(REVIEW ARTICLE)

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Review of nursing care for the neuro-rehabilitation patient

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Abstract

Registered nurses who have further education and training in rehabilitation are known as rehabilitation nurses. An introduction to the hospital is usually the first step in training, which is then followed by a didactic component about caring for rehabilitation patients and a preceptorship of varied lengths depending on prior experience. Rehabilitation nurses can advance their credentials by becoming certified in neuroscience nursing by the American Association of Neuroscience Nurses or by becoming certified in rehabilitation nursing through the Association of Rehabilitation Nurses (ARN) (AANN). Increasingly, neurological rehabilitation is viewed as a specialized form of rehabilitation needing advanced nursing skills. However, just as in many other nursing specialties, nurses in this sector know that they must expand their expertise to give their patients and their families the finest and most modern care possible. Neurological rehabilitation nurses must be knowledgeable about the corpus of existing research in this area to practice at a high level of competence and make wise judgments about their practice and future research endeavors. The review concludes that more high-quality and quantity research in this field still needs to be done. Since most of the research was conducted at a single location, it cannot be generalized to other clinical settings.

Keywords: Nursing Care; Neuro-Rehabilitation Patient; Support; Skills

1. Introduction

Nursing rehabilitation for neurological patients starts at the acute stage of their injury or disease. It can continue through different phases (acute, subacute) of inpatient rehabilitation before moving them to their homes or other long-term care facilities. In order to address the needs of the patient and family, the rehabilitation nurse must combine specialized knowledge, abilities, experience, and a sympathetic attitude. These abilities and knowledge may be used in administrative and clinical roles and responsibilities. Rehabilitation nurses can serve administratively as case managers; this role is particularly prevalent in acute care and acute rehabilitation settings. In this capacity, nurses must represent patients' and families' concerns about care inside and outside the clinical setting. The case manager must examine each patient's situation to determine the best courses of action and assistance. The case manager will file an appeal if anticipated treatments or services are left out of the plan of care or are rejected by the insurance company to get the patient the care or services they need. To assist the patient and family in moving from the medical management to the rehabilitative phases of care, the nurse case manager must be involved from the beginning of care before admission into rehabilitation. Enabling a seamless transition from inpatient to outpatient and home-based care, and vice versa. Moreover, nurse case managers aid in locating required social/financial resources and healthcare. They could include transportation, day treatment programs, hospice care, financial aid, medical insurance, visiting nurse and attendant care, independent living arrangements, elder or adult care, and financial support. The major goal of

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rehabilitation, as seen from the perspective of the rehabilitation nurse, is to help the patient progress toward gaining more independence in self-care. The self-care model developed by Dorothea Orem identifies three types of systems: fully compensating, partially compensatory, and supporting educational systems. In a compensatory patient system, only external assistance is used to meet patients' needs for self-care. In a partially compensatory system, the patient takes care of their self-care requirements while receiving some assistance from others. The patient can satisfy their self-care needs by receiving instruction and help from others in a supportive educational system. And in a helpful educational system, the patient takes care of themselves by receiving guidance and assistance from others. If fundamental activities are successfully started in the acute care setting, an initial plan of care is prepared for a neurorehabilitation patient as a partial compensatory system based on the assessments of the nurse and other interdisciplinary team members. The patient's objective will be to advance to a supportive educational environment enabling self-care in rehabilitation [1]. Here, we will examine the literature on nursing care for patients undergoing neurorehabilitation.

2. Methodology

The Rapid Review Guidebook suggests following the steps of Dr. Dobbin's evidence-informed decision-making (EIDM) methodology: Steps for Conducting a Rapid Review served as the framework. The health EvidenceTM tool was used to 1) find and access pertinent research evidence, 2) assess the evidence's methodological quality, and 3) synthesize the evidence [2].

2.1. Search Strategies

The following key search terms were established based on the quick review research questions. With the help of Neuro-Rehabilitation Patients.

2.2. The final search string is as below:

Neuro-Rehabilitation Patient or Nursing Care for the Neuro-Rehabilitation.

For the purpose of conducting a thorough search for publications, four databases have been adopted: Scopus, Google Scholar, PubMed, and the Cochrane Library. Due to the dearth of publications in the field of Neuro-Rehabilitation Patient or Nursing Care for Neuro-Rehabilitation, Google Scholar has been added to provide wider coverage of the gray literature. Scopus, PubMed, and the Cochrane Library all provided excellent coverage of peer-reviewed articles.

2.3. Eligibility criteria

The literature search included all Neuro-Rehabilitation Patients or Nursing Care for the Neuro-Rehabilitation articles, theses, and review papers released before December 2022.

2.4. Data Extraction

Two impartial reviewers from the medical community examined the articles to guarantee the selection's impartiality. On the finalized list of articles for additional data extraction, the two reviewers have achieved an eighty percent agreement.

2.5. Results of the literature search

The preliminary screening process resulted in the reduction of 52 articles to potentially relevant articles. Non-relevant articles were eliminated due to their non-English language, title, abstract, and book chapter. Based on the inclusion criteria, 17 studies were discovered (Figure 1: Preferred Reporting Items for Reviews) (Health EvidenceTM tool).

We conducted this review according to Preferred Reporting Items for Reviews (PRISMA) Figure (1)
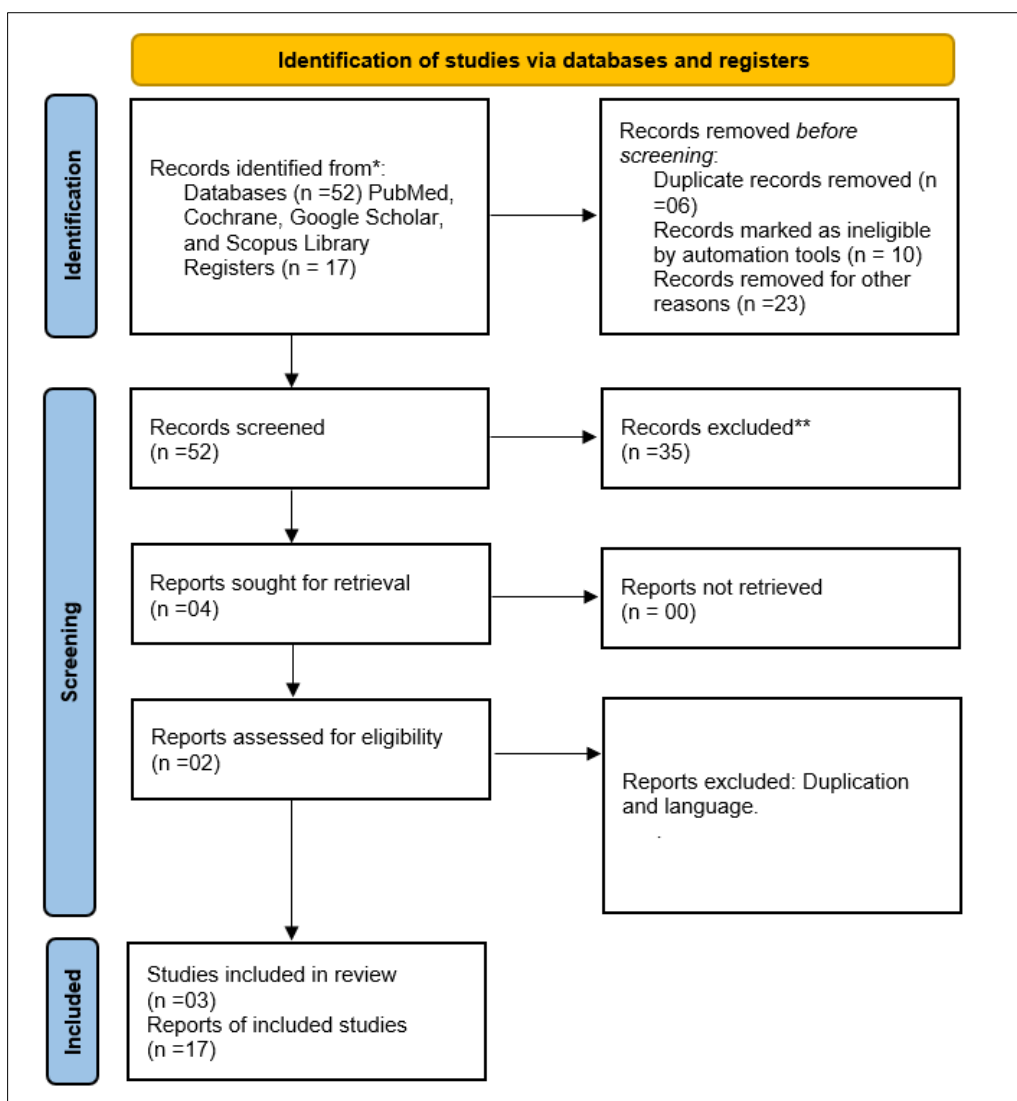
Figure 1 Preferred Reporting Items for Reviews (Health EvidenceTM tool)

(PRISMA) flow diagram of the literature screening process. [3]

3. Results and discussion

This review of the literature was to determine the nurses' actual role in stroke inpatient rehabilitation. The review includes empirical studies done between 1997 and 2010. The four nursing functions Kirkevold outlined at a high level describe the social, psychological, and physical nursing interventions. However, when providing concrete therapeutic nursing in rehabilitation, it is important to consider if the patient is aware of the alterations caused by a stroke. This might suggest evolution throughout time. So, when we examined whether the four nursing roles and functions established in 1997 still accommodated all components of the current nursing practice, nursing contributions and the four nursing roles were discovered. Surprisingly, the four therapeutic nursing responsibilities were found, but many other nursing tasks were shown to be necessary for addition to these roles. As a result, modifications to nursing duties and tasks were noted in the research literature. These new developments were included under the "beyond the four roles" elements, reflecting an expansion of the nurses' roles and contributions to stroke therapy. The "beyond the four roles" category appears to be most influenced by modifications to the "patient role," "expanding multidisciplinary teamwork," and "emphasis on rehabilitation activities carried out in the patient's environment." The inpatient and outpatient rehabilitation processes involve several facets of the healthcare system.[4]

Following identifying these key persons, the required actions must be chosen in response to the individuals' values and post-stroke adjustments. The planning phase becomes vital if the rehabilitation efforts align with the WHO's uniqueness

and quality of life explanations. The coordinator must support or compensate the patient with various cognitive and physical limitations to achieve collaboration and the preferred way of life, as advised in a current medical technology assessment and a national white book.[5]

The major goal of rehabilitation, as seen from the perspective of the rehabilitation nurse, is to help the patient progress toward gaining more independence in self-care. The self-care model developed by Dorothea Orem identifies three types of systems: fully compensating, partially compensatory, and supportive educative systems. In a compensatory patient system, only external assistance is used to meet patients' needs for self-care. In a partially compensating system, the patient takes care of their self-care requirements while receiving some assistance from others. The patient can satisfy their self-care needs by receiving instruction and help from others in a supportive educational system. If fundamental activities are successfully started in the acute care setting, an initial plan of care is prepared for a neurorehabilitation patient as a partial compensatory system based on the assessments of the nurse and other interdisciplinary team members. The patient's objective will be to advance to a supportive educational environment enabling self-care in rehabilitation.[6]

4. Conclusion

The interdisciplinary neurorehabilitation team, which includes the nurse, aims to address the needs of patients and families by bringing patients back to the height of health and enhancing their quality of life. A well-run team reduces the number of fatalities, disabilities, and long-term institutionalizations. Teams must regularly communicate to discuss patient assessments, problem identification, short- and long-term goals, and decision-making. The R.N. is crucial in informing family members and other medical staff members about the patient's condition. The nursing evaluation and care plan must be thoroughly incorporated into the interdisciplinary care plan to enable holistic management and patient success. Patients are thought to spend 8–13% of their day participating in therapeutic activities, leaving most of their care in the hands of the registered nurse of the time spent in a neurorehabilitation unit for inpatients. The nursing department is in a special position to observe patients and report critical patient information to the doctor when changes in vital signs or responsiveness happen, to the neuropsychologist when changes in cognition or behaviour happen, to PT/OT when mobility issues are obvious, and to speech therapy when nutrition/swallowing issues are identified. In order to facilitate adjustments in interdisciplinary rehabilitation management, nursing can also facilitate the carryover of goals established in therapies by other disciplines and communicate back to those disciplines. The neuro-rehabilitation team can maximize the potential for the patient with acquired brain injury to achieve the goals of reducing disability and acquiring new skills and strategies that maximize activity by keeping the patient and family as the central focus.

Compliance with ethical standards

Disclosure of conflict of interest

There are no conflicts of interest, according to the authors.

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