

**Nutritional Risk Screening and Prevalence of Malnutrition on Admission to Gastroenterology Departments: A Multicentric Study**

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**Abstract**

*Background and aims:* There is little awareness and a lack of data on the prevalence of hospital malnutrition in gastro-enterology departments. Since part of these patients are referred for surgical treatment and poor nutritional status is a known risk factor for perioperative morbidity, we conducted a prospective study aimed to screen for the nutritional risk and assess the prevalence and risk factors of malnutrition in gastro-enterology departments in Romania.

*Methods:* We included patients consecutively admitted to 8 gastroenterology units over a period of three months in our study. Nutritional risk was evaluated using NRS 2002. Malnutrition was defined using BMI (<20 kg/m<sup>2</sup>) or/and >10% weight loss in the last six months.

*Results:* 3198 patients were evaluated, 51.6% males and 48.4% females, with the mean age of 54.5 ± 14.3 years. Overall percentage of patients at nutritional risk was 17.1%, with the highest risk for patients with advanced liver diseases (49.8%), oncologic (31.3%), inflammatory bowel diseases (20.2%), and pancreatic diseases (18.9%). The overall prevalence of malnutrition was of 20.4%, higher for advanced liver diseases (39.4%), inflammatory bowed diseases (30.6%), oncologic (26.8%) and pancreatic diseases (23%). Independent risk factors for malnutrition were younger age (p<0.0001), female gender (p<0.0001), a higher (≥3) NRS (p<0.0001), presence of neoplasm (p<0.0001), of advanced liver disease (p=0.0003) and a reduction of > 25% of dietary intake (p<0.0001).

*Conclusions:* One in five patients admitted to gastroenterology units could benefit from prompt nutritional intervention. Correction of nutritional status is mandatory before any surgical procedure. Emphasis on nutritional evaluation at admission and beginning of nutritional therapy where needed are particularly required in patients with advanced liver diseases, digestive neoplasms, inflammatory bowel diseases and pancreatic diseases.

*Abbreviations:* NRS= nutritional risk score, BMI = body mass index, IBD = inflammatory bowel diseases

**Key words:** prevalence, malnutrition, gastroenterology department, NRS 2002, BMI

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