

The prevalence of malnutrition according to the new ESPEN definition in four diverse populations

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Rationale

Consensus on the definition of malnutrition has not yet been reached. Recently, the European Society for Clinical Nutrition and Metabolism (ESPEN) proposed a consensus definition of malnutrition (fact box).

Aim

To describe the prevalence of malnutrition according to the ESPEN definition in four diverse populations.

Results

Screening (by SNAQ) identified 0-30% of subjects at risk of malnutrition. The ESPEN definition diagnosed 0-14% of subjects as malnourished (table 1). The different criteria that compose the new ESPEN consensus definition of malnutrition were represented in the four populations in various ways (figure 1).

Methods

The diagnosis of malnutrition is considered a two step approach: screening by any validated tool, followed by diagnosis (fact box) for those at risk.

Fact Box: Two alternative ways to diagnose malnutrition

Option 1: — BMI <18.5 kg/m²

Option 2: Weight loss (unintentional) >10% indefinite of time, or > 5% over the last 3 months
AND

— — BMI <20 kg/m² if <70 years of age, or <22 kg/m² if ≥70 years of age

OR

..... FFMI <15 kg/m² and <17 kg/m² in women and men, respectively

Conclusion

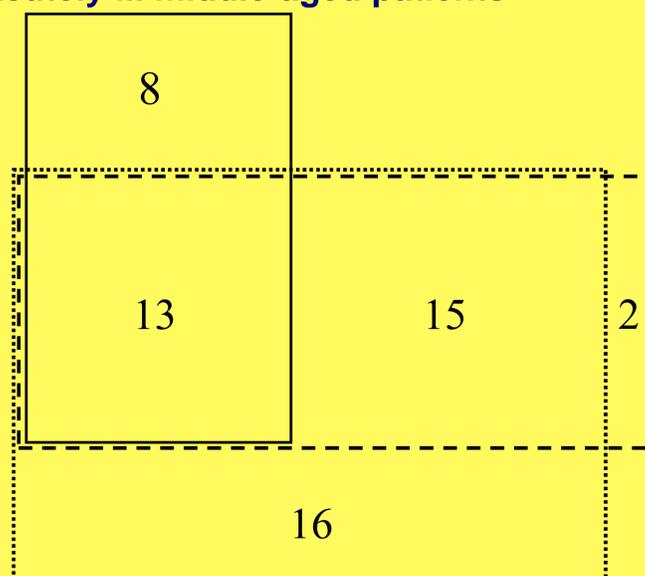
Prevalence rates of malnutrition varied in the four diverse populations. Further work is needed to fully address the validity of a two-step approach, including risk assessment as an initial step in screening and defining malnutrition. Furthermore, assessing the predictive validity of the ESPEN definition is needed.

Table 1. Prevalence rates of malnutrition in four diverse populations, n(%)

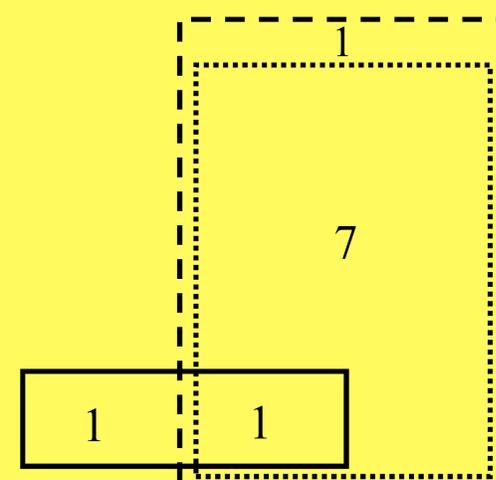
	Acutely ill middle-aged N=349	Geriatric outpatients N=135	Healthy old N=306	Healthy young N=179
Screening	105 (30)	14 (10)	1 (0,5)	0 (0)
ESPEN + screening	49 (14)	8 (6)	1 (0,5)	0 (0)
ESPEN independent of screening	54 (15)	10 (7)	3 (1)	14 (8)

Figure 1. The overlap of the new ESPEN consensus definition of malnutrition and its individual diagnostic options

A: acutely ill middle-aged patients



B: geriatric outpatients



SNAQ; Short Nutritional Assessment Questionnaire, BMI; Body Mass Index, FFMI; Fat Free Mass Index