Disparities in the evaluation and referral of children suspected of being abused

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Objectives

• Review the statistics of child abuse
• Understand the scope of the “the problem” with child abuse
• Review factors that may result in racial disparities in child abuse evaluation
• Discuss racial bias and how it can affect medical care
• Review studies that have contributed to the literature on disparities in child abuse evaluation
National Statistics on Child Abuse

- US Department of Health and Human Services
  - The National Child Abuse and Neglect Data System (NCANDS)- operated by The Children’s Bureau
- Center’s for Disease Control and Prevention (CDC)
- The National Incidence Studies (NIS)
Why Do We Care About Child Abuse?

- Social and public health problem in the United States.
- Unfortunately, the reported numbers likely underestimate the number of affected children.
- May be due to underreporting and factors related to the different data sources.

www.cdc.gov
Negative Outcomes of Abuse

• Acute outcomes: death, disease, and injury
• Long-term developmental outcomes:
  – academic problems
  – mood disorders
  – childhood aggression
  – delinquency
  – increased risk for suicide
  – high-risk sexual behavior
  – poor physical health
  – substance abuse
Child Maltreatment Statistics

• During 2013, approximately 679,000 children were confirmed to be victims of maltreatment.
• The overall national child victim rate was 9.1 child victims per 1,000 children in the population.

US Department of Health and Human Services
For FFY 2015, there were nationally 683,000 (rounded) victims of abuse and neglect 9.2 victims per 1,000 children in the population.


<table>
<thead>
<tr>
<th>Year</th>
<th>Reporting States</th>
<th>Child Population of Reporting States</th>
<th>Reported Children Who Received an Investigation or Alternative Response</th>
<th>National Disposition Rate per 1,000 Children</th>
<th>Child Population of all 52 States</th>
<th>National Estimate of Children Who Received an Investigation or Alternative Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>51</td>
<td>73,920,615</td>
<td>3,047,706</td>
<td>41.2</td>
<td>74,783,709</td>
<td>3,081,000</td>
</tr>
<tr>
<td>2012</td>
<td>52</td>
<td>74,546,847</td>
<td>3,171,619</td>
<td>42.5</td>
<td>74,546,847</td>
<td>3,172,000</td>
</tr>
<tr>
<td>2013</td>
<td>52</td>
<td>74,399,539</td>
<td>3,183,535</td>
<td>42.8</td>
<td>74,399,539</td>
<td>3,184,000</td>
</tr>
<tr>
<td>2014</td>
<td>52</td>
<td>74,371,086</td>
<td>3,260,773</td>
<td>43.8</td>
<td>74,371,086</td>
<td>3,261,000</td>
</tr>
<tr>
<td>2015</td>
<td>52</td>
<td>74,382,502</td>
<td>3,358,347</td>
<td>45.1</td>
<td>74,382,502</td>
<td>3,358,000</td>
</tr>
</tbody>
</table>

The number of children is a unique count. The national disposition rate was computed by dividing the number of reported children who received an investigation or alternative response by the child population of reporting states and multiplying by 1,000.

If fewer than 52 states reported data in a given year, the national estimate of children who received an investigation or alternative response was calculated by multiplying the national disposition rate by the child population of all 52 states and dividing by 1,000. The result was rounded to the nearest 1,000. If 52 states reported data in a given year, the number of estimated children who received an investigation or alternative response was calculated by taking the number of reported children who received an investigation or alternative response and rounding it to the nearest 1,000. Because of the rounding rule, the national estimate could have fewer victims than the actual reported number of victims.
Child Fatality Demographics

• For FFY 2015, a nationally estimated 1,670 children died from abuse and neglect at a rate of 2.25 per 100,000 children in the population.

• The youngest children are the most vulnerable to maltreatment.
Child Fatality Demographics

• Three-quarters (74.8%) of all child fatalities were in children younger than 3 years old.

• Children who were younger than 1 year died from maltreatment at a rate of 20.91 per 100,000.

• This is 3 times the fatality rate when compared with children who were older than 1 year old (6.38 per 100,000).
Exhibit 3–F Victims by Age, 2015

The youngest children were the most vulnerable to maltreatment

Based on data from table 3–4.
Child Protective Services Referral Rate

• During 2015, Child Protective Services (CPS) agencies across the nation received an estimated 4.0 million referrals, a 15.5 percent increase since 2011.

• These referrals included approximately 7.2 million children, (53.2 referrals per 1,000 children in the population).
Substantiated cases of child maltreatment

- White 10.6/1,000
- Black 25.2/1,000
- Hispanic 12.6/1,000
- Indian/Alaskan Native 20.1/1,000

Lane et al, 2002
CPS history as a risk factor for future CPS referral

• When provided a history that a child has been referred to CPS in the past, it is important to understand for what reason referrals were made in the past.

• Some research suggests that race and socioeconomic status contribute to the disparities among children and families who are reported to CPS.

• Other research has not found these disparities (Sedlak and Broadhurst 1996).
Factors That May Affect CPS Substantiation

- The definition of abuse across agencies can vary.
- This can limit communication across disciplines:
  - CPS
  - legal
  - medical
  - public health officials
  - researchers
  - Practitioners
  - advocates
Exhibit 2-C Report Sources, 2015

Professionals submitted the majority of referrals that received an investigation or alternative response.

<table>
<thead>
<tr>
<th>Report Sources</th>
<th>Unclassified</th>
<th>Nonprofessionals</th>
<th>Professionals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education Personnel</td>
<td></td>
<td></td>
<td>18.4</td>
</tr>
<tr>
<td>Legal and Law Enforcement Personnel</td>
<td></td>
<td></td>
<td>18.2</td>
</tr>
<tr>
<td>Social Services Personnel</td>
<td></td>
<td></td>
<td>10.9</td>
</tr>
<tr>
<td>Medical Personnel</td>
<td></td>
<td></td>
<td>9.1</td>
</tr>
<tr>
<td>Mental Health Personnel</td>
<td></td>
<td></td>
<td>5.8</td>
</tr>
<tr>
<td>Child Daycare Providers</td>
<td>0.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Foster Care Providers</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parents</td>
<td></td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>Other Relatives</td>
<td></td>
<td>6.8</td>
<td></td>
</tr>
<tr>
<td>Friends and Neighbors</td>
<td></td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>Alleged Victims</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alleged Perpetrators</td>
<td>0.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td>7.8</td>
</tr>
<tr>
<td>Anonymous Sources</td>
<td></td>
<td></td>
<td>7.4</td>
</tr>
<tr>
<td>Unknown</td>
<td>3.1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Percent

Data are from the Child File. Data are from 51 states. States were excluded from this analysis if more than 50 percent of reports were coded as “other” report source or more than 50 percent had an unknown report source.
Factors That May Affect CPS Substantiation

• States with broader definitions for abuse may have higher victim rates than states with narrower definitions.

• There may be variations in the level of evidence required for substantiation.
Racial Influences
Terminology

• **Disproportionality**: The underrepresentation or overrepresentation of a racial or ethnic group compared to its percentage in the total population

• **Disparity**: The unequal outcomes of one racial or ethnic group as compared to outcomes for another racial/ethnic group

• **Families/children of color**: Families or children other than those who are non-Hispanic, White-only (e.g., Black, Hispanic, Native American)
**Child victim rates by race/ethnicity**

Table II-4 displays child victim rates by race/ethnicity for 2010 through 2013.

<table>
<thead>
<tr>
<th>Children’s Race/Ethnicity***</th>
<th>2010 (N=49)</th>
<th>2011 (N=49)</th>
<th>2012 (N=50)</th>
<th>2013 (N=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Indian/Alaska Native</td>
<td>11.2</td>
<td>11.4</td>
<td>12.3</td>
<td>12.4</td>
</tr>
<tr>
<td>Asian</td>
<td>1.9</td>
<td>1.6</td>
<td>1.7</td>
<td>1.7</td>
</tr>
<tr>
<td>Black</td>
<td>14.7</td>
<td>14.3</td>
<td>14.2</td>
<td>14.3</td>
</tr>
<tr>
<td>Native Hawaiian/Other Pacific Islander</td>
<td>9.8</td>
<td>8.4</td>
<td>8.6</td>
<td>7.8</td>
</tr>
<tr>
<td>Hispanic (of any race)</td>
<td>8.6</td>
<td>8.7</td>
<td>8.4</td>
<td>8.4</td>
</tr>
<tr>
<td>White</td>
<td>8.1</td>
<td>7.9</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Two or more races</td>
<td>9.2</td>
<td>9.6</td>
<td>9.9</td>
<td>10.5</td>
</tr>
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* Rates for child victims are per 1,000 children of each racial/ethnic group in the general child population.
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<td>8.4</td>
</tr>
<tr>
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<td>7.9</td>
<td>8.0</td>
<td>8.0</td>
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<td>9.9</td>
<td>10.5</td>
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Racial Disproportionality and Disparity in Child Welfare

The child welfare community has moved from acknowledging the problem of racial and ethnic disproportionality and disparity in the child welfare system to formulating and implementing possible solutions. As jurisdictions and agencies evaluate their systems to identify where and how disproportionality and disparity are occurring, they are seeking changes that show promise for their own populations.

This issue brief explores the prevalence of racial disproportionality and disparity in the child welfare system. It also describes strategies that can assist child welfare administrators, program managers, and policymakers with addressing these issues in general and at specific decision points in the child welfare process (e.g., prevention, reporting, investigation, service provision, out-of-home care, permanency). Examples of State and local initiatives that address disproportionality also are highlighted.

WHAT’S INSIDE
- Prevalence
- Potential explanations
- Strategies to address racial disproportionality and disparities
- Conclusion
- Additional resources
- References

https://www.childwelfare.gov/pubPDFs/racial_disproportionality.pdf

- US Department of Health and Human Services
- Administration for Children and Families
- Children’s Bureau
Prevalence

• A significant amount of research has documented the over-representation of certain racial and ethnic populations in the child welfare system when compared with their representation in the general population (e.g., Summers, 2015; Wells, 2011; Derezotes, Poertner, & Testa, 2004).
Prevalence

• Studies have also shown that racial disparities occur at various, decision points in the child welfare continuum (e.g., Putnam-Hornstein, Needell, King, & Johnson-Motoyama, 2013; Font, 2013; Detlaff et al., 2011).

• Although disproportionality and disparity exist throughout the United States, the extent and the populations affected vary significantly.
• An RDI of 1.0 means a group is represented proportionately to its representation in the general population.
• RDI lower than 1.0 indicates the group is underrepresented.
• For example, an RDI of 2.0 means the group is represented twice its rate in the general population.
• An RDI higher than 1.0 indicates the group is overrepresented

<table>
<thead>
<tr>
<th>Race</th>
<th>% of Total Population</th>
<th>% of General Population</th>
<th>RDI</th>
<th>% of Total Population</th>
<th>% of General Population</th>
<th>RDI</th>
<th>% of Total Population</th>
<th>% of General Population</th>
<th>RDI</th>
<th>% of Total Population</th>
<th>% of General Population</th>
<th>RDI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African-American</td>
<td>13.8%</td>
<td>22.6%</td>
<td>1.6</td>
<td>24.3%</td>
<td>1.8</td>
<td>22.4%</td>
<td>1.6</td>
<td>23.2%</td>
<td>1.7</td>
<td>23.1%</td>
<td>1.7</td>
<td>19.4%</td>
</tr>
<tr>
<td>Native Hawaiian/Other Pacific Islander</td>
<td>0.2%</td>
<td>0.2%</td>
<td>1.0</td>
<td>0.2%</td>
<td>0.9</td>
<td>0.2%</td>
<td>1.1</td>
<td>0.2%</td>
<td>1.2</td>
<td>0.1%</td>
<td>0.6</td>
<td>0.2%</td>
</tr>
<tr>
<td>Hispanic (of Any Race)</td>
<td>24.4%</td>
<td>24.0%</td>
<td>1.0</td>
<td>22.5%</td>
<td>0.9</td>
<td>21.9%</td>
<td>0.9</td>
<td>21.8%</td>
<td>0.9</td>
<td>23.6%</td>
<td>1.0</td>
<td>22.1%</td>
</tr>
<tr>
<td>White</td>
<td>51.9%</td>
<td>46.4%</td>
<td>0.9</td>
<td>43.4%</td>
<td>0.8</td>
<td>46.1%</td>
<td>0.9</td>
<td>45.6%</td>
<td>0.9</td>
<td>43.2%</td>
<td>0.8</td>
<td>48.5%</td>
</tr>
<tr>
<td>Two or More Races</td>
<td>4.1%</td>
<td>4.7%</td>
<td>1.1</td>
<td>6.8%</td>
<td>1.7</td>
<td>6.4%</td>
<td>1.6</td>
<td>6.5%</td>
<td>1.6</td>
<td>7.7%</td>
<td>1.9</td>
<td>8.0%</td>
</tr>
</tbody>
</table>
Underrepresentation in Child Welfare

• Just as some racial and ethnic groups are overrepresented in the child welfare system, other groups, such as Asian and Hispanic children, are underrepresented.

• It is unclear whether underrepresentation is due to a lower occurrence of child maltreatment among those populations—perhaps due to cultural protective factors—or if it is caused by underreporting due to cultural factors (Cheung & LaChapelle, 2011; Maguire-Jack, Lanier, Johnson-Motoyama, Welch, & Dineen, 2015).
Potential Explanations for Overrepresentation

• It is often difficult to determine what particular factors at either the systems or individual case levels had an effect and to what degree.

• Researchers who reviewed 10 years of findings on this topic suggested four possible explanations (Fluke, Harden, Jenkins, & Ruehrdanz, 2011).
Potential Explanations for Overrepresentation

1. **Disproportionate needs** of children and families of color, particularly due to higher rates of poverty

2. Racial bias and discrimination exhibited by **individuals** (e.g., caseworkers, mandated and other reporters)

3. **Child welfare system factors** (e.g., lack of resources for families of color, caseworker characteristics)

4. **Geographic context**, such as the region, State, or neighborhood
Disproportionate Need

• Findings from the first three National Incidence Studies of Child Abuse and Neglect (NIS) found no relationship between race and the incidence of child maltreatment after controlling for poverty and other risk factors (Sedlak & Broadhurst, 1996).

• Instead, incidence of child abuse and neglect was associated with poverty, single parenthood, and other related factors.
Disproportionate and Disparate Need

• However, the most recent NIS (NIS-4) indicated that Black children experience maltreatment at higher rates than White children in several categories of maltreatment (Sedlak, McPherson, & Das, 2010).

• The study’s authors suggest that the findings are at least, in part, a consequence of
  – the greater precision of the NIS-4 estimates
  – partly due to the enlarged gap between Black and White children in economic well-being
A family’s race or ethnicity may affect a variety of child welfare decisions.

Families of color are disproportionately reported for abuse and neglect, and their cases are more likely to be substantiated at investigation than White, non-Hispanic families. (Font et al., 2012; Putnam-Hornstein et al., 2013).
Screening, Investigation, and Assessment

• One study found that, although African-Americans had lower risk scores than Whites, African-Americans were more likely to have their case acted upon, either by service provision or the child’s removal from the home (Rivaux et al., 2011).

www.childwelfare.gov
Child Welfare System Factors

• Certain characteristics of the child welfare system may affect the services.

• The Michigan child welfare system identified several institutional features that negatively impact children and families of color:
  – limited access to court appointed special advocates
  – contracted agencies not providing services in African-American communities (even when required to do so)
  – lack of quality assurance mechanisms that may help identify and correct differential treatment
Racial Bias and Discrimination

• The strong relationship between poverty and maltreatment, however, does not fully explain racial disproportionality and disparity.

• It is also possible that child welfare professionals or others involved with the case or family may knowingly or unknowingly let personal biases affect their decision-making.
Geographic Context

• It is possible that higher-level (e.g. national) data obscure differences that occur at lower levels.

• At the national level in 2013, Hispanic children were slightly underrepresented in foster care (Summers, 2015). However, they were overrepresented in 14 States.
The long term effect of over reporting

• Minority families often fare worse than Caucasians families upon entry into the child welfare system.

• A 6-year longitudinal study in California demonstrated that, compared to Caucasian children, African American children reported to CPS and removed from their homes had a lower likelihood of being reunited with their families or being adopted.

• Hispanic children were also more likely to be left in foster care at rates higher than Caucasian children.
The long term effect of under reporting

• Under reporting is unsafe as well.

• The potential for maltreated pediatric patients who go unnoticed are at significant risk of further severe physical injuries and emotional trauma.

• Appropriate reporting is needed to make sure that children who typically have a low suspicion of being abused, are not left in an unsafe environment.

Cort et. al, 2010
Negative Outcomes of CPS involvement

- Prior CPS involvement with the family is a known risk factor for subsequent CPS involvement.
- Despite the outcome of the case, CPS involvement with the family can impact the mental health of a child in the long run.

Hussey et al. 2005
Effects of Disparities on Medical Care
Racism among the Well Intentioned: Bias without Awareness

• The Social Psychology of Good and Evil
• Edited by Arthur G. Miller, 2016
• Chapter authored by: John Dovidio, Samuel Gaertner, and Adam Pearson

• This chapter aims to illustrate how “good and well-intentioned people can contribute systematically to maintaining and reinforcing disadvantage in society.”
Bias

• noun

• 1. a particular tendency, trend, inclination, feeling, or opinion, especially one that is preconceived or unreasoned

• 2. unreasonably hostile feelings or opinions about a social group; prejudice: accusations of racial bias.
Aversive Racism

• White Americans who sympathize with victims of past injustice, support the principle of racial equality, and regard themselves as non-prejudiced, but at the same time they possess negative feelings and beliefs about blacks or other groups.

Dovidio and Gaertner, 2004
Consequences of Aversive Racism

• “White physicians generally see themselves as non-predjudiced and color blind, but they also harbor negative implicit racial biases toward blacks.”

• “Physician implicit biases predict medical recommendations...in ways independent of explicit racial bias.”
  – Lower quality of coronary care for black patients (Green et al., 2007)
  – Less willingness to prescribe narcotics to ease the pain of black patients (Sabin and Greenwald, 2012)
Implicit Bias

Unlike explicit bias (which reflects the attitudes or beliefs that one endorses at a conscious level), implicit bias is the bias in judgment and/or behavior that results from subtle cognitive processes that often operate at a level below conscious awareness and without intentional control.
• “Thus, even among highly educated individuals in helping professions, who are deeply committed to the welfare of patients and espouse non-predjudice views, implicit biases produce systemic disparities in health care and ultimately contribute to racial disparities in health.”
The Good News

• Although automatic, implicit biases are not completely inflexible: They are malleable to some degree and manifest in ways that are responsive to the perceiver’s motives and environment.

Blair, 2002
As a new Child Abuse Pediatrician...

• It seemed to me that the patients being referred had similar demographics.
• Were biases playing a role in the patients I was seeing?
• I thought I recognized something that nobody else had.
• Little did I know that this topic has come to the attention of more than just myself and numerous studies have been done, though there is still much to learn.
NOTHING NEW HERE
Just to name a few

- Analysis of Missed Cases of Abusive Head Trauma - Jenny et. Al, JAMA 1999
- Racial Differences in the Evaluation of Pediatric Fractures for Physical Abuse – Lane et al, JAMA 2002
- Clinicians’ description of factors influencing their reporting of suspected child abuse: report of the child abuse reporting experience study research group – Jones et al, Pediatrics 2008
- Predicting the decisions of hospital based child protection teams to report to child protection services, police and community welfare services – Benbenishty et al, Child Abuse and Neglect 2014
- The influence of case and professional variables on identification and reporting of physical abuse: A study with medical student – Warner-Rogers et al, Child Abuse and Neglect 1999
- Racial and ethnic disparities: A population-based examination of risk factors for involvement with child protective services – Putnam-Hornstein et al, Child Abuse and Neglect 2013
- Barriers to physician identification and reporting of child abuse – Flaherty et al, Pediatric Annals 2005
• There are still many different ways to look at the same topic.
• Still many questions to be investigated and answered.
Medical Literature Review
Medical Literature Review

• My review of the medical literature supports findings of the other social studies.

• It is suggested that there is a disparity in the CPS referral rate and the rate of child abuse workup between white and minority children.

• There is evidence that suggests that, while there is a racial disparity, the disparity in referral and evaluation rate is heavily influenced by SES, possibly more so than race alone.

• There is also evidence that suggests that there is no racial disparity at all.
Pediatricians decision to report

• Results showed that the decisions of pediatricians regarding reporting to CPS were most commonly based on injury circumstances, familiarity with the family, consultation with others, and previous experience with CPS.

Jones et al, Pediatrics 2008
Variability in Expert Assessment of Child Physical Abuse Likelihood

• Assessment of child abuse likelihood showed “broad variability” between experts (pediatricians with substantial experience with child abuse cases).

• There should be caution when abuse likelihood is determined from a single expert.

• A multidisciplinary and peer reviewed approach is encouraged.

Lindbergh et al, Pediatrics 2008
Investigating Health Disparities and Disproportionality in Child Maltreatment Reporting

• The odds of **African American and Hispanic** pediatric patients in the ED to be reported to CPS were approximately **4 times greater** than the odds of Caucasian pediatric patients.

• Additionally, results demonstrated that pediatric patients from **high poverty neighborhoods** were reported to CPS at roughly **5 times the rate** of pediatric patients from low poverty neighborhoods.
Odds of Referral from the ED

• There is suggestion of an association between emergency department use and patients’ racial/ethnic background.

• African Americans tend to have less private insurance thus, tend to utilize emergency departments for routine care more than Caucasians.

• African American children in this study were more often reported to CPS than children from other backgrounds.
Analysis of Missed Cases of Abusive Head Trauma (AHT)

• The goal of the study was to determine how often AHT was missed by physicians and reasons that may have led to the diagnosis being missed.

• In the cases of missed head trauma, the children were described as being very young white children from intact families.
Influence of Race and Socioeconomic Status on the Diagnosis of Child Abuse: A Randomized Study

- 5000 pediatricians were randomly selected to receive 1 of 4 randomly assigned versions of a fictional clinical presentation.
- The case described a mobile 18 month old child who had an unwitnessed event which resulted in an oblique femur fracture.
- Rank the degree to which the injury was thought to be accidental versus abusive and whether to refer to CPS or not.
- The 4 versions presented varied: black high SES, white high SES, black low SES, white low SES.

Laskey et al, JPeds 2012
Results

- Physicians were more likely to label the fracture as abuse in patients with low SES and were more likely to be unsure about the etiology in patients with high SES.
- It is proposed that this may be related to physicians being more willing to give the high SES families “the benefit of the doubt.”
Racial Differences in the Evaluation of Pediatric Fractures for Physical Abuse

- Minority children had higher rates of diagnosis of abusive fractures but were also more likely to be evaluated for abuse and reported to Child Protective Services.

Lane et al, JAMA 2002
Disparities in the Evaluation and Diagnosis of Abuse Among Infants With Traumatic Brain Injury

- Skeletal surveys were more likely to be conducted for children with public insurance/no insurance than those with private insurance.

- The difference in the rate of getting a skeletal survey done in white infants with low SES vs high SES (82% vs 53%) was greater than in black infants with low SES vs high SES (85% vs 75%).
Results

- It was predicted that if white infants received skeletal surveys at the same rate as black infants, the proportion of white infants getting tested would increase by 14%.

Wood et al, Pediatrics 2012
Discussion

• “The observation that white children were more likely to receive the diagnosis of abuse if a skeletal survey was obtained suggests that this group of children had to reach a higher threshold for suspicion of abuse before a clinician ordered a skeletal survey.”

Wood et al, Pediatrics 2012
Questions that stood out...

• Is there a higher threshold of suspicion that must be met before white children are evaluated?
• Is there a lower threshold for minority children?
• Are minority children actually abused more often?
• Is there an over representation of abuse among minority children due to over evaluation, and an under representation of white children due to under evaluation?
Questions after the literature review...

• We have protocols for evaluation of certain patients based on certain presenting symptoms, age, history, etc. How well are those guidelines being followed?

• What are common themes in patients whose work up does not follow the guidelines?
What can I do differently?

• The aim of my study would is to look more closely at the details of cases that were not evaluated and possibly should have been.
Hypothesis

• There is a positive bias in the evaluation of child abuse related to high socio-economic status and/or non-minority race in children less than 1 year old who present to the emergency department with skull fractures.
Future Study

• Are children of minority race actually abused more often?

• Are families with low SES more often minorities thus making it appear that there is a relationship to race, when the relationship is actually to SES?
“Nice Family”
The Case of GG

• 5 month old male (28 week premature) presented to the hospital after having abnormal breathing at home. Father performed CPR. History of a fall from a bouncy seat onto carpeted floor. The bouncy seat was placed on the floor.

• Social History: Lives at home with mother and father, who are married. GG is the only child.
The Case of GG

• NAT workup was done at the hospital
• MRI brain: right convexity subdural hemorrhage, interhemispheric subdural hemorrhage, small intraventricular hemorrhage, thrombosed deep medullary veins
• Ophthalmology exam: normal
• Skeletal Survey: no fractures
The Case of GG

• Child Abuse Pediatrician impression:

“The thin-layered subdural over the right convexity of the brain as well as within the interhemispheric fissure is most consistent with an acceleration/deceleration and/or rotational force on the brain. The trauma history of falling out of the infant swing does not appear to be significant enough to cause this type of injury. The thrombosed deep veins are most consistent with being from a traumatic event. Based on the information currently available to me, GG's neuroimaging findings and his clinical presentation are concerning for abusive head trauma.”
The Case of GG

• What would be the next appropriate steps?

• Law enforcement referral was made.

• DFCS referral was made.
  – Safety Plan: Father is still in the home but has to be supervised at all times, by mother or maternal grandmother (who does not live in the home).
“Well Presenting Family”
The case of DD

• DD is a 3 month old female who presented to her PCP with a history of chest congestion. A chest x-ray was obtained and 2 rib fractures were incidentally identified. The PCP referred DD to the ED.

• Parents denied any known history of trauma aside from DD scratching her own face.

• Parents felt strongly that something may have happened to DD while she was at daycare.
The case of DD

- Social History: DD lives at home with both of her parents and is the only child. Both parents work as educators. Father is an administrator in one of the school systems.
The case of DD

• An NAT evaluation was completed.
• CT head: normal
• Skeletal Survey:
  – 2 rib fractures (left posterior 4th rib fracture and left posterior lateral 7th rib fracture).
  – clavicle fracture
  – proximal left humerus bucket handle fracture
  – right side parietal skull fracture
• Physical Exam: bruise on the right side of the face, scratches on the chin
The case of DD
The Case of DD

• What would be the next appropriate steps?

• Law enforcement referral was made.

• DFCS referral was made.
  – Safety Plan: No inpatient visitor restrictions. Discharged to maternal grandparents.
The Case of DD

• Father was taking care of DD for a few days while mother was out of town at a conference.
• Father later admitted to head butting DD because she would not stop crying.
The Case of CC

• CC is a 3 month old female who presented to the ED with unexplained bruising of her buttocks. There were no bruises on any other part of the body.

• Mother noticed the bruises one morning while changing CC’s diaper. CC has no caretakers aside from mother and father. Father took care of CC the day prior to the bruises being noticed while mother ran errands. There was no history of trauma.

• CC was taken to the PCP for a previously scheduled appointment and referred to the ED.
The Case of CC

• Social History:
• CC lives at home with her parents, who are married, and her 4 year old sister.

“Father confirmed history of anxiety for mother. LMSW asked if mother’s anxiety seems to be well-controlled and father responded "with the kids". LMSW asked father about significant behavioral problems within family and father did not provide an answer. LMSW clarified question and asked if "anyone’s behavior has been out of control or you felt that assistance was needed to get it under control". Father did not immediately provide answer and then stated "not around the kids".
The Case of CC

- Admitted for an NAT workup
- Bleeding lab evaluation: normal
- CT scan: normal
- Skeletal Survey: normal
- Physical Exam: large bruises covering the buttocks
The Case of CC
The Case of CC

• What would be the next appropriate steps?

• No law enforcement referral was made.

• A DFCS referral was made.
  – CC was discharged home to parents.
  – A home visit was completed.
  – CC’s parents refused to present for follow up skeletal.
“Poorly presenting family”
The case of JJ

- JJ is a 4 week old male who presented after a fall from the bed. Father fell asleep while holding JJ, and JJ fell onto a carpeted floor. There was a safety concern because this is the second time that JJ has fallen as a result of father falling asleep holding JJ in less than a week.
The case of JJ

- JJ was admitted for a NAT workup.
- CT scan: normal
- Skeletal Survey: normal
- Physical exam: normal

- A CPT referral was made due to concern about father’s affect and demeanor in the hospital (not making eye contact, not being very willing to speak to staff).
The case of JJ

• What would be the next appropriate steps?

• No law enforcement referral was made.
• A DFCS referral was made.
In Summary

• Disparity in the evaluation and diagnosis of abuse is most likely multifactorial and not solely based on race.
• Bringing awareness to the role that biases do play may be helpful in decreasing over evaluation of certain populations and under evaluation of others
• There is still much to be learned!
References

- Centers for Disease Control and Prevention
Literature Review

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- Racial Differences in the Evaluation of Pediatric Fractures for Physical Abuse – Lane et al, Jama 2002
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- Racial and ethnic disparities: A population-based examination of risk factors for involvement with child protective services – Putnam-Hornstein et al, Child Abuse and Neglect 2013
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Questions