Preventing Future Physicians to Identify and Treat Children with Autism Spectrum Disorder: An Educational Intervention

Kelly K. Davis, MS4 and Karen Stiles, PhD, ABPP

PROJECT RATIONALE

Problem:
- Inadequate training regarding autism spectrum disorder (ASD) is a medical school and residency program barrier.
- Medical students and residents feeling uncomfortable and unprepared to treat children with ASD (Austriaco et al., 2019).
- Barriers to quality medical care for children with ASD.

Study Goals:
- Implement an educational intervention that teaches future physicians about ASD.
- Long-term goal is to improve the knowledge and comfort level of medical students and residents on identifying, diagnosing, and treating children with ASD.

Impact of Educational Intervention

- Mean test score before and after the educational intervention in control and treatment groups.
- Mean of self-reported comfort level score before and after educational intervention between control and treatment groups.

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Methods

- Developed 3 online modules incorporating slides from the Central Missouri Rapid Response Collaborative and videos from the CDC’s Autism Case Training.
- Screened and diagnosing ASD.
- Treating ASD.

Participants:
- Clinical medical students (M3 & M4) and pediatric residents.
- Analysis: Descriptive statistics, repeated-measures ANOVA, and linear regression.

Lessons Learned and Future Directions

- Future physicians at ECU feel inadequately trained to identify, diagnose, and treat children with ASD.
- Online modules improve knowledge and comfort level regarding ASD.
- Limitations:
  - Small sample size
  - Unequal control and treatment group size
- Future directions:
  - Follow-up study to show efficacy of online modules in larger sample size.
  - Does improved knowledge and comfort level impact patient outcomes?

Acknowledgements

- Future physicians feel inadequately trained to diagnose and treat children with ASD.
- 3 online modules targeted to teach future physicians to identify, diagnose, and treat children with ASD.
- The improvement in knowledge and comfort level leads to better patient care for children with ASD.

References

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