Brief Trauma Symptom Screening for Youth in Residential Care

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INTRODUCTION

Trauma screening is an important element for providing trauma-informed services to youth in residential programs1,2. Lack of time and resources may deter clinicians from conducting trauma screening at intake2,3. Screening instruments that are less time consuming, less expensive, less invasive4, could be used to quickly detect5 the possibility of trauma symptoms and inform the need for further assessment.

Purpose

The Brief Trauma Symptom Screen for Youth (BTSSY) was created by adapting the Primary Care Posttraumatic Stress Disorder (PC - PTSD) Screen6, and testing it to determine utility for screening trauma symptoms in youth at intake into residential programs.

METHOD

Participants (N = 572)

- Sex: 59% male | 41% female
- Age: Mean = 14.3 years (10 – 18 years)
- Race: 79% Caucasian, 7% African American, 7% Multi-racial, 5% Hispanic, 1% American Indian, 1% Asian.
- Placement: 52% Residential | 48% Community
- Clinical Diagnosis: 56% externalizing, 30% internalizing, 11% PTSD.
- Clinical Groups: 33% Typically developing (TD), 56% Clinical needs without PTSD (CC-), 11% Clinical needs with PTSD (CC+).

Data were collected from youth at the initial research visit of a larger study. Parent permission and youth assent were obtained for all participants. Youth were compensated for their involvement in the study. The procedures were approved by the Institutional Review Board of the Boys Town National Research Hospital.

Measures

- Strength and Difficulties Questionnaire7 (SDQ; N = 572) was used to gather self-report information of emotional and conduct problems.
- Childhood Trauma Questionnaire8 (CTQ; N = 572) was used to gather self-report history of physical, emotional, and sexual abuse and physical and emotional neglect.
- UCLA Posttraumatic Stress Disorder – Reaction Index8 (PTSD – RI; n = 283) was used to gather self-report of multiple aspects of traumatic experiences in youth as well as PTSD symptoms.
- The Brief Trauma Symptom Screen for Youth (BTSSY) was used to screen trauma symptoms.

RESULTS

Reliability of the BTSSY

- Confirmatory Factor Analysis indicated acceptable model fit for the one-factor solution.
- Internal consistency was good (Cronbach’s α = .80).

Validity of the BTSSY

- Psychopathology: Stronger correlation with emotional problems than conduct problems.
- Maltreatment: Stronger correlations with abuse than neglect. Stronger correlations between maltreatment and BTSSY scores for youth in residential placement compared to youth living at home.
- Convergent Validity: Correlations with PTSD – RI Total score and subscales (re-experience, avoidance, arousal) indicated convergent validity.

Detecting a Diagnosis of PTSD

- A cut-score of three detected youth with and without PTSD with 75% accuracy, sensitivity = 71%, specificity = 79%.

Group Comparisons

- Large difference between CC+ (m = 5.4) and TD (m = 1.2), moderate difference between CC+ and CC- (m = 2.2), and small difference between CC- and TD.
- Girls (m = 2.9) had higher scores than boys (m = 1.7).
- Residential youth (m = 2.8) had higher scores than youth living at home (m = 1.6).

DISCUSSION

The BTSSY was quick and easy to use. BTSSY scores had good reliability and validity, and differentiated youth based on clinical needs and placement status. BTSSY scores above three were fairly accurate (75%) at detecting a diagnosis of PTSD made by a psychiatrist. The BTSSY was designed to inform the need for additional trauma assessment, but does not have the accuracy to diagnose PTSD.

FUTURE DIRECTIONS

Further testing of the BTSSY is needed with youth at intake into residential care. Mixed methods research could include input from clinicians on their views of using the BTSSY to screen for trauma symptoms, and if it is being used to recommend further trauma assessment.

REFERENCES

See Handout
Since 1917 Boys Town has been striving to help improve the way America cares for children and families. Boys Town provides a variety of services that reach more than 500,000 children and families across the United States each year. As part of Boys Town’s research history, the Boys Town National Research Hospital was established in 1977 and offers a broad range of research and clinical services. Two of the Boys Town Research Centers, the Center for Neurobehavioral Research and the Youth and Family Translational Center, were involved in this study.

Center for Neurobehavioral Research
The Center for Neurobehavioral Research (CNR) conducts research to improve the care of children through a better understanding of the neurobiology of mental health. The CNR has three interlocking research goals: 1) determining the dysfunction in specific neuro-cognitive systems that underpin different forms of impaired mental health; 2) using fMRI and behavioral biomarkers developed under Goal 1 to predict treatment response; and 3) determining the efficacy of novel interventions on forms of dysfunction associated with disruptions in mental health.

Youth and Family Translational Research Center
The Translational Research Center (TRC) links Boys Town’s 100+ year service history with expertise in research. The TRC gathers ideas from those involved in the services to inform research and then research provides results back in a way that can be used in practice. The TRC conducts and disseminates applied research and provides clinical data support to promote Boys Town’s Mission and advance knowledge and practice in child and family science. Goals include guiding the development, evaluation, implementation, and dissemination of evidence-based interventions for preventing and reducing social and behavioral problems in children and families, as well as promoting their positive development on a large scale to promote public health.

References