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in children aged 4–9 years old, with recent statistics suggesting it affects around five per 100,000 children in the United Kingdom (UK). Current treatment for the condition aims to maintain the best possible environment for the disease process to run its natural course. Management typically includes physiotherapy with or without surgical intervention. There is significant variation in care with no consensus on which treatment option is best. In 2018 the British Society for Children's Orthopaedic Surgery, working with the James Lind Alliance, identified research identifying the optimal interventions (surgical and non-surgical) for managing children with Perthes disease as the fourth-highest priority for paediatric lower limb surgery research.

Methods: A systematic review was performed, studies were identified and evaluated according to their selected interventions and outcomes. Study designs included in the review were all but case-control studies due to risk of selection bias and studies with only one group. Databases included in the review were Cochrane Central Register of Controlled Trials, MEDLINE, EMBASE, CINAHL, EMCARE, AMED and PEDro. The review looked for studies that had compared a non-surgical intervention for Perthes disease with another comparator intervention. Primary outcomes were radiological at end of intervention and were primarily Stulberg and Mose, secondary outcomes included functional outcomes such as ROM, strength and quality of life.

Results: 17 studies were deemed eligible for inclusion, seven prospective cohort studies, six retrospective cohort studies and two matched cohort studies and multi-centre prospective cohort studies. Interventions largely focussed on orthotic management (16 out of 17 studies) and physical interventions such as strengthening or stretching (5 out of 17 studies). Two studies reported statistically significant results for the Mose score of patients when treated surgically. One study reported statistically significant improvement in range of movement after physiotherapy compared with active observation.

Conclusion(s): There is a lack of high-quality trial evidence regarding which non-surgical treatments are the most acceptable, effective and cost-effective in the management of children with Perthes disease. Future research, employing randomised trial designs and reporting a wider range of patient outcomes, is urgently needed to inform clinical practice.

Impact: This piece of work will inform current practice as to the lack of evidence to support any particular treatment in place of another. More importantly, it highlights the need for more robust studies to measure the effect of non-surgical treatments.

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ONCALLbuddy: Using digital innovation to support workforce changes in response to COVID-19



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Purpose: The response to COVID-19 has placed unprecedented demands on the physiotherapy workforce. Changing models of care have required physiotherapists to work across new models of care. In many cases, staff have returned to respiratory and critical care roles. Although many organisations have provided staff training where required, there is no widely available, easy to access resource, that summarises the knowledge and skills required to support these workforce changes. The aim of the ONCALLbuddy project was to provide physiotherapy staff with easy access to knowledge and information to support the changes in roles and clinical requirements.

Methods: ONCALLbuddy used a disruptive digital product innovation process to create a mobile app. This app contained information regarding conditions, assessment, treatment, and COVID-19 specific links. This educational resource was developed by two NHS England Clinical Entrepreneurs in less than two weeks using widely available, free, web-based software. The app was shared with physiotherapists using professional networks, social media, and an email distribution list.

Results: Within the first week the app had over 7000 users. There were users from 31 countries across 13 different first languages. There were over 23,000 page views. Feedback captured from email and social media was positive and guided the development of the content of ONCALLbuddy. Users report that the app is clear and easy to navigate and that the content is pitched at the right level. Further formal user feedback will continue as the app develops and the user base increases.

Conclusion(s): Whilst there seems to be an interest for ONCALLbuddy on an ongoing basis, the current COVID-19 pandemic provided an opportunity to reach an audience at speed. Since its launch ONCALLbuddy has received international interest with downloads and users across the globe. Whilst there may be some differences in physiotherapy practice between countries there is scope to develop the app for the international healthcare market. Additionally, ONCALLbuddy has been of interest to other healthcare professionals beyond physiotherapy and has the potential to become an app for MDT members as well as patients.

Impact: The launch of the app was announced on social media a few days prior to launch. This allowed the generation of a database of potential users, which was vital in understanding if there was a demand for ONCALLbuddy. The mobilisation of existing networks to promote the launch of the app led to our conversations with HEE and the CSP about sponsorship and support. There is an anticipated ongoing demand and market for ONCALLbuddy. There are approximately 70,000 physiotherapists registered in the UK. The number of student places available has seen a year on year increase with the change in funding structure seeing a 41% increase in places in 2019/20. There are currently 47 universities in the UK providing physiotherapy courses. ONCALLbuddy would be of use to all new graduates and physiotherapy students meaning there will be an ongoing demand for the app.

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Perceived barriers to evidence based practice amongst UK physiotherapists: A qualitative analysis and proposal of solutions

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Purpose: Rapid developments in research, changing models of musculoskeletal care and advances in service delivery are required to ensure quality patient care. Evidence based practice (EBP) is advocated to provide safer, more consistent, cost-effective patient-centred care. Despite the evolution of clinical practice it is felt that barriers still remain limiting its implementation. The purpose of this study was to improve current understanding of perceived barriers amongst musculoskeletal physiotherapists, to propose practical solutions and utilise this information in the development of a manifesto for reform to promote best practice in evidence-based physiotherapy care in the UK.

Methods: 4 independent physiotherapists collected data from social media platforms and public facing events hosted by MSK Reform in 2017 and 2018, which explored physiotherapists and service-users opinions about perceived barriers and solutions to EBP. A thematic analysis was performed, which involved 1 physiotherapist coding the data and developing themes. This was followed by a consensus proposal of solutions by clinicians, student physiotherapists and service users.

Results: The themes identified were: resources, skills and responsibility:

Barriers to EBP in terms of resources included difficulty in navigating the volume of literature emerging, conflicting research results and inequitable access to literature. There were reports of a lack of protected time for development and research, as well as the pressures of limited time to disseminate information to patients in clinics. It was suggested that using Advanced Practitioners as resources for sharing knowledge, clinical support and dissemination of information to colleagues may be a useful solution.

It was felt that the skills acquired by physiotherapists are not consistent after training. There were suggestions for further biopsychosocial training including critical thinking, communication and ‘soft’ skills as well as further training in critical appraisal and research methods to align research skills with clinical reasoning, tacit knowledge and communication skills in order to provide patient-centred evidence informed care.

In terms of responsibility, it was felt that there should be a professional expectation on an individual level to upskill both in terms of critical clinical decision-making and research skills, but organisations should also have a responsibility for assessing competencies and providing support in terms of protected time, resources and accessibility to appropriate research roles.

Conclusion(s): Based on these results, a number of solution-focussed action points were proposed by consensus discussion. These included optimising access to clinical guidelines and communities of practice; continued development of clinical and communication skills to enhance patient-centred decision making; ensuring protected time for research activities at all levels and auditing clinical practice to reduce unwarranted variation; reducing the clinical-academic divide; utilising research “champions” as part of a multicomponent dissemination strategy; and enhanced responsibility on professional and regulatory bodies to support an evidence based culture in the workplace.

Impact: This study served to guide the development of a set of policies that aim to reform our relationship with evidence as part of the MSK Reform Manifesto.

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