

Frey test, which applies stimuli with nylon monofilaments (0.05 to 300 g) to the animal's paw, with an expected response of shaking, cleaning, or lifting the paw if the stimulus is felt. Each filament was applied 10 times, and a positive result occurred when the animal responded 40% of the time to the same filament. Tests were conducted before injury and on days 7, 14, 21, and 28 post-CCI. Statistical analyses included the Shapiro-Wilk normality test and one-way ANOVA with Tukey's post hoc test, using Prism 9 software. p -values < 0.05 were considered significant.

Results: In the Von Frey sensory test, all groups showed worsened sensitivity on day 7, with no significant differences ($p = 0.89$). On day 14, the CCI + VE group improved, matching the SHAM group, while the CCI group maintained significantly worse sensitivity compared to the other groups (one-way ANOVA, $F(3,11) = 5.6$; $p = 0.001$). On days 21 and 28, the CCI group aligned with the SHAM and CCI + VE groups ($p = 0.35$).

Conclusion: VE combined with EE accelerated the recovery of the CCI + VE group, which showed a faster improvement in mechanical sensitivity starting on day 14, compared to the CCI group, which only improved from day 21 onwards.

Implications: The findings suggest that the combined intervention may be a more effective strategy for neuropathic pain modulation. Translating to clinical practice, outdoor or group exercises are recommended as a form of enrichment.

Keywords: Physical Exercise, Hyperalgesia, Nervous System

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169

EDUCATIONAL LEVEL AND INCOME ARE ASSOCIATED WITH KNOWLEDGE OF STROKE IN USERS OF SUS IN SOUTH OF BRAZIL

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Background: Stroke is the primary cause of disability among adults in Brazil and imposes a substantial financial burden on the Unified Health System (SUS). This burden can be alleviated through primary care preventive measures focused on identifying risk factors and early disease diagnosis. However, few studies evaluate SUS users' knowledge about stroke.

Objectives: This study aimed to assess the knowledge of stroke among the population using the SUS in the South of Santa Catarina and explore the association of educational level and income with knowledge of stroke in this population.

Methods: This cross-sectional study was conducted between January and April 2023, using a questionnaire developed by researchers which evaluated knowledge about stroke regarding signs and symptoms, pathophysiology, risk factors and sequelae. A total of 350 individuals participated. The collected data were organized and analyzed using the Statistical Package for Social Sciences (SPSS) version 22 for Windows. The chi-square test was used to assess the association between sociodemographic variables and questionnaire responses.

Results: The sample was mostly female, with a mean age of 36 ± 14.33 years, mostly white, married/stable union, with an income of 1.5 minimum wages. It was observed that most participants believed to know in about pathophysiology, signs and symptoms,

risk factors and sequelae of stroke, but few responded correctly. Among the responses that were considered adequate, it was possible to observe a significant association between education level and giving an adequate response, demonstrating that the variable education level influences the adequacy of the participant's response. It was also possible to see that individuals with lower incomes (up to 1.5 minimum wages) make more mistakes regarding the pathophysiology of stroke. When comparing income and knowledge of the signs and symptoms of stroke, it was observed that there is a tendency to be statistically significant, with individuals with lower incomes (up to 1.5 minimum wages) presenting more inadequate responses. During the analyses, it was possible to observe a statistically significant association between those who say they know the risk factors and family history of stroke ($p = 0.001$; $X^2 = 11.343$). Individuals who had a history said they knew more about the risk factors (71.3%) when compared to those who did not have a family history (53.7%). However, when evaluating only the yes answers, classified as adequate or inadequate, it was seen that this difference was not significant ($p = 0.758$; $X^2 = 0.095$), demonstrating that having a family member with stroke does not increase knowledge of the risk factors of the disease. There was also no statistically significant relationship between family history and responding adequately to the pathophysiology of stroke ($p = 0.543$; $X^2 = 0.371$), sequelae ($p = 0.678$; $X^2 = 0.172$) and signs and symptoms ($p = 0.697$; $X^2 = 0.152$).

Conclusion: This study showed that most of the interviewees do not know in general about stroke, and that lower incomes and level of education are associated with answers that are inadequate, while having a family member with stroke does not increase knowledge of stroke.

Implications: It became evident that educational interventions are essential for the general population to enhance stroke prevention and minimize its impact.

Keywords: Knowledge, Unified Health System (SUS), Stroke

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170

BRAIN-COMPUTER INTERFACE IN COGNITIVE REHABILITATION FOR INDIVIDUALS WITH PARKINSON'S DISEASE AND IMPROVEMENT IN OCCUPATIONAL PERFORMANCE: A PILOT STUDY

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Background: Parkinson's disease (PD) causes non-motor symptoms such as cognitive impairments, which can progress to dementia, leading to occupational performance issues. The use of a non-invasive brain-computer interface (BCI) is a promising approach in neurofunctional rehabilitation, such as the application of an upper-limb exoskeleton. Although BCI has been validated for other neurological conditions, further research is needed to investigate its impact as a