

Original Paper

Association between healthy lifestyle score and upper gastrointestinal disorders in Iranian adults

Saneei P (Ph.D)¹, Hajishafiee M (M.Sc)², Esmailzadeh A (Ph.D)^{*3}
Hassanzadeh Keshteli A (M.D)⁴, Roohafza HR (Ph.D)⁵, Afshar H (Ph.D)⁵
Feizi A (Ph.D)⁶, Adibi P (M.D)⁷

¹Ph.D in Nutrition, Food Security Research Center, Students' Research Committee, School of Nutrition and Food Science, University of Medical Sciences, Isfahan, Iran. ²M.Sc in Nutrition, Food Security Research Center, School of Nutrition and Food Science, University of Medical Sciences, Isfahan, Iran. ³Professor, Food Security Research Center, Department of Community Nutrition, School of Nutrition and Food Science, University of Medical Sciences, Isfahan, Iran. ⁴General Physician, Integrative Functional Gastroenterology Research Center, Isfahan University of Medical Sciences, Isfahan, Iran. ⁵Associate Professor, Psychosomatic Research Center, Department of Psychiatry, Isfahan University of Medical Sciences, Isfahan, Iran. ⁶Associate Professor, Department of Epidemiology and Biostatistics, School of Public Health, Isfahan University of Medical Sciences, Isfahan, Iran. ⁷Professor, Integrative Functional Gastroenterology Research Center, Isfahan University of Medical Sciences, Isfahan, Iran.

Abstract

Background and Objective: Although lifestyle-related factors have separately been examined in relation to functional gastrointestinal disorders (FGIDs), there is no epidemiologic data on the combined association of lifestyle factors with these conditions. We aimed to examine how combinations of several lifestyle factors were associated with functional dyspepsia (FD), its symptoms and gastro-esophageal reflux disease (GERD) in a large group of Iranian adults.

Methods: This descriptive -analytic study was conducted on 3363 Iranian adults (19-70 yr), whom were working in 50 health centers across Isfahan province in Iran during 2012. We used easy non-random sampling to select participants. The "healthy lifestyle score" for each participant was calculated by summing up the binary score given for five lifestyle factors, including dietary habits, dietary intakes, psychological distress, smoking and physical activity. A dish-based 106-item semi-quantitative validated food frequency questionnaire, General Practice Physical Activity Questionnaire, General Health Questionnaire and other pre-tested questionnaires were used to assess the components of healthy lifestyle score. A validated Persian version of ROME III questionnaire was used, to assess functional gastrointestinal disorders.

Results: The prevalence of FD and GERD among study participants was 14.5 and 23.6%, respectively. After adjustment for potential confounders, we found that individuals with the highest score of healthy lifestyle had 79 and 74% lower odds of FD (95% CI: 0.05-0.92, OR: 0.21, P=0.03) and GERD (95% CI: 0.09-0.69, OR: 0.26, P=0.01), respectively, compared with those with the lowest score. They were also less likely to have early satiation (95% CI: 0.11-0.73, OR: 0.28, P=0.001), postprandial fullness (95% CI: 0.09-0.50, OR: 0.22, P<0.001) and epigastric pain (95% CI: 0.21-0.92, OR: 0.44, P=0.03). In addition to the combined healthy lifestyle score, low levels of psychological distress, a healthy diet, healthy dietary habits and non-smoking were separately associated with FGIDs (P<0.05).

Conclusion: This study showed that adherence to a healthy lifestyle was associated with lower odds of GERD, FD and its symptoms in this group of Iranian adults. Individual lifestyle-related factors were also associated with these conditions.

Keywords: Healthy lifestyle, Functional dyspepsia, Gastro-esophageal reflux disease

* Corresponding Author: Esmailzadeh A (Ph.D), E-mail: esmailzadeh@hlth.mui.ac.ir

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