Stereotyping in Child Abuse Evaluations

Lenora Olson, PhD
Lawrence Cook, PhD, MStat
Kristine Campbell, MD, Ms
Heather Keenan, MDCM, PhD

University of Utah Department of Pediatrics
Disclosure

I have nothing to disclose
BACKGROUND
Child Abuse & Neglect

- Serious national concern

- Annually,
  - reports filed on 3.7 million children
  - Almost 25% are substantiated
  - Physical abuse is a leading type

NCANDS, Child Maltreatment 2011
Disparities - Health Care

• Clinical uncertainty, healthcare provider bias and stereotyping*

• Pediatrics is no exception

• Child abuse and neglect
  – Infants with missed diagnosis of AHT were more likely to be from intact white families**

*Institute of Medicine, Unequal Treatment, 2003
** Jenny et. al, JAMA 1999
Stereotype & Implicit Bias

- Positive and negative beliefs automatically accessed
- Health care professionals have implicit bias and stereotype that may affect how health care is provided
Study Objective

Understand how child and family characteristics (child’s social ecology) assessed by child abuse pediatricians may form stereotypes and affect medical diagnosis.
METHODS
Child Abuse Consultation Notes

- 739 child abuse cases for physical injury
  - 36 child abuse pediatricians
  - 28 child abuse programs

- Cases of
  - TBI
  - Skull fractures
  - Extremity Fractures
Analysis

• Content analysis

• Operational definitions of risk factors and social cues
  – 15 Codes a priori (risk factors)
  – 26 Codes de novo (social cues)
# Examples-A priori risk factors

<table>
<thead>
<tr>
<th>Name</th>
<th>Example from consultation note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Birth Weight</td>
<td><em>The patient is an ex-premie</em></td>
</tr>
<tr>
<td>Social Isolation</td>
<td><em>Mother has no close family or social supports</em></td>
</tr>
<tr>
<td>Poverty</td>
<td><em>Mom receives food stamps, WIC, and Medicaid</em></td>
</tr>
<tr>
<td>Psychiatric Illness</td>
<td><em>Mom has bipolar disorder treated with medications</em></td>
</tr>
<tr>
<td>Young Maternal Age</td>
<td><em>Mom is 18 years old</em></td>
</tr>
<tr>
<td>Re-ordered Family</td>
<td><em>Lives with mom, mom's boyfriend</em></td>
</tr>
<tr>
<td>IPV Current Family</td>
<td><em>Mother states father attends Domestic Violence Classes daily</em></td>
</tr>
</tbody>
</table>
## Examples—de novo social cues

<table>
<thead>
<tr>
<th>Name</th>
<th>Example from consultation notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Issues</td>
<td>Dad has been in jail for B&amp;E in past</td>
</tr>
<tr>
<td>Violence Hx</td>
<td>Father says he was abused as a child</td>
</tr>
<tr>
<td>Risky Family</td>
<td>Mom also has an unstable living environment, moving from place to place</td>
</tr>
<tr>
<td>Negative Description</td>
<td>He often got frustrated with the baby's crying and would sometimes yell, &quot;Shut the f--- up&quot;, or, &quot;Stop crying you stupid baby&quot;.</td>
</tr>
<tr>
<td>Care Giver</td>
<td>Mom is planning to try to pick up patient differently since learning of her fractures.</td>
</tr>
<tr>
<td>Competent Parenting</td>
<td>Both parents are scientists working at different research institutes</td>
</tr>
<tr>
<td>Thoughtful Childcare</td>
<td>The parents have arranged schedules so that they do not need child care</td>
</tr>
</tbody>
</table>
Correspondence Analysis

• Explore how the risk factors and social cues associate together

• Categorical variables

• Two dimensional graphs

• Three dimensions
RESULTS
## Sample (N=739)

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Number</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Injury Type</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TBI</td>
<td>241</td>
<td>32.6%</td>
</tr>
<tr>
<td>Skull Fracture</td>
<td>207</td>
<td>28.0%</td>
</tr>
<tr>
<td>Extremity Fracture</td>
<td>291</td>
<td>39.4%</td>
</tr>
<tr>
<td><strong>Males</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>433</td>
<td>58.6%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Caucasian</td>
<td>421</td>
<td>57.0%</td>
</tr>
<tr>
<td>Ethnicity-Hispanic</td>
<td>159</td>
<td>21.5%</td>
</tr>
<tr>
<td><strong>Public Insurance</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>509</td>
<td>68.9%</td>
</tr>
</tbody>
</table>
Cues

• Total = 3,438
• Average = 4.7
• Median = 4
GRAPHICAL REPRESENTATIONS
LEGEND

- Probable Abuse
- Indeterminate
- Probable Not Abuse
DIMENSION 1 BY DIMENSION 2

- Probable Abuse
- Indeterminate
- Probable Not Abuse
DIMENSION 1 BY DIMENSION 2

NEGATIVE DESCRIPTION OF CAREGIVERS-AT-RISK FAMILY

- Probable Abuse
- Indeterminate
- Probable Not Abuse
DIMENSION 1 BY DIMENSION 3

Positive Descr Child
Positive Descr Family
Professional Parents

Changing Hx
Incompetent Parent
Neg Descr Male CG

Re-ordered
Legal
Isolation
Delayed Care
Blameshifting

IPV
Psychiatric
Risky family

Violence Hx

Sub Abuse
Low Educ
Poverty

LBW
Partnered Biodad

Probable Abuse
Indeterminate
Probable Not Abuse
Conclusions

• Two dimensions

• Cues cluster possibly generating stereotypes

• Social ecology aids in providing family needed resources

• May also bring implicit biases which affect evaluation
Limitations

- Density of cues varied
- Coding variability possible
- Correspondence analysis explores association
- Direction of causality not known
Implications

- Profound effects on child and family
- Unknown effect
- Future studies will explore whether bias is associated with abuse diagnosis
Acknowledgments

NIH/ NIC HD #1RO 1HD061373

Perceptions of Social Risk in Medical Child Abuse Evaluation

Heather Keenan, MDMC, Principal Investigator

SAFE TODAY SAFER TOMORROW

The 2013 National Meeting of the Safe States Alliance & SAVIR
Maltreatment Types

- >75% Neglect
- >15% Physical Abuse
- <10% Sexual Abuse
DIMENSION 2 BY DIMENSION 3

Delayed Care
Re-ordered Family
Incompetent Parent
Blameshifting
Prior Trauma

Probable Abuse
Indeterminate
Probable Not Abuse

+Positive Description Child Professional Parents

Sub Abuse
Mental Health
Sought care
Violence Hx
Social Support