Background: Regular exercise has many health benefits for people with axial spondyloarthritis (axSpA). However, most patients do not engage in frequent exercise. In order to improve exercise behaviour of axSpA patients, a well-founded intervention is needed.

Objectives: To identify effective intervention methods to optimise exercise behaviour in axSpA.

Methods: The first three steps of the Intervention Mapping (IM) protocol, which is a six-step framework for intervention development, were used to determine effective intervention components. This study comprised 1) a needs assessment, to examine the discrepancy between current and desired exercise behaviour of axSpA patients; 2) a determinant analysis, to identify barriers and facilitators (determinants) to overcome this discrepancy; and 3) an intervention method analysis, to select effective methods that target these determinants. All three steps included literature reviews: PubMed and Web of Science were systematically searched for articles up to August 2017 using a well-defined search strategy. Additionally, semi-structured interviews with axSpA patients and physiotherapists specialised in axSpA (n=2) explored the literature search findings of IM steps 1 to 3 qualitatively and ranked the determinants and methods identified in steps 2 and 3 in order of relevance.

Results: The literature searches resulted in 28 (64), 23 (257) and 15 (209) included articles (hits) for IM steps 1, 2 and 3, respectively. IM step 1 revealed that only one third of axSpA patients engage in (frequent) mobility, strengthening and aerobic exercises. Step 2 identified 19 determinants to overcome this discrepancy, and 3) an intervention method analysis, to select effective methods that target these determinants. All three steps included literature reviews: PubMed and Web of Science were systematically searched for articles up to August 2017 using a well-defined search strategy. Additionally, semi-structured interviews with axSpA patients and physiotherapists specialised in axSpA (n=2) explored the literature search findings of IM steps 1 to 3 qualitatively and ranked the determinants and methods identified in steps 2 and 3 in order of relevance.

Conclusion: This study showed that in order to optimise exercise behaviour in axSpA, patients should be offered an intervention including education, motivational interviewing, goal setting and action planning and they should be stimulated to exercise in a group. In addition, therapists should be educated how to tailor, individualise and monitor exercise and how to base this on thorough assessment.

References:

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