THE USE OF SBST IN EMERGENCY DEPARTMENTS FOR PATIENTS WITH ACUTE LOW BACK PAIN: A PROSPECTIVE INCEPTION COHORT STUDY

Autores

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Afiliação

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Background: The Nice guidelines recommends that physicians should use screening instruments such as STarT Back Screening Tool (SBST) in primary care to identify patients at risk of unfavourable prognosis. There are no studies that investigated the clinical utility of the SBST in emergency departments. Objectives: 1) To analyse the clinical utility of the SBST in emergency departments by describing changes in classification over time and; 2) to identify what would be the best time to use the SBST to predict long term clinical outcomes in patients with acute low back pain (LBP) seek emergency care. Methods: A 6-month prospective inception cohort study was conducted and approved by the Ethics Committee (CAAE: 25315713.7.0000.0064). A total of 200 participants with a new episode of acute LBP seeking emergency medical treatment were included. Pain intensity, disability and SBST were collected at baseline, 6 and 26 weeks. Categories of improvement, clinical worsening, and stability were created to calculate the changes in the SBST subgroups. Linear regression models were built to analyse the predictive ability of SBST when applied at baseline, 6-week as well as changes in the subgroup from baseline to 6-week. These models were adjusted for potential confounders. Results: 45% of patients were classified as high risk of chronicity at baseline. Most patients classified as medium (86.7%) or high (52.4%) risk changed their risk subgroup after 6 weeks and most of them improved. The SBST improved the prediction for all outcomes when applied at 6 weeks ($R^2 = 22.1\%$ for disability and $R^{2}=15.6\%$ for pain intensity), but not at baseline. Conclusion: Most of patients with a new episode of acute LBP seeking care in emergency departments improved after 6 when they received minimal emergency care. The use of SBST to guiding initial treatment and to predict clinical outcomes are most indicated when the instrument is applied after 6 weeks after presentation to emergency care.

Key words: Acute low back pain; Emergency department; STarT Back Tool; Inception cohort; Prediction models