Heart disease is a leading cause of morbidity and mortality for women in developed countries. A history of hypertension in pregnancy presents a group of women at a higher risk of future cardiovascular disease compared with the general female population, and yet the management and monitoring of these women for cardiovascular disease is often overlooked. This study is unique as it provided results from linked population data (n=31,656) and also results from individually reviewed medical records (n=1,158) to ensure accuracy of the diagnosis and blood pressure values. The study demonstrated that women with de novo hypertension in pregnancy are at greater risk of future cardiovascular disease compared with women who remained normotensive in their pregnancy, irrelevant of the duration of the disease or the use of antihypertensives in the pregnancy. A history of de novo hypertension in pregnancy identifies a group of women at an increased risk of cardiovascular disease before the onset of other traditional risk factors. As such, these women should be targeted to be provided with education about modification of lifestyle behaviors and early intervention to help reduce their risk of future adverse health outcomes.

Overall hypertension prevalence in the United States has not changed in the past decade, though hypertension awareness, treatment, and control have improved. Despite this progress, awareness, treatment, and control appear to be worse among young adults compared with older adults. This study of 41,331 participants ≥18 years of age from the National Health and Nutrition Examination Surveys (1999–2014) estimated temporal trends of hypertension, awareness, treatment, and control among young adults (aged 18–39 years) compared with middle-aged and older adults (aged ≥40 years). Hypertension prevalence remained unchanged from 1999 to 2014 in US young adults, and as in older adults, awareness, treatment, and control improved over time. However, all of these measures of quality of hypertension screening and treatment were worse in young adults compared with older adults. In 2013 to 2014, of ≈6.7 million US young adults with hypertension, only 50% were treated and 40% controlled. Worse hypertension awareness and management among young adults were mostly driven by shortfalls in young adult men, not young women, which may be explained by blood pressure measurements of young female patients in routine obstetric and gynecological visits. These findings suggest that public health efforts to improve blood pressure control in young adults, particularly young men, should focus on raising awareness and providing screening and treatment opportunities in medical, worksite, and community settings.

Increasing evidence supports the importance of socioeconomic status (SES) in the development of atherosclerotic cardiovascular disease. To determine whether lower arterial stiffness in adulthood is associated with higher childhood family-level SES, we analyzed the longitudinal data of 2,566 individuals aged 3 to 18 years at baseline. Arterial stiffness was quantified by carotid artery distensibility and aortic pulse wave velocity as measured 21 or 27 years later. In multivariable-adjusted analyses, higher SES was associated with lower arterial stiffness in adulthood, carotid artery distensibility being higher (β=0.029%/10 mmHg) and pulse wave velocity being lower (−0.062 m/s). These associations remained significant after further adjustment for each participant’s SES in adulthood but became weaker after further adjustment for cardiometabolic risk factors at follow-up. Our findings emphasize that children born in low SES families are at risk of vascular disease and should be targeted in programs for cardiovascular disease prevention early in life.
Clinical Implications

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