

SUMMARY

Nutritional status is an important characteristic of human health. It is especially important for vulnerable groups of population, such as senior citizens. The study provides a description and evaluation of the nutritional status of the institutionalized elderly in three retirement homes in three different North Bohemian towns (Teplice, Most, and Dubí). Inclusion criteria for the study restricted the sample to those aged 65 or over and without any acute illness or catabolic diseases, including cancer. Fifty percent of the residents living in each retirement home were examined. The sample comprised of 254 participants (183 females and 71 males). Data was collected from each facility in cooperation with the head nurse, and information related to the participant medical conditions and medications was obtained from personal medical histories. A MNA (Mini Nutritional Assessment) was used to evaluate the nutritional condition of respondents. Blood samples were taken to detect the markers of malnutrition (albumin, prealbumin, transferin, urea, and creatinine). The data was statistically analysed using the Fishers exact two-sided test and the Chi square test of independence. P values ≤ 0.05 were accepted as statistically significant. According to the results of MNA, 38.8% of respondents were in a good nutritional status, 50.8% were at risk of malnutrition and 10.4% were suffering from malnutrition. A higher proportion of females were found to be malnourished than males. The MNA category correlated positively with independence ($r = 0.56$; $p < 0.001$), mental status ($r = 0.54$; $p < 0.001$), mobility ($r = 0.46$; $p < 0.001$), calf circumference ($r = 0.42$; $p < 0.001$), BMI ($r = 0.37$; $p < 0.001$) and the ability to self-feed, ($r = 0.37$; $p < 0.001$). The average biochemical indicators were within the reference limits and decreased with deteriorating nutritional status. The level of serum albumin levels were detected in the range of 35.0-50.0g/l in 69.7% for the set. The level of serum albumin < 35 g/l was detected in 30.3% of respondents. Psychopharmacological medication was used by 42.3% of examined men and 59% of examined woman. Study results confirmed that the institutionalized elderly face issues that lower their nutritional status and put them at increased malnutrition risk; clearly these issues require attention.