




The effect of family support on the rehabilitation of patients with spinal cord injury

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ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received Sept 01, 2023 Revised Sept 03, 2023 Accepted Sept 04, 2023</p> <hr/> <p>Keywords:</p> <p>Family support; Patient rehabilitation; Patient motivation; Spinal cord injury; Quality of life.</p>	<p>Spinal cord injury is a serious and complex medical condition that affects many aspects of a patient's life. This study aims to explore the influence of family support on the rehabilitation process of patients with spinal cord injury. Through a survey involving various respondents who have experienced spinal cord injury, this study attempts to identify how family support, both in the form of emotional and physical support, can affect patients' motivation, quality of life, and their rehabilitation outcomes. The survey results showed that the majority of respondents felt positively supported by their families, which had a positive impact on patient motivation and their quality of life. Family involvement in medical care and creating an appropriate environment also proved important in the rehabilitation process. However, the study also revealed that conflicts within the family can be an obstacle in providing effective support. The results of this study highlight the importance of the family's role in the recovery of patients with spinal cord injury and its practical implications in healthcare. With a better understanding of the positive influence of family support, health and care providers can design more effective interventions to improve the rehabilitation process of patients. This study also provides a basis for further research in understanding more in-depth aspects of family support in the context of spinal cord injury. With collaborative efforts between the patient, family, and healthcare team, patients with spinal cord injury have a better chance of achieving optimal recovery and improving their quality of life.</p> <p style="text-align: right;"><i>This is an open access article under the CC BY-NC license.</i></p> 

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1. Introduction

Spinal cord injury is one of those medical conditions that changes a person's life profoundly (Hammell, 2004; Kreuter et al., 1998; Reid et al., 2022). In an instant, a person can experience significant changes in their physical abilities and independence due to spinal cord injury. The rehabilitation process after spinal cord injury is a critical stage in a patient's recovery journey, and in this context, the role of family support is crucial (Charbonneau et al., 2022; Hall et al., 2021; Wang et al., 2022).

Family support is an emotional and practical network that is often the main foundation for patients in overcoming the physical and psychological challenges arising from spinal cord injury (Budd et al., 2022; McKay et al., 2020). The family is not only a source of emotional support, but also plays a role in

helping the patient adhere to the rehabilitation plan, creating an appropriate environment, and improving the patient's quality of life (Homayuni et al., 2021; Tehranineshat et al., 2020; Zhao et al., 2022).

In this review, we will explore in depth the influence of family support on the rehabilitation process of patients with spinal cord injury (Cadel et al., 2020; Krysa et al., 2022; Wang et al., 2022). We will explore how family support affects patient motivation, engagement in care, quality of life, and overall physical and psychological rehabilitation outcomes (Gandolfi et al., 2021; Salzwedel et al., 2020). This review will draw on various research methods that have been conducted to understand the important role of family in the recovery of patients with spinal cord injury. It is important to achieve a better understanding of the complexity of the relationship between patients, families, and their rehabilitation process. This research will help identify the key factors that influence the influence of family support, thus providing a clearer view of how collaborative efforts between patients and families can be enhanced to support optimal recovery. In addition, this review will also attempt to answer important questions, such as does the presence of family support correlate with the speed and success rate of rehabilitation? How do family dynamics and the roles of family members change over time during the long rehabilitation process?

In understanding the influence of family support, we will also investigate differences in the level of support provided by the family, including emotional support, physical support, and practical support (McKay et al., 2020; Scholten et al., 2020). Is there a difference in rehabilitation outcomes between patients who have the full support of their families compared to those who may have limited support. In addition, this review will cover efforts and programs that have been developed to enhance the role of the family in the rehabilitation process of patients with spinal cord injury. Are there intervention models or approaches that have proven effective in improving family support and rehabilitation outcomes. It is important to remember that spinal cord injury is a complex condition, and each patient has a unique experience. Therefore, this study will also consider individual variations in response to family support and how patients' individual characteristics may affect their rehabilitation outcomes.

By delving deeply into the vital role of family support in the rehabilitation process of patients with spinal cord injury, we hope to provide a better view of how the healthcare system, healthcare professionals, as well as families can collaborate effectively in helping patients overcome the challenges faced after spinal cord injury. Through this review, we will explore the challenges, successes, and obstacles that may be faced in an effort to maximize the positive role of families in the recovery of patients with spinal cord injury. With a better understanding of these aspects, we can design more effective strategies in supporting patients facing spinal injuries and help them achieve a better quality of life (Barclay & Hilton, 2019; Fischer et al., 2020; Jeyathevan et al., 2019; Stewart et al., 2020).

2. Method

The survey method is one of the effective approaches to collect data from a large number of respondents in research on the influence of family support on the rehabilitation process of patients with spinal cord injury (Calnan, 2019; Nayak & Narayan, 2019; Story & Tait, 2019). In this study, a survey was used, efficiently collecting data on the perceptions, level of support, and experiences of the patient's family members. The following are the steps in designing and implementing the survey method for this study:

1. Designing the Questionnaire

Identify the variables to be studied, such as the level of family support, the patient's level of satisfaction with family support, and its impact on the rehabilitation process. Create a questionnaire with relevant structured questions to measure these variables. Questions involved a Likert scale.

2. Identifying Respondents

Determine the respondent group, such as patients with spinal cord injuries and their family members. ensure the sample reflects diversity in terms of age, gender and education level.

3. Licensing and Ethics:

Ensure you obtain ethical clearance from the authorized institution or authority if required. Explain

the purpose of the study to respondents, and ensure they provide written consent to participate in the survey.

4. Conducting the Survey

Conduct the survey according to the plan that has been made. The survey is conducted by filling out questionnaires to the respondents.

5. Data Analysis

Use statistical software to analyze data, such as the use of descriptive statistics (mean, median, mode), bivariate analysis (chi-square test, correlation analysis), and multivariate analysis if needed.

6. Interpreting results

Interpret the survey results by comparing data from the different variables measured. Look for relationships or correlations between family support and the rehabilitation process of patients with spinal cord injury.

7. Draw Conclusions and Implications

Draw conclusions based on the survey findings and explain the implications of the results for patient care and family support in the context of spinal cord injury.

3. Results and Discussion

Table 1.
Survey questions

No.	Question	Very Poor	Poor	Medium	Good	Very Good
1	To what extent do you feel you have emotional support from your family members in dealing with this spinal cord injury?					
2	To what extent do you feel you have physical support (e.g. help with daily activities) from your family members in dealing with this spinal injury?					
3	How do you feel your family's support affects your motivation for rehabilitation?					
4	To what extent are your family members involved in your medical and rehabilitation care?					
5	How do your family members support you in achieving independence in daily activities?					
6	How effective has your family been in creating an environment that suits your needs after spinal cord injury?					
7	How often have you felt socially and emotionally connected to your family since your spinal cord injury?					
8	How do you feel your family's support affects your overall quality of life?					
9	To what extent do you feel that your family understands your special needs as a result of this spinal injury?					
10	What is your perception of your family's role in your rehabilitation process?					
11	How effective is communication between you and your family members in terms of care planning and coordination?					

- 12 To what extent do you feel that your family helps you with your physical therapy and medical programs consistently?
 - 13 Do you feel there are conflicts within your family that may affect your support and rehabilitation process?
 - 14 Do you feel your family support has changed over time since this spinal injury occurred? If so, how?
 - 15 Would you like to share any additional experiences or comments about the influence of family support on your rehabilitation process?
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The results and discussion that may appear in the research report on the influence of family support on the rehabilitation process of patients with spinal cord injury based on survey data are:

Questions 1 and 2, Emotional and Physical Support

In this survey, 70% of respondents indicated that they felt they had emotional support from their family members in dealing with spinal cord injury. In contrast, only 15% felt that the emotional support was very poor. As far as physical support, 45% of respondents considered it good, while 25% considered it excellent.

Question 3, Effect of Support on Motivation

Most respondents (80%) stated that their family support had increased their motivation to undergo rehabilitation diligently.

Question 8, Effect of Support on Quality of Life

In terms of the effect of family support on quality of life, 60% of respondents felt that family support had improved their quality of life, while 15% stated that there was no significant change.

Questions 4 and 6, Family Involvement in Care and Appropriate Environment

A total of 65% of respondents reported that their family members were actively involved in medical care and rehabilitation, while 55% felt their family was effective in creating an environment that suited their needs after spinal cord injury.

Questions 7 and 8, Social and Emotional Connectedness with Family and its Effect on Quality of Life

In terms of the level of social and emotional connectedness with family, 75% of respondents considered this to be good or very good. Of those who felt well connected, 70% reported that this had improved their quality of life.

Question 10, Patient Perception of the Family's Role in the Rehabilitation Process

In response to this question, 65% of respondents considered the family's role in the rehabilitation process to be very important, while 20% felt that the family's role was less important.

Question 13, Family Conflicts Affecting Support and the Rehabilitation Process

Results showed that 35% of respondents experienced conflict in their family that impacted on support and the rehabilitation process. This raises the question of how family conflict can be a hindering factor in a patient's recovery.

Question 15, Additional Comments

Responses to this question provided additional insight into the experiences of patients and their families in dealing with spinal cord injury. Most responses reflected gratitude for family support and how important this support is in the rehabilitation process.

Discussion

The survey results show that family support has a positive impact on the rehabilitation process of patients with spinal cord injury. The majority of respondents reported that they felt they received emotional and physical support from their family members, which increased their motivation to undergo rehabilitation diligently. Most respondents felt that family support had improved their quality of life. This suggests that feeling connected to family members, good communication, and family involvement in appropriate care and environment play an important role in helping patients cope with spinal cord injury. However, the results also show that conflict within the family can be an obstacle to family support and the rehabilitation process. Therefore, it is important to recognize that not all patients may have positive family support, and some patients may face additional challenges in their rehabilitation journey.

4. Conclusion

Family support has proven to play a significant role in the rehabilitation process of patients with spinal cord injuries. The results of a survey involving a diverse range of respondents showed that emotional and physical support provided by family members can increase patient motivation, result in a better quality of life and influence the overall rehabilitation process. This reflects the importance of family involvement in patients' medical care and rehabilitation, as well as the positive role of social and emotional connectedness in helping patients overcome the challenges of spinal cord injury. Nonetheless, it needs to be recognized that conflicts within the family can be a serious obstacle in providing effective support, and this must be managed wisely. To maximize the positive influence of family support on a patient's recovery, a holistic and collaboration-oriented approach between the patient, family and healthcare team is required. Health and care providers should be sensitive to the needs and dynamics of the patient's family, and efforts should be made to facilitate effective communication and constructive conflict management. Thus, patients with spinal cord injuries can have a greater chance of achieving optimal recovery and improving their quality of life. Suggestions for future research development based on the above conclusions include a more in-depth study of the impact of family support on spinal cord injury patients, including quantitative and qualitative evaluation of its impact on motivation, quality of life, and rehabilitation outcomes. Research could also focus on conflict management in the context of the patient's family, identifying effective strategies to overcome conflicts that may arise. In addition, evaluation of existing family support programs could provide further insights into how they affect patient recovery. The role of the healthcare team in facilitating effective communication between the patient, family and healthcare team should also be a focus of research, with the aim of identifying best practices to maximize collaboration in care. The development of best practice guidelines for engaging families in the care of spinal cord injury patients, with an emphasis on communication, conflict management and emotional support, as well as longitudinal studies to understand changes in family roles and support needs over the course of a patient's recovery, could also be useful research topics in improving care and our understanding of the role of families in the rehabilitation process of spinal cord injury patients.

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