Ethnicity and cardiovascular disease. The incidence of myocardial infarction in white, South Asian, and Afro-Caribbean patients with type 2 diabetes (U.K. Prospective Diabetes Study 32).

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OBJECTIVE: To estimate the incidence of myocardial infarction (MI) by ethnicity in subjects with diabetes and to examine the effect of ethnicity, adjusting for differences in cardiovascular risk factors.

RESEARCH DESIGN AND METHODS: For a prospective study, 4,974 patients with newly diagnosed type 2 diabetes, aged 25–65 years, were recruited from 23 clinics around the U.K. between 1977 and 1991. Of these subjects, 82% were white, 10% were South Asians, and 8% were Afro-Caribbeans. Fatal and first nonfatal MIs were defined by criteria based on the World Health Organization’s Multinational Study of Vascular Disease. Age–standardized incidence rates were calculated. Cox regression was used to assess the independent effect of ethnicity controlling for risk factors for MI measured at study entry. RESULTS: Of the subjects, 295 had a fatal MI and 558 had a fatal or a first nonfatal MI. The age–standardized rate per 1,000 person years for fatal or nonfatal MI for whites was 14.6 (95% CI, 13.3–15.9), for Afro-Caribbeans 4.3 (2.5–7.0), and for South Asians 15.4 (10.6–21.4). The hazard ratio associated with Afro-Caribbean ethnicity for MI relative to whites was 0.3 (0.2–0.6) after adjusting for age, sex, year of study entry, systolic blood pressure, smoking, social class, total cholesterol, and HDL cholesterol, whereas the hazard ratio for South Asians was 1.2 (0.9–1.7). CONCLUSIONS: This study found that after adjusting for conventional cardiovascular risk factors, U.K. Afro-Caribbean subjects with diabetes had a lower risk for MI than whites, whereas South Asians did not have a risk different from that of whites.