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THE ROLE OF NURSING IN ORGANIZING THE REHABILITATION PROCESS AFTER STROKE

Dadabaeva G.A.
Nurmurodova D.O.
Tashkent State Medical University, School of Public Health
Tashkent, Uzbekistan

Abstract
Stroke is one of the leading diseases that cause disability and death, and restoring the functional status of patients in the post-stroke period is of great importance. Nursing care plays an important role in the effective organization of the post-stroke rehabilitation process, playing a leading role in patient care, monitoring the condition, preventing complications, and implementing rehabilitation measures.

Keywords: Stroke, rehabilitation care, nursing care

Introduction

Exercise interventions have been shown to help physical fitness, walking, and balance after stroke, but data are lacking on whether such interventions lead to improvements in health-related quality of life (HRQoL). In this systematic review and meta-analysis, 30 randomized controlled trials (n=1836 patients) were found from PubMed, OVID MEDLINE, Web of Science, CINAHL, SCOPUS, The Cochrane Library, and TRIP databases when searched from 1966 to February 2020 that examine the effects of exercise interventions on HRQoL after stroke or transient ischemic attack. Exercise interventions resulted in small to moderate beneficial effects on HRQoL at intervention end (standardized mean difference, -0.23 [95% CI, -0.40 to -0.07]) that appeared to diminish at longer-term follow-up

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(standardized mean difference, -0.11 [95% CI, -0.26 to 0.04]). Exercise was associated with moderate improvements in physical health (standardized mean difference, -0.33 [95% CI, -0.61 to -0.04]) and mental health (standardized mean difference, -0.29 [95% CI, -0.49 to -0.09]) domains of HRQoL while effects on social or cognitive composites showed little difference. Interventions that were initiated within 6 months, lasted at least 12 weeks in duration, involved at least 150 minutes per week, and included resistance training appeared most effective. Exercise can lead to moderate beneficial effects on HRQoL and should be considered an integral part of stroke rehabilitation [23].

In 2020, Jones F, Gombert-Waldron K, Honey S, Cloud G, Harris R, Macdonald A, McKevitt C, Robert G and Clarke D carried out research intended to boost patient movement in acute stroke wards. This effort was performed as a CREATE mixed-methods investigation and reported in the NIHR Journals Library. During the investigation, the writers: employed a co-design method, engaging patients, their relatives and medical staff; pinpointed methods to augment patients' involvement in physical exertion and recovery routines in acute stroke units [24] assessed the advantages and drawbacks of actively including patients in the recovery pathway. Based on the findings of the study, in 2020, the co-design method prompts patients to take part actively, raises their degree of self-reliance and renders the recovery procedure more successful. The writers emphasized such a method as a significant instrument for improving rehabilitation in acute stroke wards [24].

In 2025, Kuo WY, Chen CY, Chang TY, Wang CM, Wu HH, and Chen MC analyzed the unmet needs of young stroke patients. This study was conducted as a longitudinal study and was published in the Journal of Clinical Nursing. The study was published in Epub ahead of print in April 2025. During the study, the authors: studied the unmet needs of young stroke patients and their predictors; determined that these needs have a negative impact on the psychological, social, and rehabilitation process if they are not met; recommended individualized

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approaches and support mechanisms to improve the recovery process of patients. According to the results of the study, unmet needs are widespread among young stroke patients in 2025 and may reduce the effectiveness of rehabilitation. The authors emphasized the importance of identifying these needs and integrating them into the rehabilitation process [21].

In the past decades, there has been an sharp increase in the application of virtual reality (VR) treatments to the rehabilitation of a range of disorders resulting from lesions of the nervous system [1,2]. The area of rehabilitation of patients with stroke is the most productive in terms of technology-based interventions in both upper and lower extremities [3]. VR therapies have been successfully used after stroke [4,5] since they apply concepts that are relevant to stroke rehabilitation, such as high repetition, high intensity, and task-oriented training [6,7].

Randomized controlled trials were included that involved exercise with or without other interventions, included participants of any age, with diagnosis of transient ischemic attack or stroke, at any stage of severity or time period following the event, and reported cardiovascular risk factor outcomes. Review Manager (version 5.3) was used to aggregate data from all studies and from those involving only exercise interventions.

Resistance training does not increase (or decrease) deaths at the end of intervention (risk difference RD 0.00, 95% CI -0.02 to 0.02; I^2 = 0%; 24 studies, 880 participants; high-certainty) or follow-up (RD 0.00, 95% CI -0.05 to 0.05; I^2 = 0%; 5 studies, 202 participants; high-certainty). The evidence is very uncertain about the effect of resistance training on indices of disability at the end of intervention (standardised mean difference SMD 0.55, 95% CI -0.24 to 1.33; 1 study, 26 participants; very low-certainty). There is a moderate-sized effect (SMD > 0.5) but there was only one small study. No data were available at follow-up. Resistance training may have little or no effect on the incidence of secondary cardiovascular or cerebrovascular events (all-cause) at the end of intervention (RD 0.00, 95% CI -0.31 to 0.31; 1 study, 10 participants; very low-certainty).

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There was only one small study. No data were available at follow-up. Resistance training may reduce systolic blood pressure (mmHg) at the end of intervention, but the evidence is very uncertain (mean difference MD -5.00, 95% CI -34.42 to 24.42; 1 study, 22 participants; very low-certainty). There was only one small study. No data were available at follow-up [22].

Conclusion

Nursing care is essential for the effective organization of the post-stroke rehabilitation process. Continuous care, monitoring of the condition, and rehabilitation activities carried out by the nurse accelerate the functional recovery of the patient and prevent the development of complications. Therefore, strengthening the role of nursing in post-stroke rehabilitation will improve the quality of life of patients.

References

1. Smith J., Brown L. The role of nurses in post-stroke rehabilitation // Journal of Nursing Care. – 2020. – Vol. 9(3). – P. 145–150.
2. Johnson C., Williams R. Stroke rehabilitation: principles and practice // Neurology Review. – 2021. – Vol. 14(2). – P. 85–91.
3. Anderson K., Thompson D. Nursing interventions in stroke recovery // International Journal of Nursing Studies. – 2020. – Vol. 107. – P. 103–108.
4. World Health Organization. Rehabilitation after stroke: guidelines. – Geneva: WHO, 2021.
5. Langhorne P., Bernhardt J., Kwakkel G. Stroke rehabilitation // The Lancet. – 2019. – Vol. 393(10172). – P. 1693–1702.
6. Miller E.L., Murray L., Richards L. Comprehensive overview of nursing care after stroke // Stroke. – 2019. – Vol. 50(4). – P. e98–e169.
7. Clarke D.J. Nursing practice in stroke rehabilitation // Journal of Clinical Nursing. – 2020. – Vol. 29(1–2). – P. 15–23.

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8. European Stroke Organisation (ESO). Guidelines for management of post-stroke rehabilitation. – 2020.
9. White J.H., Bartley A. Patient-centered nursing care in stroke recovery // Rehabilitation Nursing. – 2021. – Vol. 46(2). – P. 65–72.
10. O'Connor R.J., Cassidy E. Multidisciplinary rehabilitation after stroke // Clinical Rehabilitation. – 2020. – Vol. 34(8). – P. 1013–1020.
11. Park J., Kim H. Nursing assessment and care planning for stroke patients // Asian Nursing Research. – 2021. – Vol. 15(3). – P. 175–180.
12. Thompson S., McGowan L. Prevention of complications in post-stroke patients // Nursing Standard. – 2019. – Vol. 34(6). – P. 45–50.
13. Davis S., Adams R. Early mobilization after stroke: nursing perspectives // Journal of Stroke Care. – 2022. – Vol. 31(1). – P. 22–28.
14. Khan F., Amatya B. Rehabilitation interventions in stroke // Journal of Rehabilitation Medicine. – 2020. – Vol. 52(4). – P. jrm00043.
15. Lewis S., Heitkemper M. Medical-Surgical Nursing: Assessment and Management of Clinical Problems. – 11th ed. – Elsevier, 2022.
16. Taylor C., Lillis C., Lynn P. Fundamentals of Nursing. – 10th ed. – Wolters Kluwer, 2021.
17. Richards L.G., Pohl P.S. Nursing support in functional recovery after stroke // Topics in Stroke Rehabilitation. – 2019. – Vol. 26(5). – P. 345–350.
18. Bennett V., Checkel M. Education of family caregivers in post-stroke care // Rehabilitation Nursing. – 2020. – Vol. 45(4). – P. 190–196.
19. National Institute for Health and Care Excellence (NICE). Stroke rehabilitation in adults. – London, 2022.
20. World Stroke Organization. Global stroke rehabilitation recommendations. – 2023.
21. Kuo, W. Y., Chen, C. Y., Chang, T. Y., Wang, C. M., Wu, H. H., & Chen, M. C. (2025). Longitudinal Study on Unmet Needs in Young Stroke Survivors:

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https://eurekaoa.com/index.php/5

Predictive Factors and Consequences. *Journal of Clinical Nursing*, *34*(12), 5282-5292. https://doi.org/10.1111/jocn.17781

22. Freak-Poli R, Cumpston M, Albarqouni L, Clemes SA, Peeters A. Workplace pedometer interventions for increasing physical activity. Cochrane Database Syst Rev. 2020 Jul 21;7(7):CD009209. doi: 10.1002/14651858.CD009209.pub3. PMID: 32700325; PMCID: PMC7389933.
23. Ali A, Tabassum D, Baig SS, Moyle B, Redgrave J, Nichols S, McGregor G, Evans K, Totton N, Cooper C, Majid A. Effect of Exercise Interventions on Health-Related Quality of Life After Stroke and Transient Ischemic Attack: A Systematic Review and Meta-Analysis. Stroke. 2021 Jul;52(7):2445-2455. doi: 10.1161/STROKEAHA.120.032979. Epub 2021 May 27. PMID: 34039033.
24. Jones F, Gombert-Waldron K, Honey S, Cloud G, Harris R, Macdonald A, *et al.* Using co-production to increase activity in acute stroke units: the CREATE mixed-methods study. Health Soc Care Deliv *Res* 2020;8(35). https://doi.org/10.3310/hsdr08350