

# Assessing PA Student Attitudes and Confidence: The Results of a Substance Use Disorder Curriculum Module Pilot Project



Cheryl Vanderford<sup>1</sup>, Paul Christensen<sup>2</sup>, Kristi Collins<sup>3</sup>, Priscilla Marsicovetere<sup>3</sup>, Jennifer Zorn<sup>4</sup>, Richard Dehn<sup>5</sup>



1. University of Kentucky, 2. Grand Valley State University, 3. Franklin Pierce University, 4. Butler University, 5. Northern Arizona University

## Introduction

There are an estimated 165 million Americans with substance use disorders (SUD), yet only 1.46 million received medication assisted treatment (MAT) in 2019.<sup>1,2</sup> Increasing access to SUD services to decrease this gap is essential to address this crisis. Physician Assistants/Associates (PAs) are vital to this effort, prompting Physician Assistant Education Association (PAEA) to develop a curriculum to help standardize SUD education across PA programs.

## Purpose

An aim of this curriculum is expansion of access to SUD treatment services. The purpose of this survey distribution is to explore PA student attitudes around and confidence in treating patients with SUD.

## Methods

From 2019-2021, PAEA developed and implemented an 8-hour online instructional module for PA students designed to encourage standardization of SUD curriculums nationally. This curriculum module was designed by a consortium of faculty from 10 PA programs and implemented as a pilot project for students in those 10 programs (N=399). Students from 10 additional PA programs were added in the second year of the pilot (N=880). A survey was administered to all students prior to starting the curriculum and immediately after completion to collect demographic information, measure attitudes around SUD, and assess the quality of the curriculum using a Likert scale. A separate questionnaire was sent to the 20 participating programs to collect program demographic data and to determine how the curriculum module was implemented.

## Results

A total of 1279 students from the 20 piloting PA programs completed the pre-curriculum survey and 739 completed the post-curriculum survey for a 62% response rate. Of the 739 students who completed the post-curriculum survey, 73.8% were female and 69.7% were white. 93% of participating students were very satisfied or satisfied with the curriculum module. Student attitudes on the diagnosis and treatment of SUD and regarding patients with SUD improved after module completion on 9 of the 12 Likert survey questions. On 3 of the Likert survey questions pertaining to statements that infer a reluctance to treat SUD patients there was a small decrease in score from pre- to post-curriculum surveys, indicating that some PA students may seek to avoid SUD patients even after completing the SUD curriculum. Additional analysis will assess whether program variations in the curriculum module implementation impacted student curriculum evaluation and attitudes towards SUD.

Table 1. Survey Demographics

|   |       |
|---|-------|
| Female                                    | 74.1% |
| Male                                      | 25.8% |
| Transgender                               | 0%    |
| None of these                             | 0.1%  |
| American Indian or Alaska Native          | 0.8%  |
| Asian                                     | 13.9% |
| Black or African American                 | 5.2%  |
| Hispanic or Latino                        | 10.0% |
| Native Hawaiian or Other Pacific Islander | 0.5%  |
| White                                     | 69.7% |

Table 2. SUD Attitudinal Survey Pre- and Post-curriculum

| Statement (Strongly Agree=5; Agree=4; Neutral=3; Disagree=2; Strongly Disagree=1)   | Year 1 Pre-curriculum Mean N=399 | Year 1 Post-curriculum Mean N=276 | Year 1 Change in Mean Score | Year 2 Pre-curriculum Mean N=879 | Year 2 Post-curriculum Mean N=516 | Year 2 Change in Mean Score |
|---|----------------------------------|-----------------------------------|-----------------------------|----------------------------------|-----------------------------------|-----------------------------|
| I am familiar with the term "substance use disorder" (SUD)  | 4.47                             | 4.72                              | +0.25                       | 4.42                             | 4.68                              | +0.26                       |
| SUD is a serious medical problem that results in substantial financial, social, and societal costs  | 4.81                             | 4.83                              | +0.02                       | 4.80                             | 4.74                              | -0.06                       |
| I believe that it is important that the PA program curriculum includes instruction about SUD  | 4.68                             | 4.77                              | +0.09                       | 4.78                             | 4.73                              | -0.05                       |
| My PA program has already provided me curriculum pertaining to SUD  | 3.79                             | 4.33                              | +0.54                       | 3.65                             | 4.23                              | +0.58                       |
| I currently feel confident in screening acute and chronic patients for SUD  | 2.98                             | 4.13                              | +1.15                       | 2.71                             | 3.96                              | +1.25                       |
| I currently feel confident in treating acute and chronic patients for SUD   | 2.46                             | 3.78                              | +1.32                       | 2.31                             | 3.69                              | +1.38                       |
| I currently feel confident in referring acute and chronic patients for SUD  | 3.17                             | 4.32                              | +1.17                       | 2.96                             | 4.23                              | +1.27                       |
| I currently feel confident in managing acute and chronic patients with SUD  | 2.45                             | 3.72                              | +1.27                       | 2.36                             | 3.73                              | +1.37                       |
| I would prefer to not treat patients with SUD   | 2.07                             | 2.28                              | +0.21                       | 2.06                             | 2.17                              | +0.11                       |
| There are specific specialties where the providers do not need to be concerned with whether their patients have SUD (*Negative score change means increased disagreement) | 1.58                             | 1.50                              | 0.00 *                      | 1.56                             | 1.71                              | +0.15 *                     |
| I feel I will need additional instruction and experience in order to identify, treat, and manage patients with SUD (*Negative score change means increased disagreement)  | 4.14                             | 3.62                              | -0.52 *                     | 4.16                             | 3.65                              | -0.51 *                     |
| SUD is a patient's choice (*Negative score change means increased disagreement)   | 2.18                             | 1.91                              | -0.27 *                     | 2.12                             | 1.94                              | -0.18 *                     |

Table 3. SUD Instructional Module Evaluation Survey

| Statement (Strongly Agree=5; Agree=4; Neutral=3; Disagree=2; Strongly Disagree=1)                          | Year 1 Mean N=276 | Year 1 Standard Deviation | Year 2 Mean N=516 | Year 2 Standard Deviation |
|--|-------------------|---------------------------|-------------------|---------------------------|
| The content and instructional methods of this module significantly increased my understanding of SUD       | 4.32              | 0.84                      | 4.22              | 0.89                      |
| The learning objectives for this module were clearly stated  | 4.62              | 0.66                      | 4.50              | 0.79                      |
| The curriculum met the learning objectives of this module  | 4.62              | 0.64                      | 4.48              | 0.81                      |
| The curriculum delivery process was effective and easy to navigate   | 4.63              | 0.72                      | 4.45              | 0.88                      |
| The content of the module substantially increased my knowledge of SUD                                      | 4.39              | 0.88                      | 4.40              | 0.87                      |
| The evaluation process was fair and matched the learning objectives and the information that was presented | 4.62              | 0.70                      | 4.50              | 0.80                      |

## Discussion

Accreditation standards used to guide PA curriculum development include education specific to SUD and its application to clinical practice.<sup>3</sup> Piloting a standardized online modular SUD curriculum increased PA student confidence in screening, diagnosing, and providing treatment for patients with SUD. Qualitative data suggests completion of the SUD modules reduced stigma associated with SUD. It is recommended that future studies document the effectiveness of various types of SUD curriculum and curriculum placement, in addition to identifying the reasons why some students may be resistant to caring for patients with SUD.

## Conclusion

SUD is a highly prevalent, undertreated condition in the US population. Improving patient outcomes requires a multiprong approach to reducing stigma and educating providers on diagnosis and treatment paradigms. PAs can play a vital role caring for patients with SUD. This study demonstrates that an online SUD curriculum can reduce SUD stigma and improve PA student confidence in diagnosing and managing patients with SUD.

## References

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