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Topic area: PARE abstracts

Topic: Patient information and education

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THE DEVELOPMENT AND EVALUATION OF AN INTERACTIVE HEALTH COMMUNICATION APPLICATION TO EDUCATE AND EMPOWER YOUNG PEOPLE LIVING WITH JUVENILE IDIOPATHIC ARTHRITIS: A PILOT STUDY

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**Background:** In parallel with clinical care, it is equally important to empower young people with juvenile idiopathic arthritis (JIA) to develop self-efficacy skills, so that they can competently self-manage their health, particularly as they transition into adult health services. Capitalising on the popularity of technology, web-enabled tools represent a novel and effective way of engaging young people with JIA. A Cochrane review of Internet Health Communication Applications (IHCAs) found that IHCAs have a positive effect on self-efficacy, empowering individuals to become more knowledgeable.

**Objectives:** The aim of this study was to: i) develop and evaluate an IHCA in young people with JIA, aged 16 to 25 years; and ii) investigate whether an IHCA enhanced young people's condition-specific knowledge, and their self-efficacy to manage their health. **Methods:** Young people aged 16 to 25 with a self-reported diagnosis of JIA were recruited to take part via social media. The IHCA was built using Microsoft PowerPoint and iSpring Suite (Figure 1). A virtual advisory group of patients, parents and healthcare professionals were involved throughout the design and development of the IHCA. The contents of the IHCA was obtained for existing published sources. Matching anonymous pre- and post-participation questionnaires were used to assess differences in knowledge of JIA and self-efficacy skills.

Results: In total, 23 (79%) young people with JIA completed both pre- and post-participation questionnaires. Most young people reported that their preferred source of condition-related information was obtained via an internet search engine (83%). Prior to completing the IHCA, only 22% of young people reported that they had an excellent understanding of JIA. After completing the IHCA, there was a significant improvement in young people's condition-specific understanding. Similarly, after completing the IHCA, there was a significant improvement in young people's confidence to better self-manage their health. Interestingly, only 30% of young people reported that the information which health professionals provided to them about JIA was adequate, in terms of comprehension and usefulness. Qualitative findings identified three core themes: resource content, practical support and accessibility/functionality. Young people liked the way that information was presented, as well as practical steps they could take to improve their health.

Image/graph:



**Conclusions:** Quantitative results correspond with qualitative findings, indicating that the IHCA was well-received by young people with JIA. Condition-specific understanding was enhanced after completing the IHCA, as was participants' confidence in their self-efficacy and disease self-management capabilities. These results indicate that with ongoing development and larger scale evaluation, implementation of this IHCA is feasible.

**References:** 1. Lindsay, S., Kingsnorth, S. *et al.* (2014). A systematic review of self-management interventions for children and youth with physical disabilities. *Disability and Rehabilitation* 36(4): 276-288.

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Disclosure of Interest: None declared