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SÍNDROMES GERIÁTRICOS Y MEDICAMENTOS

DESNUTRICIÓN Y MEDICAMENTOS

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Editorial

The Multidomain Nature of Malnutrition in Older Persons

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**"Will you still feed me when I'm 64?"***The Beatles*

When Paul McCartney wrote one of his first songs in 1967 at the age of 16 years, the concept of aging was certainly different from the one we are facing today. Back then, a teenager conceived older age and the need to be fed already at age 64 years. We may say that "aging" nowadays has been delayed for at least 10 years and that the concern about loss of self-sufficiency begins after the age of 70 or 80 years. Nevertheless, the recently published World Report on Aging and Health asserts that older persons, especially those aged over 80 years, have become the fastest

Malnutrition is not only a sign of illness, but its presence increases morbidity,^{3,6,13,14} hospital stay,^{15–17} institutionalization,^{6,18} poor quality of life,¹⁹ in-hospital complications and expenses,¹⁶ and most of all mortality risk^{3,6,17,18,20–22} because of concomitant diseases and complications. In an analysis of the impact on mortality of diverse geriatric syndromes, malnutrition and derived impaired homeostasis exerted twice the influence of factors such as the presence of multiple comorbidities and frailty.²⁰

Despite the dramatic high prevalence of malnutrition, this diagnosis is not recognized even in academic institutions. A study using a large collaborative multi-institutional database, The University Health



LA ENCRUCIJADA

Interacciones :

- fármaco-fármaco
- fármaco-paciente
- fármaco-enfermedad
- **fármaco-nutrición**
- nutrición-paciente-enfermedad



Changes with old age

Effects

Sensory impairment

- Decreased sense of taste —————> Reduced appetite
- Decreased sense of smell —————> Reduced appetite
- Poor oral health —————> Difficulty chewing, chronic inflammation, poor quality diet
- Loss of vision and hearing —————> Decreased ability to purchase and prepare food

Altered energy need —————> Diet lacking essential nutrients

Decreased physical activity —————> Progressive depletion of lean body mass and reduced appetite

Sarcopenia —————> Decreased functional ability, assistance needed with ADLs

Isolation —————> Decreased appetite

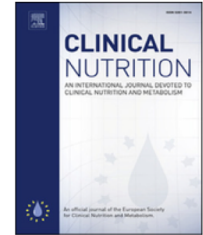
Financial —————> Limited access to food, poor quality diet

Cumulative Effects



Progressive Undernutrition

Fig. 1. Multiple contributors to the risk of progressive undernutrition in older adults. ADL, activities of daily living.



Original article

Prevalence of malnutrition using harmonized definitions in older adults from different settings – A MaNuEL study

Maike Wolters^{a,*}, Dorothee Volkert^b, Melanie Streicher^b, Eva Kiesswetter^b, Gabriel Torbahn^b, Eibhlís M. O'Connor^c, Mary O'Keefe^c, Mary Kelly^c, Eileen O'Herlihy^d, Paul W. O'Toole^d, Suzanne Timmons^e, Emma O'Shea^e, Patricia Kearney^f, Judith van Zwienen-Pot^g, Marjolein Visser^h, Isabelle Maitreⁱ, Virginie Van Wymelbeke^{j,k}, Claire Sulmont-Rossé^k, Gabriele Nagel^l, Marion Flechtner-Mors^m, Sabine Goisser^{b,n}, Ruth Teh^o, Antje Hebestreit^a, on behalf of the MaNuEL consortium

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ESPEN Endorsed Recommendation

GLIM criteria for the diagnosis of malnutrition – A consensus report from the global clinical nutrition community[☆]

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 T. Higashiguchi^g, G. Baptista^h, R. Barazzoniⁱ, R. Blaauw^j, A. Coats^{k, l}, A. Crivelli^m,
 D.C. Evansⁿ, L. Gramlich^o, V. Fuchs-Tarlovsky^p, H. Keller^q, L. Llido^r, A. Malone^{s, t},
 K.M. Mogensen^u, J.E. Morley^v, M. Muscaritoli^w, I. Nyulasi^x, M. Pirlich^y, V. Pisprasert^z,
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Detección de riesgos



Evaluación
diagnóstica



Diagnóstico



Grado de
severidad

En riesgo de desnutrición

- Utilizar herramientas de detección validadas



Criterios de evaluación

- Fenotipo
 - Pérdida de peso involuntaria.
 - Índice de masa corporal bajo.
 - Masa muscular reducida.
- Etiología
 - Reducción de la ingesta o de la asimilación de alimentos.
 - Carga de enfermedad / inflamación



Cumple con los criterios para el diagnóstico de desnutrición

- Requiere al menos 1 criterio fenotípico y 1 criterio etiológico.



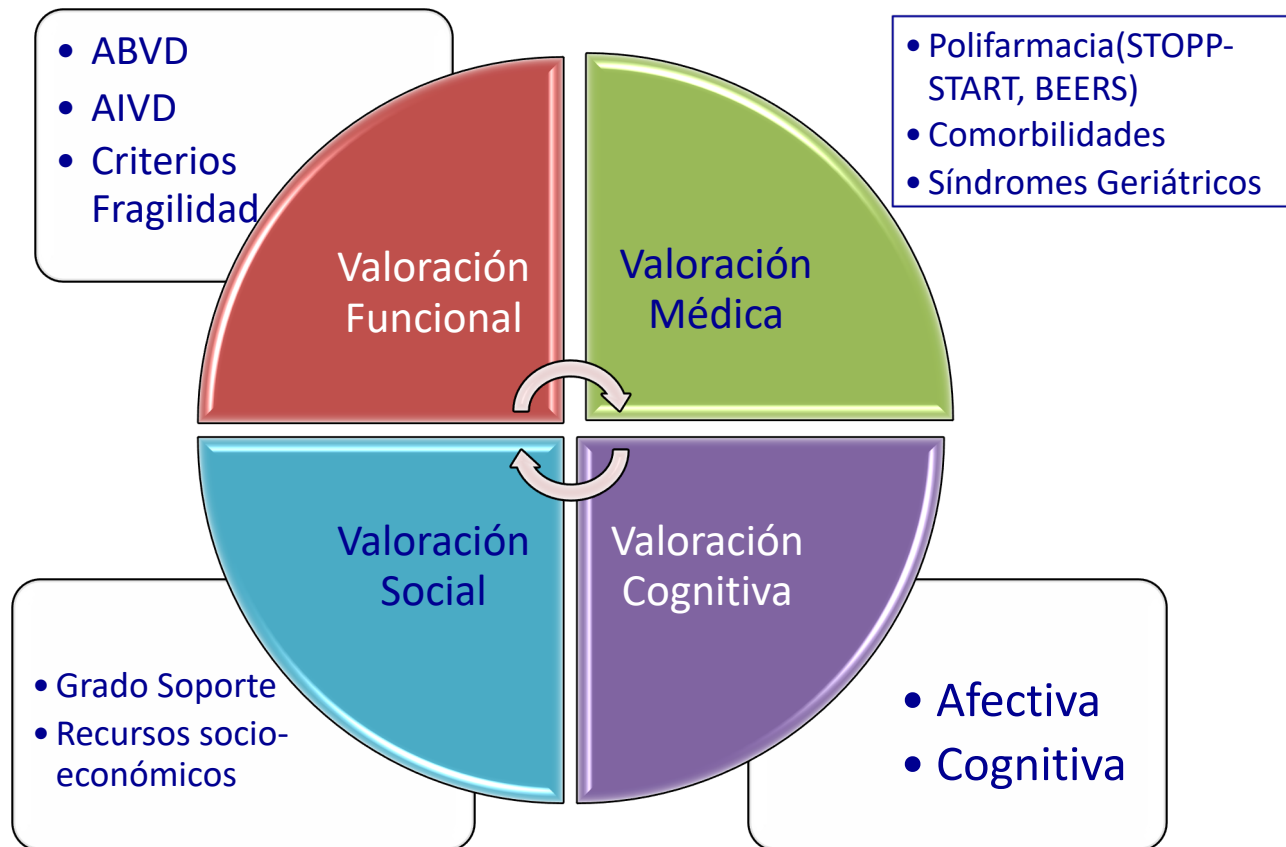
Determinar la severidad de la desnutrición

- Gravedad determinada en función del criterio fenotípico

: Esquema de diagnóstico GLIM para la detección, evaluación, diagnóstico y clasificación de la desnutrición. Modificado de (20): Cederholm T, Jensen GL, Correia M et al. GLIM criteria for the diagnosis of malnutrition - A consensus report from the global clinical nutrition community. Clin Nutr 2018. doi: 10.1002/jpen.1440 [Epub ahead of print].

*GLIM: Global Leadership Initiative on Malnutrition

VALORACIÓN GERIÁTRICA INTEGRAL: Componentes



The main geriatric domains to be assessed in CGA are **functional status**, **fatigue**, **comorbidity**, **cognition**, **mental health**, **social support**, **nutrition** and **geriatric syndromes** (e.g. dementia, delirium, falls, incontinence, osteoporosis or spontaneous fractures, neglect or abuse, failure to thrive, constipation, **polypharmacy**, pressure ulcers, sarcopenia and frailty)

VALORACIÓN DEL ESTADO NUTRICIONAL





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Original Study

Mini-Nutritional Assessment, Malnutrition Universal Screening Tool, and Nutrition Risk Screening Tool for the Nutritional Evaluation of Older Nursing Home Residents



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A B S T R A C T

Keywords:

MNA
MUST
NRS-2002
malnutrition
older adults

Introduction: Malnutrition plays a major role in clinical and functional impairment in older adults. The use of validated, user-friendly and rapid screening tools for malnutrition in the elderly may improve the diagnosis and, possibly, the prognosis. The aim of this study was to assess the agreement between Mini-Nutritional Assessment (MNA), considered as a reference tool, MNA short form (MNA-SF), Malnutrition Universal Screening Tool (MUST), and Nutrition Risk Screening (NRS-2002) in elderly institutionalized participants.

Methods: Participants were enrolled among nursing home residents and underwent a multidimensional evaluation. Predictive value and survival analysis were performed to compare the nutritional classifications obtained from the different tools.

Results: A total of 246 participants (164 women, age: 82.3 ± 9 years, and 82 men, age: 76.5 ± 11 years) were enrolled. Based on MNA, 22.6% of females and 17% of males were classified as malnourished; 56.7% of women and 61% of men were at risk of malnutrition. Agreement between MNA and MUST or NRS-2002 was classified as “fair” ($k = 0.270$ and 0.291 , respectively; $P < .001$), whereas the agreement between MNA and MNA-SF was classified as “moderate” ($k = 0.588$; $P < .001$). Because of the high percentage of false negative participants, MUST and NRS-2002 presented a low overall predictive value compared with MNA and MNA-SF. Clinical parameters were significantly different in false negative participants with MUST or NRS-2002 from true negative and true positive individuals using the reference tool. For all screening tools, there was a significant association between malnutrition and mortality. MNA showed the best predictive value for survival among well-nourished participants.

Conclusions: Functional, psychological, and cognitive parameters, not considered in MUST and NRS-2002 tools, are probably more important risk factors for malnutrition than acute illness in geriatric long-term care inpatient settings and may account for the low predictive value of these tests. MNA-SF seems to combine the predictive capacity of the full version of the MNA with a sufficiently short time of administration.

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Malnutrition is a common condition in older adults, with a prevalence rising up to approximately 90% in nursing home residents.^{1,2} Malnutrition is associated with functional impairment, reduced

Mini Nutritional Assessment

MNA[®]

Nestlé
Nutrition Institute

Last name:					First name:				
Sex:		Age:		Weight, kg:		Height, cm:		Date:	

Complete the screen by filling in the boxes with the appropriate numbers. Total the numbers for the final screening score.

Screening

A Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?
 0 = severe decrease in food intake
 1 = moderate decrease in food intake
 2 = no decrease in food intake ☐

B Weight loss during the last 3 months
 0 = weight loss greater than 3 kg (6.6 lbs)
 1 = does not know
 2 = weight loss between 1 and 3 kg (2.2 and 6.6 lbs)
 3 = no weight loss ☐

C Mobility
 0 = bed or chair bound
 1 = able to get out of bed / chair but does not go out
 2 = goes out ☐

D Has suffered psychological stress or acute disease in the past 3 months?
 0 = yes 2 = no ☐

E Neuropsychological problems
 0 = severe dementia or depression
 1 = mild dementia
 2 = no psychological problems ☐

F1 Body Mass Index (BMI) (weight in kg) / (height in m)² ☐
 0 = BMI less than 19
 1 = BMI 19 to less than 21
 2 = BMI 21 to less than 23
 3 = BMI 23 or greater ☐

IF BMI IS NOT AVAILABLE, REPLACE QUESTION F1 WITH QUESTION F2.
 DO NOT ANSWER QUESTION F2 IF QUESTION F1 IS ALREADY COMPLETED.

F2 Calf circumference (CC) in cm
 0 = CC less than 31
 3 = CC 31 or greater ☐

Screening score
 (max. 14 points) ☐☐

12-14 points: ☐ Normal nutritional status
8-11 points: ☐ At risk of malnutrition
0-7 points: ☐ Malnourished

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Validation of the Mini Nutritional Assessment Short-Form (MNA[®]-SF): A practical tool for identification of nutritional status. Kaiser MJ, Bauer JM, Ramsch C, et al. J Nutr Health Aging 2009; 13:782-788.

Ref. Vellas B, Villars H, Abellan G, et al. Overview of the MNA[®] - Its History and Challenges. J Nutr Health Aging 2006;10:456-465.
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 Guigoz Y. The Mini-Nutritional Assessment (MNA[®]) Review of the Literature - What does it tell us? J Nutr Health Aging 2006; 10:466-487.
 Kaiser MJ, Bauer JM, Ramsch C, et al. Validation of the Mini Nutritional Assessment Short-Form (MNA[®]-SF): A practical tool for identification of nutritional status. J Nutr Health Aging 2009; 13:782-788.
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 For more information: www.mna-elderly.com

Mini Nutritional Assessment MNA®



Last name: First name:
 Sex: Age: Weight, kg: Height, cm: Date:

Complete the screen by filling in the boxes with the appropriate numbers.
 Add the numbers for the screen. If score is 11 or less, continue with the assessment to gain a Malnutrition Indicator Score.

Screening

A Has food intake declined over the past 3 months due to loss of appetite, digestive problems, chewing or swallowing difficulties?

- 0 = severe decrease in food intake
 1 = moderate decrease in food intake
 2 = no decrease in food intake ☐

B Weight loss during the last 3 months

- 0 = weight loss greater than 3kg (6.6lbs)
 1 = does not know
 2 = weight loss between 1 and 3kg (2.2 and 6.6 lbs)
 3 = no weight loss ☐

C Mobility

- 0 = bed or chair bound
 1 = able to get out of bed / chair but does not go out
 2 = goes out ☐

D Has suffered psychological stress or acute disease in the past 3 months?

- 0 = yes 2 = no ☐

E Neuropsychological problems

- 0 = severe dementia or depression
 1 = mild dementia
 2 = no psychological problems ☐

F Body Mass Index (BMI) = weight in kg / (height in m)² ☐

- 0 = BMI less than 19
 1 = BMI 19 to less than 21
 2 = BMI 21 to less than 23
 3 = BMI 23 or greater ☐

Screening score (subtotal max. 14 points) ☐

- 12-14 points: ☐ Normal nutritional status
 8-11 points: ☐ At risk of malnutrition
 0-7 points: ☐ Malnourished

For a more in-depth assessment, continue with questions G-R

Assessment

G Lives independently (not in nursing home or hospital)

- 1 = yes 0 = no ☐

H Takes more than 3 prescription drugs per day

- 0 = yes 1 = no ☐

I Pressure sores or skin ulcers

- 0 = yes 1 = no ☐

J How many full meals does the patient eat daily?

- 0 = 1 meal
 1 = 2 meals
 2 = 3 meals ☐

K Selected consumption markers for protein intake

- At least one serving of dairy products (milk, cheese, yoghurt) per day yes ☐ no ☐
 - Two or more servings of legumes or eggs per week yes ☐ no ☐
 - Meat, fish or poultry every day yes ☐ no ☐
- 0.0 = if 0 or 1 yes
 0.5 = if 2 yes
 1.0 = if 3 yes

L Consumes two or more servings of fruit or vegetables per day?

- 0 = no 1 = yes ☐

M How much fluid (water, juice, coffee, tea, milk...) is consumed per day?

- 0.0 = less than 3 cups
 0.5 = 3 to 5 cups
 1.0 = more than 5 cups

N Mode of feeding

- 0 = unable to eat without assistance
 1 = self-fed with some difficulty
 2 = self-fed without any problem ☐

O Self view of nutritional status

- 0 = views self as being malnourished
 1 = is uncertain of nutritional state
 2 = views self as having no nutritional problem ☐

P In comparison with other people of the same age, how does the patient consider his / her health status?

- 0.0 = not as good
 0.5 = does not know
 1.0 = as good
 2.0 = better

Q Mid-arm circumference (MAC) in cm

- 0.0 = MAC less than 21
 0.5 = MAC 21 to 22
 1.0 = MAC greater than 22

R Calf circumference (CC) in cm

- 0 = CC less than 31
 1 = CC 31 or greater ☐

Assessment (max. 16 points) ☐

Screening score ☐

Total Assessment (max. 30 points) ☐

Malnutrition Indicator Score

- 24 to 30 points ☐ Normal nutritional status
 17 to 23.5 points ☐ At risk of malnutrition
 Less than 17 points ☐ Malnourished

Mini Nutritional Assessment: A practical assessment tool for grading the nutritional state of elderly patients. Guigoz Y, Vellas B and Garry PJ. Facts and Research in Gerontology 1994; Supplement 2 : 15-59.

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ARTÍCULO ESPECIAL

Valoración del estado nutricional en Geriatria: declaración de consenso del Grupo de Nutrición de la Sociedad Española de Geriatria y Gerontología[☆]



María Alicia Camina-Martín^a, Beatriz de Mateo-Silleras^a, Vincenzo Malafarina^{b,*}, Rosa Lopez-Mongil^c, Virtudes Niño-Martín^d, José Antonio López-Trigo^e, María Paz Redondo-del-Río^a y Grupo de Nutrición de la Sociedad Española de Geriatria y Gerontología (SEGG)

R E S U M E N

Entre los muchos métodos validados para el cribado nutricional, el MNA-SF representa una herramienta práctica. Tras evidenciar la sospecha o la presencia de desnutrición la valoración completa prevé la realización de una historia nutricional exhaustiva. Las historias clínico-nutricional y dietética pretenden evidenciar los posibles factores de riesgo sobre la base del cuadro de desnutrición. Entonces la valoración antropométrica, asociada a los datos de laboratorio, pretende objetivar las modificaciones físicas y metabólicas asociadas a la desnutrición. Hoy en día cada vez más se tiende a profundizar en la valoración nutricional utilizando técnicas no invasivas de estudio de la composición corporal asociadas al estudio funcional. Esta última representa un índice indirecto del estado nutricional de gran interés para la geriatría. En conclusión, un correcto cribado nutricional es la base fundamental para un temprano diagnóstico de desnutrición y poder valorar la indicación al tratamiento nutricional. Para esto es fundamental fomentar la investigación en el campo de la nutrición geriátrica para aumentar el conocimiento y poder hacer cada vez más una geriatría basada en la evidencia.

mas complejas y que mas recursos consumen.

El RMN y la malnutrición son altamente prevalentes en ancianos. La detección del riesgo permitiría la intervención temprana, lo que evitaría la aparición de comorbilidades asociadas, reduciendo los costes derivados de su tratamiento. Sin embargo, solamente la desnutrición está reconocida en la última edición de la Clasificación Internacional de Enfermedades (CIE-10) (entidades E40 a E46)⁷⁵. El Grupo de Trabajo en Nutrición en Geriátrica de la SEGG considera que el «RMN» debería estar reconocido como una entidad nosológica independiente en el CIE.

Como ya se ha comentado, tras la detección del RMN, debe realizarse una valoración nutricional exhaustiva, necesaria para un correcto diagnóstico que permita implementar la intervención nutricional más adecuada para cada paciente. Estos serán los aspectos que se abordarán en los futuros documentos de este grupo de consenso.





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Full length article

Malnutrition in postacute geriatric care: Basic ESPEN diagnosis and etiology based diagnoses analyzed by length of stay, in-hospital mortality, and functional rehabilitation indexes



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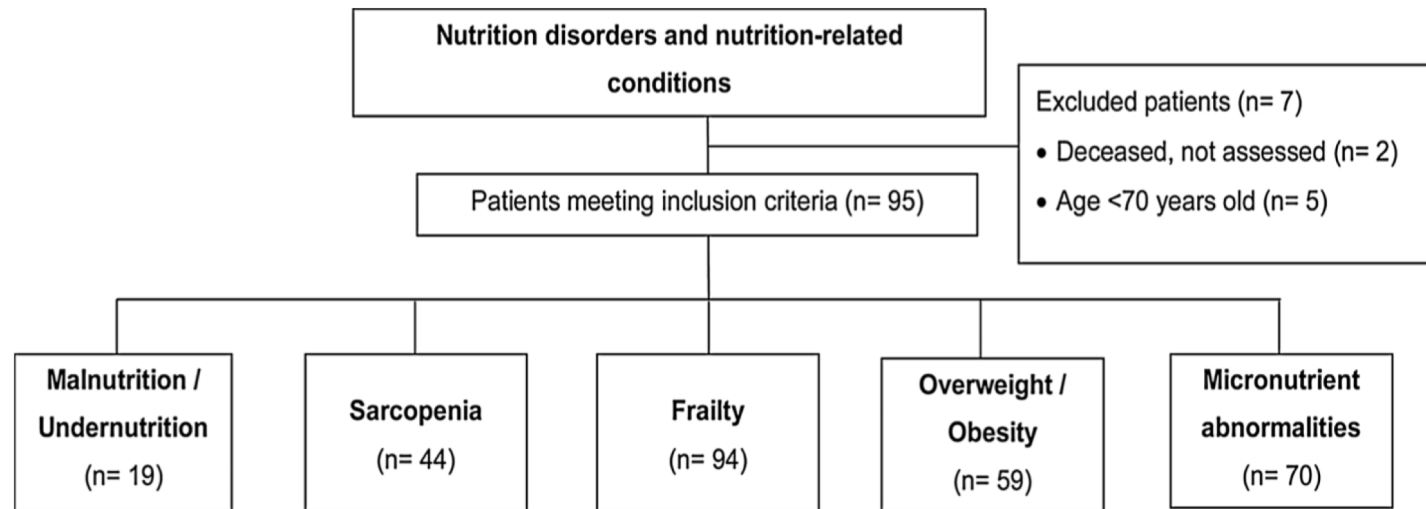


Fig. 1. Overview of nutrition disorders and nutrition-related conditions in postacute care population (Cederholm et al., 2016).

Visión general de los trastornos de la nutrición y las condiciones relacionadas con la nutrición en la población de cuidados postagudos (Cederholm et al., 2016).



Review

Towards a multidisciplinary approach to understand and manage obesity and related diseases[☆]

Stephan C. Bischoff^{a,*}, Yves Boirie^b, Tommy Cederholm^c, Michael Chourdakis^d, Cristina Cuerda^e, Nathalie M. Delzenne^f, Nicolaas E. Deutz^g, Denis Fouque^h, Laurence Gentonⁱ, Carmen Gil^j, Berthold Koletzko^k, Miguel Leon-Sanz^l, Raanan Shamir^m, Joelle Singer^{n,o}, Pierre Singer^{o,p}, Nanette Stroebele-Benschop^q, Anders Thorell^r, Arved Weimann^s, Rocco Barazzoni^t

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SUMMARY

Overnutrition and sedentary lifestyle result in overweight or obesity defined as abnormal or excessive fat accumulation that may impair health. According to the WHO, the worldwide prevalence of obesity nearly doubled between 1980 and 2008. In 2008, over 50% of both men and women in the WHO European

Appendix 1

A. The Rockwood Clinical Frailty Scale

- | | | |
|---|--|---|
| 1. Hypertension (1 = yes; 0 = no) | | 17. Malnutrition (Mini-Nutritional Assessment) <17 = yes <17 = no |
| 2. Chronic renal failure (creatinine >1.3 or glomerular filtration rate <60) (1 = yes; 0 = no) | | 18. Obesity (body mass index >30 = 1, 25–30 = 0.5, <25 = 0) |
| 3. Chronic obstructive pulmonary disease (1 = yes; 0 = no) | | 19. Constipation (1 = yes; 0 = no) |
| 4. Heart failure (1 = yes; 0 = no) | | 20. Pressure ulcers (1 = yes; 0 = no) |
| 5. Cancer (1 = yes; 0 = no) | | 21. Anemia (hemoglobin g/dL: <13 men; <12 women) (1 = yes; 0 = no) |
| 6. Stroke (1 = yes; 0 = no) | | 22. Visual impairment (1 = yes; 0 = no) |
| 7. Parkinson (1 = yes; 0 = no) | | 23. Hearing impairment (1 = yes; 0 = no) |
| 8. Atrial fibrillation (1 = yes; 0 = no) | | 24. Slow walking speed (1 = yes; 0 = no) |
| 9. Gastrointestinal problems (1 = yes; 0 = no) | | 25. Risk of falls (Timed Up and Go) (1 = yes; 0 = no) |
| 10. Thyroid disorders (1 = yes; 0 = no) | | 26. Unintentional weight loss (1 = yes; 0 = no) |
| 11. Diabetes mellitus (1 = yes; 0 = no) | | 27. Difficulties to take a bath or shower (1 = yes; 0 = no) |
| 12. Psychiatric disease (1 = yes; 0 = no) | | 28. Dressing difficulties (1 = yes; 0 = no) |
| 13. Gastrointestinal or liver disease (1 = yes; 0 = no) | | 29. Difficulties with personal hygiene (1 = yes; 0 = no) |
| 14. Musculoskeletal diseases (1 = yes; 0 = no) | | 30. Difficulties with transfer (1 = yes; 0 = no) |
| 15. Depression (geriatric depression scale) (>0 = yes 0 = no) | | 31. Eating problems (1 = yes; 0 = no) |
| 16. Dementia (Mini-Mental State Examination) (<27/30)/Mini-Cognitive Examination (<28/35) (1 = yes; 0 = no) | | 32. Difficulties with urinary incontinence (also in the database) (1 = yes; 0 = no) |
| | | 33. Difficulties with fecal incontinence (also in the database) (1 = yes; 0 = no) |
| | | 34. Polypharmacy (>5) (1 = yes; 0 = no) |



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Original article

The risk of dysphagia is associated with malnutrition and poor functional outcomes in a large population of outpatient older individuals

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SUMMARY

Oropharyngeal dysphagia (OD) is a widespread clinical condition among older adults. Although it represents a risk factor for malnutrition, dehydration and aspiration pneumonia, its assessment and contribution to functional decline is often ignored. The aim of the present study was to estimate the prevalence of OD in a large population of non-institutionalized older people and to evaluate its relationship with malnutrition and physical function. 10-item Eating Assessment Tool (EAT-10) and Mini Nutritional Assessment Short Form (MNA-SF) were used to identify the risk of dysphagia and malnutrition. Short Physical Performance Battery (SPPB) and hand-grip strength were used as functional endpoints. The relationship between risk of dysphagia and functional outcomes was tested in a multivariate regression analysis adjusted for age and sex (Model 1) and for other confounders including Mini Mental State Examination (MMSE) and polypharmacy (Model 2). Mean age of 773 subjects (61.3% female) was 81.97 years. The percentage of participants at risk of dysphagia ($EAT \geq 3$) was 30.1%, 37.8% of subjects was malnourished ($MNA-SF < 8$), 46.2% was at risk of malnutrition ($MNA-SF: 8-11$). EAT-10 was significantly and negatively associated to MNA-SF ($\beta = -0.47 \pm 0.06$, $p < 0.0001$) and the strength of the relationship was attenuated but still statistically significant in the multivariate model ($\beta = -0.28 \pm 0.07$, $p < 0.0001$). A significant and negative relationship was found between EAT-10 and SPPB and hand-grip strength in Model 1 ($\beta = -0.25 \pm 0.05$, $p < 0.0001$) and Model 2 ($\beta = -0.07 \pm 0.03$, $p < 0.0001$). After categorization of risk of dysphagia in two groups (at risk and not at risk), MNA-SF, SPPB and hand-grip strength were independently associated with higher risk of dysphagia ($OR = 0.91$, 95%CI = 0.83–0.99, $p = 0.03$; $OR = 0.83$, 95%CI = 0.77–0.89, $p < 0.0001$; $OR = 0.96$, 95%CI = 0.92–0.99, $p = 0.02$, respectively). In a large group of outpatient older individuals, we observed a significant negative association between risk of dysphagia and nutritional and physical performance, suggesting that the screening of OD, possibly supported by its assessment, should be implemented in the geriatric setting to potentially prevent the functional decline.

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JAMDA

journal homepage: www.jamda.com



Original Study

The Effect of Xerostomic Medication on Oral Health in Persons With Dementia



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Table 1

List of Continuously Used Xerostomic Medications During the 3-Year Exposure Period

Xerostomic Medications	% Persons With Dementia
C07AB02: Metoprolol	16.9
C09AA02: Enalapril	11.6
C03CA01: Furosemide	8.8
N05CF01: Zopiclone	7.5
N06AB04: Citalopram	7.3
C07AB03: Atenolol	5.7
N05CF02: Zolpidem	4.4
C03AA01: Bendroflumethiazide	4.0
M05BA04: Alendronic acid	3.7
G04CA01: Alfuzosin	2.6
N06AB06: Sertraline	2.3
N02AX02: Tramadol	1.7
R03BB04: Tiotropium bromide	1.5
G04BD07: Tolterodine	1.1
G04BD08: Solifenacin	1.1
N06AX16: Venlafaxine	1.1



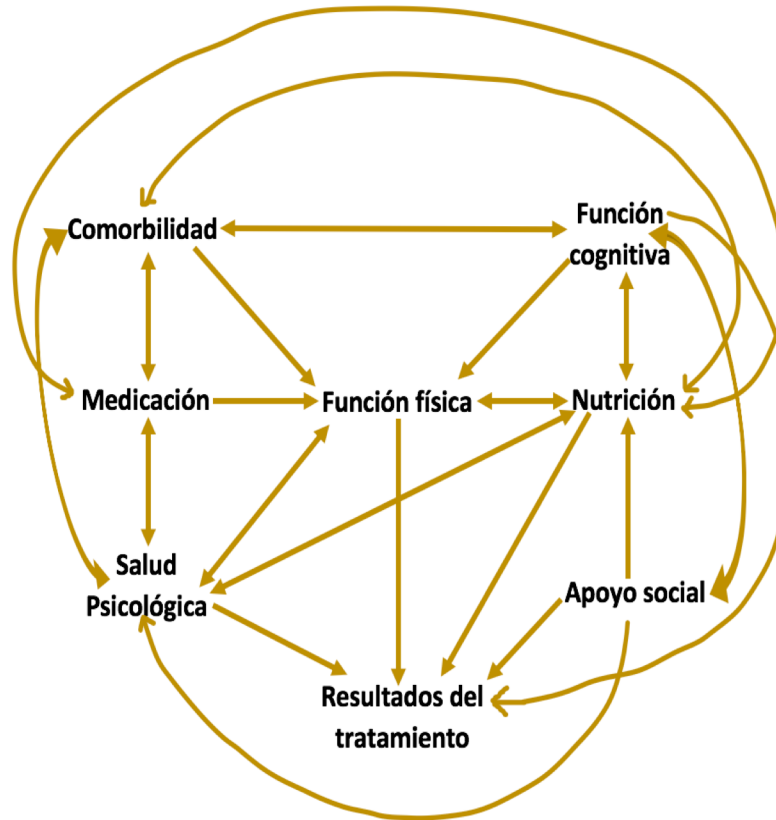
NUTRICIÓN EN EL ANCIANO

GUÍA DE BUENA
PRÁCTICA
CLÍNICA
EN GERIATRÍA

TABLA 4. FÁRMACOS Y NUTRICIÓN

Anorexígenos	Alteración Gusto		Inhibidor Absorción de Nutrientes
Diuréticos	Propanolol	Nifedipino	Antiácidos
Diltiazem	Diltiazem	IECA: Captopril, Enalapril	(Á. Fólico, Vit. B12, Calcio, Hierro)
Digoxina	Hidroclorotiazida	Espironolactona	Colchicina (Grasas, Vit. B12)
Antidepresivos Tricíclicos	Amiloride	AINE: A.A.S., Ibuprofeno	Cimetidina (Calcio, Potasio, Vit. B12, Á. Fólico)
Fluoxetina	Penicilina	Lincomicina	Omeprazol (Calcio, Cinc, Vit. B12, Á. Fólico)
Clorpromacina	Metronidazol	Claritromicina	Fenitoína (Á. Fólico, Vit. D y K)
Haloperidol	Cefamandole	Citostáticos: 5 Fluoruracilo	Diuréticos (Potasio, Calcio, Magnesio)
Sedantes	Procaína	Etambutol	Laxantes (Nutrientes, Vit. Liposolubles)
Citostáticos	Pentamidina	Carbamacepina	AAS (Á.Fólico, Á. Ascórbico)
	Levo-Dopa	Sulmatriptan	Warfarina (Vit. K)
	Fluorazepan	Triazolan	Colestiramina (Á. Fólico, Vit. A y K)
	Zopiclona		Tetraciclina (Calcio)
			Cefalosporinas
			(Proteínas, Vit. D y K)
			Gentamicina (Potasio y Magnesio)
			Trimetropin+Sulfametoxazol
			(Á. Fólico)
			Isoniacida: (Vit. B6, Niacida, Vit. D)
			Corticoides (Calcio, Vit. D)

Valoración Geriátrica Integral





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EDITORIAL

La creciente importancia del rendimiento físico en la valoración geriátrica integral



The increasing relevance of physical performance in global geriatric assessment

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Una de las cosas que más llama la atención a los profesionales que se acercan a la geriatría es la importante cantidad de escalas objetivas disponibles para la valoración de las diversas áreas que componen la principal herramienta diagnóstica de la especialidad, la valoración geriátrica integral (VGI). Aunque sería esperable que el uso de la VGI fuera homogéneo en todos los países y entornos, esto sigue sin ser un hecho¹. Establecer unos estándares comunes consensuados definiendo qué herramientas estandarizadas deben

de la marcha, el test de los⁵ minutos, el *Timed Up&Go* o el test de caminar 400 m. Cada una de estas medidas tiene sus particularidades, pero todas ellas predicen resultados clínicos relevantes, como la mortalidad, la dependencia para las AVD o las caídas y fracturas, tanto en población mayor general⁶ como en pacientes con diversas enfermedades⁵. Además, el uso de estas medidas de rendimiento físico ha demostrado ser útil para describir el estado de salud del mayor, como forma de medir la evolución del paciente y el impacto



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REVISIÓN

¿Mides la velocidad de la marcha en tu práctica diaria? Una revisión



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INFORMACIÓN DEL ARTÍCULO

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Caídas

Función física

Envejecimiento

Discapacidad

R E S U M E N

La velocidad de la marcha (VM) a paso habitual es una medida fácil, rápida, económica, fiable e informativa. Con un cronómetro, como los que actualmente se encuentran en todos los móviles, dos marcas en el suelo y una mínima estandarización, un profesional sanitario obtiene una medida más objetiva y rápida respecto a muchas de las escalas habituales de valoración de las actividades de la vida diaria, por ejemplo. La VM es uno de los pilares del fenotipo de fragilidad y está fuertemente relacionada con la sarcopenia. Es un potente marcador de caídas, discapacidad incidente y de muerte, útil sobre todo como cribado en el ámbito comunitario o de atención primaria. Paralelamente, en los últimos años empieza a tener evidencia también en el pronóstico de procesos médicos agudos o en el paciente posquirúrgico, y se está estudiando la utilidad de esta herramienta en los pacientes con demencia, a la luz de su relación con las alteraciones cognitivas.

VELOCIDAD DE LA MARCHA: Efectos positivos

Correlación clínica de los puntos de corte más habituales

Puntos de corte propuestos	Significación clínica
<i>Utilización transversal: estratificación y clasificación²⁴</i>	
< 0,6 m/s	Alta probabilidad de tener salud y función física pobres
< 0,8 m/s	Individuos con una supervivencia menor a la estimada para edad y sexo similares
≥ 1 m/s	Envejecimiento saludable y supervivencia mayor a la estimada para edad y sexo similares
> 1,2 m/s	Expectativa de vida excepcional
<i>Utilización longitudinal: sensibilidad al cambio⁹¹</i>	
0,03-0,05 m/s	Mínimo cambio apreciable (empeoramiento o mejora)
0,08 m/s	Cambio clínicamente significativo (empeoramiento o mejora)



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Review

Effectiveness and efficacy of nutritional therapy: A systematic review following Cochrane methodology[☆]



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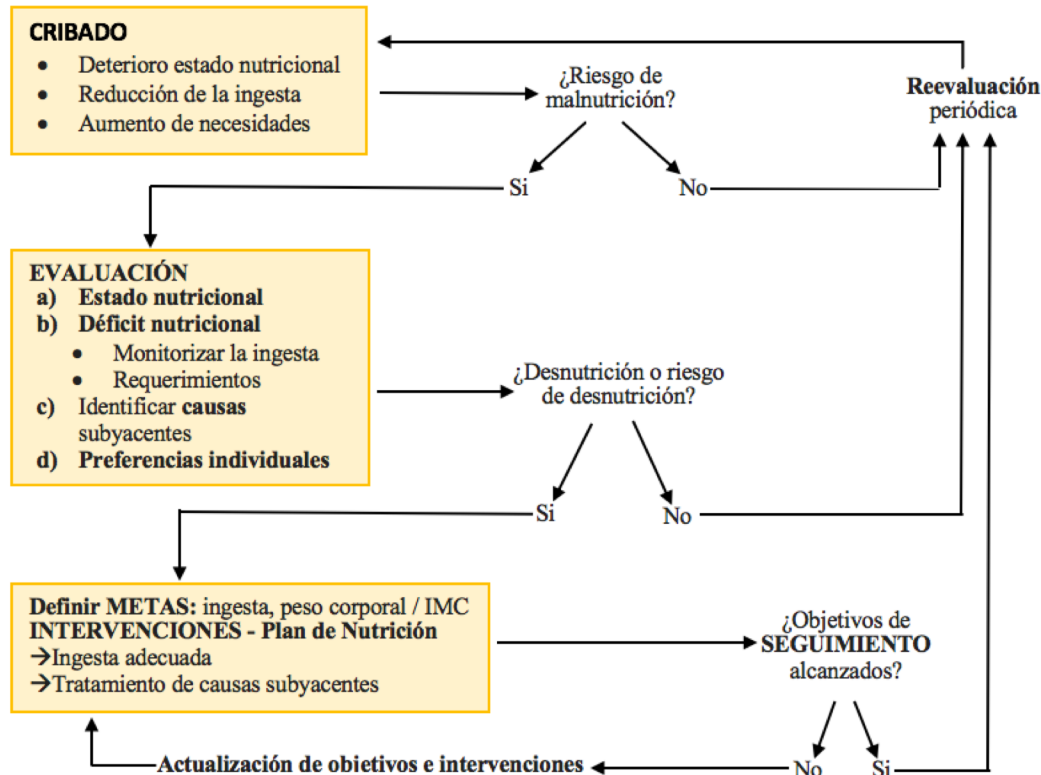
S U M M A R Y

Background & aims: Disease-related malnutrition has deleterious consequences on patients' outcome and healthcare costs. The demonstration of improved outcome by appropriate nutritional management is on occasion difficult. The European Society of Clinical Nutrition and Metabolism (ESPEN) appointed the Nutrition Education Study Group (ESPEN-NESG) to increase recognition of nutritional knowledge and support in health services.

Methods: To obtain the best available evidence on the potential effects of malnutrition on morbidity, mortality and hospital stay; cost of malnutrition; effect of nutritional treatment on outcome parameters and pharmaco-economics of nutritional therapy, a systematic review of the literature was performed following Cochrane methodology, to answer the following key questions: Q1) Is malnutrition an independent predictive factor for readmission within 30 days from hospital discharge? Q2) Does nutritional therapy reduce the risk of readmission within 30 days from hospital discharge? Q3) Is nutritional therapy cost-effective/does it reduce costs in hospitalized patients? and Q4) Is nutritional therapy cost effective/does it reduce costs in outpatients?

Results: For Q1 six of 15 identified observational studies indicated that malnutrition was predictive of re-admissions, whereas the remainder did not. For Q2 nine randomized controlled trials and two meta-analyses gave non-conclusive results whether re-admissions could be reduced by nutritional therapy. Economic benefit and cost-effectiveness of nutritional therapy was consistently reported in 16 identified studies for hospitalized patients (Q3), whereas the heterogeneous and limited corresponding data on out-patients (Q4) indicated cost-benefits in some selected sub-groups.

Cuidados nutricionales para personas mayores.



Modificado de Volkert D, Beck AM, Cederholm T, Cruz-Jentoft A, Goisser S, Hooper L et al.

ESPEN GUIDELINE ON CLINICAL NUTRITION AND HYDRATION IN GERIATRICS.

Clin Nutr. (2018) Jun 18. pii: S0261-5614(18)30210-3.

CAUSAS POTENCIALES DE DESNUTRICIÓN E INTERVENCIONES.

Modificado de Volkert D, Beck AM, Cederholm T, Cruz-Jentoft A, Goisser S, Hooper L et al.

ESPEN guideline on clinical nutrition and hydration in geriatrics.

Clin Nutr. (2018) Jun 18. pii: S0261-5614(18)30210-3.



Causa potencial	Intervenciones
Problemas de masticación	Cuidado e higiene bucal. Tratamiento dental. Dieta de textura modificada.
Problemas para tragar (disfagia)	Evaluación profesional de la deglución. Entrenamiento de la deglución. Dieta de textura modificada, según evaluación de la deglución.
Patología en la extremidad superior	Fisioterapia, terapia ocupacional. Ayuda adecuada para comer y beber (p. Ej., Cortar alimentos, proporcionar ayuda para comer y beber). Provisión de ayudas adecuadas para comer y beber. Comer con los dedos. Ayuda para comprar / cocinar, comidas sobre ruedas.
Inmovilidad / movilidad restringida	Fisioterapia. Entrenamiento con ejercicios de resistencia. Ejercicio de grupo Ayuda para comprar / cocinar, comidas sobre ruedas.
Deterioro cognitivo/Demencia	Supervisión de comidas. Supervisar la comida (por ejemplo, pautas verbales, ayuda para comer). Ayuda para comprar / cocinar, comidas sobre ruedas. Comidas de estilo familiar en las instituciones.
Estado de ánimo depresivo, depresión	Tratamiento médico adecuado. Comer y beber con otros / comidas compartidas.

Causa potencial	Intervenciones
Soledad, aislamiento social.	Ambiente de comida agradable. Actividades grupales, terapia ocupacional. Comer y beber con otros / comidas compartidas. Actividades de grupo.
Pobreza	Programas sociales.
Enfermedad aguda, dolor (crónico)	Tratamiento medico adecuado.
Efectos adversos de los medicamentos (p. Ej., Xerostomía, apatía)	Compruebe la medicación valorando los efectos secundarios potenciales. Reducir la dosis de medicación. Reemplazar o suspender medicamentos.
Dietas restrictivas	Revisión y liberalización de restricciones dietéticas.





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JAMDA

journal homepage: www.jamda.com

Editorial

Nutrition and Aging Successfully

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It is now clear that nutrition and physical activity play a major role in allowing persons to age successfully.^{1–3} Although at the beginning of the 20th century single-nutrient diseases, such as pellagra, beriberi, Wernicke encephalopathy, scurvy, and xerophthalmia, were common, these are now rarely seen in the developed world.⁴ In the modern world, overeating leading to obesity has become a major problem, resulting in a variety of chronic diseases and disability.^{5,6} Persons with obesity and low muscle mass develop obese sarcopenia associated with disability.^{7–10} However, in older persons the obesity paradox has shown that being somewhat overweight can be beneficial and that weight loss, even in persons with diabetes mellitus, can lead to increased mortality.^{11–15} This is in contradistinction to younger persons and animals, where caloric restriction may extend life span.^{16,17} Dietary restriction decreases mTOR activity and also the activation of the PI3K/AKT insulin pathway.¹⁸ However, in persons who are losing

Sarcopenia and Protein

Sarcopenia is defined as poor function due to the loss of protein.^{42–46} It can be rapidly screened for using the SARC-F.^{47–50} Sarcopenia now has its own ICD-10 code.⁵¹ In this issue of the Journal, it has been shown to be highly predictive of muscle mass and function.³⁸ Resistance exercise represents the most important therapeutic modality for sarcopenia.^{52–57}

Protein is the key nutrient for treating sarcopenia.^{58–61} Both leucine-enriched essential amino acids and hydroxyl methyl butyrate (HMB) have been shown to improve muscle mass and function when given alone.^{62,63} In addition, when protein intake is relatively low, protein may act synergistically with exercise.^{64–66} Persons with a high diet quality index tend to be less likely to have sarcopenia.⁶⁷

Table 1

The Meals on Wheels Mnemonic of Reversible Causes of Weight Loss

Medications

Emotional (depression)

Alcoholism, anorexia tardive, abuse (elder)

Late life paranoia

Swallowing problems

Oral problems

Nosocomial infections, no money (poverty)

Wandering/dementia

Hyperthyroidism, hypercalcemia, hypoadrenalism

Enteric problems (malabsorption)

Eating problems (eg, Tremor)

Low-salt, low-cholesterol diet

Shopping and meal preparation problems, stones (cholecystitis)



Nutrition may be considered a multidomain cost-effective intervention because it may have beneficial effects at multiple levels, from the biological to the clinical and the social dimensions⁴² (Figure 2). This is particularly important facing the large and growing aging population potentially exposed to the risk of malnutrition. Even in very advanced age, good nutrition and physical activity can have powerful benefits for health and well-being.^{43,44} Because of the demographic trends, prevention of malnutrition and frailty in older persons is becoming one of the greatest challenges for the social systems worldwide.

Malnutrition is particularly frequent in nursing home residents, a population mostly predisposed to loss of intrinsic capacity to maintain

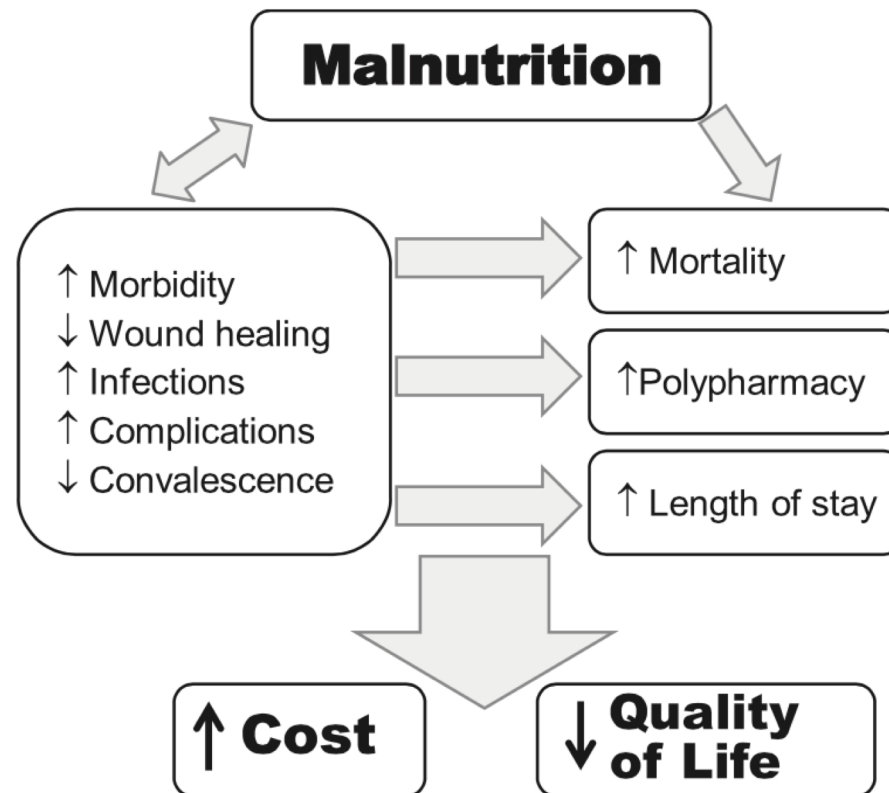


Fig. 2. Consequences at multiple levels because of malnutrition.

17-Enero-19

“Locura es hacer siempre lo mismo
y esperar resultados diferentes”

**HAY QUE CUIDARSE.
UNO A SÍ MISMO
Y UNOS A OTROS.
CUIDARSE.
SIEMPRE**

rosalopezmongil@gmail.com

Table 1
SARC-F Screen for Sarcopenia

Component	Question	Scoring*
Strength	How much difficulty do you have in lifting and carrying 10 pounds?	None = 0 Some = 1 A lot or unable = 2
Assistance in walking	How much difficulty do you have walking across a room?	None = 0 Some = 1 A lot, use aids, or unable = 2
Rise from a chair	How much difficulty do you have transferring from a chair or bed?	None = 0 Some = 1 A lot or unable without help = 2
Climb stairs	How much difficulty do you have climbing a flight of ten stairs?	None = 0 Some = 1 A lot or unable = 2
Falls	How many times have you fallen in the last year?	None = 0 1–3 falls = 1 4 or more falls = 2

*SARC-F scale scores range from 0 to 10 (ie, 0–2 points for each item; 0 = best to 10 = worst) and represent no sarcopenia (0–3) and sarcopenia (4–10).

Spanish version

Ítem	Preguntas	Puntaje
Fuerza	¿Qué tanta dificultad tiene para llevar o cargar 4.5 kilogramos?	Ninguna = 0 Alguna = 1 Mucha o incapaz = 2
Asistencia para caminar	¿Qué tanta dificultad tiene para cruzar caminando por un cuarto?	Ninguna = 0 Alguna = 1 Mucha, usando auxiliares, o incapaz = 2
Levantarse de una silla	¿Qué tanta dificultad tiene para levantarse de una silla o cama?	Ninguna = 0 Alguna = 1 Mucha o incapaz sin ayuda = 2
Subir escaleras	¿Qué tanta dificultad tiene para subir 10 escalones?	Ninguna = 0 Alguna = 1 Mucha o incapaz = 2
Caídas	¿Cuántas veces se ha caído en el último	Ninguna = 0

año?

1 a 3 caídas = 1
4 o más caídas = 2

Table 3. Association of Acute and Chronic Conditions Associated With the Inflammatory Response.²⁰

Acute Disease—Severe Inflammatory Response	Chronic Disease—Mild to Moderate Inflammatory Response
Adult respiratory distress syndrome	Cardiovascular disease
Closed head injury	Celiac disease
Critical illness	Chronic pancreatitis
Major abdominal surgery	Chronic obstructive pulmonary disease
Major infection/sepsis	Congestive heart failure
Multitrauma	Cystic fibrosis
Systemic inflammatory response syndrome	Dementia
Severe burns	Diabetes mellitus
Severe acute pancreatitis	Inflammatory bowel disease
	Hematologic malignancies
	Metabolic syndrome
	Neuromuscular disease
	Obesity
	Organ failure/transplant (kidney, liver, heart, lung, or gut)
	Pressure wounds
	Rheumatoid arthritis
	Solid tumors

Table 2. Parameters Useful to Assess for Inflammation.⁴

Laboratory	Clinical
● Decreased serum albumin ● Decreased serum transferrin ● Decreased serum prealbumin ● Elevated C-reactive protein ● Elevated blood glucose ● Decreased or increased white blood cell count ● Increased percentage of neutrophils in the cell differential ● Decreased platelet count ● Marked negative nitrogen balance	● Fever ● Hypothermia ● Presence of infection ● Urinary tract infection ● Pneumonia ● Blood stream infection ● Wound or incisional infection ● Abscess



JAMDA

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Editorial

Person-Centered Care Planning: Preferences Are a Priority



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In their accompanying article on assessment of preferences and priorities of both community-dwelling and institutionalized elders, Abbott et al¹ have compiled a practical “best-of” list of important quality-of-life determinants that we clinicians can use in our daily work. The notion of person-centered care has been a welcome guiding principle in general medical practice, and specifically in geriatrics and long-term care, for quite some time. In fact, a PubMed search reveals the notion of person-centered (as differentiated from patient-centered) care first mentioned almost 50 years ago in the nursing literature.² In the 1980s, most of the literature invoking person-centered care related to mental health treatment. When Omnibus Budget Reconciliation Act (OBRA) implementation began in 1990, more attention was turned to the rights of nursing home residents. But in the 1990s literature, the term person-centered care was mainly expanded to include oncology care and the disability community.

It was really only after the turn of the century that we began to see more references to person-centered care, and the related term “culture change,” in the geriatric and long-term care literature, including an excellent piece in JAMDA by Dr Tellis-Nayak³ in 2007. Person-centered care is not specific to physicians; indeed, this last article pertained to certified nursing assistants and how their level of work satisfaction correlated to facility-wide adoption of person-centered care principles; concepts like “bathing without a battle” also gained recognition.⁴ In addition, in the last 5 years, there have been over 400 articles in the peer-review literature with person-centered care as a keyword, with many of them pertaining to nursing home residents and persons with dementia.

To determine what factors were most important to patients, the authors used a standardized inventory called the Preferences for Everyday Living Inventory (PELI) and modified it for home healthcare patients (PELI-HC) and for nursing home residents (PELI-NH). In the article by Abbott et al,¹ several common elements that community-dwelling elders and nursing home residents consider important to their quality of life are identified, and most of them are fairly intuitive and unsurprising. Proximity and contact with family (presumably whether biological family or “logical” family, this was ranked #1 in both study groups), privacy, having choices of food and bathing times, and a variety of activities were priorities for most respondents in both settings. These items relate to connectedness and autonomy or agency, which are known to correlate positively with a sense of well-

being. Spending time outdoors was also listed in the top 10 shared items for both groups, which should guide those of us who provide care to these patients to encourage and facilitate outdoor time.

Also not surprisingly, nursing home residents rated being treated with respect, and having their personal property respected, ranked near the top of their list. Getting to go on outings was also important, as was a sense of choice of medical professionals, schedule, and environmental factors like room temperature. Although not specifically mentioned in the study, fostering a quiet environment at night and avoiding unnecessary nocturnal awakenings for nursing home residents seem obvious as compassionate and desirable interventions.

Person-centered care, like palliative care, seems inherently right. What is not like about helping frail, ill, and/or functionally dependent elders (and it is reasonable to assume that those receiving home health services or residing in nursing homes fit in one of those categories) enjoy the best quality of life they can, as they define it, to the extent we can? Whatever rubric we use, we should strive to respect our patients’ wishes and create care environments that offer the most choice, autonomy and respect that can practically be afforded. Creation of “I” care plans, completion of “Who Am I?” documents describing previous likes, dislikes, work and avocational history, and virtually mandatory inclusion of nursing home residents and their representatives in the care planning process—which is now set out much more prescriptively in the 2016 revised nursing home Requirements of Participation⁵—are all laudable practices. There are many tools and articles on how to operationalize person-centered care, and many can be found on the National Nursing Home Quality Improvement Campaign’s website⁶ (formerly known as Advancing Excellence), and the Pioneer Network also offers many resources and educational symposia.⁷

As the push increases for evaluation of outcome-related measures in the healthcare environment, it is wise to make efforts to optimize quality of life for our nursing home residents. As Dr Abbott points out, there are other preferences that may be very important to some residents that are not listed (or ranked low) in the current study, and others that rank very high here may not be particularly relevant for some residents. Obviously, individualization and personalization are cornerstones of person-centered care. But the items considered in the PELI-NH and PELI-HC are a good tool from which to start asking questions of our nursing home residents (and/or their family members), in addition to the questions already included in Section F of the Minimum Data Set 3.0,⁸ to help us do what we can to respect their individual preferences and priorities in our care planning and everyday care provision—as we would want done for our

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EAT-10: Eating Assessment Tool

Despistaje de la Disfagia

A. INSTRUCCIONES

Responda cada pregunta escribiendo en el recuadro el número de puntos.

¿Hasta que punto usted percibe los siguientes problemas?

1 Mi problema para tragar me ha llevado a perder peso

0 = ningún problema

1

2

3

4 = es un problema serio

2 Mi problema para tragar interfiere con mi capacidad para comer fuera de casa

0 = ningún problema

1

2

3

4 = es un problema serio

3 Tragar líquidos me supone un esfuerzo extra

0 = ningún problema

1

2

3

4 = es un problema serio

6 Tragar es doloroso

0 = ningún problema

1

2

3

4 = es un problema serio

7 El placer de comer se ve afectado por mi problema para tragar

0 = ningún problema

1

2

3

4 = es un problema serio

8 Cuando trago, la comida se pega en mi garganta

0 = ningún problema

1

2

3

4 = es un problema serio

EAT-10: Eating Assessment Tool

Despistaje de la Disfagia

4 Tragar sólidos me supone un esfuerzo extra

0 = ningún problema

1

2

3

4 = es un problema serio

5 Tragar pastillas me supone un esfuerzo extra

0 = ningún problema

1

2

3

4 = es un problema serio

9 Toso cuando como

0 = ningún problema

1

2

3

4 = es un problema serio

10 Tragar es estresante

0 = ningún problema

1

2

3

4 = es un problema serio

A. PUNTUACIÓN

Sume el número de puntos y escriba la puntuación total en los recuadros.

Puntuación total (máximo 40 puntos)

C. QUÉ HACER AHORA

Si la puntuación total que obtuvo es mayor o igual a 3, usted puede presentar problemas para tragar de manera eficaz y segura. Le recomendamos que comparta los resultados del EAT-10 con su médico.