

Abstract – Original Research

Authors & Affiliations:

Leij-Halfwerk Susanne 1, Verwijs Marije 1, van Houdt Sofie 3, Guaitoli Patrícia 1, Corish Clare A. 3, Power Lauren 3, Pelgrim Thomas 4, Heijmans Martijn W. 5, de van der Schueren Marian 1,7 and MaNuEL Consortium

1)Nutrition and Dietetics, HAN University of Applied Sciences, Nijmegen, Netherlands

2)Nutrition and Health, Wageningen University and Research, Wageningen, The Netherlands

3)Clinical Nutrition and Dietetics, School of Public Health, Physiotherapy and Sports Science, University College Dublin, Dublin, Ireland

4)HAN University of Applied Sciences, Nijmegen, The Netherlands

5)Epidemiology and Biostatistics, VU University medical centre, Amsterdam, The Netherlands

6)Nutrition and Dietetics, VU University medical centre, Amsterdam, The Netherlands

Presenting Author & Affiliation: LEIJ-HALFWERK Susanne, PhD

Nutrition and Dietetics, HAN University of Applied Sciences, Nijmegen, Netherlands

Title of Presentation: BEST ESTIMATES OF MALNUTRITION RISK IN EUROPEAN ELDERLY

1. Brief description/abstract for the content of the poster presentation

Objectives: The use of different malnutrition screening tools had hindered accurate estimation of the prevalence of malnutrition risk in older adults in Europe. A systematic review and pooled meta-analysis, using 22 malnutrition screening tools recently selected for high validity in adults >65 years, was performed to assess 'true' malnutrition risk in different health care settings in this population in Europe.

Methodology: Systematic searches were performed in MEDLINE (ebSCO), PubMed, EMBASE (OVID), CINAHL Plus, Cochrane Central, and Web of Science (2006 through 2017). Search terms expressing 'malnutrition' and 'prevalence' were combined with 'adults', 'elderly' and 'nutrition screening tool(s)'. High malnutrition risk frequencies of each respective NST were collated and prevalence was calculated by meta-analysis using a random effects model.

Results: Of 21465 articles, 215 articles were available for data extraction representing 202 studies in 24 European countries, n=612,541 elderly. Prevalence rates of high malnutrition risk were calculated for each screening tool for which data from ≥ 10 studies were available. In the hospital, malnutrition risk prevalence was lowest in Spain (22%, 18 studies) and highest in Sweden (45%, 10 studies). All tools combined, prevalence rates in hospital, institution and community were 29% (131 studies), 16% (27 studies), and 8% (31 studies) respectively.

Conclusion: High malnutrition risk in older adults in Europe ranges from 5 to 45%, with differences between countries, across settings and within settings, being highest in the hospital setting. As prevalence rates differ depending on the malnutrition screening tool used, uniform use of one single malnutrition screening tool per setting is strongly recommended.

1. Please give two to three key references (published by you or others) which can be used to inform future work:

Power L, Mullally D, Gibney ER, Clarke M, Visser M, Volkert D, et al. On Behalf of MaNuEL Consortium. A review of the validity of malnutrition screening tools used in older adults in community and healthcare settings – A MaNuEL study. Clin Nutr ESPEN;24:1–13.

Visser M, Volkert D, Corish C, Geisler C, de Groot LC, Cruz-Jentoft AJ et al (2017) Tackling the increasing problem of malnutrition in older persons: the Malnutrition in the Elderly (MaNuEL) Knowledge Hub. Nutr Bull 42:178–186.

2. Please identify, where possible, up to three specific key messages that participants will take away from your poster presentation to inform their future practice.
- malnutrition screening should be harmonized to avoid discrepancies in risk assessment in elderly
 - uniform use of one single malnutrition screening tool per setting is strongly recommended