
Title

Associations of diabetes with all-cause and cardiovascular disease mortality: Findings from the Mexico City Prospective Study

Abstract

Aim: To investigate the joint associations of diabetes and obesity with all-cause and cardiovascular disease (CVD) mortality in the Mexico City Prospective Study. **Materials and Methods:** In total, 154 128 participants (67.2% women) were included in this prospective analysis. Diabetes was self-reported, while body mass index was used to calculate obesity. Using diabetes and obesity classifications, six groups were created: (a) normal (no diabetes and normal weight); (b) normal weight and diabetes; (c) overweight but not diabetes (overweight); (d) overweight and diabetes (prediabetes); (e) obesity but not diabetes (obesity); and (f) obesity and diabetes (diabesity). Associations between these categories and outcomes were investigated using Cox proportional hazard models adjusted for confounder factors. **Results:** During 18.3 years of follow-up, 27 197 (17.6%) participants died (28.5% because of CV causes). In the maximally adjusted model, participants those with the highest risk {hazard ratio (HR): 2.37 [95% confidence interval (CI): 2.24-2.51]}, followed by those with diabesity [HR: 2.04 (95% CI: 1.94-2.15)]. Similar trends of associations were observed for CVD mortality. The highest CV mortality risk was observed in individuals with diabesity [HR: 1.80 (95% CI: 1.63-1.99)], followed by normal weight and diabetic individuals [HR: 1.78 (95% CI: 1.60-1.98)]. **Conclusion:** This large prospective study identified that diabetes was the main driver of all-cause and CVD mortality in all the categories studied, with diabesity being the riskiest. Given the high prevalence of both conditions in Mexico, our results reinforce the importance of initiating prevention strategies from an early age. © 2024 The Authors. Diabetes, Obesity and Metabolism published by John Wiley & Sons Ltd.

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