



# FREQUENCY OF CARDIOMETABOLIC RISK FACTORS AMONG YOUNG PEOPLE WITH TYPE 2 DIABETES MELLITUS AT A TERTIARY CARE UNIT OF KARACHI, PAKISTAN

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## ABSTRACT

**OBJECTIVE:** To observe frequency of cardiometabolic risk factors (CMRF) among young people with type 2 diabetes mellitus (T2DM).

**METHODS:** This retrospective study was conducted at Baqai Institute of Diabetology and Endocrinology, Baqai Medical University, Karachi-Pakistan. Data of all patients of T2DM aged 18-45 years, from 1<sup>st</sup> January-2000 to 31<sup>st</sup> December-2019 of first patient visit was retrieved and analyzed from computerized hospital management system record. Age, gender, duration of diabetes, smoking habit, family history of diabetes, glycemic status, fasting lipid profile, blood pressure and body-mass-index was noted to assess CMRF in T2DM.

**RESULTS:** Out of 5336, 54.5% (2907) were male and 1643 (30.8%) people were newly diagnosed. Mean age of patients at diagnosis of diabetes was  $31.94 \pm 5.52$  years, mean age at first out-patient department (OPD) visit was  $35.52 \pm 4.58$  years and mean diabetes duration was  $3.52 \pm 3.58$  years. At time of first OPD visit 3878 (77.1%) were obese, 585 (11%) were smokers and 1663 (31.4%) were hypertensive. Furthermore, 4161 (78%) had positive family history for diabetes, 1274 (47.2%) had HbA1c > 10%, 1069 (39.6%) had 7-10% and 357 (13.2%) had <7% respectively. Additionally, 1864 (85.8%) of people with diabetes had low HDL-C, 1387 (63.4%) had high triglycerides, 1552 (60%) had high LDL-C and 717 (32.4%) had high total cholesterol at the time of presentation.

**CONCLUSION:** Increased frequency of CMRF is noted in T2DM young people. Obesity, smoking, hypertension, dyslipidemia, poor glycemic control, and positive family history of diabetes all contribute to disease's burden and early cardiovascular morbidity and mortality.

**KEYWORDS:** Diabetes Mellitus, Type 2 (MeSH); Cardiometabolic Risk Factors (MeSH); Young people (Non-MeSH); Hypertension (MeSH); Obesity (MeSH), Dyslipidemias (MeSH), Smoking (MeSH).

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## CONFLICT OF INTEREST

Authors declared no conflict of interest

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