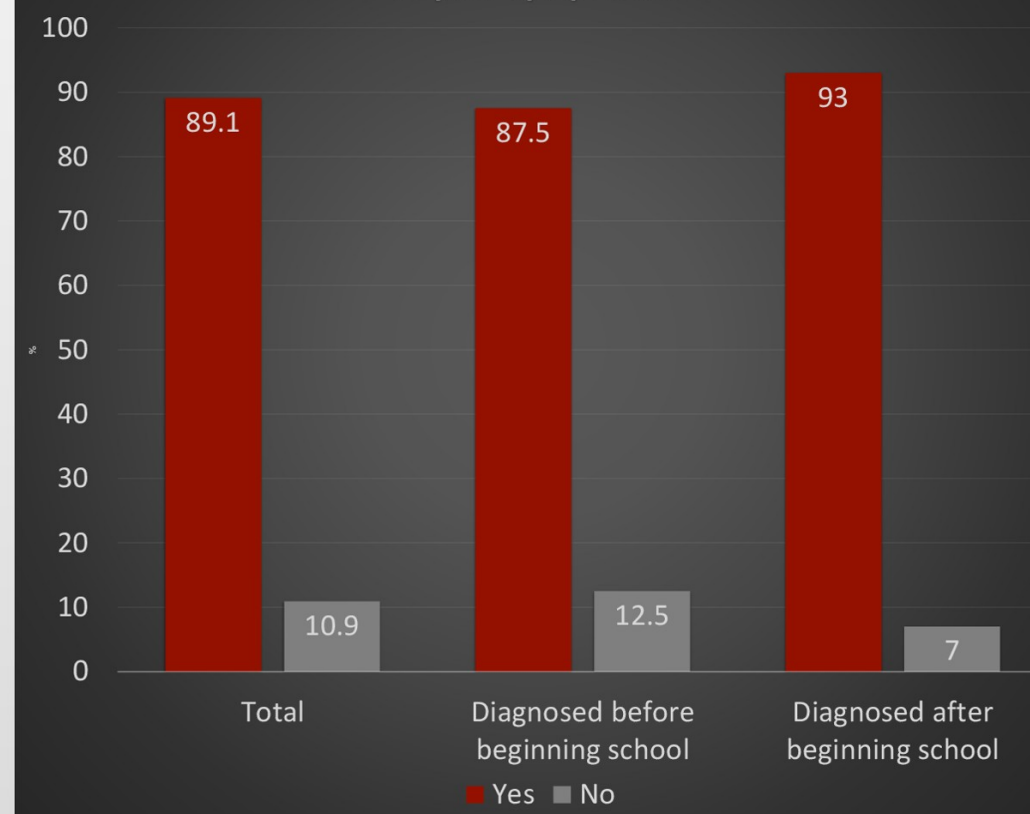
► RESULTS

The final sample included 499 students (50.7% didactic; 49.3% clinical). The geographic distribution of respondents was Midwest 35%; South 33%; West 18%; and Northeast 14%. Eighty-three percent of respondents identified as female; 16% male; and 1% non-binary. One hundred and forty-eight out of 499 students (29.7%) self-reported a diagnosis of ADHD. Of the 148 students who reported an ADHD diagnosis, 78% identified as female; 18% male; 4% non-binary. Forty-eight percent of those with ADHD were under the age of 25. A total of 104 students with ADHD (70.3%) were diagnosed prior to matriculation, while 44 (29.7%) were diagnosed after matriculation. A total of 131 students with ADHD (89.1%) noticed an exacerbation of ADHD symptoms after matriculation, but only 45 (30.4%) reported receiving academic accommodations for their diagnosis. Nearly 76% reported taking prescription stimulant-based medication to manage their ADHD while enrolled. While the majority reported taking their ADHD medication as prescribed, 21% reported using ADHD medication in a manner inconsistent with their prescription. Among the 29.7% of students diagnosed with ADHD after matriculation, 43.2% were in the didactic phase and 56.8% were in the clinical phase at the time of diagnosis (see Table 1). Most students with ADHD who noted an exacerbation of symptoms after matriculation felt that PA school had contributed to this (see Figure 1).

Table 1. Characteristics of PA Students in the U.S. with ADHD

	Total	Diagnosed Before Matriculation	Diagnosed After Matriculation
Total, N (%)	148 (100.0)	104 (70.3)	44 (29.7)
Stage in curriculum			
Didactic Phase	75 (50.7)	56 (53.8)	19 (43.2)
Clinical Phase	73 (49.3)	48 (46.2)	25 (56.8)
Currently receiving accommodations?			
Yes	45 (30.4)	31 (29.8)	14 (31.8)
No	103 (69.6)	73 (70.2)	30 (68.2)
Currently taking medication prescribed for ADHD?			
Yes – stimulant medication	112 (75.7)	83 (79.8)	29 (65.9)
Yes – non-stimulant medication	14 (9.5)	6 (5.8)	8 (18.2)
No	22 (14.9)	15 (14.4)	7 (15.9)
Prescription for ADHD altered since matriculation?			
Yes - Total daily dosage increased	37 (29.6)	21 (23.9)	16 (43.2)
Yes - Formulation was changed	9 (7.2)	9 (10.2)	0 (0.00)
Yes - Medication was changed	23 (18.4)	17 (19.3)	6 (16.2)
No	56 (44.8)	41 (46.6)	15 (40.5)
Circumstances surrounding adjustment of ADHD medication			
Dose, formulation, and/or medication was not effective or suboptimal	47 (68.1)	33 (70.2)	14 (63.6)
Medication-induced side effects	10 (14.5)	6 (12.8)	4 (18.2)
Issues with cost or insurance coverage	4 (5.8)	3 (6.4)	1 (4.6)
Other	8 (11.6)	5 (10.6)	3 (13.6)
Taking ADHD medication as prescribed?			
Yes	101 (80.8)	67 (76.1)	34 (91.9)
No	24 (19.2)	21 (23.9)	3 (8.1)

Figure 1. Do you believe that the demanding nature of PA school contributed in any way to the exacerbation of your symptoms?



► CONCLUSIONS

The prevalence of ADHD among this sample was 29.7%. Nearly 30% of respondents with ADHD were diagnosed after matriculation. We hypothesize that students with previously undiagnosed ADHD may present for care after matriculation due to worsening symptoms elicited by the rigors of PA education. While limitations of this study include response bias as students with ADHD are more likely to answer the survey, these findings may have implications for institutional support programs for students. Further studies with larger sample sizes are needed to explore possible reasons for delays in diagnosis as well as reasons for a lack of academic accommodation.

► REFERENCES

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