Effects of an eLearning course on osteoarthritis knowledge and pain self-efficacy for consumers with hip and/or knee osteoarthritis: a RCT

RK Nelligan, RS Hinman, F McManus, A de Silva, M Gregory, N Bidgood, KL Bennell

1. Background

People with osteoarthritis (OA) feel **ill-informed** about the condition and **how to self-manage**. Patient education is a core component of OA care but **comprehensive** evidence-based **education** is **neither frequently provided nor easily accessible**.

2. Methods

124 Australian community volunteers with knee/hip OA randomised to either

- 4-week self-directed eLearning*
- Electronic OA pamphlet (control)

→ 5 weeks (primary timepoint)

→ 13 weeks (follow-up)

Primary outcomes

Change over 5 weeks in:

- **knowledge** (Osteoarthritis Knowledge Scale (OAKS))
- **pain self-efficacy** (Arthritis Self-Efficacy Scale (ASES pain subscale))

Secondary outcomes:

Fear of movement, exercise self-efficacy, OA illness perceptions, physical activity levels, and use of physical activity/exercise, weight loss, pain medication, and health professional care seeking to manage joint symptoms.

***4-week self-directed eLearning course for people with hip/knee OA**

Designed in collaboration with people with OA
+ informed by behaviour & learning theory

- Week 1: Learning about OA
- Week 2: Physical activity & exercise for OA
- Week 3: Body weight & OA
- Week 4: Additional strategies, make an action plan & conclusion

3. Results

117 (94%) participants (mean (SD) age, 67.1 (8.8) years; 91 (77.8%) female) provided 5-week primary outcomes.

Primary outcomes

- At 5 weeks the **eLearning** group showed **greater improvements** in OA **knowledge** (mean difference 5.3 (95% CI 2.5, 8.2), <0.001).
- This was **sustained at 13 weeks** (4.6 (2.1, 7.0), <0.001).
- There was **no evidence** of between-group **differences in pain self-efficacy** at 5 or 13 weeks.

Secondary outcomes

- Between-group differences for exercise self-efficacy & OA illness perceptions at 5 weeks & fear of movement and use of weight loss to manage joint symptoms at 13 weeks favoured the eLearning group. There were no important differences for other secondary outcomes.

4. Conclusions

An interactive self-directed **eLearning** course led to **immediate & sustained improvements in knowledge** about OA and its recommended management but **not pain self-efficacy** when **compared** to an electronic information pamphlet, a typical OA education intervention.

Course access: futurelearn.com/courses/taking-control-hip-and-knee-osteoarthritis

THE UNIVERSITY OF MELBOURNE

Centre for Health, Exercise and Sports Medicine

Department of Physiotherapy, The University of Melbourne.
Further information: **Rachel Nelligan, rachel.nelligan@unimelb.edu.au**

@CHESM_unimelb
/CHESMunimelb
/company/chesm

Primary outcomes

Change over 5 weeks in:

- **knowledge** (Osteoarthritis Knowledge Scale (OAKS))
- **pain self-efficacy** (Arthritis Self-Efficacy Scale (ASES pain subscale))