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## BACKGROUND

Low back pain is a prevalent and debilitating condition that generates high socioeconomic costs. Although clinical guidelines recommend active interventions and pain education in primary care, the proportion of emergency department visits related to low back pain is similar to colds, fever, and respiratory problem. Furthermore, most emergency department visits for spinal pain are related to chronic non-specific low back pain. (CNLBP). However, there is a lack of evidence on the prognosis for CNLBP in emergency departments, especially in low and middle-income countries.

### Purpose

The aim of this study is to describe the prognosis of Brazilian patients with non-specific chronic low back pain from emergency departments.

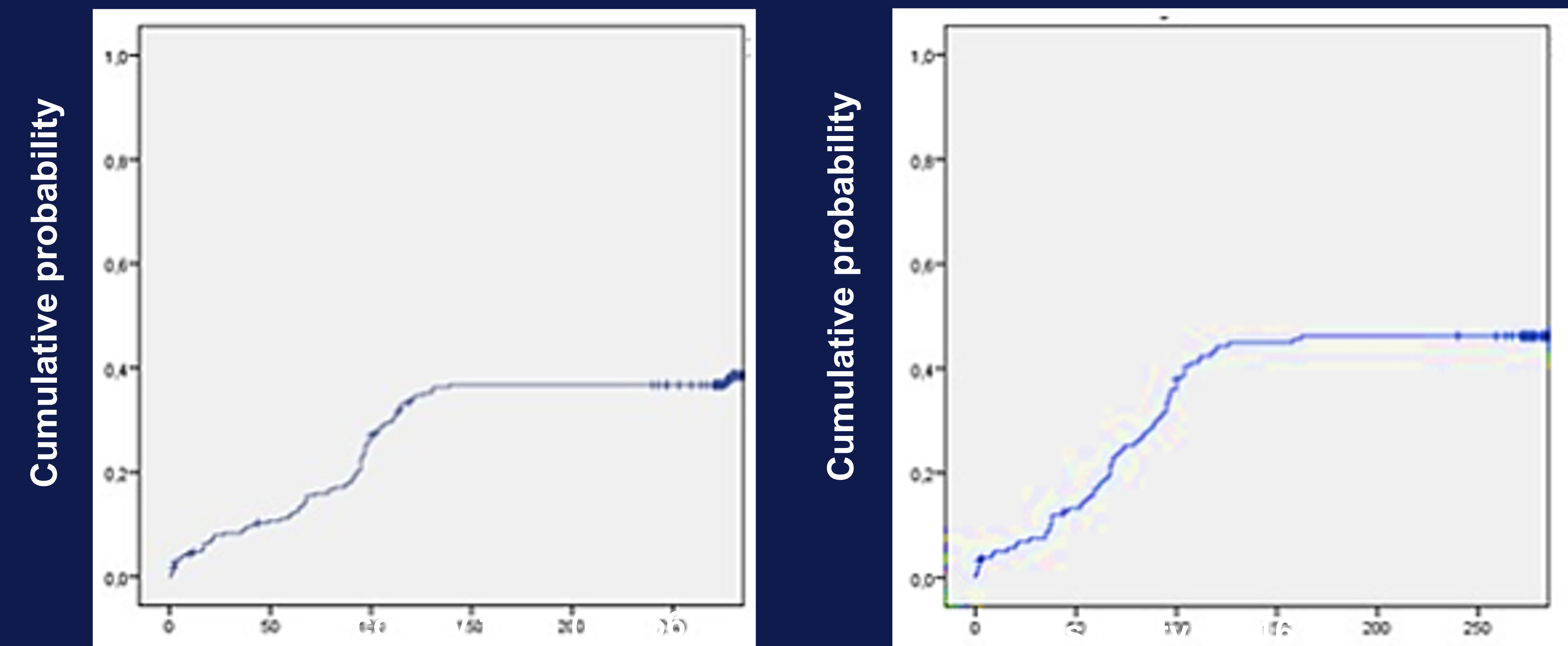
## METHODS

<b>Study design</b>	This study used data from a prospective inception cohort study on the prognosis of patients with non-specific acute low back pain.
<b>Participants</b>	Patients with CNLBP aged 18-80 years of both sexes from four emergency departments in São Paulo, Brazil were included. Patients with pain due to nerve compression, severe pathologies (fracture, tumor, and infection), any renal condition, and inability to comprehend Portuguese were excluded.
<b>Outcomes</b>	Days to recovery from pain (the absence of pain for 30 consecutive days). Days to recovery from disability (the absence of disability for 30 consecutive days).
<b>Data analysis</b>	Kaplan-Meier survival analysis was used to describe the prognosis of non-specific chronic low back pain for recovery from pain and disability. Survival curves were built using the number of days to recover from pain and disability over 9 months. The 75th percentile was used to estimate the survival time for each outcome.

## RESULTS

A total of 256 patients with CNLBP were included. Patients presented moderate pain at baseline (Numerical Pain Scale [0-10], mean=6, standard deviation [SD]=3) and at 9 months (mean=5, SD=3). Patients presented moderate disability at baseline (Roland Morris Questionnaire [0-24], mean=14, SD=7) on the onset of symptoms and at 9 months (mean=12, SD=9).

Figure 1 shows the survival curves for recovery from pain and recovery from disability. The 75th percentile survival time were 97 days for recovery from pain and 74 days for recovery from disability over nine months.



**Figure 1.** The cumulative probability for recovery from pain was 18% (95% confidence interval [CI]: 13-23) at 3 months, 36% (95% CI: 30-41) at 6 months, and 37% (95% CI: 30-42) at 9 months. The cumulative probability for recovery from disability was 30% (95% CI: 23-37) at 3 months and 46% (95% CI: 37-53) at 6 months. It was not possible to estimate the cumulative probability of recovery from disability at 9 months.

## CONCLUSION

The prognosis is moderately optimistic for Brazilian patients with CNLBP from emergency departments for recovery from pain and recovery from disability over 9 months.

## RELEVANCE TO PATIENT CARE

This study provides valuable insights for clinicians, researchers, and decision makers on the prognosis of patients with CNLBP from Brazilian emergency departments over 9 months. Recovery from pain and recovery from disability was slow and incomplete. Thus, clinicians should follow the recommendations of clinical guidelines to improve care and outcomes for patients with CNLBP in critical healthcare environments.