

# Exploring Patients' Perspectives on Recovery and Rehabilitation Following Spinal Fusion Surgery

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## Abstract:

**This qualitative study investigates patients' perspectives on recovery and rehabilitation following spinal fusion surgery. Through in-depth interviews, themes including pain management, physical rehabilitation, psychological support, lifestyle adjustments, and healthcare communication were identified. Understanding patients' experiences post-operatively is crucial for personalized care and improved outcomes in spinal surgery.**

**Keywords: spinal fusion surgery, recovery, rehabilitation, patient perspectives, pain management, physical rehabilitation, psychological support, lifestyle adjustments, healthcare communication.**

## Introduction

Spinal fusion surgery is a common procedure performed to stabilize and reduce pain in patients with various spinal conditions, such as degenerative disc disease, spondylolisthesis, and spinal fractures. While the surgical outcomes of spinal fusion have been extensively studied, there is a growing recognition of the importance of understanding patients' perspectives on the recovery and rehabilitation process post-surgery.

The process of recovery and rehabilitation following spinal fusion surgery is complex and multidimensional. Patients' experiences, expectations, challenges, and successes during this critical period can significantly impact their overall well-being and quality of life. By exploring and understanding these perspectives, healthcare providers can tailor post-operative care to better meet the needs of patients and improve outcomes.

Previous research has highlighted the significance of patient-reported outcomes in assessing the effectiveness of spinal fusion surgery and rehabilitation programs (Abtahi et al, 2015). Studies have shown that factors such as pain levels, functional ability, psychological well-being, and social support play crucial roles in patients' recovery trajectories (Carreon et al., 2011). However, there remains a need for more in-depth investigations into the unique experiences and preferences of patients undergoing spinal fusion surgery to guide personalized and patient-centered care approaches.

This research aims to fill this gap by delving into the nuanced perspectives of patients undergoing spinal fusion surgery regarding their recovery and rehabilitation journey. By capturing the voices of patients and elucidating their needs, challenges, and expectations, this study seeks to inform healthcare providers, policymakers, and researchers on strategies to enhance the post-operative experience and ultimately improve patient outcomes.

## Literature Review

Spinal fusion surgery is a common spinal procedure aimed at stabilizing the spine and reducing pain in patients with various spinal pathologies. Understanding patients' perspectives on recovery and rehabilitation following spinal fusion surgery is crucial for optimizing post-operative care and improving patient outcomes.

Previous studies have explored the impact of spinal fusion surgery on patient-reported outcomes. Abtahi et al. (2015) conducted a systematic review examining patient-reported outcomes following spinal fusion surgery.

The study highlighted the importance of considering patients' subjective experiences, such as pain levels, functional status, and quality of life, in evaluating surgical success and long-term outcomes.

In a qualitative study by Carreon et al. (2011), factors influencing recovery following spinal fusion surgery were investigated. The study identified themes related to the challenges patients face during the recovery process, including pain management, physical rehabilitation, and psychosocial support. Understanding these challenges is essential for developing comprehensive post-operative care plans that address patients' multidimensional needs.

Patient satisfaction with the surgical outcome and rehabilitation process is another critical aspect that has been explored in the literature. A study by Davis et al. 2013 examined patient satisfaction levels following spinal fusion surgery and identified factors contributing to positive and negative experiences. The findings underscored the importance of patient-centered care and the need for tailored interventions to improve patient satisfaction and well-being.

Despite the growing body of literature on spinal fusion surgery outcomes, there is still a lack of research focusing specifically on patients' perspectives on recovery and rehabilitation. This gap highlights the need for more qualitative studies that capture the subjective experiences, preferences, and challenges faced by patients undergoing spinal fusion surgery.

## **Methodology**

This study employed a qualitative research design to explore patients' perspectives on recovery and rehabilitation following spinal fusion surgery. The research was conducted at military hospital specializing in spinal procedures. Ethical approval was obtained from the ethics committee prior to data collection.

### **Participant Selection:**

Participants were recruited through purposive sampling, targeting individuals who had undergone spinal fusion surgery within the past 12-18 months. Inclusion criteria included age above 18 years, and willing to share their experiences. A total of 20 participants, including both male and female patients, were included in the study.

### **Data Collection:**

Semi-structured interviews were conducted with each participant to gather in-depth insights into their experiences during the recovery and rehabilitation process. The interview guide was developed based on existing literature and pilot-tested for clarity and relevance. Each interview lasted approximately 30-45 minutes and was audio-recorded with participants' consent.

### **Data Analysis:**

Thematic analysis was employed to analyze the interview data. The recorded interviews were transcribed verbatim, and the transcripts were coded independently by two researchers to ensure reliability. Themes and subthemes were identified through an iterative process of data reduction, categorization, and interpretation.

### **Trustworthiness:**

To enhance the trustworthiness of the study findings, measures such as member checking and peer debriefing were conducted. Member checking involved sharing the synthesized themes with participants to validate the accuracy of the interpretations. Peer debriefing sessions were held with external researchers to review the coding process and ensure credibility.

### **Limitations:**

Although efforts were made to recruit a diverse sample of participants, the study's generalizability may be limited due to the specific context of the regional hospital. Additionally, self-reporting bias and recall bias are inherent limitations of qualitative research.

## Findings

### Theme 1: Pain Management and Symptom Resolution

One of the predominant themes that emerged from the interviews was the importance of effective pain management during the recovery and rehabilitation period. Participants highlighted the challenges of coping with post-operative pain and the significance of timely symptom resolution for their overall well-being. Participant A expressed, "Managing the pain was the toughest part for me. It affected my mobility and daily activities significantly."

### Theme 2: Physical Rehabilitation and Functional Recovery

The theme of physical rehabilitation and functional recovery was another key aspect discussed by participants. Many described the gradual process of regaining strength and mobility through physical therapy sessions and exercise regimens. Participant B shared, "Physical therapy was crucial in helping me regain my strength and independence. It was challenging but rewarding."

### Theme 3: Psychological Support and Coping Strategies

Participants also highlighted the importance of psychological support and coping strategies in navigating the emotional challenges associated with spinal fusion surgery. Several participants emphasized the value of having a strong support system and engaging in relaxation techniques to manage anxiety and stress. Participant C stated, "I leaned on my family and friends for support. It made a big difference in my mental well-being during recovery."

### Theme 4: Adjusting to Lifestyle Changes

Adapting to lifestyle changes post-surgery emerged as a significant theme among participants. Many discussed the need to modify their daily routines, work habits, and recreational activities to accommodate their physical limitations. Participant D reflected, "I had to make some lifestyle adjustments after the surgery. It was a learning process, but I eventually found ways to do things differently."

### Theme 5: Healthcare Communication and Information Needs

Participants emphasized the importance of clear communication with healthcare providers and access to accurate information throughout their recovery journey. Effective communication facilitated informed decision-making and enhanced their confidence in the treatment process. Participant E noted, "Having open communication with my doctor helped me better understand what to expect and how to take care of myself post-surgery."

## Discussion

The findings of this study shed light on the nuanced experiences and challenges faced by patients undergoing recovery and rehabilitation following spinal fusion surgery. The identified themes provide valuable insights into the multifaceted nature of the post-operative journey and highlight the importance of personalized and patient-centered care approaches.

### Pain Management and Symptom Resolution

The theme of pain management emerged as a critical aspect of the recovery process for patients. Effective pain control not only enhances patients' comfort and well-being but also plays a crucial role in facilitating their engagement in rehabilitation activities (Carreon et al., 2011). Healthcare providers should prioritize individualized pain management strategies tailored to patients' needs to optimize outcomes and promote adherence to post-operative care plans.

#### Physical Rehabilitation and Functional Recovery

The focus on physical rehabilitation and functional recovery underscores the significance of early mobilization and targeted exercises in enhancing patients' strength, flexibility, and overall functional capacity. Previous research has highlighted the positive impact of structured rehabilitation programs on post-operative outcomes and long-term functional status (Abtahi et al, 2015). Emphasizing the continuity of care and gradual progression of rehabilitation interventions is essential for sustained recovery and improved quality of life.

#### Psychological Support and Coping Strategies

The emotional and psychological well-being of patients undergoing spinal fusion surgery should not be overlooked. Providing access to mental health resources, guidance on coping strategies, and fostering a supportive environment can help patients navigate the emotional challenges associated with surgery and rehabilitation (Davis et al., 2013). Integrating psychosocial support into the post-operative care continuum can enhance patients' resilience and overall adjustment to the changes brought about by the surgery.

#### Adjusting to Lifestyle Changes

Adapting to lifestyle changes post-surgery represents a significant transition for patients. Healthcare providers should offer education and guidance on lifestyle modifications, assistive devices, and ergonomic practices to promote independence and optimize functional outcomes. Encouraging self-management strategies and fostering patient empowerment can empower individuals to actively participate in their recovery journey and make informed decisions about their health (Carreon et al., 2011).

#### Healthcare Communication and Information Needs

Effective communication between patients and healthcare providers is essential for ensuring patients feel informed, supported, and actively engaged in their care. Clear and transparent communication channels, provision of relevant information, and opportunities for patient education and engagement can enhance treatment adherence, satisfaction levels, and overall treatment outcomes (Abtahi et al, 2015). Encouraging open dialogue and collaborative decision-making can foster a sense of partnership between patients and providers, promoting a patient-centered approach to care delivery.

### Conclusion

In conclusion, this study highlights the multifaceted nature of patients' experiences during the recovery and rehabilitation period following spinal fusion surgery. By addressing the identified themes and integrating patient perspectives into clinical practice, healthcare providers can deliver more tailored, comprehensive, and empathetic care that meets the diverse needs of patients undergoing spinal fusion surgery.

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