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Discharge Transition Experience for Lumbar Fusion Patients: A Qualitative Study

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ABSTRACT

BACKGROUND: Support should be provided to individuals who are ready to be discharged; however, quantitative research is lacking in understanding the challenges of postsurgery lumbar fusion patients' discharge and transition. This article delves into the in-depth experience of lumbar fusion patients with discharge transitions. **METHODS:** We conducted semistructured individual interviews with 11 patients who had lumbar fusion surgery at one of Korea's most equipped general hospitals. These interviews focused on the patients' discharge transition experiences. The data were analyzed using phenomenological analysis. **RESULTS:** Lumbar fusion patients' experiences of discharge transition fit into 4 categories: anticipation of surgical transition, the process of transition to discharge, the difficult process of recovery, and recovery strategy. **CONCLUSION:** To further expedite the discharge process and make better use of cooperative hospital resources, conducting preoperative treatment planning, identifying family and social support systems, and sharing treatment procedures are all required. Furthermore, thorough health information services and step-by-step courses on predicted problems and everyday living after surgery should be considered for postoperative education. It is critical to broadening the scope of preoperative and postoperative education programs, as well as assistance for the social support system, such as the family-based support system and cooperative hospitals.

Keywords: discharge, experience, spine surgery, transition

Spine surgery is intended to alleviate the symptoms of patients with spinal disorders that persist after surgery; nevertheless, most spine surgery patients continue to endure pain after surgery.[1,2] Furthermore, as early discharge has become more prevalent, rapid discharge preparation and follow-up care based on a knowledge of the discharge transition experience is critical for nursing.[3–5] From discomfort to a last resort decision, hospital admission, quick discharge preparation, and postdischarge recovery period, patients undergoing spinal surgery go through a transitional process.[1,5] Patients and families may endure disruptions in their everyday lives and face various levels of uncertainty during the transition.[1,6] Nurses should be at the center of the discharge transition process, recognizing patients' requirements and providing appropriate assistance so that they may constructively conceptualize their experience.[4,6]

Although sex, age, and lumbar fusion surgery have previously been identified as variables promoting discharge delay, quantitative research has yet to adequately explain the challenges associated with discharge preparation and the transition process.[7] The purpose of this study was to better understand and explain the discharge transition experience of spinal surgery patients.

Methods

This qualitative study aimed to understand and describe the discharge transition experiences of lumbar fusion surgery patients. Patients who had had spinal fusion surgery at a hospital in Seoul during the previous 3 to 4 months were eligible to participate. After

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The authors declare no conflicts of interest.

Ethics: *The institutional review board of "Asan Medical Center in Seoul" approved this study (AMC-2019-0342). The study was explained to all participants; they were then informed that they could freely suspend the interview if they wished. Interviews were conducted after receiving written consent from all participants. Upon completion, a small reward was presented to the participants. All study procedures were carried out as per principles in the Declaration of Helsinki.*

Author Contributions: *All authors listed meet the authorship criteria (according to the latest guidelines of the International Committee of Medical Journal Editors). All authors have read and approved the final submission and agreed to be accountable for the contents and findings of the work.*

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describing the purpose of this study over the phone, 11 patients agreed to take part in the study and were eventually enrolled. The interview was conducted at a convenient location, such as the participant's home, office, or hospital.

Semistructured, in-depth interviews were conducted between March and September 2019. Semistructured interview guidelines were adopted. All interviews were taped, and nonverbal reactions, including daily life at home and work, were recorded and analyzed. Following the interview guide, all interviews were transcribed promptly, and data records were verified and referenced to assist, extend, or focus subsequent interviews. When no fresh data surfaced, sampling saturation was considered to have occurred. A single interview lasted an average of 70 minutes, with times ranging from 30 to 110 minutes.

The lived experience of patients having lumbar fusion surgery was described using phenomenological analysis. To code relevant data characteristics, QSR NVivo v12 was used. After that, emerging themes were examined in connection to the data, and a thematic map was created. Transcripts were peer-reviewed, and researchers discussed the coding process. Emerging ideas were reviewed and debated until consensus was reached. All of the researchers who took part in the study were experienced in doing qualitative research. To increase the study's validity and rigor, a significant amount of time was spent examining the data to uncover nuances by reading each interview transcript and listening to audio recordings many times.[8] Throughout the investigation, researchers gathered regularly to make methodological and analytical judgments. To enhance the research's dependability, 2 participants examined to see whether the interpretations of the study results matched their own experiences.

The institutional review board approved this study. The study was explained to all participants, and they were informed of their right to discontinue the interview if they wished. All participants provided written consent and were rewarded with a participation fee of 30 000 won (however, some participants did not receive this fee).

Results

Three men and 8 women, with an average age of 65.5 years, took part in the study. After being discharged, 8 participants went to different primary medical facilities before returning home 3 to 4 weeks later; the remaining 3 went home immediately after being discharged. Two of the 11 participants were single. The analysis yielded 4 themes: anticipation of surgical transition, the process of transition to discharge, the difficult process of recovery, and recovery strategy. Seven subthemes were derived (Table 1).

TABLE 1. The Category of the Discharge Transition Experiences for Lumbar Fusion Patients

Themes	Categories
Anticipation of surgical transition	Expectations and disappointments in pain relief
The process of transition to discharge	Discharge planning
	Discharge destination
The difficult process of recovery	Encounter unexpected complications
	A greater burden on women without family support
Recovery strategy	Need for detailed recovery information
	The power of recovery

Anticipation of Surgical Transition

In the subtheme of "expectations and disappointments in pain relief," participants were unable to function properly owing to pain in their buttocks and legs caused by weariness and weakness, sleeping on electric pads and wearing warm socks (even in the summer), or a lack of anal sphincter muscle. They chose surgery because they wanted to be free of the agony. Most individuals remembered the relief from buttock and leg discomfort they had after the procedure: "After the surgery, my mood had already changed. The numbing sensation had gone completely, and I felt like 'Yes! This is it!' As soon as the surgery was over, the numbing sensation had gone. I felt that the surgery went well" (Participant 10). Some individuals, however, reported dissatisfaction because postoperative discomfort, surgical wound pain, and preoperative sensory impairments remained.

The Process of Transition to Discharge

In the subtheme of "discharge planning," patients were prepared for hospitalization using guidebooks and video instruction on the healing process, as well as discharge and exercise management if they decided to have surgery. Nonetheless, participants felt their bodies were not ready for discharge and voiced disappointment with the discharge procedure indicated in the lumbar fusion care plan: "How dare they discharge me only five days after surgery! There was an investigation in advance to decide whether to go to another hospital or home" (Participant 7). However, when they recovered gradually after surgery, they were gradually persuaded and began to trust the procedure and discharge schedules.

In the subtheme of "discharge destination," all subjects were discharged from the hospital in a stable state, with no postoperative neurological complications.

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Some patients were admitted to primary care hospitals to recover, where they were given basic steady home care and food until their condition stabilized. However, some individuals reported feeling uneasy in the main hospital setting: "My wife did not let me come back home. She told me to go to the hospital and get some rest. There, I was just given IV injections for a week and was provided with some physical therapy. But I was dying of back pain from the physical therapy" (Participant 2). Some of the participants were relieved to be sent to their homes, believing that eating what they wanted and relaxing in a familiar setting would help them recover.

The Difficult Process of Recovery

In the subtheme of "encountering unexpected complications," after surgery, several individuals reported deteriorated physical condition, psychological issues, and the adverse effects of painkillers: "It's called energy depletion. I could not help it because I ran out of energy. So, I did not want to do it and I could not do it, and I was sad and depressed…" (Participant 6). Although postoperative pain had decreased, several of the elderly patients (70 years and older) complained of tiredness and muscular weakness. They were easily exhausted after surgery, their physical power had deteriorated, and they were taken aback by their frail state. Nonetheless, they saw that they were gradually regaining strength through exercising: "When I moved, I got tired quickly. My back is very weak after surgery. It does not hurt. Why are my legs so weak? It took about four months before my appetite came back and I felt a little stronger" (Participant 1).

For postoperative pain treatment, all participants were given nonsteroidal anti-inflammatory medications and opioid analgesics, and analgesic control was offered. Some individuals, however, reported adverse effects: "They gave me a narcotic analgesic because my back, neck, and shoulders hurt. The pain was relieved after taking the medicine. Like a person who was not sick, my back moved freely and I could sit and stand up! When I took medicine, I did not have any pain, but I felt dizzy, had pain in the back of my head, and a headache" (Participant 6).

In the subtheme of "a greater burden on women without family support," housewives with children were found to be suffering not only from the effects of recuperation but also from the additional burdens of housekeeping and childcare: "Women tend to take care of their families even if they are sick. Even if I'm sick, I do housework little by little. I wish I could clean that place up if all family members are out, and if I can do it quickly, I do it quickly. That's why I should not be at home" (Participant 5). A female participant with a small child expressed sorrow and remorse for being unable to care for her child like other mothers because of being a "sick mother."

Recovery Strategy

In the subtheme of "need for detailed recovery information," walking exercises, proper sitting posture, regular position adjustments, wound treatment, painkillers, and contact information for healthcare providers were all supplied. Some participants, on the other hand, appreciated comprehensive and step-by-step recovery instructions on the particular range of activities and exercises they could undertake after surgery: "I do not think there was much information about life after the surgery. I thought a lot that it would be great if there was a detailed manual" (Participant 9).

In the subtheme of "the power of recovery," most individuals attempted to recover by using positive thinking to aid in the tough healing process; encouragement from those around them provided an additional boost. Those who returned immediately to their presurgery occupations and social life expected a speedier recovery: "Positive gives birth to positive! People should have physical strength, but first of all, they should have mental power. Do not stay home alone like this. We should go out and be active" (Participant 7).

Discussion

The goal of this study was to learn more about lumbar fusion patients' discharge transitions in Korea. Patients and their families should be able to exchange information about the treatment and recovery processes from the time surgery is planned, so they can prepare for discharge. The patients were in excruciating agony before surgery, and lumbar fusion was chosen as a last resort.[9] Most patients reported pain alleviation after surgery, although some were dissatisfied because of sensory deficits before surgery or lingering discomfort. This was comparable with other reports of pain or physical discomfort persisting even after successful surgery.[1] It is critical for patients and caregivers to express realistic expectations to achieve the best possible recovery.[10] Nurses who can help patients with the transition process recognize their patients' expectations, offer correct information about what to anticipate, teach new skills and support to manage sickness and promote recovery, and assist individuals and families with their own care.[6,11]

Despite being aware of the preoperative lumbar fusion treatment plan, the participants were not ready for release and were unhappy because they anticipated the discharge would be early.[12,13] For healthcare personnel, patients, and their families, discharge is a complex and difficult process.[14] To guarantee the ongoing quality of care throughout the postoperative discharge transition, systemic nursing interventions

and clear communication, including collaboration and coordination with other healthcare professionals and the community, are necessary.[13,15]

Some individuals reported unforeseen circumstances after surgery, such as reduced physical condition, psychological issues, and the adverse effects of painkillers. Previous research on postoperative recovery experience in patients found a "mismatch in expectations regarding the recovery experience." Patients who experienced undesired physical problems after surgery, in particular, described it as "living with painful physical symptoms and difficulties."[16,17] This implies that appropriate information for the treatment of problems is critical, as is specialized patient-centered education.[12,18] Furthermore, pain is a major concern in patients undergoing spinal surgery; therefore, it is critical to plan ahead of time and offer thorough pain management techniques and education.[2,19] Furthermore, patients want thorough advice and up-to-date information on healing during the recovery process, and medical practitioners must convey information that can increase safety and self-efficacy.[12,19] As a result, discharge education, including complication management, should give clinical assistance to recognize and treat issues, as well as provide a sense of safety and protection that is personal to the patient.[3,20]

Some of the older individuals in this research experienced postoperative tiredness and muscular weakness. Similar to studies indicating reduced appetite and functional impairment in elderly surgery patients, postoperative tiredness and discomfort might make it difficult to undertake prescribed activities.[13,16,21] The importance of more research on fragility and postoperative recovery in elderly surgery patients is underlined.

According to studies, having someone or a family to care for at home boosts patient confidence and so enhances willingness for discharge.[4,22] The findings of this study, however, indicate that housewives with families have a more difficult rehabilitation process because they do not receive support from their family and are unable to detach from home tasks. Female participants with young children, in particular, were upset and felt guilty for not being able to care for their children because they were "sick mothers." Given the unequal distribution of domestic work among Korean women, postsurgery rehabilitation must include physical and emotional stability apart from chores.[23] Further research is required on the vulnerabilities and proper therapy of spinal disorders in female Korean patients. According to the study participants, active positive thinking and social support for returning to work and resuming regular daily life encouraged speedy healing. A good adaption process and the application of coping techniques can lead to a successful discharge transition when the patient accepts his/her circumstances with an optimistic attitude.[18,24,25]

There are several nursing implications. This study provides an understanding of the discharge and postoperative recovery processes experienced by patients who underwent lumbar fusion surgery. The discharge transitions for spine surgery patients require discharge planning, including patient-centered, collaborative care, and service coordination, for a successful discharge transition to a healthy life transition, and discharge planning policies and guidelines designed by nurses, managers, educators, and organizational leaders can help with the implementation.

Limitations

This study was limited to patients who underwent lumbar fusion surgery at a single hospital in Korea; thus, our findings may not extrapolate to other settings. Moreover, our sample had limited social demographic diversity and may not represent the entire scope of spinal surgery experiences across the world.

Conclusion

The findings of this study should include a thorough health information program on discharge education and daily living, including patient-centered nursing education and postoperative problems management, to help patients having lumbar fusion surgery transition to release. It is especially important to establish a holistic recovery strategy for female and elderly patients.

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