UCD Institute of Food and Health

Testing community-dwelling older adults' understanding of the English language version of the Malnutrition Awareness Scale

*Maria Marques Previ[1], *Holly Wolfe[1], Eva Leistra[2], Marjolein Visser[2], Clare Corish[1].

1. School of Public Health, Physiotherapy and Sports Science, University College Dublin, Dublin 4, Republic of Ireland
2. Department of Health Sciences, Faculty of Science, and the Amsterdam Public Health Research Institute, Vrije Universiteit Amsterdam, Amsterdam, The Netherlands

Introduction

In Europe, it is estimated that 8.5% of community-dwelling older adults are at risk of malnutrition (1). Despite this, a lack of malnutrition awareness amongst older adults has been widely reported (2-4). Increasing malnutrition awareness amongst older adults may aid in successful malnutrition management (5).

The Malnutrition Awareness Scale (MAS) was developed in the Netherlands to assess malnutrition awareness amongst community-dwelling older adults using the integrated-change model. It has since been translated into English (6). To ensure it is suitable for English-speakers, it must undergo assessment of comprehensibility and difficulty with English-speaking, community-dwelling older adults (6).

The aims of this study were to:

i) undertake a linguistic validation of the English MAS

ii) assess malnutrition awareness in community-dwelling older adults living in Ireland.

Methods

English-speaking, community-dwelling (living independently/availing of home care) older adults living in Ireland, aged 60+ years completed the MAS and linguistics validation questionnaire.

The linguistics questionnaire was adapted from the Content Validity Index (7,8). Participants rated the comprehensibility and difficulty of each item in the MAS questionnaire, using a Likert four-point scale:

- very unclear/very difficult
- unclear/difficult
- clear/easy
- very clear/very easy

For comprehensibility, Item comprehensibility index (I-CI) and scale comprehensibility index (S-CI) were calculated. For difficulty, item difficulty index (I-DI) and scale difficulty index (S-DI) were calculated.

Ethical approval was obtained from the Undergraduate and Taught Research Ethics Committee of the School of Public Health, Physiotherapy, and Sports Science at UCD.

Results

107 participants completed the study.

Sex	Male	36.4%
	Female	63.6%
Age	60-69 y	49.5%
	70-79 y	29.9%
	80+ y	20.6%
Education	Primary	3.7%
	Secondary	21.5%
	Third-Level	74.8%

Malnutrition Awareness

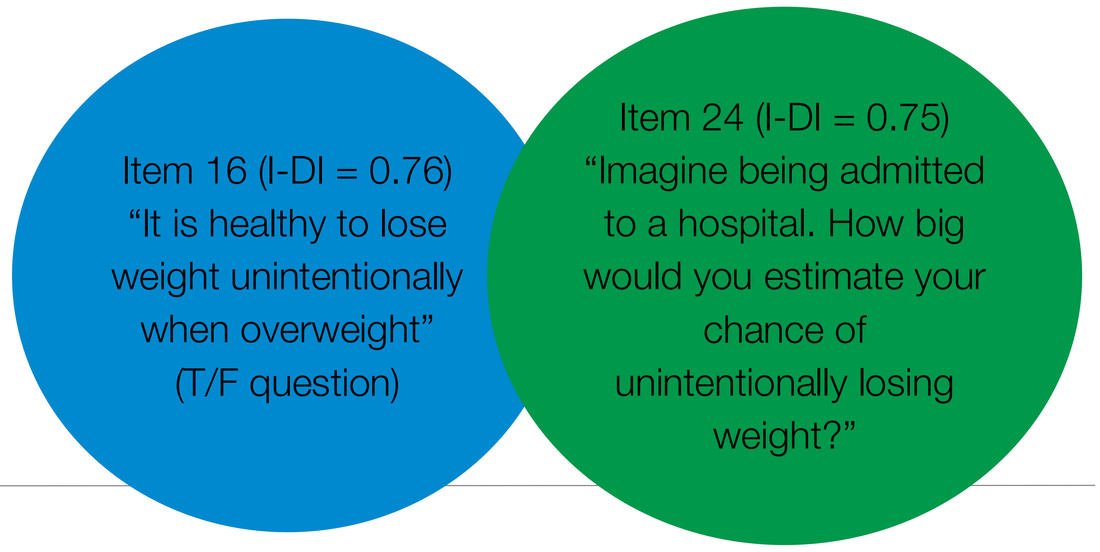
The mean MAS score was 15±3.14, with females scoring significantly higher than males (p = 0.025).

Comprehensibility

Overall comprehensibility considered ***excellent*** (S-CI:0.94) - 100% items had an excellent I-CI score (>0.78).

Difficulty

Overall difficulty considered ***acceptable*** (S-DI: 0.89). However, two items were considered unacceptable due to their I-DI scores (< 0.78)



Conclusion

The translation and cultural adaptation of the original Dutch MAS to the English setting carried out by Visser ***et al***., 2024, resulted in a comprehensible and easy-to-complete questionnaire for assessing malnutrition awareness in community-dwelling older adults living in Ireland. However, careful revision and modification of items 16 and 24 is warranted due to their unacceptable I-DI scores.

MAS scores suggested a high level of malnutrition awareness, particularly in females, amongst community-dwelling older adults living in Ireland.

The MAS has the potential to contribute to the identification of knowledge gaps and/or misconceptions about malnutrition risk in older adults and facilitate better nutritional management of vulnerable older adults.

*Maria Marques Previ and Holly Wolfe are joint first authors

References:

1. Leij-Halfwerk S, Verwijs MH, van Houdt S, Borkent JW, Guaitoli PR, Pelgrim T, ***et al***. Prevalence of protein-energy malnutrition risk in European older adults in community, residential and hospital settings, according to 22 malnutrition screening tools validated for use in adults ≥65 years: A systematic review and meta-analysis. Maturitas. 2019;126:80-9.
2. Castro PD, Reynolds CME, Kennelly S, Geraghty AA, Finnigan K, McCullagh L, ***et al***. An investigation of community-dwelling older adults' opinions about their nutritional needs and risk of malnutrition; a scoping review. Clin Nutr. 2021;40(5):2936-45.
3. Geraghty AA, Browne S, Reynolds CME, Kennelly S, Kelly L, McCallum K, ***et al***. Malnutrition: A Misunderstood Diagnosis by Primary Care Health Care Professionals and Community-Dwelling Older Adults in Ireland. J Acad Nutr Diet. 2021;121(12):2443-53.
4. Mackay S, Rushton A, Bell J, Young A. The perception and understanding of the terminology used to describe malnutrition from the perspective of patients and health workers: A meta-synthesis of qualitative studies. J Acad Nutr Diet. 2024.
5. Correia MITD. Patient Empowerment on the Fight Against Malnutrition. J Parent Ent Nutr. 2018;42(4):672-4.
6. Visser M, Sealy MJ, Leistra E, Naumann E, De van der Schueren MAE, Jager-Wittenaar H. The Malnutrition Awareness Scale for community-dwelling older adults: Development and psychometric properties. Clin Nutr. 2024;43(2):446-52.
7. Polit DF, Beck CT. The content validity index: are you sure you know what's being reported? Critique and recommendations. Res Nurs Health. 2006;29(5):489-97.
8. Polit DF, Beck CT, Owen SV. Is the CVI an acceptable indicator of content validity? Appraisal and recommendations. Res Nurs Health. 2007;30(4):459-67.