

Evaluating the Effectiveness of a Community Partnership to Raise Toxic Stress Awareness in Early Childhood



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Problem

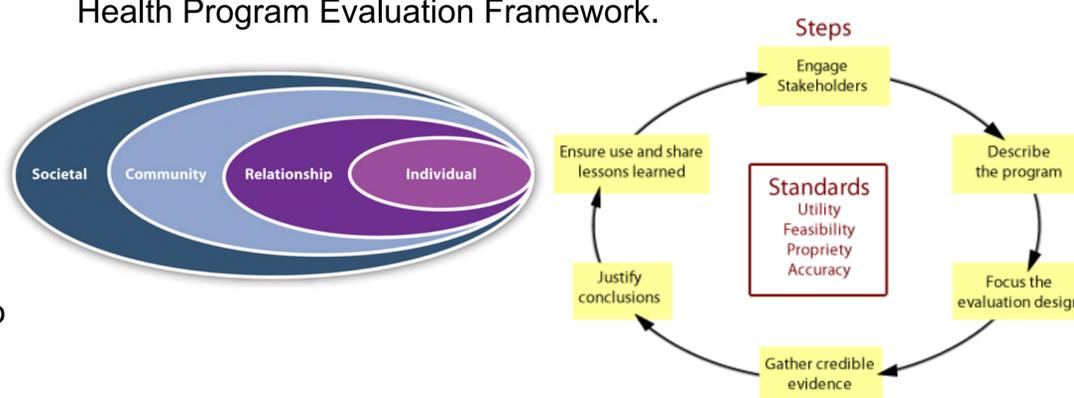
- ❖ The American Academy of Nursing has listed the reduction of toxic stress associated with adverse childhood experiences (ACEs) as a top priority for improving the health of the population (Mason & Cox, 2014)
- ❖ Exposure to ACEs or trauma in childhood places children at higher risk for developing both short-term and long-term negative physical and psychological health outcomes (Horner, 2015)
- ❖ Research has shown that children who have protective factors that promote resilience to such stress do not experience negative consequences (CDC Harvard, 2017)

Key Concepts

Toxic stress: the prolonged activation of stress response systems in the absence of protective relationships
 Resilience: the ability to overcome serious hardship, while others do not

Evaluation Framework

The evaluation process uses the Social Ecological Model (SEM) guided by the Center for Disease Control (CDC) Six-Step Public Health Program Evaluation Framework.



Methodology

- ❖ Staff received training in developmental assessment using the Ages & Stages Questionnaires with emphasis on social emotional development (ASQ-SE)
- ❖ Resources created to ensure continuity of prevention utilizing social media resources
- ❖ Families at risk met with the social worker to develop individual plans
- ❖ Learning activities designed at all 4 levels of the SEM with emphasis on promoting social emotional development and resiliency

Purpose

Share the evaluation of the effectiveness of a community partnership whose aims are to:

1. Raise awareness of toxic stress in early childhood
2. Increase resilience & protective factors in children and families

Setting

- ❖ The Early Childhood Council and the West Haven Child Development Center, designated by the American Academy of Pediatrics (AAP) as a promising medical home, are located in a suburban city in northeastern United States
- ❖ This multi-strategy toxic stress awareness intervention implemented August 2016 services approximately 130 children ages 2-5 years of primarily low or moderate income working families from culturally diverse backgrounds
- ❖ The team consists of a Pediatric Nurse Practitioner (PNP) consultant, the executive director, a school nurse, a social worker, staff, teachers, families and interprofessional university students

Outcomes

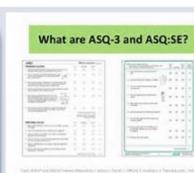
Individual Child



n=130 preschool children 3-6yrs: n=65 girls, n= 65

completed both *Feeling Buddies* and ASQ activities including emergent literacy program and identifying emotion exercises

Relational Family



75 completed ASQ SE questionnaires in February & May 2017 (n=41 girls, 34 boys) (57% response rate, total n=130)

#children	February	May	Action
n=63	Below cutoff	Below cutoff	Routine
n=2	Below cutoff	close to cutoff	enhanced
n=2	Below cutoff	above cutoff	Further assessment
n=4	close to cutoff	Below cutoff	enhanced
n=4	above cutoff	Below cutoff	Further assessment

• One child received mental health referral prior to ASQ SE assessment

Community Staff



Toxic Stress Awareness Workshop - Pre & Post Test

ASQ & ASQ SE Competency Training all staff

The Brain Architecture Game

• This tabletop board game experience engaged staff in understanding the science of early brain development—what promotes it, what derails it, and what are the consequences for society

Societal Community



A Multi-Professional Approach to Developing Strategies to Address Toxic Stress in Children 0-5

Held May 5, 2017

- Conference planning team
- Conference attended by 127 community members, families, staff, and professionals
- Overall program & speaker evaluations ranged 4.5-5.0 on 5 point Likert scale
- CEUs provided by Yale University School of Nursing



Evaluation

Indicators of success evidenced against the performance standards of utility, feasibility, propriety & accuracy include:

- ❖ parent and staff surveys, focus groups with key informants
- ❖ curricular changes
- ❖ analyses of children's stories and drawings
- ❖ ASQ-SE Questionnaires administered at recommended intervals to identify children at risk

References

Center for the Developing Child Harvard University. (2017). *Toxic Stress*. Retrieved from <http://developingchild.harvard.edu/science/key-concepts/toxic-stress>

Horner, G. (2015). Childhood trauma exposure and toxic stress: What the PNP needs to know. *Journal of Pediatric Health Care*, 29, (2), 191-198

Mason, D.J. & Cox, K. (2014). Toxic stress in childhood: Why we all should be concerned. *Nursing Outlook*, 62, (6), 382-383

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