

painACTION.com: Web-based support to self-manage neuropathic pain

Kevin Zacharoff, Jonas Bromberg, Synne Venuti, Mollie Wood, Dan Surette
Inflexion, Inc., Newton, MA, USA

Purpose

Neuropathic pain (NP) is one of the most common pain conditions encountered in clinical practice and is associated with significant physical and psychosocial morbidity. NP is difficult to manage, and extremely hard to treat with traditional biomedical approaches. It is widely recognized that a key component of effective pain treatment is engaging the patient in self-management. However, there are very few resources to support self-management available for people with NP, and those that exist are primarily clinic-based and not widely accessible.

The purpose of this study was to test the efficacy of a Web site designed to help people with neuropathic pain: (1) increase self-management behaviors; (2) reduce pain related psychosocial distress; and (3) reduce pain frequency and severity.

Method

This study is a parallel groups design conducted over a 7-month period. All participants completed online pain ratings for two weeks to establish their baseline level of pain. Participants then completed a baseline assessment before being assigned to a study group. Participants assigned to the experimental condition are given access to a tailored interactive Web site, while participants in the control condition were given access to a nontailored, information-only Web site. Participants completed a minimum number of sessions of the Web sites during a 4-week intervention period. Follow-up assessments were conducted at one-, 3-, and 6-months postbaseline.

Results

Compared to controls, participants in the experimental group showed significantly greater mean decreases in: (1) worst pain reported on the BPI (Baseline to Post: $P=.01$); (2) pain severity (Baseline to Post: $P=.001$); and (3) pain interference on the BPI (Baseline to Post: $P=.0002$). Relative to controls, participants in the experimental group showed a significantly greater mean increase for two specific pain coping strategies: (1) relaxation on the CPCI (Baseline to Post: $P=.006$); and (2) resting (Baseline to Post: $P=.005$), and a significantly greater decrease in mean change in guarding on the CPCI (restricting use or movement of a body part; Baseline to Post: $P=.006$).

Conclusions

The Internet is can be excellent vehicle for helping patients with chronic neuropathic pain manages their condition. However, existing pain Web sites do not offer site users a tailored interactive experience, which help patients attain improved outcomes in headache management and symptom reduction. Because many people have limited access to effective behavioral and lifestyle change support, the proposed online intervention will make painACTION a significantly innovative advance in neuropathic pain care.