

# Introduction

Chronic Kidney Disease (CKD) is recognized as a major health problem affecting approximately 13% of the United States population. Progression of CKD is associated with a number of serious complications, including increased incidence of cardiovascular disease, hyperlipidemia, anemia and metabolic bone disease. CKD patients should be assessed for the presence of these complications and receive optimal treatment to reduce their morbidity and mortality. A multidisciplinary approach is required to accomplish this goal (**Robert et al., 2008**).

Chronic Kidney Disease (CKD) is an important risk factor for the development of Heart Failure (HF), Myocardial Infarction (MI), stroke, and Peripheral Arterial Disease (PAD) (**Robert et al., 2008**).

Atherosclerosis is a condition in which an artery wall thickens as the result of a build-up of fatty materials such as cholesterol. It is a syndrome affecting arterial blood vessels, a chronic inflammatory response in the walls of arteries, in large part due to the accumulation of macrophage white blood cells and promoted by low-density lipoproteins without adequate removal of fats and cholesterol from the macrophages by functional High Density Lipoproteins (HDL) (**Maton et al., 2003**).

Stroke is a serious ailment because it is the third leading cause of death, after heart disease and cancer. Studies had reported a 3 to 9% greater risk for hospitalization for symptomatic stroke in dialysis patients relative to the general population, making stroke more critical in the nephrology community (**Thom et al., 2006**).

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Stroke is commonly defined as the sudden onset of focal neurologic or retinal symptoms associated with cerebral or retinal tissue ischemia. The focal symptoms can include hemiparesis, hemiparesthesia, aphasia, visual field cuts, monocular blindness, diplopia, dysarthria, and imbalance (**Ovbiagele et al., 2003**).

TIA has been defined as neurologic symptoms caused by ischemia, which resolve within 24 hours (**Albers et al., 2002**).