

# More school, less heart disease? Researchers keep finding evidence

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Most people probably think of school as something for strengthening the brain. Increasingly, researchers are learning that it may be just as important for the heart.

Education is an excellent predictor of heart disease, multiple studies have shown. Dr. Arshed A. Quyyumi, director of the Emory Clinical Cardiovascular Research Institute in Atlanta, said although having fewer years of school isn't as much of a risk factor as being a smoker or having diabetes, it's still significant.

He makes this comparison: A college-educated person who's already had a heart attack faces about the same risk of dying during a certain period of time as someone without a [college education](#) who has never had a heart attack. "So—not being educated is like having had a heart attack."

That was a finding from a 2019 study he co-wrote in the *Journal of the American Heart Association*

that followed older adults with [coronary heart disease](#) for about four years. Those whose highest level of [education](#) was elementary or middle school had a 52% higher risk of dying from any cause than those who had completed [graduate school](#). The more education someone had, the lower their risk.

Even in people without existing heart disease, the risk of eventually having coronary heart disease, heart failure or a stroke was 59% for men and 51% for women with only a grade school education compared to 42% for men and 28% for women who went to graduate school, according to a 2017 study in *JAMA Internal Medicine*.

"I think there's increasing and convincing evidence that education is really a critical risk factor for heart disease," said Dr. Rita Hamad, an assistant professor in the school of medicine at the University of California, San Francisco.

The precise nature of the connection is still being figured out. "There's just a lot of different pathways linking education and heart health," said Hamad, who is a social epidemiologist and family physician.

Quyyumi's study, for example, showed the higher a person's education, the less likely they were to smoke or to have [high blood pressure](#) or diabetes—all risk factors for heart disease. But since his study adjusted for those, the traditional risks don't provide a complete picture.

People who have higher levels of education are more likely to get better jobs, both Quyyumi and Hamad pointed out. "In the U.S., that's linked to whether you can get health insurance," Hamad said. "It's linked to whether you can afford healthy food."

People who are more educated have been shown to have lower stress levels—"maybe because they're just more comfortable financially," she said. "Those lower stress levels are better for your [heart](#) in the

long run."

Someone with less education and a low income also is less likely to have a support network that helps look after them when they have health problems. "That can also decrease their compliance" with treatment, said Quyyumi, a professor of medicine at Emory University School of Medicine.

Educational achievement gaps can be seen along racial lines. According to a 2019 report from the National Center for Education Statistics, as of 2016, the percentage of people age 25 and older who had not completed high school was highest for Hispanics (33%), followed by American Indian/Alaska Natives (17%), Blacks (15%), Asians and Pacific Islanders (13% each), and whites (8%).

Ethnic and racial minority groups also may contend with systemic discrimination, which researchers have linked to poorer health. For example, a 2020 study in the journal *Hypertension* found a lifetime of exposure to the stresses of discrimination may increase the risk of high blood pressure in African Americans.

There's no single remedy to closing education gaps, said Ronald F. Ferguson, an author and economist who has been on the faculty at Harvard Kennedy School in Massachusetts since 1983. The problem, as he puts it, stems from "an interlocking constellation of forces."

Ferguson likens the search for solutions to trying to free a fish caught in a net: "If you cut any thread in that net, you can make a little bit of a contribution towards getting it loose. But sometimes you've got to cut more than one thread."

The thread Ferguson is focused on these days starts before birth, with proper prenatal care and support for parents of infants.

"There's a ton of brain development that happens in those first several years," he said. "And the quantity and quality of that brain development depends upon the quantity and quality of interactions that the child has in their social environment, with family and others."

To that end, he founded The Basics, Inc., a nonprofit that emphasizes basic steps families can use to prepare a child for kindergarten.

From the medical side, Hamad thinks education needs to be considered both in research and in doctors' offices.

"We're missing a lot of the at-risk population in clinics because we're thinking too narrowly about what puts patients at risk," she said. "We're only thinking about the biomedical risk factors instead of the social [risk factors](#)."

Quyyumi doesn't think doctors need to start routinely asking patients about their education level during exams, but he does think doctors should consider a patient's ability to comprehend their disease and its treatment.

Ferguson said working more basic health lessons into the [school](#) curriculum could help, but overall, he does not expect one grand solution. Instead, everyone can work on whichever piece of the puzzle they're best equipped for. "Each of us has a role to play."

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