Introduction

Back pain is highly prevalent in today’s society. For example, in the 2007/2008, the Accident Compensation Corporation’s (ACC) injury statistics revealed 15,313 new back pain claims and 24,024 on-going back pain. Although pain in general is not well understood, a relationship between pain and emotions has been established for some time. Clinical studies have shown that positive emotions are frequently associated with reduced self-reported pain. More specifically, experimental studies have shown that positive emotions, induced using a variety of techniques (e.g. music, pictures, films and odours), reduce experimental pain sensitivity and increase pain tolerance in chronic pain populations (Arnold et al., 2008; Pressman & Cohen, 2005; Strand et al., 2007; Strand et al., 2006; Vaire et al., 2008). Positive psychology interventions have proven effective in increasing happiness and well-being, and reducing depression. Despite this being the case, positive psychology interventions have not been utilised within the chronic pain field. This study explored the efficacy of a character strengths and gratitude intervention with people suffering from chronic back pain.

Method

• Eight participants, recruited from the Auckland Regional Pain Service (TARPS), took part in a multiple-baseline cross-over study.
• Participants received 1-3 weeks of baseline assessment followed by either the intervention or the control for 2 weeks and then 2 weeks of the alternative (see Figure 1).
• The intervention involved two daily tasks: (a) using character strengths (identified by the Values in Action Inventory of Strengths) in new and interesting ways, and (b) identifying three good things that happened each day and their causes. The control involved 10-15 minutes of daily writing about positive memories.
• Daily measures were used to assess mood (happiness, sadness, anger) and pain. Additionally, phase measures were used to assess happiness, depression, anxiety, pain catastrophizing and pain. These were administered at the beginning of baseline, end of baseline, between experimental conditions and at follow-up.

Results

• Figures 2 and 3 show the individual means of the final seven days for each condition of happiness and anger respectively. Visual examination of the daily ratings reflected in these figures showed that for six of the eight participants happiness was highest during the character strengths and gratitude intervention, while anger was lowest for all participants during this condition.

• Table 1 shows the group medians and range for each of the emotions for each condition. There was a significant difference in anger ratings between the conditions in favour of the character strengths intervention (Friedman’s test, F(2) = 11.267, p = .004).
• Table 2 shows the medians of phase change measures. No significant differences were found.

Conclusions

• The character strengths and gratitude intervention significantly reduced anger and improved daily happiness for the majority of participants.
• While it was not effective in improving sadness, anxiety, depression, pain catastrophizing or pain, a number of factors were not controlled for. These included medication changes and adherence.
• Positive psychology interventions may be effective for people with chronic back pain although more research is warranted.

Further information


Literature cited


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