

Preoperative Total Knee Arthroplasty Education: Preparing Patients During the Outpatient

Visit – Executive Summary

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- Involvement of both patient and caregiver in preoperative education assists with understanding the surgical procedure and care and recovery of the patient post-operatively.
- Increased surgical preparation for the patient improves overall understanding and expectations of the patient's participation postoperatively.
- Role clarity for caregiver's aides in providing an optimal rehabilitation support system for TJR patients.
- Group education promotes collaborative learning and supports a thorough mechanism for answering patient questions.
- Interprofessional team design in the delivery of patient education increases understanding and improves relationships between nursing and physical therapy teams.
- Including a diverse clinical team to design and implement the education sessions increased engagement in organizational change and overall project success.

Background and Purpose

Preoperative education is a crucial component of the surgical pathway, with many benefits for total hip or knee arthroplasty patients. It improves post-surgical outcomes and fosters active patient involvement in their care. Implementing preoperative educational programs has been shown to significantly enhance patient and caregiver satisfaction, improve perceptions of the benefits of surgery, boost feelings of support, and increase readiness for

participation in rehabilitation (Anderson et al., 2022). The clinical outcomes of preoperative education for patients undergoing total joint replacement (TJR) surgery are equally impressive, including reduced postoperative falls, better pain control, and enhanced rehabilitation effectiveness (Kim & Kim, 2022).

This project aimed to design and implement a revised educational curriculum for TJR patients at a 140-bed Community Hospital. As part of the normal orthopedic care pathway, patients have preoperative consultations and assessments in preparation for surgery. Prior to the pandemic, some preoperative education was done for patients having a TJR. The pandemic caused the organization to pause these education sessions as resources were reallocated and infection control mechanisms were implemented. Post-pandemic, there was no reinstatement of preoperative education for TJR patients. As part of this project, an interprofessional team reviewed current practices and the evidence for what should be included in preoperative education. This team included physicians, nurses, operative staff, physical therapists, and administration to design the new curriculum and process for educating patients preoperatively.

Methodology

Patients were scheduled for an education session prior to surgery. Education sessions were held once per week. All scheduled for that session met together in a group setting. Patients also were allowed to invite one caregiver to participate in the preoperative education session. While evidence supports preoperative education for TJR patients, less was known about including caregivers in the education process. In addition to education, pre- and post-education surveys were administered to measure patient knowledge and preparation for surgery. Initially, the same survey was administered to patients and caregivers. Through a

continuous review of project outcomes, we recognized that patients and caregivers needed separate surveys with modifications to the questions. Before implementation, physical therapists and nurses taught the education sessions and practiced delivering the educational material. Physicians, orthopedic clinic staff, perioperative staff, and rehabilitation teams attended practice sessions to provide input and feedback on the curriculum. The curriculum was modified based on feedback from the interprofessional team. Once project implementation began, debriefing sessions were held after each education class to assess for improvement opportunities. For example, the project team recognized that the registration process required modifications to ensure staff were appropriately educated on their role in assisting patients navigating the hospital to the education classroom.

Results

The project included 25 patients and 25 caregivers attending the preoperative educational sessions. Eleven education sessions were conducted between January and April of 2024. The most significant improvement reported on the surveys by caregivers was clarity in their role during patient rehabilitation after surgery. Before the educational session, few caregivers reported understanding what actions they could take to support patient rehabilitation. The most significant improvement for patients was in preparation for the surgical procedure. Many patients reported not understanding what the surgical procedure entailed. The education sessions included a high-level review of the surgical procedure.

Strengths and Limitations

Caregiver and patient joint involvement in preoperative education is essential and not always an approach to patient education that is considered. This project found that including

caregivers in the education sessions potentially provides a more significant benefit to patients as an additional support mechanism is developed for assistance during rehabilitation. An unintended benefit of the project was delivering education in a group setting. This allowed for collaborative learning that occurred because attendees had the opportunity to ask questions and learn collectively from responses. Patients may not have thought to ask those questions in an individual session and had little opportunity for support after surgery. An additional strength of this project is the awareness of the interprofessional role created among project team members. It helped nurses understand the physical therapist's role in the rehabilitative period, and the physical therapist recognized the nurse's role in caring for patients during the preoperative clinic setting and the post-operative acute phase. The disciplines recognized where each had strengths and weaknesses in supporting patients along the orthopedic pathway. It also improved relationships for collaboration and closed gaps in care that were evident before the project implementation. The project is limited in its implementation at a single rural community hospital. Patient characteristics and surgical volume in larger, more urban settings may limit the feasibility of implementing a similar project in that setting.

Implications and Conclusions

This project enhanced patients' understanding of surgical procedures and prepared caregivers to support recovery during patient rehabilitation. Due to the need for efficiency during preoperative outpatient visits, there may be limited time to explain the actual surgical procedure and the expectations for patient participation during rehabilitation. Furthermore, the caregiver's role is rarely prioritized as an area of focus. The education sessions implemented as part of this project provide an opportunity to surround the patient with support through

caregiver education. This is particularly important when the patients are no longer in the hospital's care. This project also reinforces the value of interprofessional care by including all interprofessional team members in designing and implementing organizational improvement projects.

References

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