

Hospital Malnutrition: A Reality

Omar Abdel-lah Fernández*

Specialist in General and Digestive Surgery, Member of the Esophageal and Gastric Surgery Unit and the Dysphagia Unit, Department of Surgery, University Hospital of Salamanca, Salamanca, Spain

***Corresponding Author:** Omar Abdel-lah Fernández, Specialist in General and Digestive Surgery, Member of the Esophageal and Gastric Surgery Unit and the Dysphagia Unit, Department of Surgery, University Hospital of Salamanca, Salamanca, Spain.

Received: August 14, 2017; **Published:** September 18, 2017

Hospital malnutrition is widely known as a frequent problem among hospitalised patients. In fact, values between 10% and 85% are accepted depending on patient types (elderly, children, medical, surgical, oncology, etc.) and hospital categories, as well as on the nutritional assessment markers used for patient evaluation [1].

Malnutrition, indeed, increases during hospital stays due to multiple factors. On the one side, diseases themselves may imply inadequate ingestion of nutrients caused by anorexia, ingestion or chewing difficulties, dysphagia, mucositis or lack of autonomy for eating. It can also involve difficulty in digestion or absorption of food, or even an increase in nutritional requirements either due to metabolic stress or varying levels of nutrient loss. On the other side, certain diagnostic or therapeutic procedures may also contribute to the development of malnutrition, either if fasting is indicated to conduct specific examinations, if the patient is in the postoperative period, or if digestive rest is required as part of the treatment for certain pathophysiological situations (pancreatitis). There may also be questionable dietary indications or disregard of possible negative effects of certain therapeutic actions on nutritional status. Furthermore, it is a reality that hospital food services may be incurring in deficiencies for not offering attractive menus, not always using best quality ingredients and, occasionally, using deficient dietary protocols that are poorly suited to different patients. Finally, the lack of awareness in healthcare professionals cannot be overlooked, caused by the limited training received regarding nutrition, and the ignorance of the significance of malnutrition in patient evolution. The actual availability of nutritional support protocols means that methods for detecting and monitoring patients with nutritional problems are not applied, and existing resources for nutritional support are poorly used [2,3].

Malnutrition in hospitalised patients is the result of the complex interaction between disease and nutrition. It is highly prevalent, as well as highly ignored and undertreated. In spite of the advances in this field (knowledge about its physiopathology, diagnosis, and a wider range of therapeutic options), the incidence of hospital malnutrition has not varied in the last 50 years, which results in important clinical and economic consequences.

Clinically, it may contribute to increasing the number and severity of disease-related complications, to diminishing treatment response, to reducing the degree of immune response, and ultimately, to increasing morbidity and mortality. Economically, malnutrition has been proved to increase the costs derived from both hospital stays and additional treatment of associated complications [4,5].

Nowadays, despite the enormous methodological difficulties in nutritional intervention studies, there is scientific evidence that nutritional intervention can improve the clinical evolution of malnourished patients and reduce disease-related costs [6].

The Resolution on food and nutritional care in hospitals, adopted by the Committee of Ministers of the Council of Europe on November 12th, 2003 (<https://wcm.coe.int/rsi/CM/index.jsp>), brings to light the importance of malnutrition in hospitals and establishes measures aimed at its prevention and treatment.

However, it is a fact that there are no resources available to assess the nutritional status of all hospitalised patients. Thus, it is widely accepted that we should use screening tools which allow us to conduct an initial assessment aimed at an early detection of malnourished patients or those who are in malnutrition risk, in order to refer them for a more specific nutritional evaluation and, if needed, to initiate a nutritional treatment plan. In sum, a meticulous selection process of the patients who could benefit from a nutritional treatment [7].

The premises for conducting a correct screening process are significant prevalence, and available treatments and tools. These criteria are met in the case of malnutrition [8].

Screening methods must be valid, reliable, reproducible, practical (easy to implement, well-accepted, and economical), and linked to specific action protocols [9]. Ideally, they should be implemented by hospital nursing staff upon patient admission or within the first 24 hours in cases of emergency admissions [7].

There are clinical and automated screening methods. Most of the clinical screening methods usually include objective and subjective data (weight, height, weight changes, intake changes, comorbidities...) Among the multiple screening methods available for adult patients, the most frequently used ones are Malnutrition Universal Screening Tool (MUST), Nutrition Risk Screening (NRS 2002), Oncology Screening Tool (OST), Mini-Nutritional Assessment Short Form (MNA SF), and Malnutrition Screening Tool (MST).

If, thanks to these methods, malnutrition (or risk thereof) is detected in a patient, a more specific and thorough nutritional status assessment will be conducted by specialised staff, who will then implement a nutritional plan. If screening methods show that the individual is free of risk, the assessment must be repeated after one week, or earlier if clinical or treatment changes have been made [7].

For all the reasons above mentioned, early and periodical assessment is recommended in order to detect malnourished patients or those in risk of malnutrition. Screening methods are necessary for the detection of these patients, as well as for the further development of a more thorough nutritional status assessment, and the implementation of a nutritional action plan if needed. Each healthcare centre must use a screening method that is recommended and approved by scientific societies, but also adapted to its own characteristics. The initial screening process can be conducted by non-specialist staff.

These measures would allow for a deeper knowledge about the nutritional situation of patients, as well as for raising awareness of the magnitude of nutritional issues in each specialty and each hospital centre, thus helping to design individualised action plans that would reduce complications and hospital stays.

Bibliography

1. Planas M., *et al.* "Nutritional status among adult patients admitted to an university-affiliated hospital in Spain at the time of genoma". *Clinical Nutrition* 23.5 (2004): 1016-1024.
2. McWhirter JP and Pennington CR. "Incidence and recognition of malnutrition in hospital". *British Medical Journal* 308.6934 (1994): 945-948.
3. Kondrup J., *et al.* "Incidence of nutritional risk and causes of inadequate nutritional care in hospitals". *Clinical Nutrition* 21.6 (2002): 461-468.
4. Correia MI and Waitzberg DL. "The impact of malnutrition on morbidity, mortality, length of stay and costs evaluated through a multivariate model analysis". *Clinical Nutrition* 22.3 (2003): 235-239.
5. Reilly Jr JJ, *et al.* "Economic impact of malnutrition: a model system for hospitalized patients". *Journal of Parenteral and Enteral Nutrition* 12.4 (1988): 371-376.

6. Isenring E., *et al.* "Nutrition intervention is beneficial in oncology outpatients receiving radiotherapy to the gastrointestinal. Head or neck area". *British Journal of Cancer* 91 (2004): 447-452.
7. Weimann A, *et al.* "ESPEN guideline: Clinical nutrition in surgery". *Clinical Nutrition* 36.3 (2017): 623-650.
8. ASPEN Board of Directors and the clinical guidelines task force. "Guidelines for the use of parenteral and enteral nutrition in adult and pediatric patients". *Journal of Parenteral and Enteral Nutrition* 26.1 (2002): 9SA-12SA.
9. McClave SA., *et al.* "Guidelines for the Provision and Assessment of Nutrition Support Therapy in the Adult Critically Ill Patient: Society of Critical Care Medicine (SCCM) and American Society for Parenteral and Enteral Nutrition (A.S.P.E.N.)". *Journal of Parenteral and Enteral Nutrition* 40.2 (2016): 159-211.

Volume 11 Issue 1 September 2017

©All rights reserved by Omar Abdel-lah Fernández.