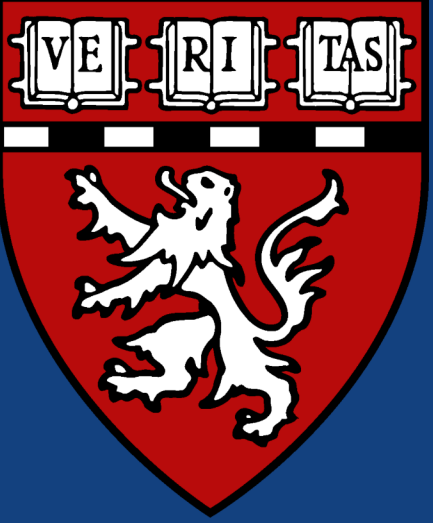


Impact of Malnutrition on Resource Utilization in Patients Admitted With Inflammatory Bowel Disease: A Nationwide Analysis



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Introduction

- Malnutrition is a major complication of Inflammatory Bowel Disease (IBD).
- Prevalence of malnutrition in IBD patients ranges from 18% to 85%, with a higher prevalence in hospitalized patients.
- Aim: We assessed the prevalence of malnutrition in patients admitted with IBD and its influence on resource utilization in the US.

Methods

- Study: Retrospective Cohort
- Database: National Inpatient Sample (NIS) for 2019
- Population: IBD patients admitted with and without malnutrition.
- Outcome: Resource utilization.
- Statistical Analysis: Stata 17
- Multivariate linear regression analysis followed by predictive margins of the model to get adjusted estimates.

Results

- Among 92,740 patients hospitalized with IBD, 14,420 (15.6%) patients had malnutrition.
- Malnutrition was associated with a significantly longer length of stay and total hospital charges in IBD patients as compared to those without malnutrition.
- Mortality was also higher in patients with malnutrition in IBD patients.

Results (Cont.)

Variables	IBD without Malnutrition (78320)	IBD with Malnutrition (14420)	p-value
a) Baseline Characteristics			
Age (SD)	46.5 (18.1)	47.4 (19.3)	0.03
Female (%)	43030 (54.9)	7150 (49.6)	<0.01
Race (%)			0.33
White	56745 (73.9)	10360 (73.8)	
Charlson Comorbidity Index (SD)	0.70 (1.3)	0.86 (1.5)	<0.01
Hospital Type (%)			
Urban	72735 (92.9)	13860 (96.1)	<0.01
Teaching	59765 (76.3)	12090 (83.8)	<0.01
Hospital Bed Size (Large)	39620 (50.6)	8575 (59.5)	<0.01
Payer Information (%)			<0.01
Medicare	20610 (27.4)	4405 (31.7)	
Private Insurance	36495 (48.4)	6250 (45.0)	
Disposition (%)			<0.01
Home	66595 (85.0)	9550 (66.3)	
AMA	1955 (2.5)	170 (1.2)	
Died	105 (0.1)	165 (1.2)	
b) Resource Utilization			
LOS (Unadjusted)	4.19 (95% CI 4.11-4.26)	9.07 (95% CI 8.71-9.44)	<0.01
LOS (Adjusted)	4.23 (95% CI 4.16-4.30)	8.88 (95% CI 8.52-9.24)	<0.01
Total Charges (Unadjusted)	44064 (95% CI 42229-45899)	94056 (95% CI 86272-101841)	<0.01
Total Charges (Adjusted)	44798 (95% CI 42955-46640)	91392 (95% CI 83771-99014)	<0.01
Adjusted for Age, Charlson Comorbidity Index, Hospital (Location, Teaching status, Bed Size), Insurance status			

Table 1: a) Baseline Patient & Hospital Characteristics b) Multivariate linear regression analysis to get adjusted estimates of the length of stay (LOS) and total hospital charges.

Results (Cont.)



Figure 1: This shows longer length of stay in malnourished IBD patients as compared to those without malnutrition in the adjusted model.

Conclusion

- Malnutrition is quite prevalent in hospitalized IBD patients.
- It is associated with increased mortality in the hospitalized cohort and prolonged length of stay resulting in increased hospital charges.
- Early recognition and intervention can improve health outcomes for patients with IBD.

Presenter's Bio & References

