BULLYING AND OSTRACISM IN CHILDREN AND YOUTH WITH SPECIAL HEALTH CARE NEEDS (CYSHCN)

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Today’s Goals

• Define various forms of peer victimization including physical bullying, verbal/social (relational) bullying, cyber-bullying, and ostracism

• Highlight the potential academic, health, and emotional-behavioral consequences of bullying and ostracism

• Summarize recent data about the elevated risk of pediatric populations who have special health care needs for bullying, ostracism, and their negative impact

• Recommend appropriate screening, referral, networking, and treatment plans for children and adolescents experiencing bullying and ostracism
Key Elements of Bullying definitions

- Power Imbalance between Aggressor and Target (not just conflict between equally matched peers)
  - Physical or psychological
  - “in-group” vs “out-group”
  - Minority vs majority
  - Same vs different appearance

- Repeated over time

- Actions intended to harm the target

- Group or individual Aggressor (or target)

Olweus, 1993; Reynolds, 2003; Swearer et al, 2009
Potential Roles your patients may play in bullying/ostracism

- **Bullies** (aggressors)
- **Victims** (targets)
- **Bully-victims** (both bully and victim; simultaneously or sequentially)
- **Bystanders**
Types of Bullying

- **Physical bullying** – e.g. hitting, spitting, pushing, punching

- **Verbal/social bullying** – e.g. teasing, taunting, name-calling

- **Ostracism** – ignoring or excluding

- **Electronic bullying** (cyber-bullying) – using computers or phones to harass, spread rumors, post harmful images
Bullying can take many forms:

**Verbal/Social Bullying**
Bullies can hurt people *verbally/socially* by teasing them, saying mean things, calling them names, spreading a lie, or cussing them out.

**Physical Bullying**
Bullies can hurt people *physically* by hitting, pinching, biting, spitting, or throwing things at them.

**Online/Cyberbullying**
Bullies can hurt people *online* by saying cruel, embarrassing, or untrue things about them in emails or website postings or by sending mean text messages. This is also called *cyberbullying*.

**Ostracism**
Bullies and even friends can hurt people by completely *ignoring* them or *excluding* them from a group. This is also called *ostracism*.
Ostracism

- **Ostracism is the ignoring and excluding of a target individual** (Williams, 2001)

- **Ostracism** has been extensively studied in college students and adults and has been shown to routinely produce negative feelings, sadness, and anger. Williams and his colleagues have identified **four constructs threatened by ostracism** (Williams 2009):
  1. sense of belonging
  2. self-esteem
  3. sense of control over environment
  4. meaningful existence

- **Ostracism may be even more painful than bullying** as it can make the target feel invisible, non-existent, and totally discounted. Bullying, however aversive, affirms that they are noticed and in some way engaged with peers (Williams & Nida, 2009; Carpenter 2011; Twomey 2012)

- **Ostracism stimulates same regions of brain that are activated during physical pain** in preliminary studies of adults using fMRI (Eisenberger et al, 2003)
Defining Bystanders

- Persons present but not taking part in a situation or event

- Expanded definition include those who possess information regarding future violence
  - Teachers
  - Parents
  - Students
  - Healthcare professionals?

- Types of Bystanders
  - Defenders of the victim
  - Followers who assist the bully
  - Reinforcers of the bully
  - Passive onlookers.
Overwhelming evidence that Bullying is NOT good for kids

Bullying has been linked concurrently and/or longitudinally to:

- School attendance issues (Mason, 2008)
- Academic Achievement problems (Beran, 2009)
- Heightened general health problems (Rigby, 1998)
- Distraction that can threaten academics (Kowalski et al, 2008)
- Externalizing and internalizing behaviors including violent and antisocial behavior, anxiety, depression, low self-esteem (Arsenault et al 2006; Nansel et al, 2003)
- Suicides (recent news stories)
- Homicides (Leary, Kowalski, & Smith, 2003)

There is little evidence to support the popular notion that bullying is just a normal part of growing up and “builds character” (or resilience)
Recent Research from Collaborative studies

- Kim Twyman’s MUSC Fellowship research about bullying in patients with special needs (Twyman et al. *JDBP* 2010)

- Margie McKenna’s MUSC Fellowship research about bullying and ostracism in patients with chronic health conditions (PAS platform presentation, May 2012)

- Chip Taylor’s study of bullying in patients with ADHD (*CHC*, 2011)

- Development of the Bullying and Ostracism Screening Scale (BOSS) (Saylor et al, 2012)

- Thesis studies of Bullying vs. Ostracism impact
MUSC – Community Pediatric Study Participants (Twyman et al)

- Data were collected in public and private pediatric primary care and sub-specialty clinics in summers of 2007 & 2008; by design sample included children with no diagnoses and CSN;

- 312 participants
- Ages: 8-17 years old
- Average age 12.06
- Gender: 57% male
- Race: 64% Caucasian 29% AA, 4% other
- School: 47% ES, 30% MS, 22% HS
- Placement: 29% honors, 43% resource, 12% self-contained
Diagnostic Groups

312 children recruited for study

294 study participants

CF: N=22
ASD: N=32
LD: N=34
ADHD: N=100
B/MH: N=33
No Dx: N=73

18 children w/ other chronic illness (excluded)
Measures and Procedures

• **If parents and children both consented**, they were each asked to complete the study measures. Children received a choice of “prizes” on the spot after completing forms, and all participants were entered in a drawing for a $100, $75, $50, or $25 gift card.

• **Children 12 and under** and older youth or parents who requested help had items read aloud and marked with the assistance of a graduate research assistant (GRA).

• **Youth 13 and older** completed forms autonomously with the option to request assistance from the GRA.

• **Parents** completed Achenbach’s Child Behavior Checklist (CBCL). For this study, we used the T-scores for Internalizing, Externalizing, and Total Behavior Problem scales as well as social competence scores to assess child adjustment.
Reynolds Bullying and Victimization Scale

- 46 items with 4 point response scale
- 2 subscales—Bullying and Victimization
- Example item: “Other kids teased me or called me names”
  - Responses: Never, Once or Twice, 3-4 Times, 5 or More Times in previous month
- Gender and grade referenced T-scores calculated
- For these studies, we used BVS to categorize as “Bullies” (Bully T > 60), “Victims (Victim T > 60), Bully-victims (both > 60), or “minimally exposed” (neither > 60)

Reynolds, 2003
Bullying and Ostracism Screening Scale (BOSS; Saylor et al. 2012)

- Original measure used for these studies had **12 bullying items** asking about four types of bullying and rate at which they occurred in this school year (or previous if completed in summer)
  
  Sample items: Girls were physically bullied; Boys were physically bullied; I was physically bullied; I physically bullied someone

- **15 Ostracism items**, to make 5 subscales: ostracism experiences, threat to belonging, self-esteem, meaningful existence, and control;
  
  Sample item: “Other people leave me out of things.”

- **Responses**: Never, Once or Twice, Sometimes, Many Times, Almost All the Time (1-5 pts)

- Current version of measure also inquires about **Bystander roles**
Mean BVS Victimization T-scores in CSHCN vs. NoDx Group
Percentage of Elementary School Students Involved as Victims, Bullies, or Bully-Victims

![Bar chart showing the percentage of students involved in bullying activities, categorized by different diagnoses (NoDx, CF, ASD, LD, ADHD, B/MH) and roles as Victim, Bully-Victim, or Bully. The chart indicates that 23.1% of students are Buller-Victims, while the percentages for Victims and Bullies are 19% each.](chart.png)
Percentage of Middle/High School Students Involved as Victims, Bullies, or Bully-Victims
Mean Ostracism Experiences Scores in CSHCN vs. NoDx Group

CF: $t=2.39$, $p<.05$
ASD: $t=2.91$, $p<.05$
ADHD: $t=3.85$, $p<.001$
Summary: Populations of CSHCN in which BOSS Bullying (BVS), Victimization (BVS) and Ostracism scores (BOSS) are significantly higher than that of patients with no dx

<table>
<thead>
<tr>
<th></th>
<th>CF</th>
<th>ASD</th>
<th>LD</th>
<th>ADHD</th>
<th>B/MH</th>
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</thead>
<tbody>
<tr>
<td>BVS Bullying</td>
<td></td>
<td></td>
<td>ES</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BVS Victimization</td>
<td>MS/HS</td>
<td></td>
<td>ES</td>
<td>MS/HS</td>
<td>ES</td>
</tr>
<tr>
<td>BOSS Ostracism</td>
<td>MS/HS</td>
<td>ES</td>
<td>MS/HS</td>
<td></td>
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</tbody>
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McKenna studies
MUSC 2010-2012

• 130 children and adolescents enrolled from subspecialty clinics in a tertiary care medical center.

• 12 were incomplete to varying degrees, and 14 were not returned, resulting a final n of 109.

• Clinics included Developmental-Behavioral Pediatrics (33%), Endocrine (28%), Cystic Fibrosis (22%), Sickle Cell (9%) and Other (8%) clinics.
**Study Participant Characteristics**

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ages</td>
<td>8-17, mean = 12.06, SD = 2.435</td>
</tr>
<tr>
<td>Gender</td>
<td>51% male, 49% female</td>
</tr>
<tr>
<td>Race</td>
<td>62% White, 32% Black, 6% Other</td>
</tr>
<tr>
<td>School</td>
<td>43.5% ES, 31.5% MS, 25% HS</td>
</tr>
<tr>
<td>Placement</td>
<td>38% resource, 39% honors</td>
</tr>
<tr>
<td>Parental Marital Status</td>
<td>65% married, 14% single, 16% separated/divorced</td>
</tr>
</tbody>
</table>
Diagnostic Categories, N=109

**Chronic Medical Condition (CMC)**
- Cystic fibrosis (22%)
- Sickle Cell Disease (11%)
- Obesity (11%)
- Type 1 and 2 Diabetes (19%)
- Short Stature (6%)
- Other (11%)

**Developmental Diagnosis**
- ADHD (39%)
- Autism Spectrum D/O (9%)
- Learning Disability (12%)
- Anxiety (11%)
- Other (11%)
Measures

**Parent/guardian**

- Demographics questionnaire
- Achenbach’s Child Behavior Check List (CBCL)
- Saylor’s Bullying and Ostracism Screening Scale-Parent Form (BOSS-P)

**Child**

- Saylor’s BOSS-EO (Short form for children)
- Child Depression Inventory—Short Form (CDI)
- Achenbach’s Youth Self-Report (YSR, if >12 years)
Parent and Child BOSS

<table>
<thead>
<tr>
<th>Definitions</th>
<th>• Both parent and youth have 4 types of bullying defined and illustrated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scales</td>
<td>• Each item is rated on a 5 point Likert scale (almost never to almost all the time)</td>
</tr>
<tr>
<td>Bullying Items (16)</td>
<td>• Respondents rate how often—girls were bullied, boys were bullied, I (my child) was bullied, I (my child) bullied someone</td>
</tr>
<tr>
<td>Ostracism Items (15)</td>
<td>• Respondents rate both ostracism experiences (e.g. other people ignore me) and need threat items (e.g. I feel invisible)</td>
</tr>
</tbody>
</table>
BOSS Scores Used for this Study

Bully Victimization
- I was physically bullied + I was verbally/socially bullied + I was cyber-bullied

Ostracism Experiences
- Other people ignore me + Other people leave me out of things + I do things by myself but I wish I had friends to join me
Multiple Hierarchical Regression

### Independent Variables

- Bully Victimization
- Ostracism Experiences
- Chronic Medical Condition
- ADHD
- Child Gender
- Child Age
## Dependent Variable CDI T-score (Depression)  
* N=103

<table>
<thead>
<tr>
<th>Model</th>
<th>R square</th>
<th>B</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ostracism Experiences</td>
<td>.325</td>
<td>1.098</td>
<td>.274</td>
<td><em>p&lt;.0001</em></td>
</tr>
<tr>
<td>2. Bully Victimization</td>
<td>.369</td>
<td>.986</td>
<td>.373</td>
<td><em>p=.010</em></td>
</tr>
</tbody>
</table>

- 33% of the Variance accounted for by Ostracism alone.
- Ostracism and being bullied combined accounted for 37% of the variance.
- Not significant: Age, Gender, ADHD, CMC
### Dependent Variable YSR **Internalizing Conditions T-Score** N=44

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<thead>
<tr>
<th>Model</th>
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<th>B</th>
<th>Std. Error</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bully Victimization</td>
<td>.365</td>
<td>2.171</td>
<td>.835</td>
<td>( p = .013 )</td>
</tr>
<tr>
<td>2. Ostracism Experiences</td>
<td>.443</td>
<td>1.648</td>
<td>.679</td>
<td>( p = .020 )</td>
</tr>
</tbody>
</table>

- 37% of the variance was accounted for by experience of being bullied.
- Being bullied and ostracism experiences combined accounted for 44% of the variance.
- Not significant: Age, Gender, ADHD, CMC
Dependent Variable **CBCL Parent Internalizing Conditions T-Score; N=103**

<table>
<thead>
<tr>
<th>Model</th>
<th>R square</th>
<th>B</th>
<th>Std Error</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Ostracism Experiences</td>
<td>.185</td>
<td>1.242</td>
<td>.369</td>
<td>(p=.001)</td>
</tr>
<tr>
<td>2. ADHD</td>
<td>.257</td>
<td>7.309</td>
<td>2.335</td>
<td>(p=.002)</td>
</tr>
</tbody>
</table>

• 19% of the variance accounted for by Ostracism Experiences
• 26% of the variance accounted for by Ostracism Experiences and ADHD diagnosis
• Not significant: Being bullied, Age, Gender, CMC
Conclusions

**Bullying and ostracism** were the strongest predictors of self-reported depression even in a population where children had many other major medical and/or learning issues.

**Ostracism** was consistently the strongest predictor of both child and parent-reported internalizing conditions.

**Age, Gender, and Chronic Medical Condition** were not significant risk factors for internalizing conditions.

**Screening for ostracism and bullying** is recommended in the ongoing care of CYSHCN.
“Adding Insult to Injury”
Taylor studies of ADHD (Twyman sample)

• The 88 students with documented ADHD had significantly higher Victimization scores than 92 youth with no dx. $t(178) = -3.48$, $p<.001$

• Highest victimization scores for ADHD only, followed by ADHD + co-morbid dx, followed by no diagnosis, $F (2,27) = 6.37$, $p<.002$ (ANCOVA)

• No differences in self-reported Bullying
Comparing 46 youth with ADHD exposed to high bullying (BVS Victim score >60) to 42 youth with ADHD whose BVS victimization was within limits for age and gender

• Note: ALL participants had a confirmed ADHD Diagnosis

• “Victims” with ADHD reported significantly higher depression on Child Depression Inventory (CDI) than patients with ADHD not exposed to excessive bullying

• Parents of “Victims” with ADHD reported their children as having significantly higher internalizing, externalizing, and total problems on CBCL than patients with ADHD not exposed to excessive bullying

• “Victims” with ADHD were described as significantly higher than patients with ADHD not exposed to excessive bullying on Aggression, somatization, social problem, and withdrawl CBCL factor scores

• Victims and non-victims were comparable on Attention, Activity, school, and social competence CBCL factor scores

Taylor et al, in press
Other clinically important findings: school placement and inclusion

- Mainstreamed CSHCN in resource placement report higher victimization rates than peers in same schools; CSHCN in self-contained classes report higher anxiety about the possibility of being bullied (Saia, Saylor, et al 2009)

- CSHCN in self-contained classes report significantly reduced victimization and anxiety in pre-post assessments of a year-long inclusive arts and service program, but reduction is not large enough to make the CSHCN comparable to peers in same school (Saylor & leach 2009)
Other clinically important findings:

Cyberbullying

• **Compared to matched students from same schools, students reporting cyber-bullying involvement (victims or bullies) are more likely to have websites and emails parents can not access and to report higher overall use of computers for non-homework (social) purposes** (Twyman, Taylor, Saylor, Comeaux, 2009)

• **Students who have talked with their parents about cyberbullying are significantly more likely to say they would report or intervene in cyberbullying** (Knippenberg, Saylor et al 2010)
Importance of asking children and adolescents (not just parents or teachers) about bullying: detecting victimization

- In Twyman’s pediatric samples and school samples combined:
  A) The student-report BOSS screening scale detected **82%** of the patients who were significantly elevated on BVS Victim score
  B) Parents’ yes or no endorsement of the question “my child may have been bullied” detected only **47%** of the patients significantly elevated on BVS victim score
Importance of asking children and adolescents (not just parents or teachers) about bullying: detecting bullying

- In Twyman’s pediatric samples and school samples combined,

A) The student-report BOSS screening scale detected 92% of the patients who were significantly elevated on BVS Bully score score

B) Parents’ yes or no endorsement of the question “my child may have bullied others” detected 0% of the patients significantly elevated on BVS Bully score; Not one parent of a child admitting to significantly more bullying acts than same grade and gendered peers knew about (or was willing or able to report) their child’s bullying behaviors
Screening for Bullying and its aftermath

• Incorporate into surveillance routines whenever possible, for patients with and without disabilities and special needs. Middle school and high school may be particular “hot spots”

• Follow up with those who note specific concerns, considering risk for emotional behavioral changes

• Consider hostile peer climate as a hypothesis for frequent somatization and school absences

• Ask parents and patients about computer access and parent monitoring
Contributing to solutions

• Hundreds of studies confirm that reducing bullying requires a multi-systemic approach; communicate with others involved and become part of the “all points press” to address the issues.

• Know school policies for counties served; Empower students and parents to request that policies be followed.

• Recognize reality that students and parents might be targeted or discounted when bullying and ostracism are reported; observe confidentiality and honor patient wishes. Keep communications open.
Contributing to solutions

• Incorporate data-based updates on bullying and ostracism into Pediatric training at all levels

• This is a rapidly-changing literature that cuts across multiple disciplines (mainly education, psychology, and pediatrics) – Great continuing education topic.

• Collaboration and networking in local community
Thank you!

Questions?