

## The Framingham Steatosis Index (FSI) ability to Predict Non-Alcoholic Fatty Liver Disease (NAFLD): A Cohort Study

Category : 13.7 سایر موارد

**Introduction :** Background: Utilization of indexes for the diagnosis of Non-Alcoholic Fatty Liver Disease (NAFLD) can be valuable. The present study was conducted to determine the ability of the Framingham Steatosis Index (FSI) to distinguish between individuals with and without NAFLD to predict the risk for NAFLD so as to establish the need for lifestyle modifications in individuals at risk to develop this disease.

**Methods :** Methods: The study was conducted in two-time phases: 2009-2010 (phase I) and 2016-2017 (phase II). A total of 4670 people in Northern Iran was included in the present study. NAFLD was diagnosed using ultrasound. The FSI was calculated based on age, sex, hypertension, diabetes mellitus status, liver enzyme levels, and triglyceride levels. Receiver Operating Characteristic (ROC) analysis was conducted to determine the discriminatory and predictive abilities of the FSI. To remove the confounding effects of potential mediators, logistic regression was performed in which NAFLD was considered as the outcome and the FSI as the predictor.

**Results :** Results: The odds ratios of the FSI, when the outcome was the prevalence of NAFLD in phase I and when the outcome was new cases of NAFLD from 2009-2010 to 2016-2017, were 4.909 (4.243-5.681) and 2.453 (2.024-2.972), respectively ( $P < 0.001$ ). Also, the Areas under the Curve (AUCs) for the discriminatory and predictive abilities of the FSI were 0.8421 (95% CI: 0.8314-0.8527) and 0.7093 (95% CI: 0.6863-0.7322), respectively.

**Conclusion :** Conclusion: The FSI has a strong ability to diagnose NAFLD while it has an acceptable ability to predict the occurrence of new cases of NAFLD.

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