The Research is Clear: Nurture Heart Health Early

Population Health Sciences

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We typically think of heart disease as a problem that only affects adults, which is understandable considering heart disease is the leading cause of death for both U.S. men and women, accounting for about one in every four deaths each year. When I initially started researching heart health myself, I focused on the adult population in order to study how health policies and neighborhood environments influence risk factors for poor heart health like smoking and high blood pressure. But I quickly saw how crucial childhood was to the prevention of heart disease, and shifted the focus of my research in that direction. For example, we often see that unhealthy behaviors start in childhood, including eating a poor-quality diet, not getting enough physical activity and getting too much screen time. It is in these early years that health issues like obesity, high blood pressure and diabetes can develop, setting children on a path toward worse health in adulthood and potentially toward future heart disease.

What we know and don't know about heart health in the earliest years

According to the American Heart Association, ideal heart health is based on having four ideal health behaviors and three ideal biological factors, referred to as "Life's Simple 7." This includes: healthy diet, exercise, not smoking, having a healthy body mass index (BMI), and healthy levels of blood pressure, cholesterol and glucose. Most children are born with ideal heart health across these seven factors, but research has shown that this ideal cardiovascular health begins to deteriorate early in life.

According to research using the National Health and Nutrition Examination Surveys, a national study designed to represent the U.S. population, **only 39 percent of children still have ideal diet, BMI, blood pressure and cholesterol levels by the time they reach the age of 8 to 11 years old.** One-third of children are already overweight or obese by that age, and less than one percent eat an ideal diet. Higher BMI, blood pressure and cholesterol are all associated with development of atherosclerosis, the buildup of plaques inside the arteries that has been shown to start in childhood and adolescence and can lead to heart attacks later in life.

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Despite the importance of preventing these issues early on, research gaps remain that keep us from understanding the full picture of heart health during childhood. We know little about how best to measure ideal cardiovascular health in infants and young children, which could help us address the earliest emergence of risk factors, and we must do more to determine how best to reduce socioeconomic disparities in heart health.

Working together to promote healthy behaviors

What we do know is that individuals can often prevent heart disease by developing healthy behaviors. But maintaining good heart health requires the ability to access and eat healthy foods, to be free of the negative effects of tobacco smoke, and to have a safe place to exercise and play. At PolicyLab, we are working to help children and their families live healthier lives in all of these areas. In my own work, I am studying how unhealthy behaviors such as having a poor diet, eating too much fast food, not getting enough physical activity and spending excessive time in front of screens cluster together in children and adolescents, in order to build better interventions to help improve these health behaviors. My colleagues are working to help families with young children learn to cook healthy meals using a peer-mentoring approach and to help parents quit smoking when they bring their children in for pediatric primary care visits.

Protecting kids' heart health today presents a real opportunity to improve the nation's health in the future. Often, people think of the health needs of children in terms of the health needs of adults—but in the case of heart health, children are often forgotten altogether. During February, as we recognize American Heart Month, we encourage others to not leave kids out and to consider their unique heart health needs too. By working together to nurture heart health in the early years, we may be able to reduce the chronic health conditions faced by so many Americans, addressing health issues before they start.

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