THINKING DIFFERENTLY: EVIDENCE ON WHAT PATIENTS WANT AND NEED IN AN EXPLANATION ABOUT OSTEOARTHRITIS

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**Background/Aims:**

Osteoarthritis (OA) is a major cause of pain and disability worldwide. Despite this and the existence of evidence-based guidelines, many patients and professionals lack clarity about the nature of OA and effective treatment strategies. Healthcare professionals (HCPs) often do not have the right words to help patients understand the condition. Patients can feel that their condition is being trivialised or can develop negative beliefs about osteoarthritis as a result. Self-management strategies, such as exercise and weight loss (if needed), are core, but commonly underused, management approaches. Updated 2022 UK NICE OA guidelines recommend that health care professionals advise people where they can find further information on osteoarthritis and how it develops, and information that challenges common misconceptions about the condition. We aimed to develop a new explanation for osteoarthritis to help people understand the condition and make sense of suggested management approaches.

**Methods**

Part one: Participants registered at four general practices, aged ≥45 years, with a recorded consultation for OA in the previous two years were mailed a conjoint survey. The survey included eight pairs of potential OA explanation statements for participants to select the explanation that would most help them to self-manage their OA, alongside questions on socio-demographics, OA symptoms, comorbidity and health literacy. The OA explanations were designed using a partial-profile choice-based conjoint analysis (profile strength 4, comparison depth 3) from a set of 11 theoretically informed key attributes (Table 1). Each attribute contained two statements: one representing current information sources, and one a newly designed statement from our previous co-design work with patients and stakeholders. Part two: A Patient Advisory Group (PAG) met three times to discuss how best to translate the survey findings into a story board for a new animation and content for a patient leaflet (electronic and written version).

**Results**

The survey response rate was 22% (428/1980) (average age = 65 years (SD= 10); 66% female). The newer statement was preferred to the existing statement for 10 of the 11 statements (indicated by a positive regression coefficient) and 8 of these differences were statistically significant (p < 0.05) (Table 1). Sensitivity analyses (e.g., to adjust the model to allow for within person correlation of response, and to test for 2-way interactions between model attributes) did not change the findings from the primary model.

**Table 1: Conjoint analysis results (main effects)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Statement Number and Attribute Type | Coefficient |  |  | P-value |
| S01: Definition  | 0.07 |  |  | 0.101 |
| S02: Causes | -0.13 |  |  | 0.007 |
| S03: Impact | 0.22 |  |  | < 0.001 |
| S04: Severity  | 0.17 |  |  | 0.001 |
| S05: Prognosis | 0.15 |  |  | 0.007 |
| S06: Prevalence | 0.04 |  |  | 0.417 |
| S07: Treatment effectiveness | 0.33 |  |  | < 0.001 |
| S08: Effectiveness of exercise/weight loss | 0.31 |  |  | < 0.001 |
| S09: Barriers to exercise/weight loss | 0.35 |  |  | < 0.001 |
| S10: Self-efficacy | 0.34 |  |  | < 0.001 |
| S11: Consequences | 0.46 |  |  | < 0.001 |

The patient advisory group preferred a “cartoon” not whiteboard animation and advised depicting a journey with patients progressing and achieving activities, taking control, living fulfilling lives and achieving goals (positive and hopeful). Things to avoid included red flames/circles denoting painful joints (rather depict functional limitations e.g., need for use of aids) and focusing on no cure. Also avoid humorous images as it could belittle the condition. Headings were discussed for the video and leaflet and included: What is Osteoarthritis; What Causes it; How does osteoarthritis affect people; What happens over time and can it be improved; What should I do; How should I start increasing activity and what should I expect; What benefits might I see. All text was **further assessed using Flesch reading ease and Flesch Grade level.**

**The animation is now available at** <https://youtu.be/6iz78WMm-Lo>

**Conclusion**

Our conjoint analysis has provided evidence about what explanation statements patients with OA prefer and will improve likelihood of self-management. Combined statements have formed a new explanation available in a video and electronic or written leaflet, codesigned by patients. The new explanation is now available to help overcome prevailing negative perceptions about OA.

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