



METHODOLOGY

Electronic searches from several electronic databases for cohort and randomized controlled trial (RCT) was carried out in May 2022 with the following keywords: "Diabetes Mellitus Type 2" and "Mediterranean diet" and "Prevention" and "Incidence." Pooled effect was calculated using the statistical software Stata version 13. Primary analyses included the incidence of T2D and was limited to prospective studies in the healthy and/or high-risk population.

RESULTS

From 546 studies published from 2007 to 2020, 4 RCTs and 18 cohort studies (751,161 subjects) were included in our meta-analysis. Subgroup analysis was performed based on health status and sex. From pooled analysis, Mediterranean diet will decrease the risk for T2D by 17.6% (RR 0.824 (95%CI 0.803-0.845, I²: 70.05, P<0.0001). This effect was greater in the high-risk population (27%) and females (9.98%). The Egger regression test showed no evidence of substantial publication bias (P=0.12).

CONCLUSION

The present study has shown the benefits of adopting the Mediterranean diet among the healthy and high-risk population. Diet modification is essential, especially in those at risk for T2D and CVD.

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THE DIAGNOSTIC VALUE OF FIBROSIS-4 SCORE (FIB-4) IN DETECTING NON-ALCOHOLIC FATTY LIVER DISEASE AMONG ADULTS WITH TYPE 2 DIABETES MELLITUS

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OBJECTIVES

This study aimed to determine the diagnostic value of Fibrosis 4 (FIB-4) index in detecting non-alcoholic fatty liver disease (NAFLD) among adult Type 2 Diabetes Mellitus (T2DM) patients.

METHODOLOGY

A single center, analytical cross-sectional study was conducted among adult T2DM patients with and without NAFLD at St. Luke's Medical Center, Quezon City. Medical history was obtained by reviewing charts of eligible patients. Liver ultrasound was used as the reference standard for the diagnosis of NAFLD. The FIB-4 index was calculated with the formula: age (years) × AST (U/L)/(platelets (10⁹/L) × ALT (U/L)^{1/2}.

RESULTS

A total of 305 patients with T2DM were included in the study. The prevalence of NAFLD based on ultrasound among diabetic patients is 76.07%. The median age, AST, and ALT were significantly higher in patients with NAFLD than those without. Platelet count was significantly lower in patients with NAFLD than those without. The proportion of patients with low platelet count, high AST and high ALT were significantly higher in patients with NAFLD than those without. In this study, the FIB-4 index cut-off score for screening of NAFLD is ≥ 0.76 , with an accuracy of 66.23%, sensitivity of 75%, specificity of 38.3%, PPV of 79.46% and NPV of 32.56% in detecting fatty liver.

CONCLUSION

A FIB-4 index value of ≥ 0.76 has acceptable sensitivity for screening NAFLD even in the absence of fibrosis among patients with T2DM. However, due to its low specificity, additional tests to establish a diagnosis of NAFLD may be required.