Malnutrition as key predictor of physical frailty among Malaysian older adults

ABSTRACT

Studies have been carried out on the association between frailty and malnutrition, but the similarities and divergence of the relationship remain debatable. This study aimed to explore the prevalence of malnutrition risk and frailty as well as the overlapping constructs. The associations that emerged were assessed independently of other risk factors. A total of 301 community-dwelling older adults with a mean age of 66.91 ± 5.59 years old were randomly recruited. Fried Criteria and Mini Nutritional Assessment-Short Form (MNA-SF) were used to assess frailty status and malnutrition, respectively. Other related nutritional assessments were assessed (body mass index (BMI), circumference measures, body fat % and skeletal muscle mass). The prevalence of frailty was 14.6% and prefrail was 59.7%; 29.6% were at risk of malnutrition, and 3.3% were malnourished. Malnutrition risk was significantly associated with a higher number of chronic diseases, BMI, circumference of mid-upper arm (MUAC), and calf, (CC)and skeletal muscle mass (SMM) and frailty, whereas frailty was significantly associated with higher number of chronic diseases, SMM and malnutrition. Frailty syndrome can be predicted with increasing age, body fat, lower skeletal muscle and malnutrition. Those who were frail were found to be five times more likely to be at risk of malnutrition. Results suggested that frailty and malnutrition shared considerable overlap, which emphasised the interrelated but discrete concepts. Therefore, the assessment of malnutrition is imperative and could be used as a practical implication in assessing frailty syndrome.

Keyword: Frailty; Ageing; Malnutrition; Elderly; Sarcopenia