Objectives: To explore the feasibility and preliminary efficacy of a web-based, peer-supported exercise program for people with hip or knee OA.

Methods: This study was a single-group, pre-post feasibility study. Patients aged 40-80 years with hip or knee OA who were not candidates for surgery were eligible. The 12-week intervention was delivered through patient-organizations (The Norwegian Association for Rheumatic Diseases) web-based platforms, and included weekly exercise programs, weekly motivational messages, an OA and exercise website and assigned peer-supporters. Feasibility was evaluated by calculating the proportion of eligible patients who were enrolled and retained at follow-up, as well as time resources used on delivery of the intervention. Acceptability was evaluated by calculating proportion of patients who had valid baseline accelerometer data and completed the maximal cardiorespiratory exercise test according to protocol. Primary efficacy measures were change in PA assessed by accelerometers and change in exercise capacity (VO2peak) assessed by indirect maximal cardiorespiratory exercise test. Secondary efficacy measures were change in patient reported outcomes assessed by HOOS and KOOS (www.koos.nu) (a 10-point change in normalized scores was considered a minimally important change). Data was analysed using paired sample t-test, given as mean change (95% confidence interval) and p-values.

Results: We identified 49 eligible patients of which 35 (71%) consented and were enrolled. Among those who consented, 22 (63%) were retained. Time resources used on delivery of the exercise programs and motivational messages were mean (SD) 7.3±1.1 min per week/patient. Compliance with wearing the accelerometer was mean (SD) 6.1±1.0 valid days (mean (SD) 13.8±1.3 hours/day). Twenty (67%) out of 30 patients who attended baseline testing performed the maximal cardiorespiratory exercise test, of which 18 completed according to protocol. Due to Covid-19 restrictions, follow-up testing of primary efficacy measures was feasible with fair agreement on treatment decisions. Further work is required to determine the agreement between remote decision making and the outpatient clinician.

Conclusion: The pre-categorised remote decisions were: no change to biologic, add or confirm a concomitant DMARD, reductions/removal of a concomitant DMARD, further work is required to determine the agreement between remote decision making and the outpatient clinician.

Disclosure of Interests: None declared

REFERENCES:

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Objectives: To assess the effect of a smoking cessation intervention in a rheumatology setting.

Methods: We designed a smoking cessation interventional feasibility study. RA patients who were active smokers were asked to participate. A nurse-delivered program consisting of behavioural changes techniques and voluntary pharmacotherapy was executed. The intervention was at baseline and at several time points during a 24 month period, based on the individual patient’s needs. Smoking status was collected at baseline, 6, 12, 18 and 24 months. Smoking cessation was verified by 7-days abstinence and carbon monoxide in expiratory air. The main outcome was the proportion of patients who quit smoking (QS) at 24 months.

Results: A total of 99 patients were included in the study between 2011-2020. Median (IQR) age of patients was 58 (50 - 64), 69 % were female and 82% were RF and/or ACPA positive. 59% of patients had a newly diagnosed, RA, (included from the early RA-track), with a median (IQR) symptom duration of 5 (2-9.5) months. Patients with established RA 41% (included from regular rheumatology department) had a median disease duration of 4 (2-8) years. After 24 months 21% quit smoking (QS) (Table 1). At months 6, 12, 18 and 24 the proportion of QS patients was 12, 13, 15 and 21, respectively. The proportion of QS patients at month 12 and continued being in the QS group throughout the study period was 10%. In the subgroup of patients who continued smoking (CS) the median number of cigarettes per day was significantly reduced at all follow-up time points (Table 1). No significant differences were observed at baseline between CS at 24 months and QS, apart from the proportion of patients who reported anxiety (extracted from EQ-5D and defined as absent or present), which was significantly fewer in the QS group (Table). In the QS group at month 24, the proportion of females was numerically lower compared to CS (52% vs. 73%, p=0.07).

Table 1. Baseline demographical, clinical characteristics and number of cigarettes at specific time-points for patients who were non-smokers (QS) and smokers (CS) at month 24.

<table>
<thead>
<tr>
<th>Age* (median, IQR)</th>
<th>Symptom duration in early RA patients (months) (median, IQR)</th>
<th>Disease duration of patients with established RA (years) (median, IQR)</th>
<th>% females</th>
<th>% RF and/or ACPA positive</th>
<th>DAS28* (median, IQR)</th>
<th>HAQ* (median, IQR)</th>
<th>VAS pain* (medic, IQR)</th>
<th>% of patients with reported anxiety* (part of EQ5D)</th>
</tr>
</thead>
<tbody>
<tr>
<td>N=21 (21%)</td>
<td>6 (1-2)</td>
<td>8 (3.5-16.5)</td>
<td>52</td>
<td>85</td>
<td>4.24 (3.13-5.72)</td>
<td>0.75 (0.25-1.38)</td>
<td>46.0 (11-60)</td>
<td>28</td>
</tr>
<tr>
<td>N=78 (79%)</td>
<td>4.5 (2-8.5)</td>
<td>3 (2-6)</td>
<td>73</td>
<td>81</td>
<td>4.11 (2.88-5.36)</td>
<td>0.88 (0.38-1.25)</td>
<td>34.5 (12-70)</td>
<td>58</td>
</tr>
<tr>
<td>Difference between QS and CS (p-value)</td>
<td>0.94</td>
<td>0.69</td>
<td>0.74</td>
<td>0.90</td>
<td>0.02</td>
<td></td>
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</tr>
</tbody>
</table>

Conclusion: Smoking cessation intervention in a rheumatology clinic setting may facilitate reduced smoking or complete cessation in patients with RA. Patients who did not report anxiety were more likely to quit smoking.

REFERENCES:


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