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The prevalence of malnutrition in patients who develop *Clostridium difficile* associated disease in Ireland

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Clostridium difficile is the most common cause of nosocomial infectious diarrhoea⁽¹⁾. There are a number of identifiable risk factors for the colonisation and development of *Clostridium difficile* associated disease (CDAD); the most common are exposure to antibiotics, advanced age and length of hospital stay. Advancing age and length of hospital stay are also risk factors associated with malnutrition. To date, there is no information on the prevalence of malnutrition in patients who develop CDAD in Ireland.

The aim of this study was to assess the nutritional status of patients diagnosed with CDAD and compare their nutritional status with that of a control group of patients within an academic teaching hospital.

The Malnutrition Universal Screening Tool (MUST)⁽²⁾ was used to assess the prevalence of malnutrition in both the CDAD and control group of patients. The control group was a mix of medical and surgical patients with varying length of hospital stay. Nutritional screening in the CDAD group was carried out within 72 hours of diagnosis.

The prevalence of malnutrition was 59% ($n = 20$) in the CDAD group (MUST of 2 or more) compared to the control group in which there was a prevalence of malnutrition of 50% ($n = 18$). The CDAD group ($n = 34$) had a lower mean BMI 21.4 (11.4–30.1) kg/m² compared to the control group [$n = 36$; mean BMI of 25.1 (15.8–40.4) kg/m²]. One-third of the control group ($n = 12$) were classified as well nourished compared to 26.5% ($n = 9$) in the CDAD group. Of those classified as malnourished in the CDAD group, 14 (14/20) had been referred for dietetic intervention and 13 were receiving nutritional support [enteral tube feeding ($n = 4$) and oral nutritional supplements ($n = 9$)].

A higher prevalence of malnutrition was observed in the CDAD group compared to a mixed patient group in this hospital population. This highlights the need for nutritional screening in patients with CDAD and the instigation of appropriate nutritional care plans in this patient group.

1. Johnson S & Gerding DN (1998) *Clin Infect Dis* 26, 1027–1036.

2. Elia M (2003) Malnutrition Advisory Group (MAG), a Standing Committee of BAPEN. Redditch, Worcesterhire: BAPEN.