

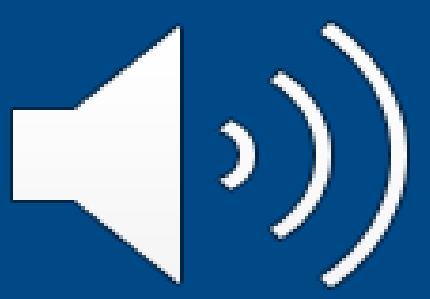
The Transitional Epigenetics of Caregiver Anxiety to Pediatric Anxiety

NRS 222B/242B: Research Quality Improvement and Evidence Based Practice and Implementation Science for Clinicians

UC DAVIS
HEALTH

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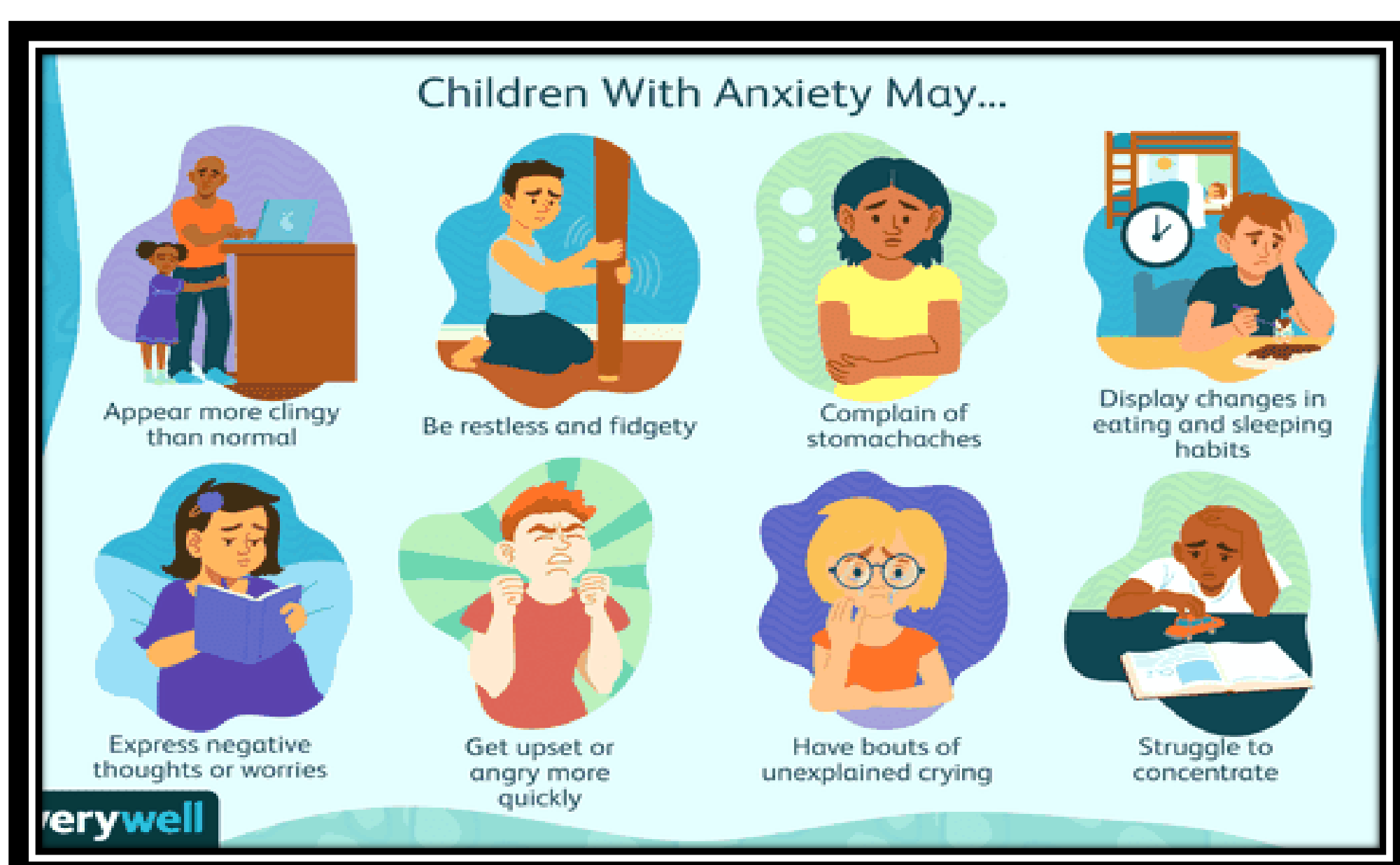
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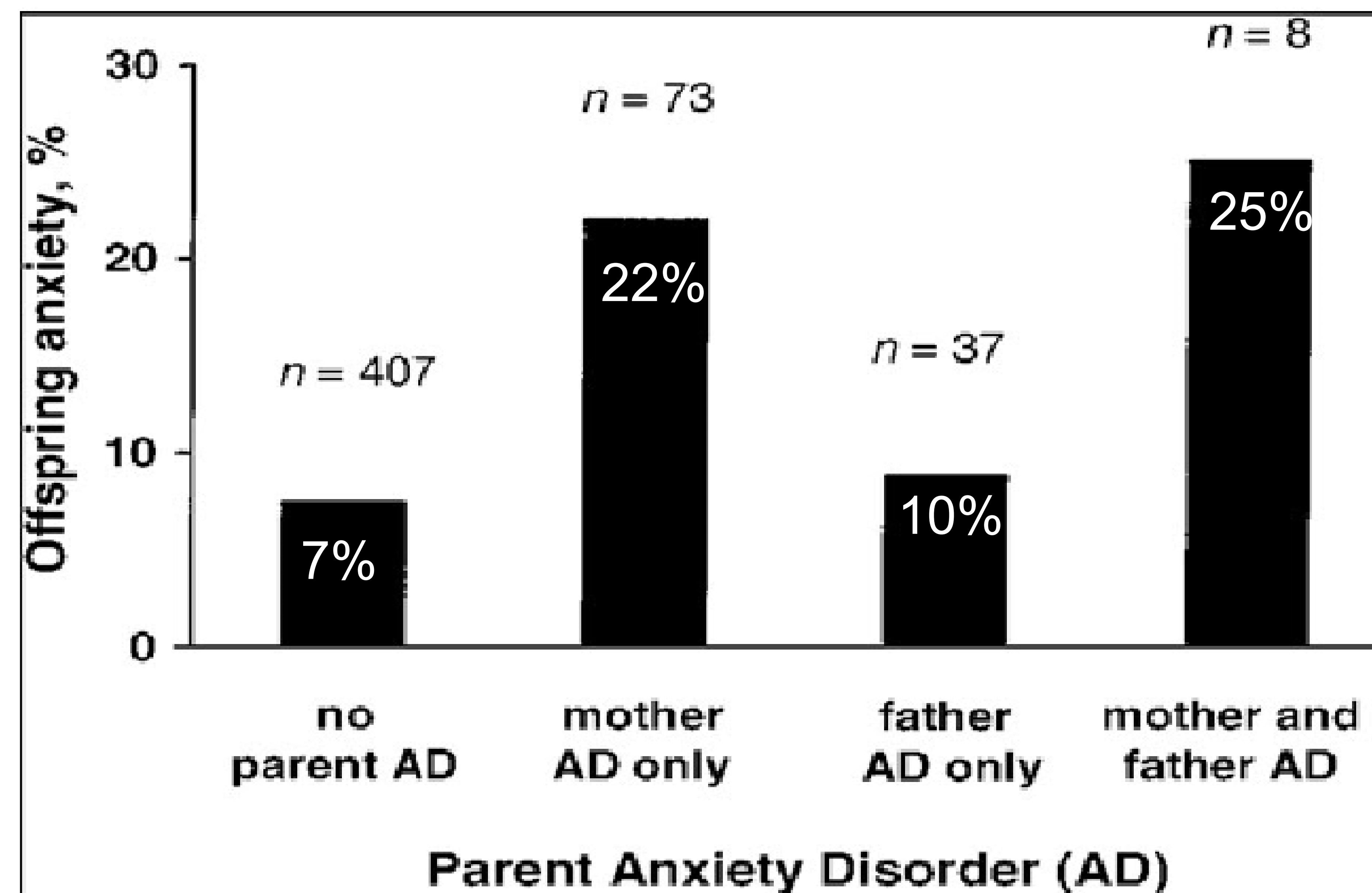
Introduction

- Pediatric individuals with anxiety represent a rising population of patient care, as *Archives of Pediatrics & Adolescent Medicine* identified 25% of Americans will meet the criteria for an anxiety disorder with earliest manifestation being 11 years of age. This was further supported by the CDC, which found 7.1% of children aged 3-17 to have a diagnosed anxiety disorder.
- Anxiety among pediatrics can be shown as school absenteeism and poor academic performance, which can transition to functional impairment, economic burden, and psychiatric conditions.
- Generalized Anxiety Disorders in children are determined by the DSM criteria, with general focus of “excessive anxiety and worry” most days of week for different environments of life.
- Due to the implications of untreated mental health disorders in children, there is recognition to address the why which has led to a focus of environmental, behavioral, and/or biological aspects transmitted from a primary caregiver that lead to the development of early anxious traits.
- Evidence from literature reviews are to both explore a causative relationship and increase medical provider awareness of common childhood anxiety disorders for improved clinical care for the pediatric population to reduce the future retrogression of mental health for both individuals and society.



PICO QUESTION

Are pediatrics (age 17 and under) (P), who have at least one primary caregiver with a diagnosed anxiety disorder (I) compared to those without anxiety (C), at an increased risk for developing an anxiety disorder during their early lifetime (O)?



Journal of
Abnormal Child
Psychology.

Fig. 2.
The relationship
between parent
and offspring
anxiety disorder
status.

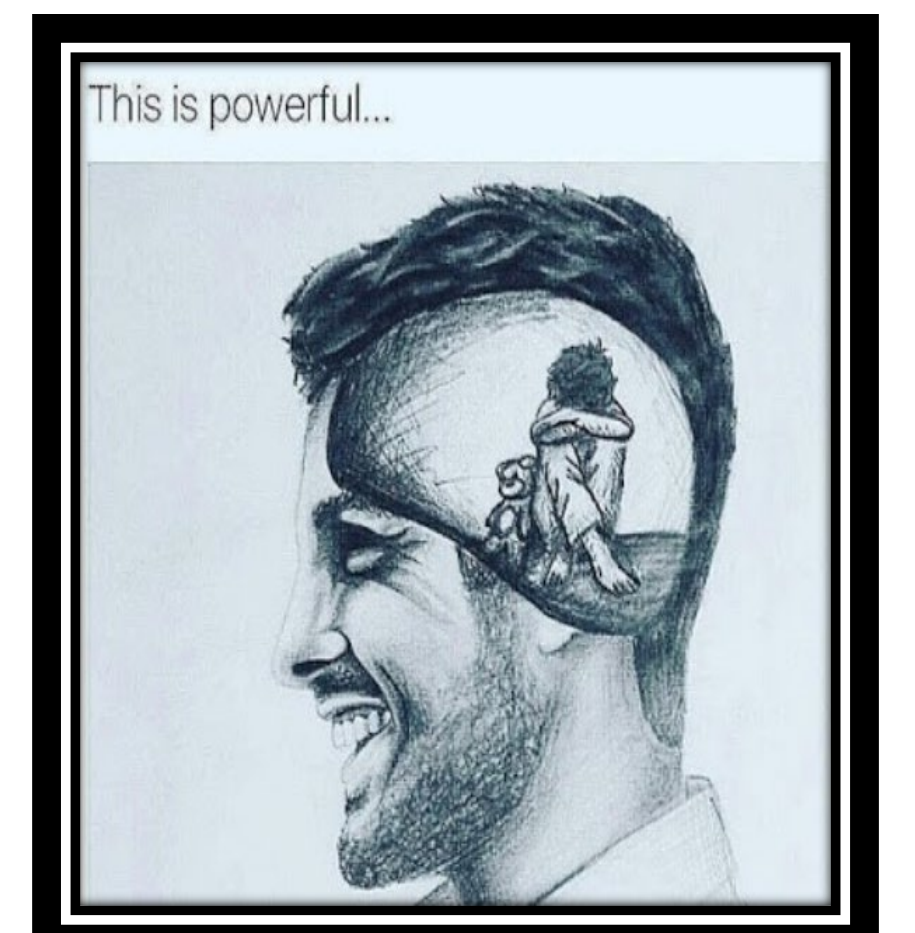
Results

- Offspring of parents with an anxiety disorder were significantly more likely to have anxiety and depressive disorders. Of those offspring, risk for anxiety were higher than for depressive disorders. In addition, those offspring were at increased risk for separation anxiety, specific phobia, and GAD but not social anxiety disorder or panic disorder.
- While prenatal anxiety exposure does not cause offspring any internalizing problems, postnatal anxiety exposure may be related to concurrent offspring emotional problems associated with anxiety and depression through non genetic and environmental pathways such as modeling process and social learning.
- Harsh punitive parenting, may contribute to social anxiety in adolescence.
- Offspring of depressed and anxious patients are at very high risk of a mood and/or anxiety disorder themselves. Parental early onset, having 2 affected parents, female gender, and family functioning are important additional markers that can be used in clinical practice to identify those offspring at greatest risk.

Acknowledgements / Reference (See next slide)

Method

- Systematic search for available research studies using online Google Scholar, PubMed, and CINAHL
- Search terms: offspring anxiety, anxiety disorder, mood, parental, families, generational, children, adolescence, transmission, parenting, parents with anxiety, genetics
- Screened 415 articles and included 17 literatures that focus on either genetic or environmental influences on offspring's anxiety disorder
- Inclusion criteria: Available in English, pediatric population (age 17 and under), primary caregivers/parents clinically diagnosed with anxiety disorder or depression
- Exclusion criteria: Full-text not available, not published in English



Conclusions

We should identify pediatric anxiety disorders early and implement intervention strategies to help mitigate mental health disease from progressing.

- **Macquarie University in Sydney Australia:** Parents who participated in a six-session patient education program had children who showed a significantly decreased risk of anxiety and anxiety related disorders at 12 months as compared to the control group.
- **Early Therapy Works:** Clinical trials tested clinician-facilitated discussions separately with children, parents, and the family unit. Study showed that therapy resulted in a significant improvement in the mental well-being of both children and parents at 1 year, and 2.5 years post intervention.

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