

MULTIMORBIDITY AND PAIN CHALLENGES IN STROKE REHABILITATION

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Introduction: Multimorbidity, characterized by the presence of multiple chronic conditions in an individual, presents significant challenges in stroke rehabilitation. Stroke, a leading cause of disability globally, often affects individuals with multimorbidity, further complicating the rehabilitation process. This paper aims to explore the interplay between multimorbidity and pain in the context of stroke rehabilitation and the associated challenges.

The objective of this study is to investigate the prevalence of multimorbidity and pain in stroke patients and their implications for rehabilitation outcomes. A comprehensive literature review was conducted to gather pertinent research on stroke, multimorbidity, pain, and rehabilitation. The review revealed a high prevalence of both multimorbidity and pain among stroke survivors, with common comorbidities

Material and methods: We conducted an analysis on a sample of 270 stroke survivors enrolled in a rehabilitation facility to examine the data and apply statistical methods. The data collected included demographic information, such as age, gender, and medical history, along with the presence of comorbidities and pain experienced by the participants. Descriptive statistics, including means, standard errors, and confidence intervals, were calculated to summarize the data. The prevalence of multimorbidity and pain among stroke survivors was determined, and inferential statistics were used to compare the mean number of comorbidities for individuals with and without pain.

Results. The sample of 270 participants were divided into those with and without pain. For the group without pain, the mean number of comorbidities was 2.818. The 95% confidence interval for the mean ranged from 2.621 to 3.015. For the group with pain, the mean number of comorbidities was 4.175. The 95% confidence interval for the mean ranged from 3.944 to 4.406.

Out of the total sample size of, 107 (39.6%) reported having no pain, 49 (18.1%) reported experiencing acute pain, and 114 (42.2%) reported chronic pain. The mean number of regions for individuals experiencing pain is 2.581, with a standard error of 0.1091. The 95% confidence interval for the mean ranges from 2.366 to 2.797.

The presence of comorbidities and pain in stroke patients significantly impacts the rehabilitation process. Firstly, managing multiple chronic conditions concurrently increases the workload and complexity for healthcare professionals, necessitating a multidisciplinary approach to care. Secondly, comorbidities and pain often lead to functional impairments and heightened disability, making rehabilitation goals more challenging to achieve. Thirdly, the interaction between comorbidities, pain, and stroke can result in unique clinical presentations, requiring customized treatment plans.

Several challenges arise in stroke rehabilitation due to the coexistence of multimorbidity and pain. Customizing treatment plans to address the individual needs and limitations of each

patient becomes crucial. Coordinating care among diverse healthcare providers becomes more intricate, demanding effective communication and collaboration. Furthermore, managing polypharmacy and potential drug interactions adds complexity to stroke rehabilitation. Finally, integrating behavioral and lifestyle interventions becomes vital in addressing risk factors and promoting overall health when managing multiple chronic conditions and pain.

Conclusions: Individuals with pain tend to have a higher mean number of comorbidities compared to those without pain. The distributions for both groups display slightly positive skewness, indicating a preference for lower comorbidity counts. The coexistence of multimorbidity and pain presents significant challenges in stroke rehabilitation. The high prevalence of comorbidities and pain among stroke survivors complicates the rehabilitation process and necessitates tailored approaches to meet individual needs. Addressing the unique challenges associated with multimorbidity and pain requires a multidisciplinary approach, effective care coordination, and innovative interventions. By comprehending and addressing the impact of multimorbidity and pain, healthcare professionals can optimize stroke rehabilitation outcomes and enhance the quality of life for individuals with stroke and comorbidities.