

Outcome measures:

Participants answered questions on acceptability, including perceptions of clarity and balance in presentation of benefits and harms (1), and preparation for decision-making (2). In addition, participants provided information on their knowledge about the treatment options, and decisional conflict based on the SURE test (3,4), which were embedded in the stepped patient decision aid (StDA). These outcomes were measured using valid and/or reliable instruments. The knowledge test was created to verify participants' understanding of the options presented in the DA.

The clarity and balance of information of the StDA were assessed using a questionnaire that was developed by the Informed Medical Decisions Foundation that elicited participants' evaluations of the amount, length, clarity, and balance of information as well as whether it was useful in decision making and should be recommended to others. Questions have been used in other studies of decision-making needs (1) for chronic illnesses. Questions are rated on 3- to 5-point Likert scales.

The preparation for decision making scale (2) was adapted to assess patients' perceptions of how useful the StDA is in preparing them to communicate with their health provider. It has shown adequate internal consistency (Cronbach alpha= 0.92-0.96) and validity (Pearson $r = 0.13-0.21$ for subscales of the decision-making scale and discriminated between patients who found the decision helpful and those who did not) (2). Questions were rated on a 5-point Likert scale ranging from "Not at all useful" to "a great deal useful". We reported items to be helpful if they were "a little", "somewhat", "quite a bit" or "a great deal useful".

Knowledge of the treatment options was tested using a 5-item "knowledge test" embedded in the last section of the StDA. The question format has been used in other decision

aids. The content of the questions was developed to test the understanding of the key information in the StDA. Participants have to choose one of four answers for each item.

The SURE test was embedded in the last section of the StDA to elicit the extent to which decisional needs were met. The SURE test comprises 4 questions about knowledge of the options, clarity of patients' values, the support and advice from others to make a choice and the certainty of the decision (3,4). The SURE has shown moderate internal reliability (Cronbach alpha= 0.54-0.65) and adequate construct validity (Pearson $r=-0.46$ with the decisional conflict scale and discrimination between individuals who had made a choice for a treatment and those who had not) (3). The four questions are scored on a dichotomous scale.

Additional open-ended questions asked about participants' overall impressions of the StDA, strengths and areas for improvement, as well as potential helpfulness of the StDA, from patients' and health providers' perspectives. They were the following: "*What did you like about the decisions aid?*"; "*What, if any, changes would you make to the decision aid prior to them being used by patients?*"; and, "*As someone who has faced the decision about treatment for osteoarthritis, tell me how you think the decision aid you reviewed would have helped you make your treatment decision?*".

Finally, when completing the StDA, patients also provided information on disease severity, current OA treatment regimen and degree of adherence, their values for outcomes of options, their preferred treatment option, and their motivation in following the plan.

Additional Results Embedded in the StDA:

Currently used OA treatments:

When filling out the StDA, patients mentioned using several types of treatments to manage their OA: exercises (n=43, 87.8%), insoles (n=26, 53.1%), interventions to have a healthy weight

(n=25, 51.0%), non-steroidal anti-inflammatory drugs (n=23, 46.9%), acetaminophen (n=22, 44.9%), glucosamine (n=20, 40.8%), chondroitin (n=16, 32.7%), non-steroidal creams (n=14, 28.6%), TENS (n=10, 20.4%), joint injection (n=5, 10.2%), opioids (n=4, 8.2%) and consultation with a surgeon to discuss joint replacement (n=6, 12.2%).

Values and preferences:

When asked about their values and preferences, the most important were to avoid side effects such as bleeding ulcers and heart attack (n=40, 83.3%), or withdrawal symptoms (n=39, 79.6%), which would lead to avoidance of NSAID pills and opioids, respectively. Patients also valued pain relief (n=31, 63.3%) and avoiding treatment inconveniences such as taking pills (n=18, 36.7%) or needles (n=17, 35.4%).

Preferred treatment option and motivation to make a change:

After reviewing the option information and clarifying their values, 18 participants (38.3%) mentioned that they needed to change their current plan for managing OA. These changes included performing exercise (n=5), losing weight (n=3), acupuncture (n=3), joint injection (n=1), NSAIDs (n=1), pain management options (n=2), seeing a new rheumatologist (n=1) and surgery (n=1). One participant did not specify the change to make. Most patients were motivated to make a change (n=15, 93.8%).

REFERENCES

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