**Background**

- Toxic stress results from exposure to extreme stressors in early childhood, eg. poverty, violence, parental mental illness.\(^1\)
- Persistent elevation of stress response system can cause physiological disruptions leading to poor long-term health outcomes eg. obesity, cardiac disease, diabetes & mental illness.\(^1\)
- Supportive caregiving can buffer against toxic stress, but specific caregiving patterns that are most protective remain poorly understood.\(^2\)
- A caregiver’s past experiences can also affect maternal-child relationship, but impact on toxic stress response in children is unknown.\(^2\)

**Study Aims**

- To describe & examine relationships among past maternal experiences, current caregiving patterns & children’s indicators of a toxic stress response in a multiethnic, urban sample of maternal-child dyads.

**Ecobiodevelopmental Model\(^1\)**

- Explains link between early childhood adversity & lifelong health.
- Child’s biology combines with the early social environment to influence long-term health and development.

**Methods (Cont.)**

- Visits conducted in participants' home, local library, or university laboratory
- Preliminary analysis: Small sample size (n=54), goal to describe sample (univariate statistics) & determine effect sizes (Pearson correlations) for subsequent studies. Descriptive analyses for select variables are reported.

**Sample Demographics**

<table>
<thead>
<tr>
<th>Mother</th>
<th>Age (years)</th>
<th>M 26.7 (± 3.37), Range 20-34</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race</td>
<td>White</td>
<td>N=14 (25.9%)</td>
</tr>
<tr>
<td></td>
<td>Black</td>
<td>N=26 (48.1%)</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>N=14 (25.9%)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td>M 1st year college, Range 10th grade to 4th year college</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child</th>
<th>Age (years)</th>
<th>M 6.68 (± 2.08), Range 4-9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender (female)</td>
<td>N=25 (46.3%)</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>M 1st grade, Range Pre-K to 5th grade</td>
<td></td>
</tr>
</tbody>
</table>

- Public assistance usage:
  - N=49 (90.7%) Medicaid or CHIP
  - N=32 (59.3%) SNAP

**Methods**

- Descriptive, cross-sectional study of maternal-child dyads living in socioeconomically disadvantaged neighborhoods in Connecticut, USA
- Dyads included if child age 4 to 9 years & mother has regular contact with child

**Preliminary Findings**

**Maternal History of Childhood Trauma**

- CTQ Scale\(^4\) Meets DSM-V Criteria
- PTSD Diagnosis: N=14 (25.6%)

<table>
<thead>
<tr>
<th>Measure (Possible Range)</th>
<th>Mean Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supportive Parenting</td>
<td>47.02</td>
</tr>
<tr>
<td>Hostile Parenting</td>
<td>14.7</td>
</tr>
<tr>
<td>Reflective Functioning-Interest</td>
<td>34.09 (±5.72)</td>
</tr>
<tr>
<td>Racial Socialization</td>
<td>45.37 (±5.22)</td>
</tr>
</tbody>
</table>

**Current Caregiving Patterns**

**Correlations with Child BMI Percentile**

**Discussions & Next Steps**

- Sample children have high rates of obesity, asthma, allergies & learning problems compared to the US population.
- Mothers in the sample report high rates of childhood trauma and PTSD symptoms, but also demonstrate high levels of protective caregiving strategies.
- Ongoing analyses will describe child stress biomarkers & further explore correlations among maternal characteristics and child outcomes.
- Variations by age, gender & race/ethnicity will also be explored.

**Conclusions & Implications**

- Study will lay important groundwork for future studies that may lead to development of interventions & policies to promote health & reduce disparities in vulnerable families at risk for toxic stress.

**References**


**Acknowledgements**

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