Abstract

Background: Atherosclerotic cardiovascular disease (ASCVD) is the leading cause of morbidity and mortality worldwide. During 2018, ischemic heart disease (IHD) was the number one cause of mortality, followed by stroke; representing 23.33% of all mortality in the country. Low-density lipoprotein cholesterol (LDL-C) is a primary cause of atherosclerosis and non–high-density lipoprotein cholesterol (no-HDL-C) is more atherogenic than either lipoprotein alone.

AIM: To determine the status of achievement of lipid goal in Colombian very high risk population.

Methods: A nationwide longitudinal, retrospective study was conducted in Colombian very high risk population (Previous diagnosis of high blood pressure, diabetes mellitus or chronic kidney disease). Data from General System of Social Security in Health were collected by The High Cost Account, during 2014 to 2018. Goals lipid levels were defined LDL-C<70 mg/dL, no-HDL-C<100 mg/dL, triglycerides<150 mg/dL, TC<200 mg/dL. Descriptive statistics were used.

Results: 5,471,806 subjects were included in the study with an average study follow-up of 3.5 years. 60.45% were female and the mean of age was 62.81 years (±15.08). The attainment of no-HDL-C goal was 24.07%, LDL-C 25.07%, triglycerides 65.26% and TC 74.69%. For those whose baseline status was out of target, the probability of remaining out of target at the end of each year was 89.98% for no-HDL-C, 89.98% for LDL-C, 71.44% for triglycerides and 64.39% for cholesterol.

Conclusions: 75% of the very high risk Colombian population had LDL-C and non-HDL-C levels higher than targets established by The American Heart Association; therefore, it is necessary to promote dissemination and application of Guideline on the Management of Blood Cholesterol in order to improve modifiable ASCVD risk factors.