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Is your patient sick—or hungry?

With millions of Americans struggling to recover from job loss and recession, it's critical to include hunger and poverty in the medical history and physical assessment.

Late last year, news outlets nationwide confirmed what many had long suspected: America's middle class is shrinking. The latest data from the US Census Bureau found that nearly half (48%) of Americans are poor or low income.[1,2]

That means 46.2 million people—more than 15% of US citizens—are living below the federal poverty level (FPL), which is $23,050 for a family of 4. Another 97.3 million (about 33%) meet the criterion for low income—earning between $23,050 and $45,869 for a family of 4.[1,2] These numbers are based on the Census Bureau's new supplemental poverty measure, which considers costs like medical and housing and benefits such as food stamps in calculating poverty.[3]

The way that census data are analyzed is a key consideration for policy makers and legislators. For primary care physicians, the findings simply serve as a critical reminder that millions of Americans—including some of your patients—are struggling to stay afloat.

In some cases, the problems patients face will be so severe that there won't be much you can do about them. In others, there are steps you can take to lend a helping hand (**TABLE**).

Death by poverty?

That's the title of a summary of a recent study, posted on the Web site of Columbia University's Mailman School of Public Health.[4] The researchers found that poverty, low levels of education, and a lack of social support, among other "social" factors, account for as many deaths as heart attack, stroke, and lung cancer.[5]

A related study, also by researchers at Columbia, attempted to quantify the health impact of some leading medical and nonmedical factors. Their findings: The detrimental effects of poverty, smoking, and being a high school dropout exceed those of binge drinking, being overweight or obese, and being uninsured.[6] The average low-income individual loses 8.2 years of good health simply because of his or her economic status, the lead researcher reported. In contrast, the average loss associated with obesity is 4.2 years and 6.6 years with smoking. The overall health of the US population won't improve until poverty rates are reduced and educational deficits are addressed, the lead researcher concluded.[7]

That's not to negate the importance of health coverage, however: A Kaiser Family Foundation study of low-income adults found that fully half (51%) of those who lacked health insurance had not gone to a doctor or clinic in the previous 12 months—and 69% had received no preventive care in the course of the year.[8]

Another survey, completed in 2007, asked adults younger than 65 about their use of medication. About 1 in 7 (13.9%) said they had failed to fill a prescription in the previous year because they couldn't afford it. Four years earlier, 10.3% had done so.[9]

Recently, however, the situation appears to have gotten even worse. In a 2011 *Consumer Reports* survey, just under half of adults taking prescription medication reported

that they had cut costs by engaging in what the surveyors described as "risky health care tradeoffs"—eg, not filling a prescription, skipping doses, or taking an expired medication.[10]

Poverty in childhood has long-lasting effects

Children may be less likely than adults to require prescription drugs, but they are typically the hardest hit by poverty—both in numbers and long-term effects. The poverty rate for those younger than 18 is 22%, according to the National Center for Children in Poverty.[11] For kids under the age of 5, it's more than 25%.[12]

Children of poor, uneducated parents have worse health and die earlier than those whose families are wealthier and better educated, research suggests.[13-16] Even kids from middle class families fall short on measures of health and well-being compared with children whose families are more affluent. What's more, being poor in early childhood appears to have lasting effects. Regardless of social or economic status or individual behavior later in life, studies suggest that the stress of poverty in the early years is associated with chronic illness and disability in adulthood.[13-16]

The bottom line, according to the Robert Wood Johnson Commission to Build a Healthier America: "For the first time in our history, the United States is raising a generation of children who may live sicker, shorter lives than their parents."[13] Hunger, or the lack of an adequate supply of nutritious food, is a key factor.[17]

Hunger hits home

In an op-ed in the *San Francisco Chronicle*, family physician Laura Gottlieb told the story of an 8-year-old boy whose family she'd known for years. Brought to her office because of abdominal pain, the boy underwent multiple tests, including urine and stool examinations, blood work, and imaging studies. As soon as one test came back, Dr. Gottlieb ordered another. All were negative, and no cause for GI distress was found.[18]

Only later did she discover that hunger was the source of the pain. "It had never even occurred to me to ask his mother about how much food there was in the house," Dr. Gottlieb wrote.[18]

TABLE

Help the poor and uninsured: 9 things you can do

1. Stress the importance of early—and less costly—treatment
2. Use fewer diagnostic tests
3. Do more in-office procedures
4. Request courtesy consults
5. Prescribe generics
6. Reduce polypharmacy
7. Discuss drug costs
8. Use drug samples sparingly (if at all)
9. Connect patients with community resources

In a similar vein, CBS News recently ran a story about a high school football team that seemed to be down on its luck. Besides being on a losing streak, many of the players were lethargic. Eventually, an astute coach realized that a mental pickup wasn't what the team members needed—nutrition was. In this impoverished Burke County, Georgia school, about 85% of the student body qualify for in-school breakfast and lunch. But for many kids, those 2 meals were all they had to eat.[19]

With the help of a school nutritionist and the federal Healthy Hunger-Free Kids Act, hundreds of students now receive dinner, too. And last season, in late 2011, the properly fueled team members went on to win the state championship.[19]

Who is "food insecure"? In 2010, the latest year for which figures are available, 14.5% of US households (representing a total of 48.8 million people) were "food insecure," as the problem of having too little to eat is officially known.[20] Most of these families managed without substantially disrupting their normal eating patterns or reducing their intake, the US Department of Agriculture reports. This was accomplished by cutting back on the *variety* of foods they ate, getting federal food assistance, or getting food from food banks, among other coping strategies. But for 6.4 million households, the problem was severe enough to disrupt normal eating patterns and cause those affected to eat less than usual at least part of the time in the course of the year.[20]

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About 1 in 7 respondents said they had failed to fill a prescription in the previous year because they couldn't afford it.

Here, too, the toll on children is especially high. Twenty percent of households with children face food insecurity, nearly twice the rate of childless households.[20] In a child's earliest years, too little energy, protein, and other nutrients can result in long-lasting deficits in social, cognitive, and emotional development; malnutrition and deficiencies in vitamins and minerals may even result in brain impairment.[17] In addition, school-age children who don't have enough to eat have more behavioral problems and are more likely than those who are not struggling with hunger to be in special education classes.[17]

The hunger and obesity link

Ironically, hunger is also associated with obesity. High calorie, high carbohydrate foods like pasta and bread typically cost considerably less than nutrient-rich low-carb foods like cheese, fruit, fish, and vegetables, and are more filling. And in poor neighborhoods, food that is high in carbohydrates and low in protein and other nutrients tends to be more available than fresh, healthy—and more perishable—food.[21]

What's more, people living in poverty may find it especially difficult to exercise. In many neighborhoods, exercising outdoors can be dangerous, gyms are unaffordable, and safe parks and playgrounds may be few and far between.[21]

Identifying poor and hungry patients

In a survey conducted by the Childhood Hunger Initiative of Oregon, most of the nearly 200 physicians and nurse practitioners who responded expressed a desire to learn more about the consequences of hunger and how to address them. Besides being uncomfortable broaching the subject of hunger and other poverty-related issues, the providers cited time constraints as a barrier to doing so.[22]

Ask this question

Citing similar obstacles, Canadian researchers conducted a pilot study in search of an easy-to-use, evidence-based "case-finding" tool. They offered questionnaires to patients at 4 clinics in British Columbia to determine which questions had the highest likelihood of determining whether an individual was struggling with hunger, poverty, or homelessness. Participants, which included patients above (n=94) and below (n=51) the poverty line, were also asked how they felt about being asked such questions.[23]

One particular question—"Do you (ever) have difficulty making ends meet at the end of the month?"—proved to be the best predictor of poverty. Although 2 additional questions about food and housing were identified as suitable for a 3-item screening tool, this single question alone had 98% sensitivity and 60% specificity (odds ratio, 32.3; 95% confidence interval, 5.4-191.5). Equally important, 85% of study participants with income below the poverty level thought that poverty screening was important, and 67% said they felt comfortable talking to their family physician about it.[23]

Take this course

In response to the results of the provider survey conducted by the Childhood Hunger Initiative of Oregon, a team at the Oregon State University Extension Service developed an online training program. The free 5-module course, available at http://oregonstate.edu/instruct/dce/chi/modules.html, addresses the impact of childhood hunger and provides screening and intervention tips.[24]

A recommended strategy is to incorporate a question related to hunger and food insecurity into the medical history or physical assessment. Noting that you'll learn more by asking whether a family has sufficient resources to provide a healthy diet than by simply inquiring about a balanced diet, a narrator uses this wording:

"In the past month, was there any day when you or anyone in your family went hungry because you didn't have enough money for food?"[24]

What you can do to help needy patients

Some patients who are out of work, uninsured, and barely able to pay for food and shelter will simply put off doctor visits—or come in only after their condition is so dire that you have no recourse but to send them to

the emergency department (ED). The result, of course, is just the opposite of what they had hoped for. They end up with a much larger bill—or, if they have coverage, with a much bigger copay—not to mention a far more serious condition than they would likely have had if they'd come in sooner.

Here are some ways you can help.

Discuss costs with uninsured patients. To encourage uninsured patients to come in before their condition worsens, make them aware of the comparatively low cost of a visit to your office vs that of, say, imaging studies, specialist visits, and lab tests, as well as ED costs. That's one of the interventions recommended by Robert A. Forester, MD, and Richard J. Heck, MD, the authors of "What You Can Do to Help Your Uninsured Patients."[25] Consider offering discounts to low-income patients (within the bounds of Medicare and other insurance provisions), they also suggest.

Use fewer diagnostic tests. Ordering a battery of tests when a diagnosis is not readily apparent is a "cost-insensitive" way to practice medicine, authors Forester and Heck observe. Spending additional time with such patients, using your cognitive and diagnostic skills and performing a complete history and physical, frequently results in a diagnosis and treatment plan, they note.[25] If patients are aware that you're trying to minimize costs, they'll often consent to a step-by-step diagnostic work-up that can be stopped at any time it is appropriate.

Do it yourself. Expand your practice to include a variety of minor procedures, such as removal or biopsy of common skin lesions, colposcopy, or setting simple fractures. These measures can help keep costs down to better serve poor and low-income patients. The American Academy of Family Physicians offers courses and training in various procedures that family physicians can competently perform in their own offices.

Request a courtesy consult. On occasion, you may be able to avoid a costly referral by calling a colleague and asking for a courtesy consult. The specialist will often tell you how he or she would handle a clinical presentation like the one you describe and suggest you try a similar approach, suggests Doug Campos-Outcalt, MD, MPA. Dr. Campos-Outcalt, a faculty member at the University of Arizona College of Medicine and the author of JFP's bimonthly Practice Alert column, has extensive experience working with underserved communities.

Connect patients with community services. Poor patients typically have many social and psychological needs, as well as the need for medical care, and integrated care is particularly important for those facing hunger, homelessness, and chronic illness, says Jonathan Cartsonis, MD, medical director of Healthcare for the Homeless in Phoenix. Maintain contact with hospital social services and emergency psychiatric services, and have information—and handouts—about local food banks, homeless shelters, and com-

Resources

Feeding America Food Bank Locator
http://feedingamerica.org/foodbank-results.aspx

Insure Kids Now
http://www.insurekidsnow.gov/state/index.html/

National Association of Free and Charitable Clinics
http://www.freemedicalcamps.com

Nutrition Standards for School Meals (Healthy, Hunger-Free Kids Act)
http://www.fns.usda.gov/cnd/Governance/Legislation/nutritionstandards.htm

Partnership for Prescription Assistance
www.pparx.org

Rx Outreach
http://rxoutreach.com/

SNAP (Supplemental Nutrition Assistance Program)
http://www.fns.usda.gov/snap/applicant_recipients/eligibility.htm#income

WIC (Supplemental Nutrition Program for Women, Infants and Children)
https://stars.fns.usda.gov/wps/pages/start.jsf

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munity clinics, among other resources. (See the resources listed in the box on page 251.)

In Seattle, for example, "Project Access" is an organization that helps give the underserved access to specialists. And in many parts of the country, local Rotary clubs sponsor free clinics staffed with volunteer and retired physicians, working cooperatively with local pharmacies to provide at-cost generic drugs.

Keep drug costs down

Physicians can help to insulate their poor and low-income patients from high drug costs in a number of ways:

Reduce polypharmacy. Half of Americans take at least one prescription drug, according to the 2011 *Consumer Reports* survey. Among this group, people with limited income—those earning less than $40,000—take, on average, 5.7 different drugs.[10] Eliminating unnecessary medications, including supplements, herbs, and any other over-the-counter products, can lead to substantial savings. To determine what can be eliminated, ask patients to bring in everything they're taking and conduct a brown bag medication review. To learn more, see "Help your patient 'get' what you just said: A health literacy guide" (*J Fam Pract*. 2012;61:190-196).

Prescribe generics. Newer brand-name drugs may not be markedly better than older, established agents. And many generics are available at major retailers like Wal-Mart for just a few dollars for a 30-day supply or at CVS for $9.99 for a 3-month supply.[26] Yet some physicians routinely order newer medications, even for indigent patients.

Be upfront about drug costs. When you prescribe a new drug, whether generic or branded, it is important to discuss the cost (easily accessible online and in many electronic medical record systems) with the patient. Yet only 5% of respondents to the 2011 *Consumer Reports* survey said their health care providers had done so. Two-thirds of those surveyed (64%) did not discover the cost of a drug until they went to a pharmacy to pick it up.[10]

Think twice before handing out samples. Drug samples would appear to benefit the poor and the uninsured, but evidence suggests otherwise.[27,28] In a study that assessed out-of-pocket costs associated with the use of samples, patients who had never received samples had lower out-of-pocket costs.[28] That's partly because most samples are newer, more expensive drugs, and patients who start taking them are often unable to afford the cost of a prescription. Another study found that the use of generic drugs for uninsured patients rose (from 12% to 30%) after the clinic discontinued the use of samples.[27] JFP

One particular question—"Do you ever have difficulty making ends meet at the end of the month?"—proved to be the best predictor of poverty.

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