

## Risk and Protection in the Perpetration of Child Abuse

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Michelle Hughes and her colleagues provide a comprehensive and accurate summary of the literature on predictors of child abuse in this issue of the *North Carolina Medical Journal*.<sup>1</sup> Their review is organized in layers that conform to an ecological model of the factors that lead someone to engage in abuse or neglect of a child. The factors are further organized into risk factors (those that increase the likelihood of abuse) and protective factors (those that buffer a parent from engaging in abuse). The risk and protective factor approach is commonly used in this field, but may not be familiar to the broader public. What may bring this excellent review to life is an analogy to a more publicly understood phenomenon.

### Preventing Heart Attacks and Preventing Child Abuse: An Analogy

Preventing child abuse is a bit like preventing a heart attack. Using the analogy of cardiovascular disease, one can see how the study of risk and protective factors for child maltreatment may lead to innovative approaches to prevention. Cardiovascular disease is used as a model because it is familiar to most persons, has distressingly high morbidity and mortality, and has had successful prevention outcomes, which have accrued from a risk and protective factor approach. There are both similarities and differences between child abuse and heart attack, which will help one better understand the former.

First, cardiovascular disease is a syndrome, that is, a loose collection of precursor signs that develop into symptoms which, over time, sometimes end up with a dramatic event, a heart attack. Early signs include high blood pressure and abnormal electrocardiogram (EKG) results, often without noticeable behavioral dysfunction. The developmental progression is one where these signs and symptoms worsen on a continuum, leading to a pathological process of narrowing of arterial pathways, culminating

in the extreme event of a heart attack. Unlike many classic diseases for which a single pathogen is the defining characteristic (e.g., with AIDS, the defining characteristic is the presence of HIV), cardiovascular disease has no single operational definition, but instead is inferred from a pattern of nonessential, nonexhaustive, and insufficient symptoms.

So, too, it is with child abuse. The parent who ultimately maltreats a child may be identified even before becoming a parent (through risk factors, such as their own childhood of victimization). This person may display early signs of dysfunctional parenting that, if untended, can sometimes sharply catapult into a single dramatic event of child abuse or, in other cases, gradually worsen to the point that maltreatment is observed by another person and reported. There is no single indicator of the eventual abusive parent, and there are many routes to child abuse. Thus, the precursors of child abuse, like cardiovascular disease, are a nebulous array of behaviors, risk factors, and life circumstances, rather than a sharply defined disease.

### A Continuum of Dysfunction

Second, cardiovascular disease is understood as being at the end of a continuum of dysfunction on which all persons can be placed. Although qualitatively distinct outcomes occur at the extreme end of this continuum (e.g., a heart attack), the continuum nevertheless suggests that the difference between normality

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and disorder is a gradual one of degree. This connection between normality and disorder increases the public's ability to identify with the afflicted person, to empathize with her or his plight, and to provide nonstigmatizing support for the person with cardiovascular disease. We all know that we stand just a few steps away from the disorder ourselves. With child abuse, research on strategic framing indicates that much of the public views the abusive parent as one whose difficulty does not lie on a continuum that includes the public; rather, the abusive parent is perceived as a "monster" that is unlike the rest of us. Because of this distancing, the public has been relatively unwilling to support child abuse prevention efforts. If the public could come to understand that the actual difference between any parent and the maltreating parent is, in fact, simply one of degree or magnitude, then greater empathy and support for prevention of maltreatment might be generated.

Of course, some cases of cardiovascular disease do indeed represent a qualitatively different pathological disease process that is not found in most people. Likewise, some cases of child abuse involve severe parental psychopathology that is sharply different from normal behavior. Fortunately, as with cardiovascular disease, these pathological cases are rare.

### **Risk Factors**

Third, the epidemiology of cardiovascular disease has identified different risk factors that occur at the distal and proximal levels. At the distal level, risk factors that have been identified through replicated longitudinal investigation include a fatty diet, sedentary lack of exercise, cigarette smoking, high levels of chronic emotional stress, and possibly genes. These risk factors are predictive of later cardiovascular disease over long periods of time. The relation is empirical and probabilistic, meaning both that the risk factor is not necessarily causal and that exceptional cases that do not conform to the pattern are possible. Not every McDonald's® hamburger lover develops heart disease, but a steady diet of fatty foods is like spinning a roulette wheel for a heart attack.

At the proximal level, the build-up of plaque in coronary arteries heightens blood pressure and dramatically increases the risk of a heart attack. This imminent risk factor is so strong that dramatic preventive intervention, such as bypass surgery, is often recommended. The relation between distal and proximal risk factors provides insight into the causal chains that lead to a heart attack: a steady diet of fatty foods increases plaque build-up, which closes arteries, which can cause a heart attack.

Distal and proximal risk factors in child abuse can be described in the same way. Distal risk factors for becoming a child abuser that are described in the Issue Brief in this issue of the Journal<sup>1</sup> include an early life as a victim of child abuse, dropping out of school, having a large number of closely spaced children, being a single or teen parent without adequate economic resources, lacking knowledge of child development and parenting, and being socially isolated. The parent who lives in these circumstances is statistically at risk for engaging in abuse or neglect of a child. Proximal risk factors include substance use, depression, marital violence, and acute family stress. One

proximal process in child maltreatment involves the parent who becomes consumed by substance use and, thus, neglects the child. This proximal process also is correlated with a prior distal history of a childhood of victimization, poverty, and social isolation. One (among many) developmental story moves from the distal factors of past victimization and social isolation to a current situation of high stress that triggers child abuse.

### **The Effects Are Cumulative**

Another similarity between child abuse and heart disease is that risk factors accumulate. Research has shown that the more risk factors that one has for heart disease, the greater the likelihood of a heart attack. Similarly with child abuse, evidence has shown that the more risk factors a family has, the greater the likelihood of committing or experiencing child abuse. This relationship is probabilistic, though exceptional cases do occur. Not every lifelong smoker develops heart disease, and not every past victim of child abuse perpetuates the cycle in the next generation.

### **Equifinality and Multifinality**

Two characteristics of heart disease are equifinality and multifinality. One person may develop a heart attack as a consequence of smoking, whereas a nonsmoker may develop heart disease as a consequence of a fatty diet. There are several independent paths to heart disease (called equifinality). So, too, the paths to child abuse are divergent. One abusive parent may follow a path from childhood victimization to current marital violence to the abuse of a child, whereas another parent may begin the course by being a single, teenage, socially isolated parent. Multifinality is the phenomenon that many of the same risk factors for heart disease also happen to be risk factors for other diseases such as lung disease and cancer. Cigarette smoking leads to heart disease in some persons and to lung disease in other persons. Many of the risk factors for child abuse also happen to be risk factors for other problematic outcomes, such as psychopathology, medical illness, unemployment, and welfare.

Multifinality is an important characteristic because it buttresses the case for prevention efforts that are targeted toward risk factors. Intervention with single, teenage parents or with couples experiencing marital violence is economically and ethically justified not only because of the link to later child abuse, but also because of links to other costly and devastating outcomes.

### **The Public Good of Prevention**

Cultivating public interest and government support for preventive intervention has been difficult, even for heart disease, because the time lag between the occurrence of a distal risk factor and the occurrence of child abuse may be long, and the relation is merely probabilistic with many exceptions. The case for preventive intervention with heart disease has grown from empirical studies demonstrating the links between risk factors and pathological outcomes, a good simple story of how the problem develops, and economic studies suggesting that dollars (and

lives) can be saved by investment in prevention. There is a public good in the investment in prevention, just as there is a public good in preventive maintenance of roads, bridges, and levees.

With heart disease, prevention occurs at the universal, selective, and indicated levels, corresponding to the type of risk factor that is targeted and the population that suffers from that risk factor. Universal interventions include taxes on cigarettes and regulations requiring listing the fat content on food packages because the entire public is at risk for smoking and eating fatty foods. Selective interventions, such as daily aspirin and other medications, are targeted toward proven high-risk persons, such as those with high blood pressure. Indicated interventions, such as coronary bypass surgery, are delivered to those who have a demonstrated pathological process such as a clogged artery.

With child abuse, the preventive interventions that are recommended by Hughes et al.<sup>1</sup> follow the same structure and logic. Universal interventions that are recommended for all parents include public awareness campaigns and improved screening during pediatric visits. Recommended selective interventions include intensive home visitation for (high-risk) poor, single mothers, and respite care for parents of children with special

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needs. Finally, recommended indicated interventions include parent-child interaction therapy for first-time abusive parents to prevent recurrence.

Preventive interventions include both risk-reducing efforts and protection-enhancing efforts. Heart disease risk-reducing interventions target the risk factor directly (e.g., medication to lower blood pressure), whereas protection-enhancing interventions build strength to resist future risks (e.g., daily exercise). With child abuse, some interventions target a risk factor directly (e.g., couples therapy to resolve marital violence), whereas others promote protection by building strengths (e.g., parenting skills training).

With heart disease, we have recognized that not all prevention can or should operate at the individual level. Government efforts to get food-processing corporations to decrease the fat content of foods through regulation are as important as efforts to get individuals to stop purchasing these foods. The public at large, and government, have taken on the task of reducing the overall rate of heart disease because it will prove cost-beneficial. What is needed is a more concerted effort to get the public and government to take on the task of reducing the population rate of child abuse and not to rely solely on efforts to help individuals refrain from abusing children.

## Summary

In sum, the adoption of a risk and protective factor approach to understanding and preventing child abuse is highly consistent with empirical study of how child abuse develops and with efforts in the prevention of heart disease. This analogy can be helpful in designing a comprehensive approach to the prevention of child abuse. It should not be taken too far, however. For example, it may be destructive to perceive abusive parents as “sick.” There may be better metaphors that do not invoke sickness, such as literacy. So, the analogy would go like this: abusive parents are like illiterate adults, and prevention of abuse will require a universal comprehensive, life-long, public education system that includes years of focused education for all, coupled with a selective special education system for high-risk individuals. **NCMedJ**

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## REFERENCES

- 1 Hughes M, et al. Preventing child maltreatment in North Carolina: New directions for supporting families and children. *NC Med J* 2005;66(5):343-359.