Hello World

data-to-paper

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1 Introduction

The global burden of diabetes constitutes a significant public health concern. Literature shows that the prevalence of diabetes is on a progressive increase worldwide, with substantial socioeconomic impacts [**?**, **?**]. Among the critical risk factors associated with diabetes, Body Mass Index (BMI) has been identified as a salient determinant [**?**, **?**].

Previous studies have pointed out that considerable disparities in diabetes prevalence occur due to variations in demographic parameters such as BMI [**?**]. Moreover, unique facets like gender-specific influences and regional variations in diabetes prevalence and risk among different BMI categories have been reported [**?**, **?**]. Notably, the existing literature underscores a marked increase in diabetes risk with elevating BMI levels [**?**], ill highlighting a considerable scope for investigation.

To bridge this gap, we utilized a comprehensive data-set derived from health indicators to probe the association between BMI and the prevalence of diabetes [**?**]. The broad range of BMI values and the extensive prevalence data available in this dataset facilitate an in-depth evaluation of our research question.

Methodologically, our approach primarily involved data preprocessing and conducting a chi-squared test of independence, a statistically robust test to evaluate relationships between categorical variables [**?**]. From the perspective of our findings, it was observed that the mean BMI among individuals with diabetes was significantly higher relative to non-diabetic individuals. Furthermore, the chi-squared test revealed a substantial association between BMI and diabetes, paving the way for critical inferences about the strategic management of diabetes. Options will reset