

Clinical and Psychosocial Predictors of Eating Disorder Medical Readmissions in Paediatric Patients in Cork – A Case-Control Study

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DOI: 10.33178/SMJ.2026.24

Abstract

Background: Eating disorders (EDs) are severe psychiatric illnesses characterised by persistent disturbances in eating behaviours and carry the highest morbidity and mortality of any mental health disorder. Onset commonly occurs during childhood and adolescence, with potentially life-threatening medical complications often necessitating hospitalisation for medical stabilisation. In recent years, ED-related hospital admissions among paediatric patients have risen sharply. Given the substantial clinical and economic burden of repeated admissions, identifying factors associated with medical readmission is essential to optimise management and improve long-term outcomes. This study aimed to identify clinical and psychosocial predictors of ED-related medical readmissions in paediatric patients in Cork, Ireland.

Methods: A retrospective case-control chart review was conducted of patients <18 years admitted to Cork University Hospital for ED medical stabilisation between 2018–2024. Cases include patients with multiple ED-related admissions, while controls achieved complete remission after a single admission. Demographic, clinical (e.g. BMI, vitals), and psychosocial factors (e.g. household structure) were extracted using Medical Emergencies in Eating Disorders (MEED) guidelines.

Results: Sixty-two patients were analysed, divided equally between single- and multiple-admission groups. Admission MEED scores were comparable ($p = 0.055$), but multiple-admission patients had significantly higher discharge scores ($p < 0.001$). They exhibited greater weight loss ($p = 0.002$), poorer engagement ($p < 0.001$), and worse discharge outcomes in cardiovascular, haematology, overactivity, and self-harm domains. This cohort also required higher rates of nasogastric feeding ($p = 0.005$) and had a higher comorbidity burden ($p < 0.001$).

Conclusions: This study identifies important clinical and psychosocial predictors of ED-related medical readmissions in paediatric patients. Recognition of these factors may facilitate earlier risk stratification, targeted inpatient interventions, and improved discharge planning, with the potential to reduce rehospitalisation rates and improve outcomes in this vulnerable population.