Improved Screening for Early Detection of Emotional Disturbance in Children and Adolescents by Performing Universal Screenings for Adverse Childhood Experiences (ACEs) and Anxiety: A Evidenced-based Project

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# Background/Purpose

**Problem**: Approximately 7.1 % of children in the US are diagnosed with anxiety (Baxter et al, 2014). However, primary care providers do not routinely screen for anxiety. Early detection of anxiety may reduce other mental illness in adulthood (American Academy of Pediatrics (AAP), 2021; Walter et al., 2020).

**Purpose**: Implement a new universal anxiety screening protocol for early detection of anxiety and anxiety risk factors for children at an urban pediatric clinic.

#### PICOT:

- Population: children and adolescents ages 4 to17 years old Intervention: new universal screening protocol for anxiety and adverse childhood experiences (ACEs)
- Comparison: pre- and post-implementation number of patients screened for anxiety, ACEs
- Outcomes: 90% increase in the number of patients screened for anxiety and/or ACEs and increase in the number of patients referred to behavioral health (BH) services
- Time: Three months

**Clinical Question**: During a three-month period, will implementing a new universal screening protocol for ACEs and anxiety for children and adolescents ages 4 to 17 years increase the number of pediatric patients screened, diagnosed, and referred to behavioral health services for anxiety and anxiety-related disorders compared to pre-implementation numbers?

# Available Knowledge

- Used 27 Level-1 and level-2 studies (John Hopkins, n.d.)
- Clinical guidelines of the AAP & the American Academy of Child and Adolescent Psychiatry (AAP, 2020; Walter et al, 2020).
- National objectives established by US Department of Health and Human Services (HHS), *Healthy People 2030* (HHS, n.d.).

# Model / Framework

- Lewin's Theory of Change: used to implement changes to the current screening protocol for anxiety (Wojciechowski et al., 2016).
- Iowa Nursing Model: used an iterative approach to integrate scholarly information and site specific data to improve early diagnosis and treatment of anxiety and anxiety-related disorders (Titler et al., 2001).

# Methods

- **Aim**: Increase the number of patients screened and treated for anxiety by 90 % compared to a pre-implementation baseline.
- Time frame: May-August 2022

30.0%

20.0%

10.0%

0.0%

00.0%

90.0%

80.0%

70.0%

60.0%

50.0%

40.0%

30.0%

20.0%

10.0%

0.0%

Staff increased

understanding of

new screening

protocol

- Ethical Consideration: No human subjects
- Exclusion criteria: Already receiving treatment for anxiety



Non-Hispanic

Black

Figure 2. Comparison of Key Project Measures

Documentation for Documentation for

completed anxiety & BH referrals within

ACE screens

48 hours

Baseline Implementation

Baseline

Non-Hispanic

White

Patient ELL with

referrals to site

PMHNP or outside

BH specialist

Ave exam time >20

Implementation Anxiety Dx

Public ins

# Additional evaluations Psychotherapy medications Offsite BH specialist Conclusions Anxiety screening tools combined with use of the DSM-5 criteria can be incorporated into the primary care setting to diagnose for anxiety.

 Consider ADHD, asthma, allergies, eczema, sleep disturbance, obesity, and the number of ACEs as anxiety triggers.

Discussion

Screening and direct interviews using DSM-5 criteria resulted

in diagnosis and treatment for 15 patients (24%) of subjects.

Approximately 60% of patients diagnosed with anxiety were

also had attention deficit/hyperactivity disorder (ADHD),

to patients in the baseline group.

Proposed dissemination to Journal of DNP.

ages 16-17 years and 66% of children diagnosed with anxiety

asthma, allergies, eczema, sleep disturbance, or were obese. The number of patient' screened increased by 100% compared

The timeframe for the study limited the number of subjects.

# **Implications for Practice**

Anxiety screening in children helps patients & their families become more aware of anxiety and triggers, helps reduce the overall number of undiagnosed children, and helps reduce future healthcare costs by addressing mental illness early in a person's life.

- Utilization of an onsite BH specialist ensures continuity of care. DNP Essentials - Integrates use of evidence-based research, interprofessional collaborations, leadership, nursing models, technology, population health, & advocacy (American Association of Colleges of Nursing, 2006).
- Time needed to score and discuss anxiety questionnaires would need to be factored into the length of healthcare visits.

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