The Path to Better Cardiovascular Health in North Carolina: An Interview with a Family Physician and Lipidologist

Interview conducted by Kaitlin Ugolik Phillips

Cardiovascular disease remains a major health issue in North Carolina, significantly affecting longevity and health care costs. *NCMJ* Managing Editor Kaitlin Ugolik Phillips sat down with family physician Dr. Thomas White to discuss his experiences and perspectives on this disease process.

Introduction

Cardiovascular disease (CVD) is the leading cause of death in the United States and the world [1]. It also remains a leading cause of death in North Carolina [2]. CVD contributes significantly to disease burden and overall health care costs [3]. The causes and risk factors for CVD have been well elucidated, but progress in its prevention has been challenging. In this interview, **Dr. Thomas White**, a long-time family physician and former president of the North Carolina Academy of Family Physicians, talks about provides insight on CVD and the challenges we face in improving outcomes in our state.

Kaitlin Ugolik Phillips: What led to your interest in cardiovascular disease prevention?

Dr. Thomas White

Dr. Thomas White: *I grew up in the small town of Cherryville in Gaston County, North Carolina. My first introduction to cardiovascular disease was when my grandfather suffered a stroke and was rendered aphasic. I recall being told his blood pressure was extremely high, and of course at that time we had limited therapies for hypertension. I just could not understand why this kind, mild-mannered man could no longer communicate with me as a five year old, and I sensed his own frustration. A few years later, he died of another massive stroke. My father's side of the family has seen a number of heart attacks, almost all sudden and fatal. When my father turned 80, he underwent emergency coronary bypass surgery for severe three-vessel disease. Postoperatively, and until his death, he experienced severe memory difficulties. These experiences led me, early in my career, to have a special interest in lipid disorders, hypertension, diabetes, and obesity. I became involved with the National Lipid Association back in the 1990s, and was one of the first physicians in North Carolina to successfully pass their board certification process. I have remained active in that organization since. In my role as a small-town family physician, I have seen what cardiovascular disease can do to families and the community.*

Phillips: What trends in cardiovascular disease have you observed over the course of your career?

White: *Cardiovascular disease has remained the leading cause of death in this country for many years. Even with the COVID-19 pandemic, CVD still leads cancer and COVID-19 as the leading cause of death in the United States [4]. In North Carolina, according to the Justus-Warren Heart Disease and Stroke Prevention Task Force, only recently has cancer surpassed cardiovascular disease as the leading cause of death in the state [2]. We have actually made some progress, however, both nationally and in North Carolina. Since peaking in the late 1960s, deaths from CVD have actually been on the decline [5]. One might think this decline would be attributable to our very excellent emergency and hospital systems, and the technological advances we have made in the treatment of CVD, but in fact, studies have shown that the most significant contribution to reducing CVD deaths has come from the early identification and treatment of the known modifiable risk factors such as smoking, elevated cholesterol, hypertension, diabetes, and obesity [6]. Much credit for this should go to our primary care clinicians and nurses, and our public health system. Despite this reduction in deaths, the burden of CVD has actually grown tremendously [1]. A significant number of living individuals are afflicted with various forms of cardiovascular disease—not only coronary disease, but peripheral vascular disease, congestive heart failure, and the effects of previous stroke (like my late grandfather), and their care can be expensive. We spend an estimated $400 billion annually in this country on CVD, and that figure is rising [3].*

Electronically published September 12, 2022.

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N C Med J. 2022;83(5):353-355. 0029-2559/2022/83515

Phillips: Reflecting on your experience, what have been the biggest challenges of providing prevention-minded care in your practice?

White: *First, we do not have enough primary care clinicians doing what I and others like me are doing. And we have a maldistribution problem, with inadequate primary care access in areas of greatest need. Only about 30% of our medical school graduates choose a primary care specialty [7]. This is quite the opposite from most developed countries in the world. And it has been well demonstrated that societies with a strong primary care base tend to have much better health outcomes [8].*

The second challenge is that of denial. I am concerned that the public too often feels that the consequences of CVD are not to be feared, that we have the technology in place to deal with most anything. In fact, someone still dies in this country about every 36 seconds from a CVD event, and about every 40 seconds from a heart attack [3]. Most heart attacks occur in people who have never had one, and very often, they occur without warning [3]. This is a particular issue for women, who now experience almost as many heart attacks annually as men, and their preceding symptoms tend to be either absent, or much less typical than those in men [9]. The perception that women are less likely to develop CVD and are at risk of their symptoms being ignored still exists [10]. Within health care itself, we are slow to adopt new and potentially more effective strategies. As an example, the AHA/ACC Multispecialty Cholesterol Guidelines published in 2018 provided a very detailed but flexible algorithm for assessing the CVD risk of an individual patient and providing guidance as to when statin therapy might be indicated, including the use of coronary CT to screen for the presence of atherosclerosis in patients of intermediate or uncertain risk [11]. This approach has proven to be very instructive in my personal experience when used selectively and when affordable for the patient.

The last obstacle is compliance. Quitting smoking, losing weight, eating better, moving more, sleeping better, taking appropriate medications, and reducing stress in one's life are all very difficult. Patients need access to primary care, and that primary care clinician needs the time and resources to be of greater help.

Phillips: How have workforce issues affected CVD outcomes?

White: *To complicate everything else, primary care appears to be in crisis. COVID-19 has had a significant negative impact on primary care practices, both financially and emotionally [12]. Physicians currently in practice express a high degree of dissatisfaction and burnout, and a significant number have threatened to leave primary care and medicine altogether [13]. We have a significant number of older physicians practicing family medicine in North Carolina, and my concern is they will retire sooner than later due to the frustrations and challenges of their work life. Not to ignore the challenges and difficulties of other specialties, but primary care physicians feel too rushed in the office and too pushed to complete what they feel are nonessential administrative duties, such as prior authorizations and lengthy documentations. While their pay has increased, especially since the Affordable Care Act, it is still significantly outpaced by their specialty colleagues [14].*

Phillips: When CVD patients can access the care they need, how does it impact their life expectancy?

White: *That is very difficult to measure. We need more meaningful data. We need our multiple and various unconnected electronic health records to give us better feedback and point the way to more effective strategies. Of course, as a longtime family physician, as do all physicians, I fully appreciate that none of us will live forever. Unexpected and non-preventable things can happen and shorten our lives suddenly, in ways we might not see coming. Something, if not CVD, will end our lives eventually. Nevertheless, my goal as a primary care physician has always been to help patients avoid illness, including CVD, and hopefully give them the opportunity to live a high-quality life for as long as possible, and when the time comes, to die as peacefully as possible. That should be the goal of medicine, and all society, in my opinion.*

Phillips: What policies might make addressing cardiovascular disease easier and more effective at the state and/or local level?

White: *There are so many. We need to continue to educate and increase awareness of CVD, its causes, and its consequences. We need to increase our primary care workforce by incentivizing medical students' decision to choose primary care, offering greater compensation and improving work satisfaction, and by expanding the primary care team with more nurse practitioners and physician assistants. We need to give primary care more time with patients, especially those with complex problems. To this end, we need to explore emerging and innovative models of primary care that afford smaller care panels, greater access, and lengthier appointment times, such as direct primary care. And we need to make primary care available to everyone, regardless of their socioeconomic level.*

We need to recognize that the social determinants of health are critically important. We know that certain ethnicities and racial groups suffer greater morbidity from CVD. For example, in North Carolina, part of the so-called "Stroke Belt," African Americans suffer greater stroke risk, in large part due to hypertension [3]. We need to get care to these vulnerable populations.

We also need to be more sensitive and effective in our approach and treatment of obesity, a growing epidemic that contributes to the increased prevalence of diabetes, and threatens to reverse whatever gains we have made in the fight against CVD [3]. Too often, overweight patients are "fat-shamed," simply told by their doctor to "push back from the table and move more." They can be discriminated against by insurers, who either deny effective and approved medications for weight management or render them unaffordable. We do have effective strategies to help patients lose weight. But these take time

(usually a team approach), can be costly, and also require a commitment from the patient. We must do better when it comes to addressing this crisis of obesity if we are to succeed in our efforts to prevent CVD. There are challenges, but there are paths forward There are challenges, but there are paths forward. NCMJ

Acknowledgments

Disclosure of interests. No interests were disclosed

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