Estimated Prevalence of Familial Hypercholesterolemia Among Egyptian Patients with Acute Coronary Syndromes; Analysis from The Cardiorisk Project

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Aims: The prevalence of familial hypercholesterolemia (FH) in Egypt is largely unknown. We aimed to estimate the prevalence of FH among 3224 Egyptian patients with acute coronary syndromes enrolled from 2015 to 2018 in the nationwide cross-sectional cardioRisk project.

Methods and Results: We applied the Dutch Lipid Clinic criteria for the diagnosis of FH on the available data recorded for the patients enrolled in the Cardiorisk project. Two main criteria were applied: the presence of premature CAD (given 2 points in the Dutch criteria), and the categorized low density lipoprotein cholesterol (LDL-C) levels (given 1, 3, 5, or 8 points in the Dutch criteria according to the level). From a total of 3224 patients, 2743 patients had available LDL-C levels. Among those patients, when applying the abovementioned 2 criteria, we estimated that 472 patients had at least ‘possible’ FH (17.2% of the total population). Specifically, 4 patients had ‘definite’ FH (0.1%), 7 patients had ‘probable’ FH (0.25%), and 461 patients had ‘possible’ FH (16.8%).

Conclusion: The estimated prevalence of at least ‘possible’ FH among Egyptian patients with ACS is 17%.

Keywords: Egypt • Familial Hypercholesterolemia • Prevalence.

Additional Content: An author video to accompany this abstract is available on https://academic.oup.com/eurheartjsupp