

The NEW ENGLAND JOURNAL of MEDICINE



Saving Tiny Tim — Pediatrics and Childhood Poverty in the United States

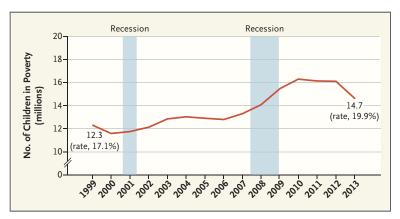
Perri Klass, M.D.

hen I talk about child poverty, I often begin with iconic 19th-century literary images:
Hans Christian Andersen's little match girl,
freezing to death on the street on New Year's Eve

— the poor child as helpless victim of adult cruelty (if she failed to sell matches, "her father would surely beat her") and social indifference ("In all the windows lights were shining, and there was a wonderful smell of roast goose"), her only reward in heaven, where her grandmother's spirit would welcome her into the warmth and light. Or Ragged Dick, Horatio Alger's homeless bootblack who overcame poverty and adversity through hard work, courage, physical prowess, and strength of character, having "firmly determined that he would lay by every cent he could spare from his earnings towards the fund he hoped to accumulate." Extreme child poverty was a versatile narrative property — it could be used to point a moral about a harsh, cold life in this world and hope and salvation in the next or to construct an obstacle to be overcome by individual will and market-economy gumption.

But extreme child poverty is real: in the United States today, nearly 7 million children live in deep poverty (with a family income less than half of the federal poverty level), and well over a million live in extreme poverty, in families with incomes of less than \$2 per day per family member. The detrimental effects on children's lives

are serious, and they lack simple storybook resolutions. But the policy statement on Poverty and Child Health in the United States issued by the American Academy of Pediatrics (AAP) in March is more than symbolic.1 A landmark for pediatricians and organized pediatrics, it represents another honorable step on the trajectory toward understanding and confronting the "new morbidity" - a phrase coined by the visionary pediatrician and community health advocate Robert Haggerty in the 1970s to describe a range of behavioral, developmental, and functional problems. Haggerty and his colleagues recognized the increased prevalence of some problematic social issues affecting children and families. Paradoxically, this focus also reflected certain kinds of progress: the beating back by vaccines, public health efforts,



Number of Children in Poverty (and Child Poverty Rate) in the United States, 1999–2013.

Data are from the U.S. Census Bureau.

and improved medical care — of the infectious causes of so much childhood illness and death. That progress allowed pediatricians to look up from their concerns about diphtheria, measles, and polio to notice the other problems interfering with children's ability to grow and learn, develop and thrive.

In pediatrics, growing and learning almost always go together. Health in a pediatric population implies growth and development. The differential diagnosis for failure to thrive encompasses just about every organ system because when something goes wrong with the heart or the kidneys or the endocrine system, a child may not grow - and then takes you back to the family, the economic circumstances, the social context. Children grow and learn when they are healthy or to put it another way, health is expressed in children partly by growth, development, and learning.

Poverty stunts that growth and development. The damage it does to children's health is reflected by many indicators, from birth weight to language acquisition to risks for both chronic illness and accidental injury.2 So we pediatricians find ourselves talking about how to mitigate those effects of childhood poverty - and how to reduce the number of children living in poverty. Targeted antipoverty efforts have worked before: poverty among the elderly, once the poorest U.S. demographic group, was dramatically reduced by Social Security and Medicare in the mid-20th century. Children, and families with young children, are now disproportionately poor (see line graph). But bipartisan efforts directed at child poverty have been remarkably successful in Britain and other developed countries, by using strategies particularly aimed at reducing the expenses and increasing the resources of families with young children.

I could cite many more fictional poor children, often in rather moralistic stories, written to be read to or by other children— from Sara Crewe in A Little Princess (you can be reduced to poverty by cruel circumstance, but your inner aristocrat will shine through) to the Five Little Peppers (a warm, loving family

matters more than money). But the one I always return to is Tiny Tim, a child who has literally been stunted by a mysterious malady that is clearly linked to his family's poverty. Tiny Tim's diagnosis has long been of passing interest to doctors, since even though Charles Dickens was writing a ghost story in his 1843 novella "A Christmas Carol," he was essentially a reporter and a realist in depicting poverty and human suffering. Any number of medical and literary sleuths have tried to determine what malady stunted his growth ("Tiny" Tim), dealt him one crippled leg (that famous crutch), and would have killed him if no one had intervened (the grave that Scrooge visits on Christmas Yet to Come). Theories proposed in the medical literature have included rickets, tuberculosis, and renal tubular acidosis.

Why does it matter which disease afflicted this fictional child? Because it had to be something that could be reversed, if the impoverished circumstances of the child's life were improved. It couldn't be a malady whose cure depended on 20th-century (or 21st-century) science and medicine—it had to be something that could be fixed by alleviating the crushing poverty in which the Cratchit family lived. Tiny Tim was being destroyed by something rooted in his socioeconomic status.

In a 2012 presidential address to the Academic Pediatric Association (APA) on "The Case for Ending Child Poverty," Benard Dreyer argued that as pediatricians, we should be working both to end childhood poverty and to alleviate its ill effects. A pediatric task force was established soon after; the AAP partnered with

this effort and added "Poverty and Child Health" to its strategic agenda in 2013 (I was part of the APA Task Force and worked on the recent Academic Pediatrics supplement on child poverty3). Both organizations drew on members who have spent decades caring for families raising children in poverty, designing and studying interventions designed to mitigate the social, developmental, and medical damage done. But the effort to mobilize the will and energy of pediatricians and their advocacy groups against child poverty has also involved reaching out beyond the boundaries of pediatrics to partner with and learn from people with other kinds of social, economic, and policy expertise.

For many practicing pediatricians, the imperative keeps coming back to the exam room. Recently, in the pediatric outpatient clinic at Bellevue Hospital, which has served the poor of New York City since 1736, I saw a toddler who was seriously overweight, and I tried to talk with his mother about ending the practice of nighttime milk bottles. The mother became very distressed when I broached the subject of the child's weight, and the risk of severe dental caries. She knew it all she had already been through dental procedures for her son, she was worried about the family history of diabetes and the risks associated with obesity. But if she didn't give her son a milk bottle, he would cry - loudly and at length — and his crying at night disturbed the other people sharing the apartment, who all had to get up early for work or school. She was clearly worried that following my advice might mean losing her living situation, which

was already tenuous. The toddler in my exam room was already suffering from some of the chronic diseases — obesity, dental caries — that are part of the medical risk of poverty. That child was growing up in circumstances of insecurity and uncertainty about his housing situation, clearly putting his mother under great stress, which in turn had ramifications for the emotional dynamic between mother and child. And yes, that child had access to health



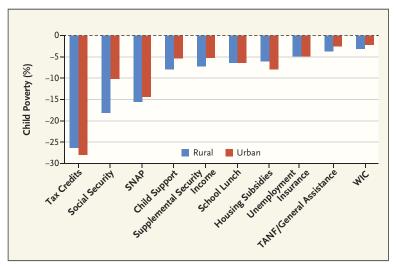
care, but I, his health care provider, had in my well-meaning way given advice that was only dialing up the stress.

Because so many children in the United States live in or near poverty, many pediatric primary care providers are personally familiar with the damage that growing up in poverty can do, and there is a long honor roll of clinicians, researchers, advocates, and activists coming from the pediatric profession. The recent AAP policy statement incorporates that history of activism but

takes it to a new level in organizational pediatrics, both in recognizing the clinical damage that poverty can do and in encouraging clinicians to screen for poverty and its ill effects and to find ways to link families with resources and programs that can help them help their children to thrive.

The new policy statement asks that we screen all children, and it suggests several tools. At its most basic, screening can involve a single question, "Do you have any difficulty making ends meet at the end of the month?" As with all forms of screening, asking the question is not enough: you have to know, when you ask, how you are going to offer help and guidance to people who screen positive. In the case of pediatricians and poverty, the hope is that we — and the pediatric medical home — can get better at helping families connect to the resources that are often out there, from Medicaid enrollment and WIC (the Special Supplemental Nutrition Program for Women, Infants, and Children) and SNAP (the Supplemental Nutrition Assistance Program) to Early Head Start programs and parenting supports (see bar graph). But it's also true that just asking the question over and over helps make the problem visible and reminds us of the complexities that many families face in trying to follow all the other guidance we give.

The statement also examines some family-support programs that are already based in pediatric care. I am the national medical director of the Reach Out and Read program, which uses the opportunity of primary care visits in the first 5 years of life to pro-



Reduction in Child Poverty Rates from Income Support Programs, 2013.

SNAP denotes Supplemental Nutrition Assistance Program, TANF Temporary Assistance to Needy Families, and WIC Special Supplemental Nutrition Program for Women, Infants, and Children. Data are from the Bureau of Labor Statistics, Current Population Survey, Annual Social and Economic Supplement. Poverty measured by Supplemental Poverty Measure.

mote parental interaction around books and reading aloud; we counsel parents about incorporating books and reading into their home routines and give children's books at every checkup. I first got involved with Reach Out and Read back in 1992, when it was a single program at Boston City Hospital and I interviewed the doctor who'd invented the model, Robert Needlman, for an article I was writing for the New York Times Magazine about pediatrics and poverty, that perennial issue. I was drawn to the program, but also to the modesty and realism of what he said about the intervention he'd designed: "Kids need comprehensive services, adequate social services and jobs and housing and medical services. This is a small part. It's one other thing that pediatricians can do that moves things in the right direction."

I still believe, of course, that a home with books in it, a bedtime routine, more language, and more family interaction can help shift the balance, brighten a child's life, and increase the chance of positive and responsive parent-child interactions. The evidence shows that parents who get the guidance and the books at their clinic visits read aloud more frequently and that at-risk children's vocabularies improve (www.reachoutandread.org/ why-we-work/research-findings). And a more intensive intervention built on the same platform and model, the Video Intervention Project, has recently published evidence that working with the parents of young children on playing and reading with their children can improve behavioral outcomes, reducing hyperactivity and aggression and improving social and academic engagement.4 So there are opportunities for us to support families right in the clinic — but the job is bigger than that.

There is good evidence to support more intensive programs, including validated home-visiting models such as the Nurse-Family Partnership, which has been shown to change the odds in many ways for high-risk, low-income, first-time mothers. And there is increasing consensus that the best investment we can make as a society, dollar for dollar, is in early care and education programs that reach children when their brains are in those crucial early years of growth and development.

So there is a role here for health care providers that starts with our awareness and educated understanding, which needs to be part of how we learn medicine, how we screen, and how we react to what we hear and see in the exam room. But the imperative of working against child poverty goes beyond even the coordination and referral that can help our patients take advantage of these programs. Mitigation is important, but it isn't enough without working for systemic changes that reduce child poverty by changing the larger balance between what families earn and what they owe.

Those 19th-century literary images of child poverty feel out of date in some ways but fright-eningly current in others. The little match girl reminds us of the dramatic wealth disparities that can render a desperate child somehow invisible right outside the windows of affluent homes. Ragged Dick raises questions about contributors to social mobility and the importance of savings in breaking out of poverty.

And don't forget what happened at the end of "A Christmas Carol." Dickens knew the most

important lesson about child poverty: children are poor because their families are poor. When Scrooge underwent his overnight conversion, he became the kindly founder of the holiday feast, but that wasn't his most important intervention. The reformed Scrooge tells Bob Cratchit, "I'll raise your salary, and endeavor to assist your struggling family." Dickens and Scrooge were right: benevolence toward the child is not enough — though it helps. A holiday food handout makes for a happy picture, but it doesn't solve the problem. Access to medical care helps. But to lift children out of poverty, mitigate its damage, and turn things around, their parents need opportunity and, not to put too fine a point on it, money. Children stop being poor when their parents stop being poor.

That's why the AAP policy statement looks to safety-net programs such as Temporary As-

An audio interview
with Dr. Klass is
available at NEJM.org

sistance to Needy Families and to programs that increase families' access to

cash and benefits, especially the Earned Income Tax Credit and the Child Tax Credit,⁵ which have been judged to lift more children out of the shadow of poverty than any other U.S. government initiatives, by changing that cash balance, as well as to the hope of raising the minimum wage.

For Tiny Tim, it worked. That's why it's so interesting to consider what ailment might have been reversed when the Cratchits' circumstances were improved. Tiny Tim, so gentle, so frail, might seem to be created to speak his pious lines and then expire pathetically, in the best Victorian sentimental tradition. But having created a child stunted and damaged by poverty, almost to the point of death, Dickens reprieved him — probably much to the surprise and relief of his audience. Dickens relished confounding their expectations. A showman famous for his live readings, Dickens watched his audience carefully for their reaction; women fainted, for example, at the violence in Oliver Twist. His public readings of "A Christmas Carol" were hugely popular events. In 1855, he wrote proudly to a friend, "Enormous effect at Sheffield . . . they took the line, 'and to Tiny Tim who did NOT die,' with a most prodigious shout and roll of thunder." Tiny Tim reminds us that the devastations and damage of poverty can in fact be mitigated, alleviated, lifted — and not only in the next world — if the will is there to do it.

Disclosure forms provided by the author are available with the full text of this article at NEJM.org.

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DOI: 10.1056/NEJMp1603516
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The Hell of Syria's Field Hospitals

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here's my mom?" a boy asked as he woke from surgery. Both his legs had been amputated when a missile hit his home in Aleppo, Syria. His mother had died in the blast. It didn't take him long to realize the answer.

Every time I have volunteered

to work in a field hospital caring for Syrian patients, I witness similar horrors and come back with nightmares. It gets worse with each trip. And whereas I never stay more than a month, Syrian physicians have endured these conditions for years — many working in caves and basements

under persistent siege and bombardment. Each day is the same: cleaning mutilated wounds, amputating obliterated limbs, and watching people die in overcrowded emergency rooms with pitiful resources.

If we have two critically wounded patients and only enough