Bullying Prevention and Treatment:
in Primary Care

By

Toney Welborn MD, MS

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Chapel Hill

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Abstract

Bullying can be classified as repeated occurrences where one or more persons intimidate another person using aggression (Bentley & Li, 1996; DHHS, 2013a; Powell & Ladd, 2010). This can take the form of harassment that is verbal, physical or seeks to exclude. Bullying is a public health problem in the United States and in other nations around the world. In the 2011 Youth Risk Behavior Survey (YRBS), 20.1% of students surveyed stated they had been bullied at school over the preceding 12 months (CDC, 2011). The 2009 National Crime Victimization Survey (NCVS) found 28% of students aged 12-18 who were surveyed indicated they were bullied at school (Dinkes, Kemp, & Baum, 2009).

The purpose of this review was to provide the evidence base for identification, prevention and treatment of bullying for PCPs in order to increase their engagement in these processes across the levels of the social ecological model (SEM) framework in pursuance of ultimately reducing the rates of bullying. Under the SEM framework, evidence recommended specific action at the individual, interpersonal, community and policy levels for bullying prevention and treatment. Bullying prevention recommendations focused on identification of symptoms and signs of bullying, screening of patients, education on parental protective behaviors, advocating in community for youth violence prevention and promoting policies for statewide programs for bullying prevention. Bullying treatment recommendations strongly encouraged family therapy in a community setting and more resources for behavioral health.

Engaging PCPs in reducing bullying rates across the spectrum of the SEM framework will result in an increased sense of responsibility and prioritization for bullying
prevention and treatment in their practices and communities. PCPs can join with public health, schools and other community organizations to call for change at local, regional and national levels to reduce rates of bullying across the SEM framework. Change of this type requires vision and collaboration
Introduction

Bullying can be classified as repeated occurrences where one or more persons intimidate another person using aggression (Powell & Ladd, 2010). Bullying behavior refers to the actions of bullies, victims, bully-victims and bystanders. Bullying is a public health problem in the United States and in other nations around the world. In the 2011 Youth Risk Behavior Survey (YRBS), 20.1% of students surveyed stated they had been bullied at school over the preceding 12 months (CDC, 2011). The 2009 National Crime Victimization Survey (NCVS) found 28% of students surveyed, aged 12-18, indicated they were bullied at school (Dinkes, et al., 2009). Bullying activities encompass many forms of harassment. Table 1 includes additional data on bullying activities from the same NCVS report.

Table 1: NCVS Report Results

<table>
<thead>
<tr>
<th>Bullying behavior</th>
<th>Percentage of students affirming</th>
</tr>
</thead>
<tbody>
<tr>
<td>“made fun of”, “called names” or “insulted”</td>
<td>19%</td>
</tr>
<tr>
<td>“the victim of rumors”</td>
<td>16%</td>
</tr>
<tr>
<td>“pushed, shoved, tripped or stepped on”</td>
<td>9%</td>
</tr>
<tr>
<td>“threatened with harm”</td>
<td>6%</td>
</tr>
<tr>
<td>“excluded from activities on purpose”</td>
<td>5%</td>
</tr>
<tr>
<td>“pushed to do things they did not want to do”</td>
<td>4%</td>
</tr>
<tr>
<td>“property destroyed”</td>
<td>3%</td>
</tr>
</tbody>
</table>

Healthy People 2020 (HP2020) (DHHS, 2013c) identified areas where, if objectives were met, improvement in the health of the nation would occur. They selected 41 topics for attention. Reduction of bullying in adolescents was objective 35 of 43 for the topic area: Injury and Violence Prevention. HP2020 notes that the leading
causes of death under age 45, as well as lifelong leading causes of morbidity for all ages, fall under the objectives of this topic area, including bullying.

Bullying behavior, as prioritized by HP2020, is an example of a public health issue that cannot be solved by any one person or organization. The World Health Organization in their World Report on Violence and Health (WHO, 2002) applied the social ecological model (SEM) to violence causation and prevention. The SEM evaluates public health issues at multiple levels, including the individual, interpersonal (family and friends), community and policy levels (Stokols, 1996). The WHO (2002) utilized the SEM framework to clearly identify causes of violence at each level. The WHO (2002) advocated for use of the SEM framework not only to identify causes of violence, but also to prevent violence. Another group looked at the SEM framework specifically for youth violence. In 2012, Goebert, et al. reviewed different models of youth violence and found that a social ecological approach was superior at identifying factors spanning multiple levels. The authors felt programs that reach youth at multiple levels of the SEM framework have the greatest potential for reducing youth violence.

Bullying behavior, an example of violence, can be identified, treated and prevented utilizing multiple levels of the SEM framework. Resources for communities and individuals for violence prevention, available on the HP2020 website (DHHS, 2013d), span the SEM framework.

At the individual level, long term behavioral health problems that start in childhood and extend well into adulthood can be linked to involvement in bullying behaviors. Actions of bullies often can be classified as a conduct-disordered behavior pattern (Fleming et al., 2002). Bullies are more likely to abuse alcohol and drugs (Gini &
 Victims of bullies often have anxiety and/or depression. A separate class of bullies is bully-victims. Bully-victims have been bullied, but tend to also bully others. These children are often diagnosed with attention deficit disorders.

In addition to behavioral health problems, individuals experience physical health problems related to bullying. These may include somatic complaints often related to the behavioral health diagnoses of anxiety and depression (DHHS, 2013b). Health problems also include long term sequelae of anxiety, depression, alcohol and drug abuse. Unfortunately, they also include the acute injuries and long term sequelae of these injuries inflicted by bullies and inflicted by victims who fight back. Lastly, individual effects of bullying can result in suicide and homicide.

At the interpersonal and community levels of SEM framework bullying exerts effects through the behavioral health, physical health, injury and death costs. These costs are not only financial, but also denigrate social connections through lost time at school, disconnection from friends, family and community. Most shocking in the headlines are local and national community effects from school shootings. From 1996 in Moses Lake, WA until the end of 2012 in New Town, CT, 60 school shootings have occurred in the US (IPD, 2012). In 2002, the Secret Service conducted a study of 37 school shootings from December 1974 to May 2000 (Vossekuil, 2002). They found that 71% of the 41 shooters were victims of bullying behavior. In response to the New Town shooting, a public outcry for stricter gun control laws and more behavioral health services has emerged (Frances, 2012).

In order for children to be referred to behavioral health services, a clinician must refer them. This is most likely their Primary Care Provider (PCP). PCPs must to be able
to recognize bullying behavior. Through an increased understanding of bullying behavior, these clinicians can serve a vital role starting in early childhood to prevent bullying behavior in the lives of their young patients.

The purpose of this review is to provide the evidence base for identification, prevention, and treatment of bullying for PCPs in order to increase their engagement in these processes across the levels of the SEM framework in pursuance of ultimately reducing the rates of bullying (see logic model figure 1). Engagement in reducing bullying rates across the spectrum of the SEM framework will result in PCPs with an increased sense of responsibility and prioritization for bullying prevention and treatment in their practices and communities. PCPs can join with public health, schools and other community organizations to call for change at local, regional and national levels to reduce rates of bullying. Change of this type requires vision and collaboration. PCPs, public health, schools and other community organizations working together across the SEM framework can achieve this positive change.

**Figure 1: Logic Model to Reduce Rates of Bullying**
**Research Methods**

A literature search using Medline, PsycINFO, and reference lists of articles from Medline search was conducted. Search terms were bullying, prevention and treatment. As few articles on bullying were found, no articles were excluded based on year of publication. For prevention articles, non-English and school based articles were excluded. Bullying prevention articles focused on recommendations for PCPs, risk factors, protective factors, and screening were selected for inclusion. As limited treatment articles were found for bullying behavior, only non-English articles were excluded. All articles evaluating implementation of primary care programs were reviewed, including school based interventions with a primary care application. Articles studying use of SEM framework for bullying prevention were also reviewed. Articles selected for inclusion were based on human studies. Intervention articles were selected for inclusion if they demonstrated statistically significant results. Studies were grouped using the SEM framework, prevention versus treatment and topic similarity. The body of evidence for each study group was then given a grade of recommendation based on the strength of the evidence (Ebell et al., 2004). (See Table 2.)

**Table 2: Strength of Evidence Grading**

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grade A</td>
<td>Consistent patient centered evidence that is of good quality.</td>
</tr>
<tr>
<td>Grade B</td>
<td>Patient centered evidence that is inconsistent or of lesser quality.</td>
</tr>
<tr>
<td>Grade C</td>
<td>Evidence that is based on consensus, expert opinion, usual practice, disease oriented or case series.</td>
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In order to compare the evidence base with current practice in primary care, a search of primary care specialty organizations, whose members interact with children
on a level consistent to warrant knowledge in bullying behavior, was conducted.

Websites and primary journals were searched using the terms bullying and bullying education. Results are reported in Table 3.

Table 3: Website and Primary Journal Bullying Search Results for Primary Care Specialty Organizations Who Care for Children

<table>
<thead>
<tr>
<th>Organization</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Academy of Pediatrics (AAP)</td>
<td>Article: Role of the Pediatrician in Youth Violence Prevention (AAP, 2009)</td>
</tr>
<tr>
<td>American Academy of Physician Assistants (AAPA)</td>
<td>Refer to Healthy People 2020 (AAPA, 2012)</td>
</tr>
<tr>
<td>American Association of Nurse Practitioners</td>
<td>Article: Has your patient been bullied? (Blaney &amp; Chiocca, 2011)</td>
</tr>
<tr>
<td>American Medical Association (AMA)</td>
<td>Proceedings: Educational Forum on Adolescent Health: Youth Bullying (Fleming, et al., 2002)</td>
</tr>
<tr>
<td>American Psychological Association</td>
<td>APA Resolution on Bullying Among Children and Youth (APA, 2004)</td>
</tr>
<tr>
<td>Public Health Nursing</td>
<td>Article: Childhood Bullying: A Review of Constructs, Concepts, and Nursing Implications (Liu &amp; Graves, 2011)</td>
</tr>
<tr>
<td>Society for Adolescent Medicine</td>
<td>Bullying and peer victimization: Position paper of the Society of Adolescent Medicine (Eisenberg &amp; Aalsma, 2005)</td>
</tr>
</tbody>
</table>
**Literature Review**

The information obtained in the literature is divided into bullying prevention, bullying treatment and specialty organization recommendations using the SEM framework. Bullying prevention is further subdivided into individual level: symptom and sign recognition and screening, interpersonal level: parental protective behaviors, and community and policy level: advocacy and statewide models. Under symptom and sign recognition bullying behavior roles are defined. Bullying treatment is further subdivided into individual and interpersonal levels: family therapy and research studies, individual, interpersonal and community level: family therapy and research studies and policy level.

Specific specialty organization recommendations are displayed in Table 4 for ease of comparison. Specialty organization recommendations will be compared recommendations from the evidence base using the SEM framework in the Summary of Findings.

**Bullying Prevention – SEM Individual level**

*Symptoms and Signs of Bullying Behavior*

Symptoms are defined as physical or behavioral features indicating a condition (Merriam-Webster, 2013b) expressed by the child or parent; whereas signs are qualities indicating a condition (Merriam-Webster, 2013a). Symptoms and signs for bullying behavior can be classified according to the child’s role in the bullying behavior, i.e. bully, victim, bully-victim or bystander. Many symptoms and signs cross role categories. Therefore, clinicians need to recognize the constellation of symptoms and signs that typify each role when screening for bullying behavior and counseling children and parents.
Bullies tend to be quick tempered, have difficulty with rules, (Fleming, et al., 2002; Gini & Pozzoli, 2009; Lyznicki, et al., 2004) do not view violence negatively, frustrate easily (Fleming, et al., 2002; Lyznicki, et al., 2004), and show poor academic performance (Gini & Pozzoli, 2009; Lyznicki, et al., 2004) including dropout and school failure risk (Lyznicki, et al., 2004). Bullies can come from homes without clear limits or supervision (Fleming, et al., 2002; Lyznicki, et al., 2004), homes where physical abuse and homes where sexual abuse has occurred. Some bullies come from homes with more than one of these concerns (Fisher et al., 2012; Fleming, et al., 2002; Lyznicki, et al., 2004; Shields & Cicchetti, 2001). Psychosomatic complaints of headache, abdominal pain, bed wetting and sleep problems can be symptoms of bullying; although, these complaints are more often vocalized by victims (Lamb, Pepler, & Craig, 2009). At school bullies are liked and have friends, and these friends tend to also not view violence negatively (Fleming, et al., 2002). Additionally bullies are more likely than peers to have access to firearms (Bosworth, Espelage, & Simon, 1999). Bullies are often stronger and bigger than their peers, have little remorse for their actions against others, and have difficulty understanding when others are upset (Liu & Graves, 2011; Lyznicki, et al., 2004). Bullies are more apt to smoke and use alcohol and drugs than their peers (Gini & Pozzoli, 2009). Bullies are more likely to go on to commit crimes such as vandalism and theft (Fleming, et al., 2002).

Victims are those persons upon whom the harm is inflicted. Victims tend to be more timid, insecure children who have few friends (Fleming, et al., 2002; Lyznicki, et al., 2004). Victims often have low self-esteem (Gini & Pozzoli, 2009), depression and anxiety (Craig, 1998; Gini & Pozzoli, 2009), increased risk of self harm (Fisher, et al.,
2012), and suicidal thoughts (Lyznicki, et al., 2004). Similar to bullies, victims are more likely to have poor academic performance (Gini & Pozzoli, 2009) and may be physically or sexually abused. Additionally, victims may be neglected (Fleming, et al., 2002; Shields & Cicchetti, 2001). Psychosomatic complaints of headache, abdominal pain, bed wetting and sleep problems can be symptoms of victimization (Lamb, et al., 2009; Lyznicki, et al., 2004). Physical disabilities, cognitive dysfunction (Fleming, et al., 2002), weak appearance (Lyznicki, et al., 2004) and dental appliance use, such as braces, are risk factors for victimization (Fleming, et al., 2002).

Bully-victims, also called provocative or aggressive victims, are those persons who are more easily angered and often try and fight back when victimized (Fleming, et al., 2002; Lyznicki, et al., 2004). Bully-victims also tend to bully those who are smaller and younger than themselves (Lyznicki, et al., 2004). Bully-victims have similar risk factors to victims. However, hyperactivity is a unique trait among bully-victims (Fleming, et al., 2002; Gini & Pozzoli, 2009; Kumpulainen et al., 1998; Lyznicki, et al., 2004). Bully-victims also tend to have poor grades, (Fleming, et al., 2002; Lyznicki, et al., 2004) have few friends (Fleming, et al., 2002), possess poor social skills, (Gini & Pozzoli, 2009; Kumpulainen, et al., 1998), and are isolated (Gini & Pozzoli, 2009; Lyznicki, et al., 2004). They also experience anxiety (Gini & Pozzoli, 2009), low self-esteem, anhedonia, and pessimism (Kumpulainen, 1998). Bully-victims tend to smoke and use alcohol more than their peers and other victims (Fleming, et al., 2002; Lyznicki, et al., 2004).

Lastly, bystanders are those who are not the bully nor the victim, but are witnesses to the bullying behavior (DHHS, 2013b). These persons may choose to
participate to encourage the bully, attempt to stop the bully or do nothing for fear of retaliation (Fleming, et al., 2002). Bystanders are children who often do not have many symptoms or signs indicative of bullying behavior consistent with any of the other role categories (DHHS, 2013b).

Symptom and sign recognition studies were predominately retrospective patient centered cohort studies. Studies were considered retrospective because participants were already labeled in their bullying behavior role (bully, victim, bully-victim, bystander). Strength of evidence for PCPs to identify symptoms and signs of bullying behavior is grade B.

**Screening**

Lamb, Pepler, and Craig (2009) recommend screening all children for bullying behavior recommended clinicians be aware to screen children presenting with school phobia, attention deficit problems or diagnosis, trouble at school for harm (verbal, physical or exclusionary) to others or self (AAP, 2012; Lyznicki, et al., 2004; Massetti, 2012), and use of tobacco, alcohol, or illicit drug. Lyznicki, McCaffree, and Robinowitz (2004) advocate for using symptoms, signs and co-morbid behavioral problems, especially those that coincide with bully-victim bullying behavior, as indications to ask about bullying behavior. The Centers for Disease Control and Prevention (Hamburger, Basile, & Vivolo, 2011) has published a compendium of assessment tools for bullying behavior. This publication provides questionnaires that can be used to screen children of elementary, middle or high school age. The different questionnaires can help clinicians to identify bullies, victims or bully-victims (Hamburger, et al., 2011).
In general, screening is recommended for conditions in which evidence proven treatment is available early in the course of the disease to slow disease progression (Andermann, Blancquaert, Beauchamp, & Dery, 2008). Lack of strong evidence establishing currently available treatment decreases morbidity or mortality for bullying behavior. Screening, therefore, is an expert opinion. Screening has a strength of evidence grade of C at this time.

The information on signs and symptoms and screening presented in this section is essential for the development or use of tools to enable PCPs to identify, prevent and treat bullying at the individual level of the SEM framework.

**Bullying Prevention – SEM Interpersonal level**

*Parental Protective Behaviors*

Counseling for prevention can begin with parents during a child’s early years (Phillips, 2000). Counseling informs and encourages parents about children’s needs for social development, conflict resolution, and how to manage feelings in stress provoking situations (Lyznicki, et al., 2004). Training in parenting is an important part of prevention with a strong focus on encouraging supervision, a loving home environment, (AAP, 2009; Baldry & Farrington, 2005; Lyznicki, et al., 2004), appropriate social interactions, proper discipline (Lyznicki, et al., 2004), cognitive development (AAP, 2009), acceptance, autonomy, and problem solving (Baldry & Farrington, 2005).

Studies have associated certain parenting styles with bullying behaviors. Spriggs et al. (2007) evaluated data collected from the 2001 Health Behavior in School Aged Children Survey for US children. They found, for whites only, both bullies and victims had lower percentages of living in homes with both biological parents; for whites and
blacks, lower levels of parental involvement in school activities; and for blacks only, poorer parent child communication.

In a study by Baldry and Farrington (2005) adolescents completed a questionnaire about bullying, parenting styles and coping strategies. Four parenting style areas were assessed: authoritative, conflicting, punitive and supportive. Authoritative parents allowed their children to develop with a high level of autonomy and acceptance. The child who is in a home with a conflicting parenting style may be in conflict with the parent(s) or the parents may be in conflict with each other. Punitive parents punish their child with verbal or physical harm when the child has done a perceived wrong. Supportive parents support their child in all facets of the child’s life. The authors found punitive and conflicting parenting styles to be a risk factor for victimization, and an authoritative parenting style was found to be protective against victimization. They also found conflicting parenting style to be a risk factor for bullying behavior, whereas, authoritative and supportive parenting styles were found to be protective against bullying behavior.

The evidence review identified specific parental protective behaviors based on retrospective patient centered cohort studies. Studies were small earning prevention based parental protective behaviors a grade B for strength of evidence.

Bullying Prevention – SEM Community and Policy level

Advocacy

The United States White House (Lee, 2011) hosted the White House Conference on Bullying Prevention. President Barack Obama advocated first and foremost for dispelling the myth that bullying is normal childhood growing up behavior. Lyznicki,
McCaffree and Robinowitz (2004) recommend that physicians, as consultants to many organizations in their communities (schools, police and community organizations, etc.) promote bullying behavior prevention education using SEM framework. They recommend advocating for anti-bullying programs with prevention and early intervention components in local schools. Interventions should focus on skill building, problem solving and anger management. They encourage PCPs in professional organizations to advocate for involvement of these professional organizations in bullying prevention education. The authors offered a tool to help PCPs educate community groups on the problem of youth violence. They recommend the AMA’s (Knox, 2002) Connecting the Dots to Prevent Youth Violence: A Training and Outreach Guide for Physicians and Other Health Professionals. This guide provides, according to the author, all information needed to conduct speeches or workshops on youth violence prevention for health, non-health and mixed professional groups. The manual is divided into seven sections focused on: 1. preparation, 2. written speeches for health and non-health groups, 3. slides sets for the speeches, 4. case studies in violence including one on bullying, 5. issue briefs which introduce an area of youth violence, give context to the “scope of the problem, review of risk factors and promising strategies for intervention and prevention, 6. “Act Now Handouts” for different groups and 7. resources for professionals, families and individuals.

Statewide Models

Some promising statewide models for bullying prevention exist. Payne, S.& Elliot, D. (2011) review “Safe2Tell,” a statewide reporting system for school violence prevention in Colorado. This was a policy level action to prevent bullying in the SEM
framework. Callers’ reports are anonymous and encrypted. Calls are answered by a live
person 24 hours a day, seven days a week. Every valid call is investigated. The SEM
framework is employed in this model at every level not just the policy level. At the
individual, interpersonal and community level education about the program is delivered
to students, teachers, bus drivers and school staff. At the community level, “Safe2Tell”
is promoted locally with each community defining their promotion tactics. From
September 2004 – November 2010, 2961 credible reports from 56 of Colorado’s 64
counties were investigated. Eighty-three percent of these events resulted in action.

Another study by Schroeder, B. et. al. (2012) evaluated the outcomes of the
statewide implementation of the Olweus Bullying Prevention Program (OBPP) in 107
schools (56 elementary, 28 middle and 23 high schools) in 49 of Pennsylvania’s 67
counties. The application of this program statewide demonstrates action at the policy
level of the SEM framework. The OBPP concentrates efforts in four areas
encompassing the individual, interpersonal and community levels of the SEM
framework, see Table 5.

**Table 5: Olweus Bullying Prevention Program Areas of Concentration**

<table>
<thead>
<tr>
<th>1</th>
<th>Whole school training on anti-bullying rules. Survey of students yearly.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Classroom discussions, meetings, role playing and anti-bullying rule reinforcement.</td>
</tr>
<tr>
<td>3</td>
<td>Individual and parental components for bullies and victims.</td>
</tr>
<tr>
<td>4</td>
<td>Community involvement to disseminate the anti-bullying wisdom beyond the school walls.</td>
</tr>
</tbody>
</table>

The components met recommendations by Lyznicki, McCaffree, and Robinowitz,
(2004) in the areas of early intervention, skill building, problem solving (for example
through role playing), and anger management through individual components for bullies.
The implementation was performed through community coalitions/partnerships for three years with a goal to see change prior to the end of the three year implementation. The authors measured change in bullying behaviors using the Olweus Bullying Questionnaire. High school students had a 15-39% decrease in “bullying of others”. Teachers increased “talking about bullying” at least twice monthly in the classrooms by 14% to131%. The authors did not provide any additional information on why this range or specific characteristics of teachers who increased “talking about bullying” more than average.

An evidence level for community and policy is hard to determine. For advocacy a “guide” was provided to PCPs for educating others, but no studies of “guide” implementation were found. Strength of recommendation for advocacy is grade C based on expert opinion and consensus. There were two policy level studies looking at statewide bullying prevention programs. The studies were patient centered prospective population level trials. Strength of evidence grade B is due to a limited number of studies and dissimilarity of the models.

**Bullying Treatment**

Studies recommended referral to behavioral health specialists to treat bullying behavior. The behavioral health literature recommends family therapy for bullying behavior, specific models are discussed below. A few research studies were found addressing counseling treatment of bullying behavior. These studies have small numbers and limited follow up and are reviewed below.
Bullying Treatment – SEM Individual and Interpersonal Levels

Family Therapy

Powell and Ladd (2010) reviewed the literature on bullying treatment by family therapists. They found evidence demonstrating less bullying behavior in males and less aggression in females undergoing family therapy. They noted a paucity of evidence based research demonstrating which specific family therapy models work best for bullying treatment.

Based on the limited evidence they chose three models with some evidence to support their use in bullying behavior treatment. The models were solution focused, narrative and combined strategic and structured family therapy. Solution focused and narrative family therapy models ask participants to develop solutions to the problems they are encountering. The therapist in these models serves as a facilitator for the discussion. In combined strategic and structural therapy the therapist works with the family to diminish “negative communication patterns” and build skills in conflict resolution.

Research Study

A study by Nickel et al. (2006), in Germany, evaluated 12 sessions of brief strategic family therapy (BSFT) on bullying behavior and cortisol secretion. Boys, aged 14-15, who self reported aggressive bullying behaviors were selected for inclusion in the intervention. Cortisol levels have been shown to be elevated by anger and, by extension, aggressive bullying behaviors (Moons, Eisenberger, & Taylor, 2010). Seventy-two participants were enrolled in the study. After completion of BSFT, fewer boys in the intervention group (n=11) reported bullying behavior compared to baseline
(n=36) and compared to the control group (n=29). Compared to the control group and baseline, the intervention group also decreased State-Trait Anger Expression Inventory scores and lowered their salivary cortisol levels.

Family therapy of solution focused, narrative and combined strategic and structured type were recommended by Powell and Ladd (2010) based on limited, patient centered studies. Nickel et. al. (2006) performed a small controlled patient centered study of BSFT resulting in decreased bullying behavior. The strength of evidence is grade B for family therapy of solution focused, narrative, strategic and combined strategic and structured types.

Bullying Treatment – SEM Individual, Interpersonal and Community Levels

Family Therapy in Community

Butler and Platt (2008) suggest combining the narrative and structural models to create a treatment model that acts at three levels of the SEM of health: individual, interpersonal, and community. Their suggested model engages child, family, teachers and a family counselor. The family and counselor communicate directly with the school, demonstrating to the student they are creating an environment where the child can recognize everyone is working together to ensure his/her health and safety. The treatment has three stages 1) “Structuring Change”, 2) “Changing the Story”, and 3) “Solidifying Change”. Stage 1 brings the family together for structural family therapy. Stage 2 has the counselor meeting with the child and parents separately utilizing narrative therapy. Stage 3 has the counselor wrapping up the separate counseling and bringing the family back together for the last session using narrative family therapy. In this treatment model the authors stress communication with the family, counselor and
school as an integral part of ensuring success. They state that therapy alone, even family therapy, will not resolve bullying behaviors and that there must be interaction at the school level.

**Research Studies**

Two studies evaluated brief behavioral therapy for bullying behavior in schools. The studies were small, 46 – 68 participants, and none were performed in North America. Both of the studies included girls, but the study from Australia excluded data from the girls in their analysis.

The most recent study by Fung (2012) based in Hong Kong evaluated a 10 session cognitive behavioral therapy for bully-victims. This study enrolled 68 students (48 males, 20 females; ages 11-16). Students were classified by questionnaires and identified by teachers as bully-victims.

Cognitive behavioral therapy sessions focused on cognitive reorientation, management of emotions and anger, coping skills, and improved social adaptation. Qualitative responses from teachers and parents agreed students in the intervention demonstrated positive behavioral change. Qualitative responses from students also demonstrated positive behavioral change. Quantitative results from students exhibited a sustained decrease in reactive aggression, aggressive behavior, anxiety, depression, physical victimization, verbal victimization, and social exclusion, see Figure 2.
The second study by Berry and Hunt (Berry & Hunt, 2009) based in Catholic schools in Sydney, Australia evaluated an eight session program of cognitive behavioral anxiety management strategies for anxious boys who were victims of bullying behavior. This study had 46 male participants who were nominated by school counselors. Cognitive behavioral anxiety management group sessions were divided into eight weekly one hour sessions during the school day. Parallel parent groups were also available. Many parents did not make most of the sessions due to scheduling issues. Participants in the intervention group experienced a statistically significant decrease in the Screen for Child Anxiety Related Emotional Disorders (SCARED) anxiety score (p<0.001) and Bullying Incidence Scale (BIS) total bullying score (p<0.001) compared to the control group. In fact, BIS total bullying score continued to drop over time, see Figure 3.
In community settings, family therapy for bullying behavior is successful in the immediate and short follow up term. Butler and Platt (2008) theorized use of narrative and structural type family therapies would be best. Of the two counseling studies reviewed, none focused on family therapy. Therapy type was described as cognitive behavioral therapy. Studies were small patient centered randomized controlled trials and cohort studies. No studies evaluating long term effects of these treatment types on the sequelae of bullying behaviors, chronic physical disease, chronic behavioral disease and risk of subsequent incarceration were found. Strength of evidence to recommend individual cognitive behavioral in a community setting for bullying behavior is grade B.

Bullying Treatment – SEM Framework Policy Level

No specific studies on policy level interventions for bullying treatment were reviewed. One of HP2020’s Mental Health and Mental Disorders Treatment Expansion
objectives calls for an increased rate of children who need behavioral health treatment receiving treatment (DHHS, 2013e). In 2008 (DHHS, 2013e), only 68.9% of children needing behavioral health services received them. In order to improve access to behavioral health care, HP2020 advocates for increased number of primary care locations providing behavioral health services on site or by referral. In 2006 (DHHS, 2013e), 79.0% of all primary care locations offered on site or referral for behavioral health services. Cunningham (2009) reviewed results from the 2004-2005 Community Tracking Study Physician Survey. The survey asked physicians about access to care for patients in the preceding 12 months. Two-thirds of physicians expressed frustration with obtaining behavioral health referrals for their patients. Frances (2012) advocates for improved funding and better use of resources for behavioral health care in the US.

Statistics indicated a lack of access to care for behavioral health services. This data is patient centered and consistent based on population and physician surveys. A call for advocacy for funding and resource allocation is recommended by expert consensus. No specific funding or resource allocation advocacy tools were found. The strength of evidence for lack of access to care for behavioral health is grade A. The recommendation to advocate for funding and resource allocation is grade C.

**Specialty Organization Recommendations to Members**

Clinicians are required by certifying entities, state licensure boards and employers to maintain competency in their field of specialty. One way clinicians and specialty organizations can provide proof of continued learning is through continuing education units (CEU's) or in medicine, continuing medical education (CME) credits.
Most specialty organizations sponsor publications that provide clinicians with timely evidence based reviews of current issues in health. Bullying behavior prevention and treatment recommendations are one such health issue.

The specialty organizations selected for review were those most likely to have a continuing role in the care of children who may be involved in bullying behavior. The specialties selected were Advanced Registered Nurse Practitioners, Child and Adolescent Psychiatry physicians, Family Medicine physicians, Med-Peds physicians (physicians trained in both internal medicine and pediatrics), Pediatric physicians including those with specialty in Adolescent Health, Physician Assistants, Psychologists, and Public Health Nurses. The specialty organizations for these specialties are listed in Table 6. Additionally, recommendations from the Commission for the Prevention of Youth Violence with commissioners from many primary care organizations were reviewed.
Table 6: Specialty Organizations included in Review

<table>
<thead>
<tr>
<th>Specialty</th>
<th>Organizations</th>
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</thead>
<tbody>
<tr>
<td>Advanced Registered Nurse Practitioner</td>
<td>American Association of Nurse Practitioners (AANP)</td>
</tr>
<tr>
<td>Child and Adolescent Psychiatry physicians</td>
<td>• American Academy of Child and Adolescent Psychiatry (AACAP)</td>
</tr>
<tr>
<td></td>
<td>• American Psychiatric Association (APA)</td>
</tr>
<tr>
<td>Family Medicine physicians</td>
<td>American Academy of Family Physicians (AAFP)</td>
</tr>
<tr>
<td>Med-Peds physicians</td>
<td>American Medical Association (AMA)</td>
</tr>
<tr>
<td>Pediatric physicians</td>
<td>• American Academy of Pediatricians (AAP)</td>
</tr>
<tr>
<td></td>
<td>• Society for Adolescent Medicine</td>
</tr>
<tr>
<td>Physician Assistants</td>
<td>American Academy of Physician Assistants</td>
</tr>
<tr>
<td>Psychologists</td>
<td>American Psychological Association (APA)</td>
</tr>
<tr>
<td>Public Health Nursing</td>
<td>Public Health Nursing (journal not linked to an organization)</td>
</tr>
<tr>
<td>The Commission for the Prevention of Youth</td>
<td>AACAP, AAFP, AAP, American College of Physicians-</td>
</tr>
<tr>
<td>Violence</td>
<td>American Society of Internal Medicine, AMA, American</td>
</tr>
<tr>
<td></td>
<td>Medical Association Alliance, American Nurses</td>
</tr>
<tr>
<td></td>
<td>Association, American Psychiatric Association, American Public Health</td>
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<tr>
<td></td>
<td>Association, US Department of Health and Human Services</td>
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</table>

For ease of comparison, recommendations for prevention, treatment, advocacy and research can be viewed in Table 7. The American Academy of Physician Assistants information is not in Table 7. They suggested that their members review the Healthy People 2020 recommendations as a reference (AAPA, 2012). They did not identify specific areas using the SEM framework.
<table>
<thead>
<tr>
<th>Organization</th>
<th>Prevention Recommendations</th>
<th>Treatment Recommendations</th>
<th>Advocacy Recommendations</th>
<th>Research Recommendations</th>
<th>Reference</th>
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<tr>
<td>American Medical Association</td>
<td>1. Recognize risk factors/signs/symptoms of bullying behavior and screen patients. 2. Educators should promote training of students, residents and other practitioners on bullying behavior.</td>
<td>Refer bullies and victims to behavioral health providers in school and/or community, but avoid group treatment for bullies, peer mediation, or short-term solutions as these have not been proven to benefit and may cause some harm.</td>
<td>Advocate against school anti-bullying programs with zero tolerance or three strikes policies as these have not been proven to benefit children.</td>
<td>Conduct research into protective factors, contributing factors, screening instruments, and physical and psychological effects for victims.</td>
<td>AMA Educational Forum on Adolescent Health: youth bullying (Fleming, et al., 2002)</td>
</tr>
<tr>
<td>Organization</td>
<td>Prevention Recommendations</td>
<td>Treatment Recommendations</td>
<td>Advocacy Recommendations</td>
<td>Research Recommendations</td>
<td>Reference</td>
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<tr>
<td>American Psychological Association</td>
<td>Implementation and dissemination of anti-bullying programs with demonstrated effectiveness</td>
<td></td>
<td></td>
<td>1. Support of research by public and private funding sources. 2. Rigorous evaluation of existing programs for bullying prevention in all settings (example schools, after-school programs).</td>
<td>APA Resolution on Bullying Among Children and Youth (APA, 2004)</td>
</tr>
<tr>
<td>Organization</td>
<td>Prevention Recommendations</td>
<td>Treatment Recommendations</td>
<td>Advocacy Recommendations</td>
<td>Research Recommendations</td>
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<tr>
<td>Public Health Nursing</td>
<td>Public health and school nurses should develop interventions for use in schools to prevent bullying.</td>
<td>Public health and school nurses should develop interventions for use in schools to treat bullying.</td>
<td></td>
<td>1. causes of bullying and negative outcomes 2. short and long term outcomes of bullying behavior for both victims and bullies</td>
<td>Liu and Graves (2011)</td>
</tr>
<tr>
<td>Society for Adolescent Medicine</td>
<td>1. Recognize Bullying behavior. 2. Intervene early.</td>
<td>1. Discuss interventions with parents 2. Refer for mental health disorders.</td>
<td>Provide leadership to schools and community organizations.</td>
<td>1. Large longitudinal studies on morbidity. 2. Biopsychosocial characteristics of roles. 3. Effective prevention programs.</td>
<td></td>
</tr>
</tbody>
</table>
Summary of Findings

Bullying Prevention

SEMB Framework Individual Level

In the SEM framework for bullying prevention, at the individual level the strength of evidence for symptom and sign identification and screening was grade B. Most organizations recommended identifying signs and symptoms of bullying behavior and screening for bullying behavior. These organizations indicated the same symptoms and signs to varying degrees as the evidence base review. The CDC (Hamburger, et al., 2011) produced a compendium of bullying assessment tools. Many of the assessment tools are specific to age of child and role in bullying behavior. No studies were found evaluating specific assessment tools to screen for bullying behavior in clinical practice.

SEMB Framework – Interpersonal Level

Within the SEM framework at the interpersonal level for bullying behavior parental protective behaviors were found to have grade B strength of evidence. Only the AAFP, AAP and SAM recommended to counsel parents or promote parenting skills. However, no information was provided to PCPs as to how to counsel, what to counsel or which parenting skills were protective. Only one organization, the AAP studied the implementation of their “Connected Kids Program” into 8 clinics (Levin-Goodman, 2009). “Connected Kids” focuses on child and parental education and screening for violence prevention. Counseling and screening for violence prevention occurs at every well child visit under the program. A pamphlet for parents about bullying behavior is one of the resources in the program.
SEM Framework – Community Level

SEM framework found evidence for community advocacy for bullying behavior prevention to have a strength of evidence grade of C. Organizations made many specific advocacy recommendations (see Table 7). The only tool found was the AMA’s training and outreach guide (Knox, 2002).

Some organizations advocated for more practice based research. Practice based research (PBR) is research conducted at the clinical practice level and centers on practice based improvement and implementation (Mold & Peterson, 2005). Examples pertinent to bullying behavior might include evaluation of screening implementation, testing of a screening tool, or review of current bullying treatment referrals.

SEM Framework – Policy Level

Studies of two statewide programs to prevent bullying had strength of evidence grade B. However, no organizations made specific recommendations toward policies for statewide or nationwide programs to prevent bullying behavior.

Bullying Treatment

SEM Framework – Individual Level

No studies advocated for individual level only treatment. Family therapy and family therapy in community were recommended by evidence review. Most organizations advocated for behavioral health referral, but only the Commission for the Prevention of Youth Violence (Phillips, 2000) recommended a specific therapy. They also did not advocate for individual only treatment. They recommended multisystemic family therapy. It is important for PCPs and professional organizations to recognize no
evidence based recommendations exist for individual therapy alone for bullying behavior.

SEM Framework – Interpersonal Level

Only one review and research study were found to recommend based on results individual plus interpersonal (family) based therapy. The strength of evidence was grade B. The recommended family therapy types were solution focused, narrative, strategic, and combined strategic and structural. Most organizations advocated for behavioral health referral, but only the Commission for the Prevention of Youth Violence recommended a specific therapy (Phillips, 2000). They recommended multisystemic family therapy. Multisystemic family therapy is therapy aimed at juvenile offenders (MST, 2013). It is not one of the types of family therapy recommended for bullying behavior in the evidence based review.

SEM Framework – Community Level

Butler and Platt (2008) recommended combining narrative and structural family therapy in a school setting. Two other school based studies (Berry & Hunt, 2009; Fung, 2012) demonstrated decreased bullying behavior with individual cognitive behavioral therapy. Both studies engaged family and the school in the treatment program. Strength of evidence for therapy with a family and community component was grade B. Most organizations advocated for behavioral health referrals for bullying behavior and anti-bullying policies in schools. None mentioned specifically anti-bullying programs with a therapy component. Some did advocate for school counselors.

SEM Framework – Policy Level
The strength of evidence for lack of access to care for behavioral health is grade A. The strength of evidence to advocate for funding and resource allocation is grade C. Specialty organization policy advocacy recommendations were to increase public education on bullying. A few specialty organizations advocated for more behavioral health services. Most organizations also called for increased funding to support more research in bullying behavior. Most evidence studies stated more research is needed in bullying behavior, but none discussed a lack of funding for research.

Conclusions

The purpose of this review was to provide the evidence base for identification, prevention, and treatment of bullying for PCPs in order to increase their engagement in these processes across the levels of the SEM framework in pursuance of ultimately reducing the rates of bullying (see logic model figure 1). The summary of findings section succeeded in meeting the first two steps in the logic model.

The third step is to increase rate of PCPs engaged with reducing the rate of bullying through organizational and community change using SEM framework. PCPs with an increased sense of responsibility and prioritization for bullying prevention and treatment and a vision for reducing rates of bullying can be champions for change. PCPs can begin by making bullying behavior prevention a priority, by assessing the need for quality improvement in their clinical settings and by their willingness to learn the skill of advocacy.

PCPs have opportunities to lead organizational change in their individual practices, group practices and health systems. Using the SEM framework PCPs can join with other key stakeholders; clinical and administrative leadership, other providers,
staff and patient advisory groups, to implement change in these settings. Ideas for change interventions could include individual patient level prevention interventions where every child gets screened. Bullying assessment tools compiled by the CDC (Hamburger, et al., 2011) could be implemented for those children who screen positive. At the interpersonal level, research into resources for parental training in the community could be made readily available and used early and throughout childhood. At the community level, PCPs should advocate for school based anti-bullying programs with a treatment component and statewide bully prevention programs.

The key stakeholders will need to decide as a group which objectives have the most appeal and best possibilities for success in their organization. These objectives should be linked to the overall health mission of the organization. It will be important for the organization to create SMART goals. SMART goals are specific, measurable, attainable, relevant and time bound (Meyer, 2006). They will need to reassess often and revise their implementation based on interval assessment.

For PCPs to be involved in reducing bullying rates in community, PCPs will have to advocate. Advocacy is a topic most clinicians know little about. They have not been trained in the skills necessary to be productive at the community and governmental advocacy levels (Young, Mitsuishi, & Tong, 2012). In addition to the tool created by the AMA (Knox, 2002), PCPs can reach out to their public health colleagues for education in advocacy. Public health leaders trained in advocacy can help local health care systems to utilize tools and indicate opportunities for clinicians to advocate for bullying behavior prevention and treatment.
Advocacy with others is more powerful than advocacy alone. PCPs can collaborate with others interested in reducing bullying rates in order to increase their advocacy reach. Sugimoto-Matsuda and Braun (2013) examined the role of coalitions in advocating for policy change in youth violence prevention. They looked at 23 collaborations. Ten of these collaborations had health professional members and most had members from education. Statewide collaborations numbered 14. Outcomes included 18 completed projects, 8 organizational level policy changes and two collaborations led to passage of legislation.

Collaborations appeared to follow “Change Model and Process” as outlined by Cocowitch (2001). They identified problems, understood the need for change, joined together to make change happen, devised a project plan, implemented and assessed the plan. The article did not discuss if successes were celebrated. PCPs work with patients trying to implement behavioral change for better health. They are well versed in recognizing incremental change. Often PCPs must encourage their patients based on small successful change. It will be important for PCPs to be champions in the celebration step to encourage continued positive change and reduction of bullying.

Empowered by an enriched understanding of bullying, armed with specific evidence based recommendations, tools for screening, instruction in advocacy, and collaboration membership to reduce bullying rates, PCPs can feel confident in their abilities to advocate for change. PCPs can join with public health, schools and other community organizations to call for change at local, regional and national levels across the SEM framework to reduce rates of bullying. Change of this type requires not only; a vision and commitment to reduce, but also collaboration.
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