

EDITORIAL

Nutrition screening in health care, an unavoidable necessity. Our unresolved matter[☆]



Cribado nutricional en la asistencia sanitaria, una necesidad ineludible, nuestra asignatura pendiente

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In 1974, Charles E. Butterworth, the Director of the Nutrition Program of the University of Alabama in Birmingham, began his article “The Skeleton in the Hospital Closet” with an interesting reflection on the increased costs of hospitalization, the role of malnutrition in prolonging hospital stay, and the negligent attitude of healthcare professionals in not caring for the nutritional status of their patients.¹ It was a thought-provoking article which denounced a lack of sensitivity among the scientific community in the face of the problem of disease-related malnutrition (DRM) in the hospital setting. At the time of publication it was regarded as incendiary and alarmist, but we can now see that it represented a rigorous strategic analysis and, moreover, addressed challenges that we still face today. On the one hand, it emphasized the need to identify patients at early risk, and on the other hand, it underscored the obligation to organize nutritional care to avoid “iatrogenic malnutrition” induced by poor clinical practice, among other issues.

What Butterworth restricted to the hospital setting we currently extend to the different care levels. Address-

ing disease-related malnutrition is now more than ever a challenge for our healthcare system. We know the causes and clinical consequences of this condition. In effect, disease-related malnutrition delays patient recovery, prolongs hospital stay and increases the readmission rate, worsening both quality of life and mortality. All this has a considerable economical impact – a fact of great interest in evaluating the sustainability of the system.

In Europe, disease-related malnutrition is estimated to affect 30 million individuals and cost 170 billion euros annually.² In Spain, the associated costs in the hospital setting are in the range of 1143 million euros annually, or 1.8% of the healthcare budget in 2009. These figures are consistent with those reported in other European countries such as the United Kingdom, Germany, the Netherlands or Ireland.³

There is evidence of the benefits of nutritional intervention in terms of clinical outcomes, reducing the rate of related complications, hospital stay and readmissions. This undoubtedly has an impact upon healthcare costs.^{4,5} It is therefore possible to prevent and treat disease-related malnutrition. It is clear that disease-related malnutrition is a suitable clinical condition for screening according to the criteria of Frame and Carlson.⁶ In effect, disease-related

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malnutrition is a highly prevalent condition that can be detected in the presymptomatic phase (risk of malnutrition), and which we can treat early with effective and safe methods.

Nutritional screening is a standardized procedure that allows for the identification of malnourished individuals or subjects at risk who may benefit from appropriate nutritional care. Screening is the first step in the management of disease-related malnutrition. The screening tool or method must be simple, valid, reliable, reproducible and practical. It must also be associated with specific action protocols and possess "diagnostic precision", expressed as sensitivity, specificity, positive predictive value and negative predictive value. In sum, it must be efficient.⁷

More than 70 nutritional screening methods have been described, involving clinical and biochemical measures that have been used by different authors to assess nutritional status at a specific time during the course of the disease; to assess the probability of progression or recovery; and even to evaluate the impact of the background disease condition upon nutritional status.

Some screening tools have been defined and validated for specific age groups, such as the Screening Tool for the Assessment of Malnutrition in Pediatrics⁸ or the Mini-Nutritional Assessment Short-Form in patients over 65 years of age, or for concrete disease conditions, such as the Malnutrition Screening Tool in cancer patients, now validated for the general population.⁹ Tools have even been developed for concrete care levels, such as those recommended by the ESPEN, the Nutrition Risk Screening 2002 (NRS 2002) for the hospital setting, and the Malnutrition Universal Screening Tool that can be used in the three care levels (community, hospitals and nursing homes).¹⁰ Other instruments in turn have become more than just a screening tool, representing a structured nutritional assessment tool, such as the Subjective Global Assessment, the gold standard for the American Society of Parenteral and Enteral Nutrition.

In 2003, the Council of Ministers of Europe, aware of the severity of the problem, adopted a resolution on diet and nutritional care in hospitals. Point 1.1 v of the appendix of the resolution, which details its specific aspects, defines the need to monitor the risk of malnutrition routinely in all patients before or at the time of hospital admission, with regular repetition depending on the degree of the risk of malnutrition.¹¹

The Spanish consensus on the Approach to Hospital Malnutrition in Spain, developed by 22 scientific bodies (including the SEEN), the Nutrition Foundation and the Spanish Patient Forum, states the need to perform nutritional screening in the first 24–48 h after patient admission.¹² If screening proves negative, re-evaluation timepoints are to be established and are regarded as essential for monitoring the nutritional status of the patient. This measure aims to recover the 9.6% of patients in hospital who are admitted well nourished but suffer malnutrition during admission.¹³ The mentioned consensus document also establishes recommendations for the management of disease-related malnutrition in the community and in nursing homes.

To date, more than 21,000 literature references (incorporated mainly over the last 18 years) can be found in PubMed when using "nutritional screening" as descriptor.

The studies, of variable quality, include validations of the different tools; comparisons between screening methods; the identification of patients and clinical responses to interventions; analysis of associated costs; and recommendations for use made by different scientific bodies in the field of clinical nutrition, etc. However, despite the availability of this valuable information, of European and national recommendations, and of examples both recent and near at hand, the universalization of nutritional screening remains a pending subject in our system.

The lack of specific training of healthcare professionals that conditions their sensitivity to the problem; the lack of material resources (scale and stadiometer, measuring tape, etc.) in many care units; the selection of the most adequate tool; care overload, particularly among nursing teams, which results in limitations in the time dedicated to each patient; the widespread difficulties in accepting changes caused by a lack of routine in the recording of standardized measures; and the excessive confidence of some nurses in assessing the patients or the lack of a structure capable of quickly responding to the demands in identified malnourished patients or individuals at risk of malnutrition are examples of some of the barriers facing implementation.

However, the most significant issue is undoubtedly a lack of awareness on the part of politicians and health management supervisors, who do not even consider the problem and so fail to provide health policies which emphasize nutritional care as an imperative need at every healthcare level, with screening as the beginning of the process. Without the commitment of professionals, managers and politicians it will not be possible to implement the measures recommended by the resolutions of the Council of Ministers of Europe or the consensus documents of the scientific bodies.

Following the example of other European initiatives,¹⁴ the More Nourished Alliance, of which the SEEN is an active member, was created in an attempt to combat this problem. Its primary short-term goal is to increase awareness and knowledge of the importance of malnutrition and its costs among politicians and public administrators in all healthcare settings. One of the principles of its plan against disease-related malnutrition refers to the need for universal screening. In recent years, significant progress has been made, with the start of pilot projects and the diffusion of good clinical practice.¹⁵ One of the recent milestones has been the unanimous approval by the Spanish Congress of a proposal for the management of disease-related malnutrition, which among other actions contemplates the "promotion of nutritional screening of individuals at risk, with adequate assessment of disease-related malnutrition in order to detect risk situations or malnutrition, and conduct follow-up."

Identifying patients at risk of malnutrition or malnourished individuals cannot remain a pending subject. As endocrinologists supervising nutrition units, we can contribute in our daily work to the breaking down of barriers. In this respect it should not be forgotten that it is the responsibility of all healthcare professionals to work together to offer the effective responses which our patients expect, with the adoption of a clearly defined action plan to combat disease-related malnutrition at all healthcare levels.

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