

DOES A BRIEF EDUCATIONAL SESSION PRODUCE POSITIVE CHANGE FOR INDIVIDUALS WAITING FOR TERTIARY CHRONIC PAIN SERVICES?

MAIN REFERENCE:

Burke, A. L., Denson, L. A., & Mathias, J. L. (2016). Does a brief educational session produce positive change for individuals waiting for tertiary chronic pain services?. *Pain Medicine*, 17(12), 2203-2217. <https://doi.org/10.1093/pm/pnw125>

ADDITIONAL REFERENCE:

Stanislawski, K. (2019). The coping circumplex model: an integrative model of the structure of coping with stress. *Frontiers in Psychology*, 10, 694. <https://doi.org/10.3389/fpsyg.2019.00694>

1.INTRODUCTION

STEPS model:

self-training educative pain sessions (STEPS): a 2-day (or six-session) pre-clinic program that educated patients on pain management and promotes active self-care.

- Finding: improved self-efficacy, reduced disability, greater strategy use, and increased patient satisfaction.

- Findings: significant reduction in demand for individual appointments, with over 50% of participants opting out of further input.

Current study:

- Exploring the effectiveness of a single, 3-hour, low-intensity multidisciplinary session for individuals on a chronic pain wait-list
- Aim: to assess if this brief session can provide positive short and intermediate term benefits for patients waiting for treatment.

2. METHODOLOGY

PARTICIPANTS:

- Included in sample:** newly referred adults to the PMU during the recruitment period.
- Patients must have basic english fluency and literacy to complete study components.
- Excluded in sample:** Referrals for cancer/palliative care, early interventions (e.g., Complex Regional Pain Syndrome), or within 6 months of referral, as they would likely receive initial appointments before the educational sessions or follow-up time-points.
- Individuals referred prior to November 2011, as all recruitment occurred at the time of referral.

STUDY DESIGN:

- Randomised into groups using a list generated online tool:
- treatment as usual: stander wait-list management.
 - Experimental: standard wait-list management and given an educational session.

INTERVENTION

Session duration was 3 hours, as recommended by research, to ensure effectiveness in the delivering of educational content.

Topics included:

- The processes of chronic pain
 - Information on the clinical unit and treatment expectations
 - The impact of psychological factors on pain
 - Pain management techniques (e.g., relaxation, mindfulness, and cognitive strategies).
 - Goal setting, sleep hygiene, distraction, self-care, exercise, pacing activities, and medication.
- The goals of the session:**
Encourage participants to rethink their approach to managing pain though:
- Basic education on pain processes
 - Discussing the limitations of pain medications
 - Exploring ways to improve quality of life despite the pain

THEORY

Lazarus and Folkman's coping theory examines how individuals manage stress through cognitive and behavioral efforts. They identify two main coping strategies:

- Problematic-focused (addressing the stressor)
- Emotion-focused (managing emotional responses)

The theory emphasizes the importance of personal perception and appraisal in determining how someone responds to stressors (Stanislawski, 2019).



MEASURE

- Patient Screening Questionnaire (PSQ)
- Pain severity (Brief Pain Inventory: BPI-PS)
- Pain-related interference (Brief Pain Inventory: BPI-PI)
- Kessler Distress Scale: K10)
- Chronic Pain Acceptance Questionnaire (CPAQ)
- WHOQOL-BREF
- Social Desirability Response Set Scale (SDRS-5)



3. RESULTS

Pre-clinic education session:

- 66 participants attended the session, and 59% provided feedback.
- Most participants were satisfied with the content and found it moderately useful.
- despite satisfaction, the session had limited impact on changing their pain perceptions.

Outcomes measures and results:

- Pain acceptance: no significant impact from the educational sessions. However, pain acceptance improved over time for all groups.
- Pain-related interference: no significance difference between groups.
- Psychological distress: not influenced by the session attendance or waiting time.
- Health care utilisation (HCU): no significance difference between groups. However, HCU decreased over time, especially for the experimental group.
- Treatment types: no significant difference in the type of treatment tried, but treatment usage decreased after referral to the PMU.
- Quality of life: no significant change across groups from most quality of life domains.
- Pain severity: no significant difference across groups or time points.
- Symptom exaggeration: no significant changes observed
- Health knowledge/ beliefs: no significant difference in health knowledge/ beliefs across groups or over time.

PROCEDURES

Referral and randomization --> study documents
--> Treatment as usual group (TAU) / Experimental group (EXP) --> Questionnaire follow-up --> session feedback --> clinical appointment --> reminder pack --> support for distress --> thank you note.

STATISTICAL ANALYSIS

- Independent samples t-test and Chi-square tests: used to compare EXP participants who did not attend (DNA).
- One-way ANOVAs: used to check for differences between groups at baseline (time point 1 (T1) to ensure comparability.
- Repeated measures mixed-model analysis: explore the impact of time points (T1, T2, T3), and groups (EXP, DNA, TAU) on outcome measures like pain acceptance, pain interference, psychological distress, QOL, etc.
- Post-Hoc Analysis: where significant differences were found, post-hoc t-test with Bonferroni corrections were conducted.
- Effect size:
- Cohen's d was calculated to assess standardised differences between groups.

CRITICAL EVALUATION

STRENGTHS

- clear objective
- Robust sample size
- Effective randomisation
- Diverse outcome measure
- Longitudinal assessment
- Real-world application

WEAKNESS

- No long term follow up
- Limited impact of the educational session
- Potential bias in participant selection
- Self-reporting bias
- Lack of treatment group comparison

4. CONCLUSION

The study challenges the assumption that educational interventions alone can improve functioning, and highlights that referral to a chronic pain service, rather than the actual treatment, may bring short-term functional improvements. However, the lack of improvement in function despite some positive short-term change's calls into question the overall effectiveness of the educational session. Furthermore, the study doesn't explore the psychological aspects of the waiting period in-depth, despite reporting some improvements in psychosocial distress.