



Using the Pain Self-Efficacy Questionnaire (PSEQ) to predict likely outcomes of pain management interventions

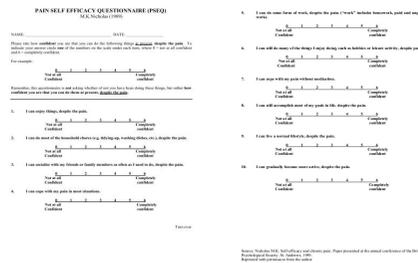
Christian Cooke Clinical Specialist Physiotherapist, Grevin Jones Clinical Specialist Physiotherapist & Professor Haag Consultant in Pain Medicine. Wrexham Maelor Hospital, Pain Management Service BCUHB.

Introduction

Within chronic pain services across the UK, injection based interventions are commonly used to help diagnose and treat chronic pain conditions. They play a significant part in the multimodal treatment of chronic pain particularly of a more musculoskeletal nature. It is often observed that outcomes can vary considerably despite adherence to a standardised, best practice approach and a careful selection of appropriately diagnosed conditions. An unsuccessful intervention may impact the patient negatively in terms of the potential physical and psychological harm. There is also a significant cost factor involved in the provision of ineffective treatment which in the case of intervention can be very costly. The following poster was aimed at assessing whether the PSEQ could help predict outcomes of pain interventions. The PSEQ is a prevalent outcome measure used within Chronic Pain services around the world. Self-efficacy is defined as our ability to confidently achieve a goal or complete a task and whether we think it will have a positive result (Bandura et al., 1977).

Objective

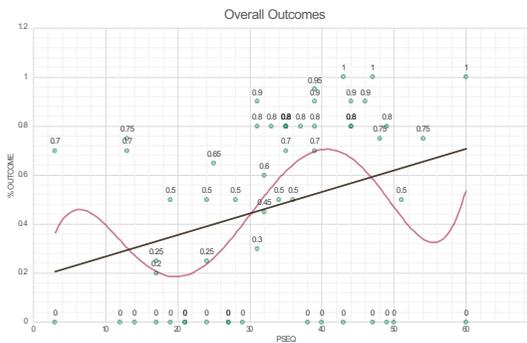
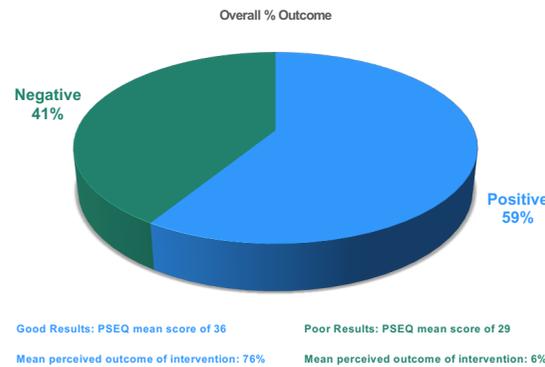
To assess whether the PSEQ could be used as a predictor of outcome when looking at pain interventions.



Method

- PSEQ taken pre intervention and the patient was followed up post intervention with perceived outcome of procedure.
- Pre education was provided prior to the intervention along with an assessment.
- Patients were followed up at 6 to 12 weeks.
- Perceived improvement was measured on a self reported scale of 0-100%. 100% relating to complete resolution of symptoms. A measurement of 50% relief was deemed a positive outcome.
- Data was collected and stored in tables and graphs.

Pre Intervention PSEQ and Outcome Post Intervention



Percentage of likely outcomes from PSEQ scores	Positive	Negative
30+	27 = 75%	9 = 25%
30-	7 = 35%	13 = 65%

Results

Below is a list of the interventions carried out.

Intervention	Number
Lumbar RF	22
Cervical Facet Joints	7
Epidurals	7
SU RF	6
Others	14

There was a total of 56 interventions over a 6 month period between August 2019 and February 2020. Each patient was assessed by two physiotherapist who specialise in pain management. A noticeable trend of higher PSEQ scores relating to a positive outcome. This is highlighted in the graphs opposite. There appears to be an apparent correlation between higher PSEQ scores and perceived improvement. In table 3, 75% of patients having higher than 30 PSEQ had a positive outcome from the interventions. This is in comparison to those scoring 30 or less who had a 35% of having a positive outcome. It was also highlighted that patients degree of successful outcome increased with PSEQ with those having a mean score of over 36 reporting over 76% improvement. This is compared to those recording a mean score of 29 with a 6% mean outcome of improvement.

Conclusion

It would seem that there is a relationship between self-efficacy using the PSEQ and perceived outcome of various interventions for patients with persistent pain. It would seem that patients who score more than 30 on the PSEQ are more likely to have a positive outcome whereas patients who score below 30 are more likely to have a negative outcome.

Suggestion

The PSEQ may be used as a predictor of outcome when considering an injection based intervention subject to further research. It could also suggest when interventions are not appropriate and other pain management approaches could be more beneficial. This may also raise the question to what extent self-efficacy could be improved prior to a planned intervention and hence improving the overall outcome. PSEQ may improve the efficiency of a patient pathway, ensuring the patient is seen by the appropriate clinician and receiving the most effective treatment in a timely fashion.