The impact of Advanced Practice Nurse-led discharge planning on 30-day readmission rates in patients post coronary artery bypass graft surgery

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On my honor I pledge that I have neither given nor received any unauthorized assistance on this paper. 05/06/2020, Stella Macheso

Abstract

Background: The increase in 30-day readmission rates after coronary artery bypass graft (CABG) surgery is a national and international concern, particularly with new insurance reimbursement models. Post-CABG patients experience unplanned hospital readmissions due to many preventable issues related to self-care following surgery. Patients and their families often lack knowledge about the prevention of wound infections, signs of clinical deterioration, and who to contact following discharge from the hospital.

Purpose: The purpose of this quality improvement project was to increase self-care knowledge in post-CABG patients with the goal of reducing 30-day readmission rates of post-CABG patients. The aims of the project were (1) to increase patient knowledge of self-care through individualized learning assessment and teach-back discharge education, as evidenced by post care behaviors; (2) to decrease the 30-day readmission rate of post-CABG patients receiving individualized learning assessment and teach-back discharge education, as compared to patients with traditional discharge instruction; and (3) to compare patient knowledge between those who had a caregiver attend discharge teaching and those who did not have a caregiver in attendance.

Methods: The project employed a one-group pretest/posttest design to assess the effect of an individualized discharge plan on patient self-care knowledge and 30-day readmission rates. Knowledge was assessed using an adaptation of the Revised Heart Failure Self-Care behavior scale. The 30-day readmission rates were compared between those who received the intervention and those who did not during the project period.

Results: The sample included 48 total participants, with 19 receiving the intervention. Knowledge scores increased with a mean difference of 3.05 points ($p < 0.01$). No difference was noted between the intervention and control groups for 30-day readmission rates. For patients who had caregivers, their knowledge score increased on average 2.82 points (SD=2.21) versus 5 points (SD=4.24) for patients without a caregiver present ($p < .35$).

Implications: The data revealed improved patient knowledge of self-care in patients that received the discharge education, with even greater improvement being shown in patients who also had a caregiver present during the education. Further adaption of the intervention is needed to explore the role of caregivers in successful discharge teaching.