

# Prescribed medication and malnourishment at risk of malnutrition

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## Abstract

Malnutrition is a common health problem in polymedicated older adults. This cross-sectional study investigates the relationship between the prescribed medication and malnourishment/risk of malnutrition. The research was conducted in a representative sample of 749 community-dwelling elders aged 65 years and over, showing a combined prevalence for the malnourished/ at risk of malnutrition group of 14.3% (assessed by the short form of the Mini Nutritional Assessment, MNA-SF). Each medication was categorized according to the Anatomical Therapeutical Chemical (ATC) classification. Low MNA-SF score group ( $\leq 11$  points) consumed a higher number of medications ( $6.5 \pm 3.5$  vs.  $4.5 \pm 3.2$ ,  $p < 0.001$ ) and presented higher polypharmacy (5 or more, 64.5% vs. 40.0%,  $p < 0.001$ ). The most common drug classes in malnourished/at risk of malnutrition participants were cardiovascular (76.6%), alimentary tract and metabolism (70.1%) and nervous system (68.2%). Stepwise logistic regression analyses revealed that no consuming alimentary tract and metabolism (adjusted OR 1.61; 95% CI 1.01 to 2.56), blood and blood forming organs (adjusted OR 1.69; 95% CI 1.09 to 2.60) and nervous system (adjusted OR 2.16; 95% CI 1.38 to 3.38) drug classes was related to lower MNA-SF scores. Therefore, the consumption of these medications is associated with the presence/absence of malnutrition. These findings reveal the importance of a correct prescribed medication related to the most frequent health problems in older adults to avoid the presence of malnourishment/ risk of malnutrition and to propose appropriate intervention.

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