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Using Health Literacy Guidelines to Improve Discharge Education and the Post-Hospital Transition: A Quality Improvement Project

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The post-hospital transition represents a vulnerable period for patients discharged on new medications. Evidence-based discharge education may improve follow-up adherence and lower readmission rates.¹⁻³ Health literacy and health policy evidence should be considered when developing educational interventions.⁴⁻⁶ Low health literacy is strongly associated with higher mortality.⁵ We assessed the impact of a health education intervention on follow-up adherence and unplanned readmission among patients with osteoarticular infections discharged on outpatient parenteral antibiotic therapy (OPAT).⁷

This study used a quasi-experimental design. Preintervention patients received usual discharge teaching. Postintervention patients received an educational brochure written at a seventh-grade reading level. Combined teaching from Infectious Diseases (ID) providers emphasized post-hospital care. The brochure was developed using interdisciplinary clinical evidence and health literacy guidelines.

This study includes patients age >18 seen on the ID consultation service at Barnes Jewish Hospital between September 2010 and December 2011. Patients must have been discharged on IV antibiotics and have planned follow-up in the ID clinic. This study was approved by the institutional review board.

Statistical analysis was performed using SPSS version 18 (IBM SPSS, Chicago, IL). *P* values <.05 were considered statistically significant. The primary end points were adherence to ID clinic follow-up and readmission because of a defined set of conditions associated with OPAT (including *Clostridium difficile* and treatment failure).

Two hundred patients (100 preintervention and 100 postintervention) with similar demographics met criteria for analysis. There was a significant improvement in follow-up adherence in the postintervention group compared to the preintervention group (*P* = .02). Readmissions were similar in each group (*P* = .17). Treatment failure was the most common reason for readmission in both groups.

Our intervention demonstrated an improvement in post-hospital follow-up adherence for patients receiving OPAT. Previous studies have demonstrated that similar educational interventions resulted in improved post-hospital follow-up adherence.¹ Discharge education combined with post-discharge support may improve readmissions significantly.^{1,2,8} This study was underpowered to analyze the multiple variables leading to treatment failure. Future studies should assess the factors that contribute to treatment failure and readmissions.

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