13
Coping and Heart Disease: Implications for Prevention and Treatment

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What Is Cardiovascular Disease?

Cardiovascular diseases include stroke, congenital heart defects, heart failure, and other cardio-circulatory ailments. Yet, the most common form of cardiovascular disease is coronary heart disease (CHD). CHD is usually marked by one of three symptoms: angina, myocardial infarction, or sudden cardiac death (Walker & Lorimer, 2004). Each of these symptoms typically stems from partial or complete blockages of the vessels that prevent normal blood flow to and from the heart; the degree of severity, or damage to the heart, runs along a continuum from angina to sudden cardiac death.

At one end of the severity spectrum, angina is severe chest pain usually experienced due to insufficient blood flow supplied to the heart (Walker & Lorimer, 2004). Although painful and frightening, angina represents the least serious of the symptoms of CHD, often signaling to the individual that drastic lifestyle changes are necessary. Myocardial infarction (MI), or heart attack, involves damage or death to part of the heart muscle on account of a lack of oxygenated blood to that area. Unlike angina, however, MIs result in actual damage, or infarcts, to the heart muscle. Regardless of the size of the infarct, the area of muscle damage subsequently forms scar tissue, thereby disrupting normal heart activity. Pain from MIs is similar to that experienced in individuals with angina, but individuals with MI have the possibility of much more severe and long-lasting discomfort.

At the other end of the spectrum, some individuals’ first symptoms of CHD culminate in sudden cardiac death. Sudden cardiac death is defined as a death that occurs instantaneously on account of CHD symptoms, or death that occurs up to 24 hours following the onset of symptoms. Ventricular fibrillation, a rapid and uncoordinated pumping of the blood through the heart, is often the cause of sudden cardiac death. The American Heart Association (AHA; 2006) estimates that approximately 7.2 million individuals suffer MIs annually. The AHA also estimates that approximately 6.5 million individuals, who are diagnosed with
CHD, experience some form of angina during the course of the disease. Further, it is estimated that 335,000 people die each year on account of sudden cardiac deaths.

The Incidence, Prevalence, and Impact of Cardiovascular Disease

Cardiovascular diseases are the number one cause of death in the U.S., with the AHA (2006) estimating that approximately 37% of deaths in this country are a result of one form of the disease. The most current data show that in 2003, over 910,000 individuals died as a result of cardiovascular diseases. Furthermore, the AHA estimates that one in three adults in the U.S. has one form of the disease—that is, approximately 71.3 million individuals are currently estimated to be afflicted with a cardiovascular disease.

The AHA (2006) reports that if all forms of cardiovascular disease were eliminated, the current projected lifespan of Americans would lengthen by seven years—from approximately 77 years to 84 years. The AHA also estimates that 13.2 million Americans are diagnosed with CHD, with approximately 650,000 deaths annually related to CHD. Furthermore, it is estimated that approximately every 30 seconds someone in the U.S. will experience a cardiac event and that nearly every minute someone will die from CHD in the U.S. In addition, the direct and indirect costs associated with CHD are staggering—the AHA estimates these costs to be $142.5 billion in 2006.

Risk Factors for Cardiovascular Disease

With the marked increase in the incidence of CHD in the United States over the past few decades, much research attention has been paid to better understanding the risk factors that contribute to the onset and progression of CHD. The three main risk factors, or what Daly-Nee, Brunt, and Jairath (1990) call the “classic triad” (p. 7), are elevated cholesterol, hypertension, and smoking. Other important (and related) risk factors are sedentary lifestyles, obesity, and diabetes. The AHA (2006) reports that only 30% of U.S. adults report regular leisure-time activity; that is, less than one-third of Americans report engaging in physical activity for at least 30 minutes per day for five or more times per week. In a related vein, the AHA reports that 136.5 million adults were overweight in 2003 and that an additional 64 million adults were obese. Additionally, risk for death as a result of CHD is two to four times higher among individuals with diabetes than their non-affected counterparts. Age and family history are also important risk factors for CHD. Research indicates that one’s risk steadily increases with age and that having a first-degree relative with the disease sharply increases one’s chances of being diagnosed with CHD (Walker & Lorimer, 2004).