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IMPACT OF A SELF-CARE EDUCATION PROGRAM FOR PATIENTS WITH OSTEOARTHRITIS

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Purpose: To create a self-care program for osteoarthritis (OA) patients in order to improve their quality of life and therefore to reduce the socioeconomic cost mainly related with primary care (PC) and specialist visits.

Methods: The design of the self-care program was carried out by 2 PC physicians, 1 rheumatologist, 1 rehabilitator, 1 nurse and 2 psychologists. The program included a total of 9 sessions of 1.5 hours once a week. There were 2 sessions for each of the following topics: general information of the pathology, physical activity in OA patients, healthy nutrition, coping with the disease, and 1 summary session. Three OA patients were trained following the program and afterwards they were in charge of imparting the program to other OA patients with the assistance of a nurse. OA patients were divided into groups of 10 individuals. Before and after the program some data was collected relating the patients' knowledge of the pathology, food and physical activity habits, social networks and hours of rest. Furthermore, they were asked to complete WOMAC, EuroQol-5D, and Hospital Anxiety and Depression Scale (HADS) questionnaires. Regarding data comparison between groups, chi-square and t-test were performed, for categorical and continuous variables, respectively. For the comparison between data obtained before and after the self-care program instruction, McNemar and paired t-test were performed for categorical and continuous variables, respectively. The statistical analysis was performed using package SPSS v16.

Results: 60 Knee OA patients were recruited from Hospital del Mar and Vila Olímpica PC center, and divided into 6 different groups. The sessions were carried out from January to November 2017. Only the results of the first two groups are shown. Patients were recruited and divided in two groups: 1 (11 patients) and 2 (10 patients). The follow-up of 4 patients was lost, 2 from each group. First we analyzed differences between the basal data collected and the ones collected after the last course session. The analysis of the data from all the patients (groups 1 and 2) showed that in knowledge about OA management the average value obtained in the basal visit was 6.31 ± 2.798 , and 7.81 ± 1.94 after the last session ($P = 0.024$). Analysis of pain by VAS showed that the average value obtained in the basal visit was 3.91 ± 1.82 , and 2.44 ± 2.03 after the last session ($P = 0.014$). We could also observe a tendency, although it doesn't reach significant differences in quality of life evaluated by EUROQOL-5, where the average value obtained in the basal visit was 2.31 ± 1.81 , and 1.63 ± 1.54 after the last session ($P = 0.052$). In the HADS scale the average value obtained in the basal visit was 9.86 ± 6.02 , and 8.36 ± 5.40 after the last session ($P = 0.052$). Regarding the analysis of differences between two groups, categorical items were analyzed. In the total questionnaire at the end of the sessions the average for group 1 was 6.89 and for group 2 was 8.75 ($P = 0.038$). Meeting with friends frequency at the beginning and at the end of the study was also different among groups ($P = 0.014/P = 0.019$).

Conclusions: This self-care education program had a positive effect on the OA patients pain perception, and it could also be observed an improvement in the quality of life and the anxiety and depression, although these changes were not significant. As differences among groups were also observed, socioeconomic and education aspects must be considered in the future.

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SUBGROUPING AND TARGETED EXERCISE PROGRAMMES FOR KNEE AND HIP OSTEOARTHRITIS (STEER OA): AN INDIVIDUAL PARTICIPANT DATA META-ANALYSIS INITIATIVE

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Purpose: Therapeutic exercise is a recommended core treatment for people with knee and hip osteoarthritis (OA). However, the average effect sizes for pain and physical function observed in randomised clinical trials (RCTs) tend to be small to moderate compared to no exercise controls. This may be due to insufficient targeting of exercise to subgroups of people who are most likely to respond, and/or sub-optimal content of exercise programmes. This study aims to identify a) subgroups of people with knee and hip OA that do/do not respond to therapeutic exercise, and to different types of exercise programme, and b) mediators of the effect of therapeutic exercise for reducing pain and improving physical function. It is hoped this could lead to better targeting and refining of future exercise interventions.

Methods: Systematic review update and individual participant data (IPD) meta-analyses, with ongoing patient and public involvement and engagement, due for completion July 2019 (PROSPERO: CRD42017054049). We previously conducted a systematic review that identified 60 RCTs of therapeutic exercise for people with knee and hip OA. We are updating this review. The previous search strategy has been re-run from March 2012 (the previous search date) in 10 electronic databases. Identified titles, abstracts and subsequent full texts have been reviewed against inclusion/exclusion criteria by two independent reviewers. A third reviewer helped resolve disagreements as necessary. For each included trial, details on design, sample size, population characteristics, interventions (exercise frequency, intensity, impact, type, duration, setting, and exercise deliverer), comparator, and candidate variables (potential treatment moderators and mediators), will be extracted and summarised into tables. Pain and function outcomes at time points nearest to 12-weeks, 6-months and 12-months post randomisation will also be extracted by two independent reviewers. We will use the Cochrane Collaboration's tool to assess the risk of bias. In collaboration with the OA Trial Bank, we are contacting lead authors of included trials to inform them about the study and invite them to share their IPD. Trial- and participant-level characteristics (for baseline variables and outcomes) of included studies will be summarised. All meta-analyses, apart from mediation analyses, will use a two-stage approach, where estimates are obtained for each trial and then synthesised using a random effects model. All analyses will be on an intention-to-treat principle and all summary meta-analyses estimates will be reported as standardised mean differences with 95% confidence intervals.

Results: The systematic review update identified 3943 unique references, which reduced to 272 following title and abstract screening. Remaining full texts were combined with those included in the original review ($n = 60$) and nine identified from other sources, and were screened against the inclusion/exclusion criteria. In total, 114 RCTs met our criteria and are included in the review. To date, we have attempted to contact 107 RCT authors, and have successfully made contact with 73. Of those, 11 communications are ongoing, 2 are unable to share IPD due to it no longer being available and 60 have agreed, in principle, to share IPD (approximately 8500 participants in total).

Conclusions: This global initiative will be the first study to combine IPD from existing RCTs of therapeutic exercise for hip and knee OA, facilitating standardised analyses across trials and allowing direct derivation of desired information independent of significance or reporting. Combining IPD from existing RCTs will increase the statistical power to identify whether there are subgroups of individuals who benefit most from therapeutic exercise, and to identify mediators of the effect of therapeutic exercise. This may lead to more personalised health care, by better targeting and refining of future exercise interventions.