### **RESEARCH BRIEF**







# Characteristics and impact of self-management programs in people with chronic pain: A systematic review and meta-analysis

### **Summary**

Results of this review demonstrate the wide variety not only of conditions targeted by pain self-management programs but also the diversity of self-management strategies used in these programs, and the various delivery modes, duration and intensity of these programs.

Despite this wide variety, we found a small but significant impact of self-management programs compared with no intervention or usual care, especially in the short-term period.

### **Implications**

Self-management programs for chronic pain have significant effects on several short- and medium-term health outcomes. These results support the use of self-management as a viable treatment option. People with chronic pain are likely to improve their physical and mental health by participating in a self-management program for chronic pain.

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### What is the current situation?

Access to the most effective, evidence-based self-management programs for chronic pain is needed to help patients better cope with their condition.

### What is the objective?

To evaluate the characteristics and impact of self-management programs for individuals with chronic pain aged 14 years and older.

### How was the review conducted?

We conducted a systematic review in MEDLINE, CINAHL and PsycINFO and two grey literature sources. Meta-analyses were conducted to evaluate the impact of self-management programs for people with chronic pain.

#### What did the review find?

- 158 articles describing 104 self-management programs were included in the review. Of these articles, 57 were randomized controlled trials and were included in the meta-analyses.
- The majority of studies were from the United States (33%), Australia (17%), United Kingdom (9%) and Canada (8%), and were published between 2010 and 2019 (67%).
- 42% of the programs were for individuals with chronic pain in general and 33%targeted individuals with chronic musculoskeletal pain.
- The most common components were mind-body approaches (89%), physical activity (83%), pain education (80%), psychological education (75%) and healthy lifestyle education (54%).
- The most frequent self-management strategies used in the programs were goal setting (75%), pacing (52%), problem solving (44%), and action planning (33%).
- Psychologists (37%), physiotherapists (35%), nurses (23%) and occupational therapists (11%) were the most frequent program facilitators.
- More than half of the programs were delivered in a course format (56%) and included group (34%) or individual discussions (24%).
- Compared to usual care, self-management programs significantly improved pain interference, physical-related quality of life, anxiety, stress, and catastrophizing in the short-term (0-3 months).
- Although small, this effect was present in the medium-term (4-6 months) for pain interference, depression, anxiety, catastrophizing and self-efficacy.