Commentary

Adverse Childhood Experiences and Adult Health

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The article by Flaherty and colleagues[1] in this issue studies the determinants of health in 805 high-risk children by evaluating them at age 6 and age 12, prospectively matching adverse life experiences against subsequent health outcomes during childhood. This follows the general concept of the Adverse Childhood Experiences (ACE) Study,[2–4] which matched adverse childhood experiences against adult and adolescent health risks, health status, and social functioning.

The most important findings of the Flaherty article[1] are that adverse childhood experiences are surprisingly common even in the earliest years, are generally unrecognized, can be identified during childhood by history from children and caretakers, and can start to manifest their damage as ill health and somatization during childhood itself. Recognition of these facts provides clear opportunity for early intervention. Although none of us is yet experienced in devising appropriate primary prevention on the necessary large scale, the need is clear, the opportunities are major, and no one will be in line ahead of the pediatricians who take on this important preventive work. As was demonstrated in the ACE Study, what happens in childhood—like a child's footprints in wet cement—commonly lasts throughout life. Time does not heal; time conceals.

Many of our most intractable public health problems are the result of compensatory behaviors like smoking, overeating, and alcohol and drug use, which provide immediate partial relief from the emotional problems caused by traumatic childhood experiences. Those experiences are generally unrecognized and become lost in time, where they are protected by shame, by secrecy, and by social taboos against exploring certain areas of human experience. A public health paradox becomes apparent wherein the public health *problem* is also often an unconsciously attempted *solution.* Not surprisingly, it is hard to give up something that almost works, particularly at the behest of someone who issues cautionary advice without any idea of what is really going on. For instance, in the public health onslaught against smoking, we have lost sight of the psychoactive benefits of nicotine, which is well documented as having antianxiety, antidepressant, anger suppressant, and appetite suppressant properties. Before scientific documentation, the American Indians recognized its psychoactive benefits through their use of the peace pipe. In this same vein, we seem to have forgotten that the antidepressant medication methamphetamine, introduced for prescription sale in 1940, is now in its impure and dose-unregulated form the demonized street drug "crystal meth." Do these uncomfortable observations *mean* anything? Need we ask ourselves why a kid seeks the psychoactive benefits of nicotine, given its risks, or why one would buy on the street an antidepressant that is both impure and of unregulated dose? If we are to accomplish more than do our current approaches against smoking, overeating, and street drugs, perhaps we need to understand both sides of the equation.

Two broad mechanisms exist by which adverse childhood experiences transform into biomedical disease:

- disease as the delayed consequence of various coping devices like overeating, smoking, drug use, and promiscuity; for example, adverse childhood experiences → depression or anxiety → overeating → type 2 diabetes → coronary artery disease;
- disease caused by chronic stress mediated by chronic hypercortisolemia and proinflammatory cytokines; for example, chronic headache or back pain, primary pulmonary fibrosis, osteoporosis, coronary artery disease.[5]

A serious question is what primary prevention would look like. One suspects that improving parenting skills across the nation might be the crucial issue here. The number of adults is myriad —including physicians—who have had no firsthand experience of supportive parenting. How might we address that serious lack on a population basis? The impact of a successful approach here might be as great as that of a major vaccine.

Resistance to obtaining and acting on this information from childhood is to be expected. It will be the result of several factors: the awakening of personal ghosts, discomfort in breaking taboos, lack of training or knowledge, concern over upsetting parents, and perceived lack of time and reimbursement. Preliminary work at Kaiser

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Permanente suggests that these problems can be addressed by those who see a need to move from our current symptom-reactive style of practice to the comprehensive approach that was originally conceived for primary care. Certainly, Flaherty and colleagues[1] have shown the need for pediatricians to take a leadership role both in everyday practice and particularly in academic settings.

REFERENCES

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