

Adverse Childhood Experiences and Urinary Incontinence in Elementary School Aged Children

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Purpose

The purpose of this project is to determine if there is an association between high ACEs scores and urinary incontinence in childhood.

Background

- Adverse Childhood Experiences (ACEs) in childhood have an impact on health throughout the lifespan (Filletti et al., 1999; Hughes et al., 2017).
- ACEs range from physical and mental abuse, substance abuse in the home, parental separation or loss, financial instability, acute illness or injury, witnessing violence in the home or community, and incarceration of family members (Hughes et al., 2017).
- ACE exposures or experiences during the ages of 0-18 can effect the child's physical and mental development (Filletti et al., 1999; Hughes et al., 2017).
- Chronic stressors cause prolonged activation of the body's response and can result in long term damage to various body systems (Filletti et al., 1999; Hughes et al., 2017).
- In a 2016 study by Park et al. found that a positive ACEs score was correlated with the severity of IBS symptoms (Park et al., 2016).
- Urinary incontinence is known to be secondary to stress in many situations (Lai et al., 2015).

The CYAACE-Q questionnaire is a well validated, reliable tool used for ACEs screening.

CYA ACE-Q questionnaire

- Patients with a score of 4 or more are considered + for ACEs
 - Patients with a score of 3 with symptoms are also considered + for ACEs
- Symptoms include, but are not limited to:
- nocturnal enuresis
 - constipation
 - depression
 - anxiety
 - school failure
 - weight changes

Methods

Study Design

Retrospective Chart Review

Setting

Outpatient Pediatric Urology Clinic

Study Duration

Five months

Study Population

Children aged 6-11 years

New patients presenting with urinary incontinence

ICD-10 code 39.81

IRB

UTHSC Institutional Review Board has deemed the project as exempt.

Inclusion criteria:

- English speaking
- Children ages 6-11 years
- Presenting to the urology outpatient office for an initial visit
- Primary diagnosis of urinary incontinence

Exclusion Criteria:

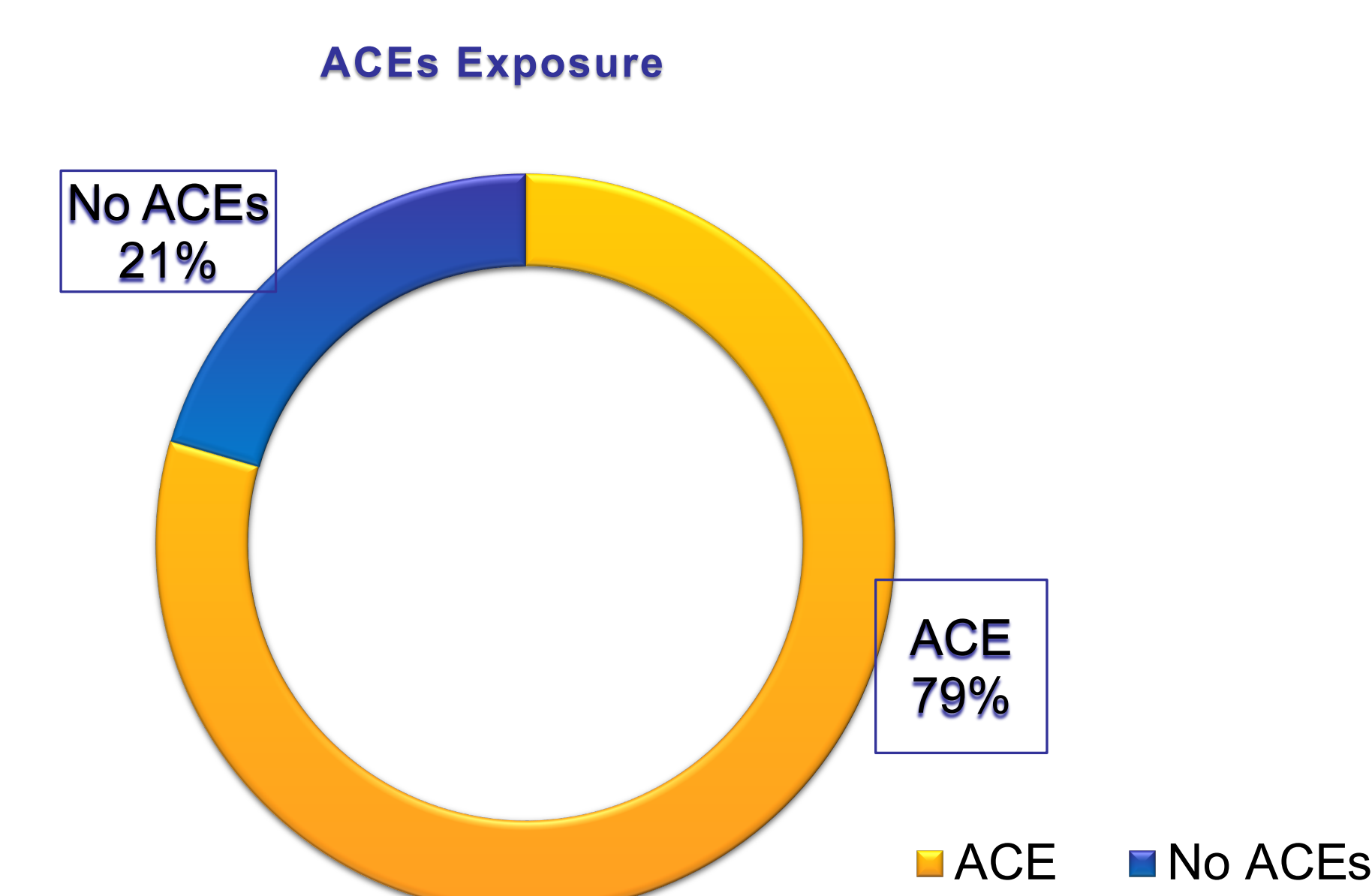
- Chronic conditions such as spina bifida, cerebral palsy, severe autism, etc.

Charts were reviewed for:

- Documentation of individual or family risk factors for ACEs exposure
- Community risk factors for ACEs exposures
- Documents where no risk factors were included

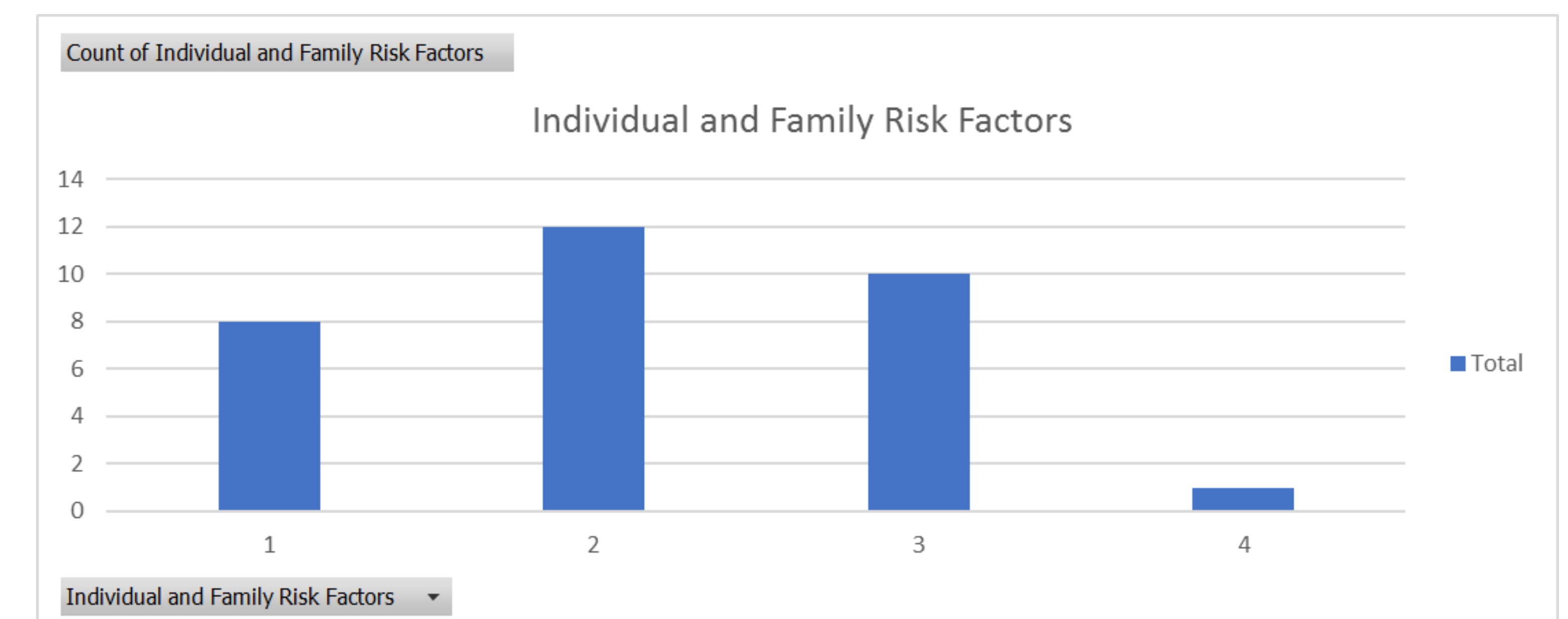
Results

Thirty-nine patients were identified. No community risk factors were documented in any of the patients. One or more individual or family risk factors were documented in 79% of the patients.



Results

Of those exposed to ACEs the majority of children scored >1



Implications for Practice

- This chart review indicates that a significant percentage of pediatric, school-aged patients presenting with urinary incontinence have exposure to ACEs.
- A formal assessment for ACEs at the time of initial urology visit would be helpful to identify those at highest risk.

References

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