

Prevalence of familial hyperlipidemia in the adult population of the Colombian Caribbean

Miranda P. A., Salcedo Mejía F. E., Paz-Wilches J., De La Hoz F., Alvis-Guzmán N.

Abstract

Objectives: To estimate the prevalence of Familial Hyperlipidemia (FH) in a population of the Colombian Caribbean affiliated with Colombian Public Health Insurance Company (PHIC) and project this estimate to the population of the Colombian Caribbean. **Methods:** Data on a history of hyperlipidemia was collected by study investigators at including adults patients affiliated with PHIC (64,667) with ICD-10 diagnosis of hyperlipidemia (E78), or with a personal history of hyperlipidemia; or with abnormal lipid profile; or patients under treatment with lipid-lowering drugs. Data on personal or family history of premature coronary artery disease (CAD), presence of xanthomas and family history of FH were included. FHHe corresponded to LDL-C ≥ 190 mg/dL (5 mmol/L) for adults and/or with 1 first-degree relative similarly affected or with CAD. FHHo corresponded to LDL-C ≥ 500 mg/dL (13 mmol/L) or LDL-C ≥ 300 mg/dL (8 mmol/L) under treatment with statins and/or 1 or both parents having clinically diagnosed FH. For the projection of the estimated prevalence of FH to the population of the Colombian Caribbean, the data of the adult population projections for the Colombian Caribbean of 2015 (general 10,442,134, adults 6,685,734) of the Departamento Administrativo Nacional de Estadísticas (DANE) were used. **Results:** If we assume that 1 of 5 patients with LDL-C ≥ 190 mg/dL (5 mmol/L) may have HF. The prevalence of patients with FH was 0.13% (87/64,667). The prevalence of adults with heterozygous FH (FHHe) was 0.13% (85/64,639). The prevalence of adults with homozygous HF (FHHo) was 0.0015% (1/64,639). Applying these estimates to the general population of Colombian Caribbean in 2015, the estimated number of cases of HF, FHHe and FHHo in the Caribbean Colombian could be approximately 13,574, 8,691 and 140, respectively. **Conclusions:** The estimated prevalence of FH, FHHe and FHHo in Colombian Caribbean was 1 of 769, 1 of 769 and 2 of 100,000 patients, respectively