

Persistence of Anxiety and Depression in Patients with Prolonged Post-Concussion Symptoms



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Introduction



Concussion commonly results in various physical, cognitive, sleep and emotional symptoms, which for 10-15% of patients persist long-term. These patients can benefit from interventional rehabilitation to promote earlier symptom resolution, recovery and the reduction of secondary emotional sequelae.

Study Aim

- To evaluate the incidence of anxiety and depression for patients with persistent post-concussion symptoms who are being treated in Epworth HealthCare's Concussion Rehabilitation Clinic
- To evaluate whether commonly reported symptoms post-concussion (i.e. dizziness, visual problems, light sensitivity, sleeping more than usual, trouble falling asleep, irritability, nervousness and sadness) predict the persistence of anxiety after rehabilitation therapy on clinic discharge

Methodology / Participants (n=84)

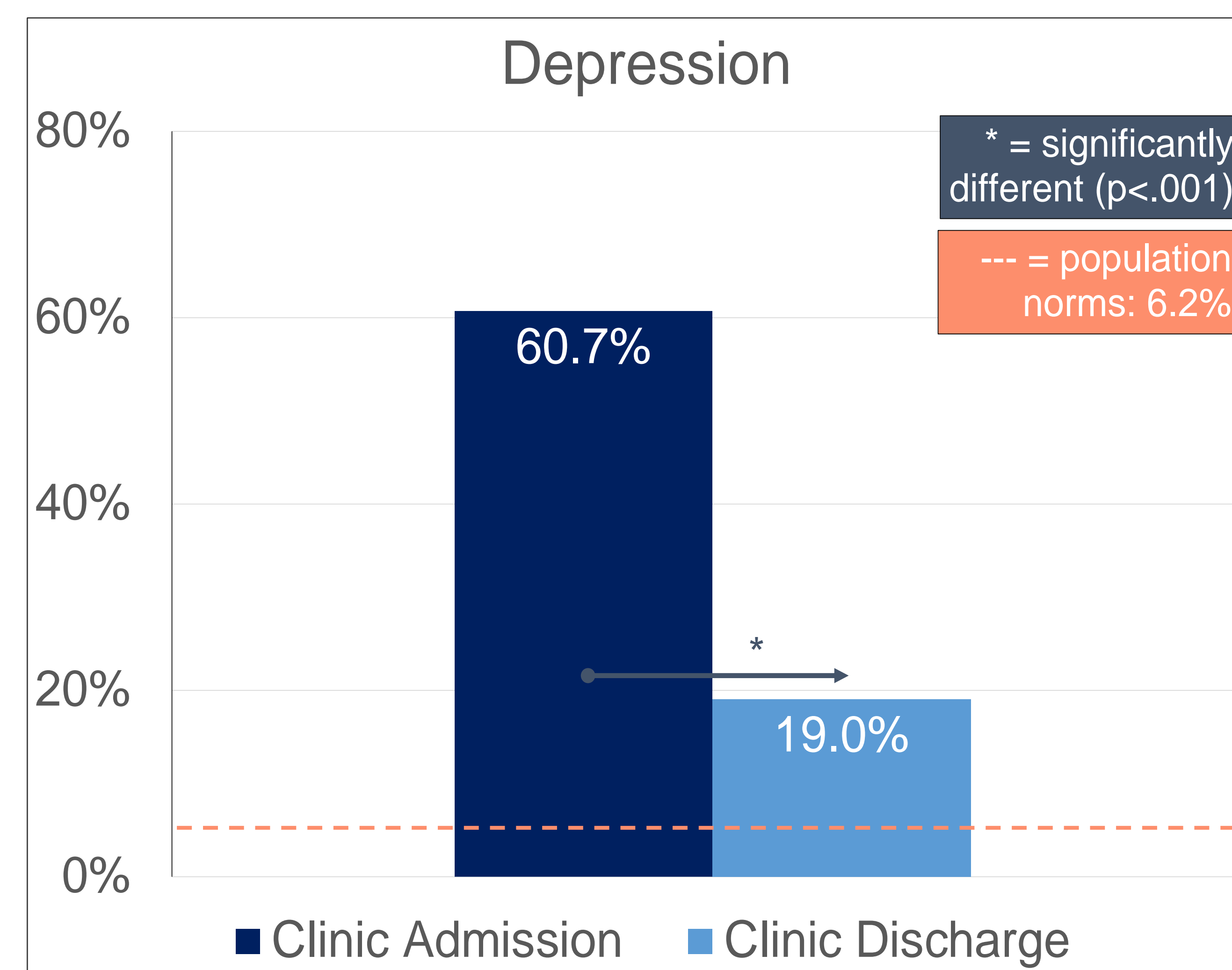
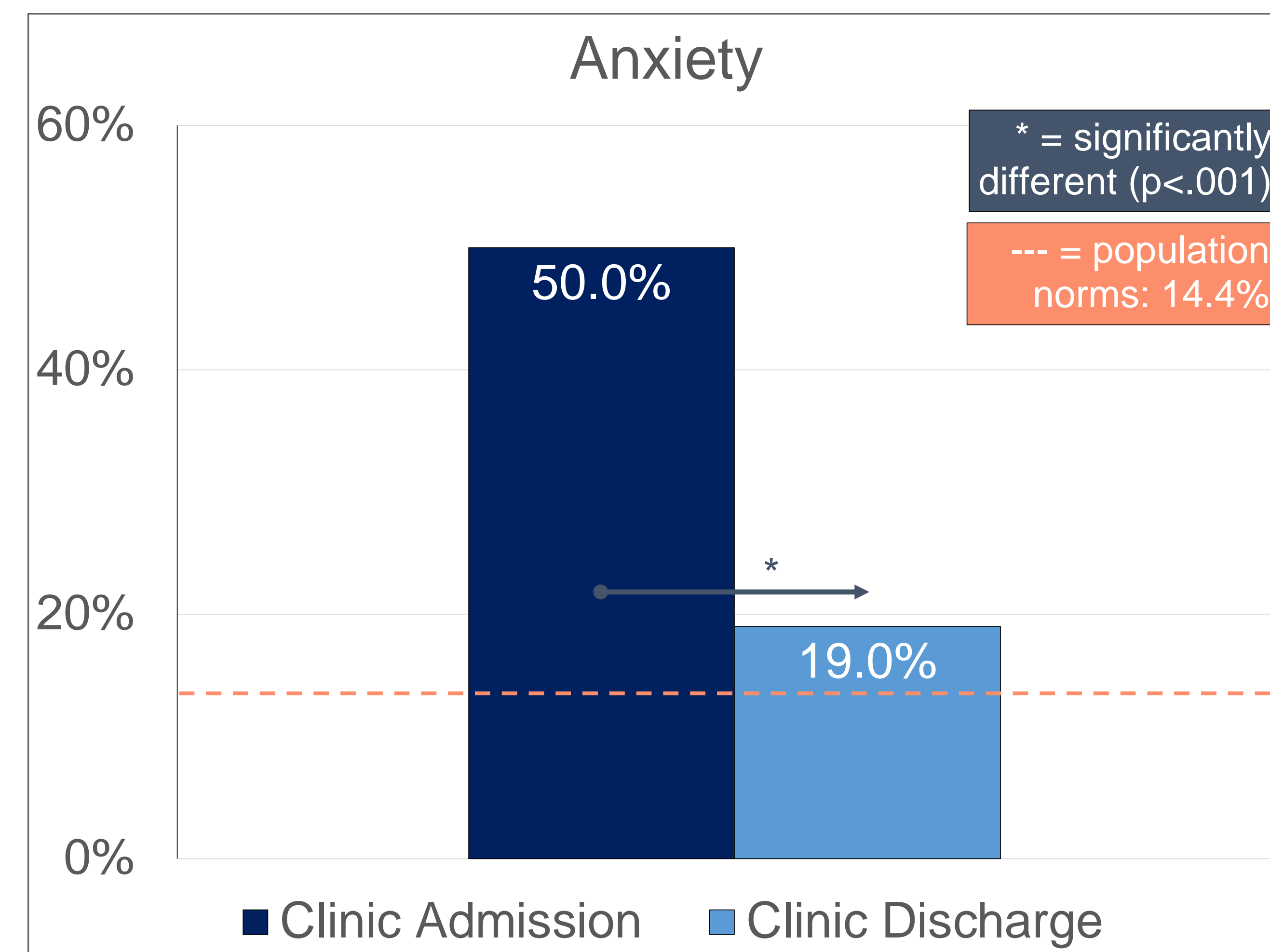
- On clinic admission and discharge, patients rate the presence/severity of 23 concussive symptoms using the Oregon Post Concussion Symptom Checklist. Initial symptom presentation directs referral for multidisciplinary therapy (e.g., neuropsychology, physiotherapy)
- Neuropsychologists administer the Depression Anxiety and Stress Scale (DASS-21) where anxiety and depression are defined as a score of ≥ 8 and ≥ 10 respectively, and then offer treatment.

Median Age (years): 32.0
Females: 58.3%

Median Days post injury: 62.0

First Concussion: 47.0%

Results



Population Norms from: <https://www.beyondblue.org.au/media/statistics>

Conclusions

Anxiety and depression are common and can persist post-concussion, likely stemming from the distress of experiencing other debilitating symptoms. Evaluating the predictive value of initial symptoms may result in extra attention towards alleviating these symptoms to promote better long-term emotional functioning.



- Of the sample, anxiety was reported in 50.0% of patients on admission. After rehabilitation treatment and on clinic discharge, there was a significant reduction in the number of patients with anxiety (19.0%). No patients developed anxiety during treatment.
- Depression was reported in more patients on admission (60.7%), and this was significantly reduced by discharge (19.0%)
- Anxiety and depression frequencies were higher than population norms
- Poisson regression found that patients with moderate-severe ratings of **nervousness** and/or **sleeping more than usual** on admission, are 8.9 and 3.2 times more likely to be classified as anxious on discharge