Understanding Persistent Pain (UPP): a Decision Aid Tool to inform management of persistent pain in pharmacy

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Background

Pharmacists can contribute to persistent pain management in primary care[1].

A decision aid tool (DAT) could support shared decision making (SDM) in a patient-pharmacist consultation[2] for such a preference-sensitive condition as pain.

Many DATs have been developed for use in other settings, varying in format and content, but few have instruments that can mimic treatment decision trading and present patients with a real-time results.

Discrete Choice Experiments (DCE) are a well-established method to elicit preferences in health[3]. However, this method typically relies on post- sample-level analysis which limits its use at the individual level.

Aim & Objectives

To develop and test a digital Decision Aid Tool, that includes a DCE as a preference elicitation instrument, for the management of persistent pain.

The main objectives are to:

- Develop a DAT that includes key features of pain management and can estimate preferences in real-time and present a personalised report to patient and pharmacist.

- Assess its usability and feasibility as part of a pharmacist-led consultation and evaluate study procedures to design a future trial.

Methods

This study was conducted in **three stages**:

1. Systematic review of literature

- Review of studies that have used a DCE instrument to elicit preferences in the area of pain and studies that have used/tested a DAT in the area of pain.
- Use narrative synthesis to identify potential key features of pain management.

2. Qualitative study to elicit features of pain and design DAT content.

- Semi-structured interviews with patients, pharmacists and General Practitioners to characterise current pain management.
- Conduct a thematic analysis of recurrent themes that informs features for a DCE.

3. Usability testing using a feasibility randomised study[4].

- Develop a computer-based DAT based on (1) and (2) above.
- Conduct a feasibility study where pharmacists (n=7) will undertake routine pain consultations (n=60) with and without the use of the DAT (2:1 randomisation).
- Assess the DAT's usability of the DAT and validity of the algorithm used for analysis.

Results

Stage 1

DCEs have been used to elicit preferences for pain. Existing DATs don't include digital tools tasks that mimic how treatments are decided and present results in real time.

Stage 2

Interviews with patients (n=24), pharmacists (n=10) and GPs (n=9) revealed the types of trade-offs that patients and their clinicians are making when they decide on a management approach.

Stage 3

The DAT was co-designed with the help of a patient advisory group, local patient groups and clinicians.
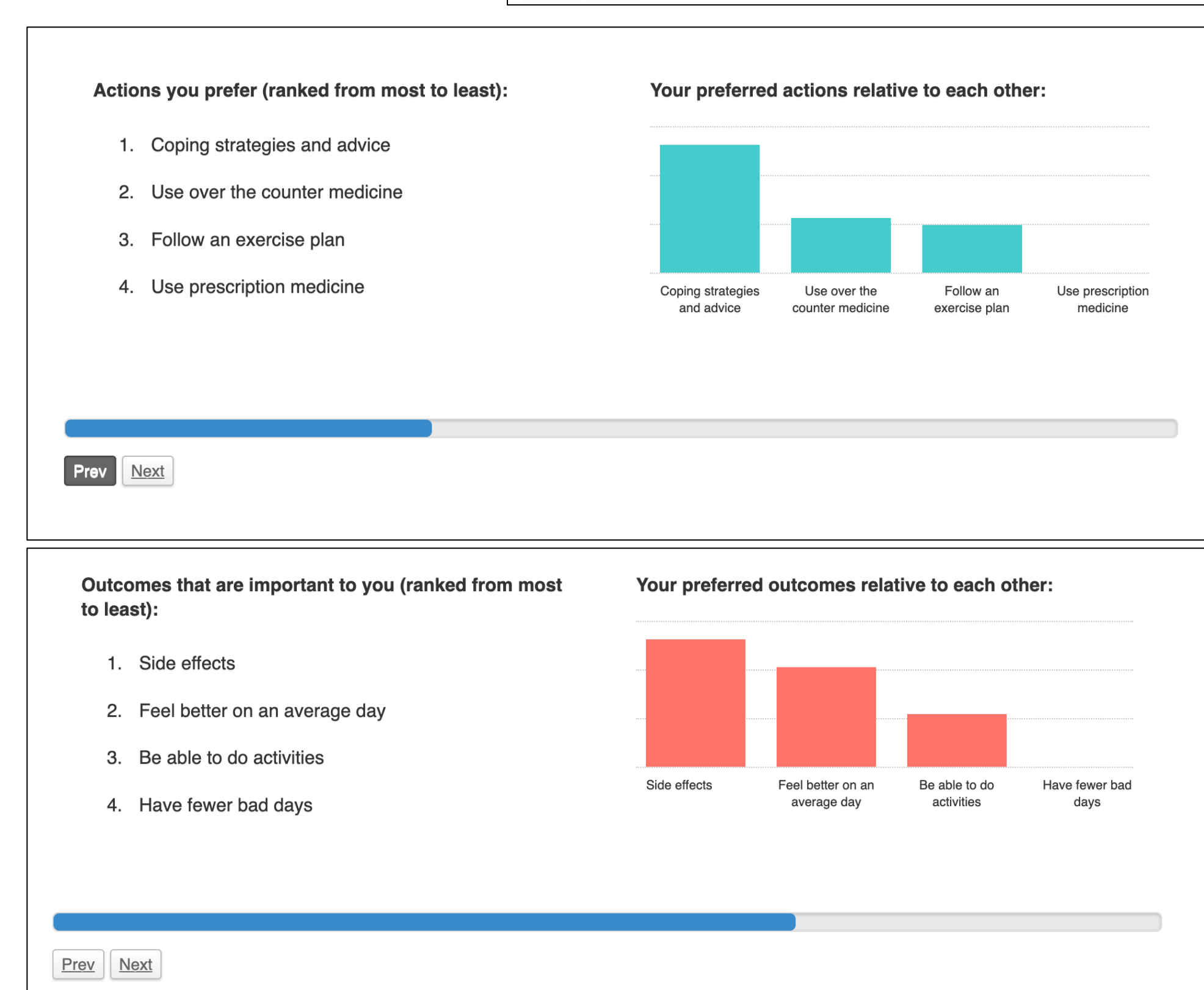
Results (continued)

The inbuilt DCE had twelve choice cards that when analysed in real-time resulted in quantifiable measures of preference and used to create an individual report that visualises their relative importance (see below).

Example choice task

Report Screen 1

Report Screen 2

Unfortunately, the Covid-19 pandemic impacted patient recruitment (n=17) and pharmacist retention:

- Pharmacists reported the DAT helped guide the consultation and the report was seen as valuable by patients.

- They also reported completion time was too long to be realistically implemented in routine non-research setting consultations.

- They saw the tool would be best used if adapted to self-management.

To test this we carried out a patient workshop event (n=21). This found the tool had a usability score of 75 (e.g., above average). However, concerns were raised about the difficulty of the DCE task and interpretation of the report if it were to be implemented as a standalone tool.

Discussion & Conclusion

We have built a DAT that can estimate individual preferences in real time and generate a report that can be used to improve communication.

The inclusion of a DCE instrument, that mimic treatment decision-making, was found useful to help patients think what is important and help pharmacists guide consultation.

Due to current and expected busy workloads, the study procedures are not feasible. The tool would be best implemented as a self-management tool or to be completed ahead of a consultation.

More research is needed in adapting the tool to be completely self-completion and development of a more easily interpretable report.

References

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