

CALL TO ACTION! Prediabetes as a risk factor for Myocardial Infarction - A Nationwide Study



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BACKGROUND

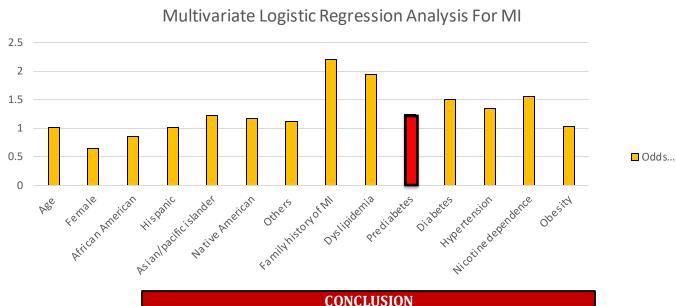
- Diabetes mellitus (DM) is a well established risk factor for atherosclerotic cardiovascular diseases (ASCVD).
- Despite mounting evidence, clinicians are unaware that Prediabetes is also a major risk factor for ASCVD.
- Our objective is to add to the current growing body of evidence about the hazards of 1.5 Prediabetes.

METHOD

- In our retrospective study, we included Patients of Age ≥ 50 years with a Primary or Secondary diagnosis of Prediabetes from the National inpatient sample (NIS) between 2016-2018.
- After coding the relevant variables based on the ICD-10 coding system, we performed
 Univariate and Multivariate logistic regression analysis to determine if Prediabetes was
 associated with CAD and MI.

RESULTS

- A total of 1,794,149 (95% CI 1,753,742-1,834,556) weighted hospitalizations had MI and 330, 814 (95% CI 313, 189-348, 440) patients had prediabetes.
- Prediabetes was greatly associated with increased odds for MI (OR 1.41, 95% CI 1.35-1.47, P=0.000).
- Despite adjusting for Age, Gender, Race, Family history of MI, Dyslipidemia, HTN, DM, Nicotine dependence, and Obesity, Prediabetes was significantly associated with increased odds of MI (OR 1.25, 95% CI 1.20-1.31, P=0.000), PCI (OR 1.45, 95% CI 1.37-1.53, P=0.000) and CABG (OR 1.95, 95% CI 1.77-2.16, P=0.000).





Prediabetes - an independent risk factor for MI despite adjusting for the well-established risk factors (OR 1.25, 95% CI 1.20-1.31, P=0.000).



Our study serves as a wake-up call for clinicians and patients to shift the focus to prevent Prediabetes, not just Diabetes.



Importance of early recognition through screening and early intervention to aggressively manage the cardiovascular risk factors to prevent MI.

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