Preparing Future Physicians to Treat Children with Autism Spectrum Disorder

Kelly A. Kimble

Brody School of Medicine
East Carolina University
Greenville, North Carolina, 27858
kimblek15@students.ecu.edu

IDEA

• Implement the CDC’s Autism Case Training (ACT) program among clinical medical students and pediatric residents

• Compare the level of knowledge and confidence of medical students and pediatric residents in identifying the characteristics and treatment of children with autism spectrum disorder (ASD) before and after the implementation of the ACT program

NEED/RATIONALE

Inadequate training in medical school and residency programs

Medical students and residents feeling uncomfortable and unprepared to treat a child with ASD (Austriaco et al., 2019)

Overload of sensory information, the break in the child’s normal routine, and inconsistency of the visit

Hurdles to receiving quality medical care for children with ASD

Improving the training of our physicians will make them more comfortable treating children with autism, and it has the potential to improve the quality of care children with autism receive.

METHODS

Initial Survey

• Level of Training
  • Level of comfort
  • Perception of knowledge

Pretest:

• KCAHW Questionnaire: 19 Questions

ACT Online Module

• Module 1: Case A
• Module 2: Case A
• Module 3: Case B

Posttest:

• Same KCAHW Questionnaire

Exit Survey

• Level of comfort
• Perception of Knowledge

EVALUATION PLAN

• Subjects: 3rd and 4th year medical students and pediatric residents at East Carolina University

• Data Collected via Surveys and Knowledge about Childhood Autism Among Health Workers (KCAHW) Questionnaire (Bakare et al., 2008): demographics (age, year in program/medical school), level of training, comfort and perception of baseline knowledge from the initial survey, KCAHW Questionnaire pretest score, comfort level and perception of knowledge from the exit survey, and the posttest score

• Descriptive statistics: identify the trends in pretest and posttest questionnaire scores

• Correlation analyses between:
  o level of training indicated on the initial survey and performance on the pretest
  o year of medical school/residency and performance on the pretest
  o performance on pretest and posttest
  o level of comfort before and after the modules
  o students’ perception of knowledge and results on the KCAHW Questionnaire pretest and posttest

POTENTIAL IMPACT

• Better prepare future physicians to identify and treat children with autism spectrum disorder

• Lay the foundation for long-term educational interventions in medical education

Medical students and residents receive adequate training in medical school and residency programs

Feel comfortable and prepared to treat a child with ASD

Physicians anticipate and seek to address the specific challenges for children with ASD (sensory overload, break in routine, etc.)

Children with ASD receive quality medical care

REFERENCES
