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EDITORIAL

The Urgent Need to Refocus Cardiovascular Disease Prevention Efforts on Young Adults

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Life expectancy in the US is now the lowest it has been since 1996, with young- and middle-aged adults seeing the most rapid declines.[1,2] These declines began in 2014 and have accelerated over the past 3 years of the pandemic. While COVID-19 represents a significant proportion, increases in heart disease between 2020 and 2021 explain more than 4% of the most recent shortening in life expectancy.[2] These increases in cardiovascular mortality reflect recent disturbing trends in cardiovascular risk determinants and events in younger adults.[3,4] Although overall cardiovascular disease mortality declined until 2020, hospitalization and death rates flattened or in some cases increased among specific racial and ethnic subgroups of young adults during this time.[3,5,6] In particular, hypertensive heart disease, heart failure, and endocarditis have increased in young adults, particularly among Black individuals, through 2018.[7] Consequently, young adults make up a growing proportion of cardiovascular disease events, with the proportion of premature myocardial infarction among adults younger than 40 years increasing by 2% every year.[8] The increasing event rates observed among younger adults can be attributed to the increasing prevalence and onset of risk factors such as obesity and hypertension at younger ages, which exacerbate cumulative exposure and cardiovascular disease risk over near- and long-term time horizons.[9]

Related article

In this issue of *JAMA*, Aggarwal and colleagues[10] used the most recent data from the National Health and Nutrition Examination Surveys (NHANES) to examine trends in diagnosis, treatment, and control of cardiovascular risk factors among young adults (aged 20-44 years) from 2009 through 2020. Their findings clearly demonstrate that the burden of cardiovascular risk factors is unacceptably high and increasing in young adults. The age-adjusted prevalence of obesity, hypertension, and diabetes increased from 33% to 40.9%, from 9% to 11.5%, and from 2% to 4.1%, respectively, from 2009 to 2017-2020. Only the rates of hyperlipidemia decreased between 2009 and 2020, with age-adjusted rates decreasing from 41% to 36%. Despite declines in tobacco prevalence in older adults in the US, smoking prevalence remained constant in young adults during the study period. Importantly, the study demonstrates that despite current efforts, rates of controlled hypertension and diabetes remain low among young adults with these conditions.

These most recent findings within NHANES also highlight the growing inequities in cardiovascular health across racial and ethnic subpopulations in the US. Black young adults had twice the prevalence of hypertension as all other racial and ethnic subgroups in NHANES. These striking disparities have not improved over the past decade and contribute to their high rates of premature cardiovascular disease mortality owing to disproportionately high rates of stroke and heart failure. In addition, Mexican American and other Hispanic young adults experienced increases in hypertension and diabetes prevalence between 2009 and 2020, thus setting the stage for greater cardiovascular disease burden in the future. These disparities are unacceptable and represent a failure of current disease prevention efforts.

The prevalence of these major risk factors and the disparities that exist in the US highlight the importance of focused prevention programs early in adulthood and the need for innovative and effective strategies to address them. It has long been known that these disparities exist and that the growing burden of cardiovascular disease risk factors will lead to increases in incident cardiovascular disease, effectively ending the decades of gains that have been made in combatting heart disease. The time is now for aggressive preventive measures in young adults. Without immediate action there will continue to be a rise in heart disease and the burden it places on patients, families, and communities. Effective community-based interventions focused on Black and Hispanic populations such as the FAITH! trial[11] and Black barbershop-based outreach programs[12] exist but have predominantly included older adults. Current clinical screening and intervention strategies fall short of what is needed for young adults. There is currently a major gap in addressing the unique prevention needs of diverse, younger adults.

Young adulthood represents an unprecedented opportunity for cardiovascular disease prevention, as individuals who reach midlife with optimal risk factor levels have been shown to live substantially longer and healthier lives with low absolute risks of cardiovascular disease.[13] However, intervening to promote cardiovascular health among adults aged 20 to 44 years has unique challenges, including a lack of engagement in the health care system, a period of competing priorities in terms of family and career, as well as a lack of prioritization of long-term health.[14] These challenges necessitate tailored approaches to primordial and primary prevention in this age group. Given the multilevel influences on cardiovascular health, efforts must include population-wide policy changes, community-based health promotion, as well as individual-level interventions, both behavioral and pharmacological, to promote risk factor prevention and control. Public health approaches, ie, laws and policies, such as those that address tobacco control, diet quality (sugar-sweetened beverage taxes and the Supplemental Nutrition Assistance

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Program), support for family leave, and early childhood education can result in population-wide improvements in cardiovascular health starting early in life. At the system level, efforts to engage young adults in the health care system are needed. Transitioning from pediatric to adult medical care often leads to discontinuity in care. Added to that, young adults are often the least likely of any age group to have health insurance despite recent improvements in coverage due to the Affordable Care Act. Even among young adults who engage with the health care system, treatment rates have been stagnant for hypertension and diabetes, and control rates have been low and decreasing in the most recent years. At the individual level, community-based approaches tailored to the needs and preferences of young people, such as their comfort with technology, are needed to engage them in cardiovascular health promotion. In the clinical setting, continued research is needed to inform recommendations for frequency and timing of screening for risk determinants in young adults. In addition, more research is needed that rigorously evaluates effective lifestyle and pharmacological strategies to preserve optimal risk factor levels and control nonoptimal risk determinant levels when present.

The foundation of cardiovascular health begins early in life. Already by young adulthood, clinical cardiovascular risk factors are common and long-standing disparities are being fueled by inequities rooted within society. These worsening trends in risk factors highlight the importance of focusing on prevention in adolescence and young adulthood in order to promote cardiovascular health across the lifetime. Early adulthood is a period in which risk is accumulating and without intervention will lead to increased events in early and mid-adulthood. Despite the recent focus on primary prevention efforts, the US has experienced worsening rates of obesity, hypertension, and diabetes among young adults, with consistent disparities, which have been exacerbated by the recent COVID-19 pandemic. Multilevel interventions to promote cardiovascular health tailored to young adults are critical to stem the growing burden of cardiovascular disease.

ARTICLE INFORMATION

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