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Low Health Literacy is Associated with Decreased Adherence to Enhanced Recovery Programs Among Bariatric Patients

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Introduction

Enhanced recovery programs (ERP)

- **reduce perioperative complications**
- **shorten hospital stays**
- **improve outcomes for patients across surgical disciplines**

The effectiveness of ERP protocols is dependent on adherence to their components. Patient level factors associated with ERP adherence are largely unknown.

We aimed to assess the relationship between health literacy (HL) and ERP adherence among bariatric surgery patients.

Methods

A **retrospective review** was performed of patients who underwent bariatric surgery at a single tertiary care center from 2024-2025.

Patient demographic and ERP adherence data was obtained from the electronic medical record, including 12 ERP protocol components.

HL was assessed by the validated BRIEF survey administered in bariatric surgery clinics. Patients were stratified by HL: high HL (score ≥17) or low HL (≤16).

Bivariate analysis was performed to compare ERP adherence by HL level. Overall ERP adherence was defined as adherence to ≥70% of protocol components.

Results

302 patients underwent bariatric surgery

	Low Health Literacy	High Health Literacy
	6.6% of patients	93.4% of patients
	0% ERP Adherence	25.2% ERP Adherence*
	5% Received Multimodal Analgesics	47% Received Multimodal Analgesics*
	0% Received Post-Op VTE Prophylaxis	41.3% Received Post-Op VTE Prophylaxis*

*p<0.05

No significant differences in HL groups for:

- Antiemetic Prophylaxis
- Analgesic Blocks
- Early Mobilization
- Pre-Op Education

	Health Literacy			
	Low (N=20)	High (N=282)	Total (N=302)	P-value
Age				0.952
Mean (SD)	50.2 (20.44)	50.0 (14.39)	50.0 (14.82)	
Sex, n (%)				<0.005
F	6 (30.0%)	190 (67.4%)	196 (64.9%)	
M	14 (70.0%)	92 (32.6%)	106 (35.1%)	

Conclusion

- **This study demonstrated a significant relationship between health literacy and enhanced recovery program adherence**
- **Some of the components of ERP protocol adherence, such as post-operative venous thromboembolism chemical prophylaxis administration, may also be driven by provider/system level issues**
- **Further work must be done to explore these differences in adherence at both the patient and provider level**

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