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## PREDICTORS OF FUNCTIONAL RECOVERY IN PATIENTS WITH CHRONIC NECK PAIN UNDERGOING A PHYSIOTHERAPY MULTIMODAL TREATMENT

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**Background and aims:** Few studies have investigated prognostic factors associated with short-term outcomes following physiotherapy treatment. This study aimed to identify prognostic factors associated with successful outcomes (SO) after 7-weeks of physiotherapy, in chronic neck pain (CNP) patients.

**Methods:** A prospective study of 108 CNP patients undergoing a 7-week multimodal physiotherapy treatment. Patients were assessed at the baseline and 7 weeks after. Socio-demographic and clinical characteristics of CNP were included as potential predictors of a SO. Based on a previous study, a SO was defined as a change in the Neck Disability Index of > 6 points (minimal clinically important difference - MCID; range values: 0-50). Logistic regression analysis (backward method) was used to identify the associations between predictors and the outcome.

**Results:** Of the 108 patients enrolled, 105 completed the follow-up (mean age of  $51.9\pm10.2$ ). Rate of success after 7 weeks of physiotherapy treatment was 55%. In the final multivariate model, SO was significantly associated with higher levels of disability at the baseline (OR 1.190 - CI 95% 1.102-1.285), and low levels of pain (OR 0,684 - CI 95% 0.510-0.918). The logistic regression model was statistically significant (X2(5) = 26.956, p < .0001) and explained 30.3% (Nagelkerke  $R^2$ ) of the variance of the improvement of the disability above the MCID. The model correctly classifies 71.4% of the patients (sensitivity, 72.4%; specificity, 70.2%).

**Conclusions:** CNP patients with low levels of pain and high levels of disability at the baseline are more likely to experience successful short-term outcomes after physiotherapy treatment.