This Bioethics Special Supplement started out with a narrow focus on bullying.

We thought that the issues associated with bullying among children and teenagers deserved the attention of bioethicists. We were specifically interested in why bullying has traditionally been treated as an almost normative childhood experience, something that is just a part of growing up, and that children should learn to deal with it on their own. The model for this benign neglect of the seriousness of bullying activities is illustrated in an anecdote recounted by Koo. In 1885 at King's Boarding School in the United Kingdom, a 12-year-old boy was killed from bullying behaviors by his older classmates. The boys responsible were not punished because the bullying behavior was seen as normal and acceptable among schoolboys.

Although attitudes about bullying have changed, there is still a tacit acceptance of behavior that in most other social contexts would be considered at least illegal if not criminal. Olweus, a pioneering researcher into the phenomenon of bullying, points out that the hallmark of bullying is not just that it is aggression by the powerful against the powerless, but that the aggression is repeated in a systematic, patterned way. Smith and Sharp focused on the ways that bullying is “a systematic abuse of power.” They point out that bullying is not done for personal gain, but instead is done primarily for the emotions and status that accompany the process of humiliating a weaker person. Bullies do not usually rob or rape their victims. They do not directly profit from bullying. If there is a gain for the bully, it is a gain in prestige, in admiration, or in the fear that it engenders in others.

Another essential component of bullying is that it is repetitive. Bullies hound their victims. Because of the repetitiveness, bullying is predictable. A bully will repeat the bullying actions over and over again. Because bullying is so predictable, it should be preventable. But even today, it is generally not prevented. Even today, bullies are often permitted to continue their bullying. As was the case a century ago, bullying is tolerated and thus tacitly condoned. Even more worrisome, bullying is often not recognized at all, and so is neither condemned nor punished.

The statistics are mind-boggling. Approximately 25% of school children report that they are bullied every year, and often bullying is not even reported. In spite of laws against bullying in almost every state, most bullies are not punished. Twenty-five percent of teachers see nothing wrong with bullying or putdowns, and consequently intervene in only 4% of bullying incidents. In some cases, those who report on bullies are themselves punished.

Yet, from the pediatric perspective, being victimized as a child is associated with serious mental and physical health consequences, some of which persist into adult life, including depression, anxiety, and increased...
C-reactive protein.\textsuperscript{8} Thus, as advocates for children's health, we see society's tolerance of bullying as an ethical problem demanding attention. In this bioethics issue, our initial goal was to look at the age-old problem of bullying in light of recent research showing serious health harms, and ask why, in spite of the increased attention to the long-term harms that bullying causes, does it remain so difficult to prevent or control? Yet, as we solicited articles from experts on the topic, the focus of the inquiry changed. It became apparent that bullying is really the tip of an iceberg, or perhaps the tip of a few different icebergs. So our inquiry became broader. Why, we began to wonder, do the sorts of dominance and subordination relationships at the heart of bullying seem so ubiquitous, not just among schoolchildren, but in almost all human societies and organizations? We started to see bullying as a manifestation of the sorts of social hierarchies that are common in all human societies in which dominant members of the hierarchies are given special rights and privileges, including the right to exploit and perhaps insult those who are lower down in the hierarchy.

Once seen in this way, the problem of bullying appeared to be a subset of the problems in any social hierarchy that is structured in such a way that those lower down in the hierarchy learn to accommodate to their position in the hierarchy by accepting and even developing their own fixed roles as subordinates. Put another way, there is a kind of coordination among group members in perpetuating their status. The Darwinian view of such collusion is that this reflects primate behavior and helps society run efficiently. By this view, the alternative to such hierarchies might be a Hobbesian anarchy in which nobody can be a Hobbesian anarchy in which nobody knows who is in charge and everyone suffers ill effects as a result. However, as the articles presented here show, fixed subordination, even absent overt aggression, causes serious lifetime health problems. New research even suggests that being only a bystander to such dominance and subordination can have health effects.\textsuperscript{9} Thus, the claim that everyone is better off in rigid roles needs to be critically reexamined. It may be that hierarchies are better than anarchy, but it is also true that some hierarchical behaviors cause serious, lifelong damage.

Seen in this way, the question that we started with gets expanded considerably. Instead of asking why bullying persists in spite of its widespread moral condemnation, we must ask instead how, given our overriding tendencies to form social hierarchies, we can ensure that they do not devolve into fixed roles for any individuals, or in which whole groups of people become subordinate? That is, rather than targeting a few bullies for blame, we must examine how we are all involved in societal enactments of dominance and subordination. How do class, race, and gender power differentials relate to the fixed subordination of young children in playground hierarchies? What are the health impacts on being a lower-status worker who is routinely dominated by one's employer? What about the weathering, or toxic stress that African American individuals experience due to constant threats to their dignity in daily social interactions with white people? Or the overt bullying of women by men, such that 24.3\% of American women “have experienced severe physical violence by an intimate partner (e.g. hit with a fist or something hard, beaten, slammed against something).”\textsuperscript{10} All of these different manifestations of toxic social hierarchies and power differentials create enduring health damage and even premature mortality. Consider how lower socioeconomic status is strongly associated with worse health outcomes and significantly shorter lives. The life expectancy for men is age 66 in Quitman County, Mississippi, and age 82 in Marin County, California.\textsuperscript{11} Importantly, emerging research suggests that the mechanisms equated with this life expectancy gap originate in childhood. Cohen and colleagues note,\textsuperscript{12} in a recent review, that “Socioeconomic status exposures during childhood are powerful predictors of adult cardiovascular morbidity, cardiovascular mortality, all-cause mortality, and mortality due to a range of specific causes.” Hughes and Simpson showed that “Persons of lower socioeconomic status suffer disproportionately from nearly all diseases and have higher rates of mortality than people of higher socioeconomic status.” Along with cardiovascular disease, they showed associations between low socioeconomic status and infant and maternal mortality, unintended injury, homicide and suicide,\textsuperscript{13} and the prevalence of various diseases, including arthritis, heart disease, ulcers, diabetes, hypertension, and chronic bronchitis.\textsuperscript{14} These associations persist both at the aggregate or area level and at the individual level.\textsuperscript{15}

The same health consequences are seen among children who are bullied as are seen among children who grow up in poverty.\textsuperscript{4} With these insights, our focus changed. What began as an inquiry into bullying as a circumscribed problem became an inquiry into the ways that rigid social hierarchies, including those created by socioeconomic disparities, function as a sort of societal bullying. With these sorts of questions in mind, we asked a number of experts to speculate about the ways in which hierarchies raise ethical issues to which pediatricians, in particular, must be attentive. Halpern and colleagues show how repeated subordination leads to lifelong problems. They argue that society has a role responsibility to protect children because society conscripts children into schools. Society's promise to parents that schools will be full fiduciaries entails an obligation to safeguard each

\textsuperscript{8} Functions of immunity and inflammation in cardiovascular disease and beyond.\textsuperscript{9} Cox, S.D., Chlebowski, R.T., Turan, T., Paltauf, T., Egan, K., Guo, J., Hsi, P., Spenlehauer, N., Cui, L., Milam, J., and Weitzberg, E. Inflammation and cardiovascular risk: can we do anything about it? The American Heart Association Scientific Statement from the council on epidemiology and prevention.


child's right to a reasonably open future. This argument, they claim, applies not just to bullying but, more broadly, to other social determinants of health.

Hawley shows that the social dynamics within human groups, like classrooms, can be positively influenced by those in a position of authority, such as teachers. Teaching strategies can mitigate the negative effects of subordination and power differentials. She notes, however, that the situation gets more complicated as children get older and their school ecology becomes more complex. But even in those situations, she suggests, intervention programs work. They only work, however, if those in positions of authority do, in fact, intervene. She suggests a crucial role for the medical community in providing up-to-date information, support, and advocacy for children of all positions of rank. Doctors can educate parents to ameliorate faulty perceptions, attitudes, and beliefs. Such strategies can mitigate the ill effects of social hierarchies on children.

Pickett and Wilkinson examine the policy implications of inequality. They focus on recent studies showing that income inequality is significantly related to declining performance on an index of child well-being. They argue that such income inequality can be ameliorated by 3 policy initiatives: (1) more progressive, rather than regressive, tax policies; (2) guaranteed access to nutrition to eliminate food insecurity and provide basic energy needs; and (3) better regulation of employment to guarantee social rights. These 3 should be part of an overall program to reduce inequality, particularly during childhood.

Finally, Jutte, Miller, and Erickson discuss the role of public-private partnerships to promote community development. They argue that healthy child development requires improving conditions in distressed, high-poverty neighborhoods. They show how investment in these neighborhoods can transform both the built environment and the social service environment. They suggest that pediatricians work with the community development sector because the goals of both are to help children remain healthy and productive.

We hope these articles help pediatricians to think in new ways about the relationship between bullying, social hierarchies, poverty, and toxic stress, and adverse child health outcomes.

REFERENCES

Bullying, Social Hierarchies, Poverty, and Health Outcomes
John D. Lantos and Jodi Halpern
Pediatrics 2015;135;S21
DOI: 10.1542/peds.2014-3549B

The online version of this article, along with updated information and services, is located on the World Wide Web at:
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