

The increasing number of cardiovascular diseases (CVDs) in both developed and in the majority of developing countries emphasizes the importance of epidemiological research on cardiovascular disease risk factors (RFs) and their relationship, including dyslipidemia. Evidence from international randomized clinical trials suggests that elevated cholesterol levels are associated not only with atherosclerosis, but also with other chronic non-infectious diseases. These relationships are based on changes in lipid metabolism, increased concentration of free fatty acids, insulin resistance, and other mechanisms.

Hypertriglyceridemia and decreased high-density lipoprotein cholesterol, being significant independent RFs of cardiovascular diseases, nevertheless show a weaker association compared to hypercholesterolemia, and the possibilities of their pharmacological correction are less bright. Many factors influence the prevalence of dyslipidemia, including certain racial-ethnic group with certain lifestyle, genetic and cultural differences. The same CVD risk factors may differ in males and females. The article discusses the age-related aspects of dyslipidemia prevalence and mechanisms of cholesterol metabolism disorders with a regard to aging processes. We present the data of scientific research on the prevalence and characteristics of dyslipidemia considering race/ethnicity, gender and age.