Proceedings of the Nutrition Society (2020), **79 (OCE2)**, E619 doi:10.1017/S0029665120005686

The 13th European Nutrition Conference, FENS 2019, was held at the Dublin Convention Centre, 15–18 October 2019

Comparison of Portuguese and Turkish older adults' nutritional status assessed by MNA-FF

Bruno M. P. M. Oliveira[1,2], Meryem Elif Öztürk[3], Rui Poínhos[1], Cláudia Afonso[1], Nurcan Yabancı Ayhan[4] and Maria Daniel Vaz de Almeida[1,5]

[1]*Faculdade de Ciências da Nutrição e Alimentação da Universidade do Porto, Porto, Portugal,*
[2]*LIAAD - INESC TEC, Porto, Portugal,*
[3]*Karamanoğlu Mehmet Bey University, Health Science Faculty, Nutrition and Dietetic Department, Karaman, Turkey,*
[4]*Ankara University, Health Science Faculty, Nutrition and Dietetic Department, Ankara, Turkey and*
[5]*GreenUPorto, Porto, Portugal*

Abstract

Malnutrition is associated to a progressive decline in health, reduced physical and cognitive functional status and mortality. However, the malnutrition prevalence differs across countries. Previous studies reported 19% of malnourished elderly in Turkey and 1.3% in Portugal.

We aimed to compare the nutritional status between between Portuguese and Turkish older adults using the Mini-Nutritional Assessment.

This is a cross-sectional study using data from the Pronutrisenior project, collected in Vila Nova de Gaia, Portugal (n = 430), and a study in Ankara, Turkey (n = 162). The sample consisted of older adults living at their homes. Socio-demographic data, clinical data from the medical records, the full form of Mini-Nutritional Assessment, MNA-FF and anthropometry (weight, height, BMI, mid-arm circumference and calf circumference) were collected.

Turkish older adults lived more frequently with children, are more likely to be widow/widower, and have a higher probability of being housewife/househusband. A larger proportion of the Portuguese have tooth loss, diabetes, hypertension, oncologic diseases, kidney diseases, osteoarticular problems, or eye problems and a larger proportion of the Turkish have anemia. The BMI average is smaller in the Turkish sample, while the calf circumference average is larger. Turkish have a larger proportion of malnourished or at risk of malnutrition (4.9% and 31.5% vs. 1.2% and 24.0%, respectively). The average MNA-FF score is higher among the Portuguese, males and on people using denture, and without: toothloss, hypertension, CVD, anemia and oncological diseases. Moreover, higher MNA-FF scores were associated with younger ages, higher BMI and higher calf circumference.The effect size was larger for CVD and sex.

The prevalence of malnutrition in European and American populations ranges from 1% to 15% in ambulatory living elders, more common among females as in this work. Other studies showed that higher BMI is related with lower malnutrition prevalence and higher prevalence of obesity-related chronic diseases. Tooth loss was more frequent in the Portuguese, which may be due to a higher intake of sweets or packaged food. Portuguese elders had lower calf circumferences but higher BMI, which may be related to lower muscle mass and/or higher fat mass. The differences between the Portuguese and the Turkish may be related to the different *per capita* gross national product, positively correlated with BMI and the consumption of processed foods. Anemia in Turkish elders may be related with BMI and their lower consumption of meat and the higher tea intake that may reduce iron absorption, as reported by other studies.

Conflict of Interest

There is no conflict of interest.

Downloaded from https://www.cambridge.org/core. Ankara Universitesi, on 11 Dec 2021 at 23:55:55, subject to the Cambridge Core terms of use, available at https://www.cambridge.org/core/terms. https://doi.org/10.1017/S0029665120005686