## **Original Paper**

## Prevalence of malnutrition in hospitalized patients in Taleghani hospital in Tehran

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## Abstract

**Background and Objective:** Malnutrition in hospital increases the mortality of patients. The aim of this study was to investigate the prevalence of malnutrition and related risk factors in hospitalized patients.

**Materials and Methods:** This descriptive study was carried out on 446 patients (217 males, 229 females) during 6 months, admitted to the Taleghani hospital in Tehran, Iran during 2005. Anthropometric measurements and previous admission to hospital in previous 6 months for each patient was recorded. Mild, moderate and severe malnutrition were considered as BMI=18-20 kg/m² and TSF, or MAMC<10th, or weight loss<5%; as BMI=16-18kg/m² and TSF, or MAMC<5th or weight loss>5-10% and severe as BMI<16kg/m² and TSF, or MAMC<5th or weight loss>10% in previous 6 months respectively.

**Results:** The prevalence rate of malnutrition as a general was 52% with following subdivision: 14%, 10% and 28% in mild, moderate and severe, respectively. The highest prevalence of malnutrition observed in gastrointestinal ward, males, those aged 18-29 year and patients with secondary and high school education. In malnourished patients, the prevalence of TSF, MAC and MAMC <5th were significantly more than of well-nourished subjects (P<0.05). Increase BMI per unit decreased the risk of malnutrition by 17% (OR: 0.83; CI: 0.79-0.87). Malnutrition was 64% higher in patients with 1≥ gastrointestinal disturbances, compared with those without it and 2.1 higher in patients with 2≥-hospitalized readmission, compared with subjects without readmission in previous 6 month. Odds ratio of at least one hospitalized admission in previous 6 month was 1.64 in patients with MAC <5th, compared with those with MAC 50-75th (P<0.017).

**Conclusion:** This study showed that Malnutrition upon hospitalization is common in Tehran. BMI, gastrointestinal disturbances, and readmission were associated with malnutrition.

**Keywords:** Prevalence, Malnutrition, BMI, triceps skinfold thickness, Mid-arm muscle circumference, Hospitalized patient

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