

Abu Dhabi - United Arab Emirates

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## Background

- Understanding patients' preferences is a vital key in managing non-urgent illnesses like osteoarthritis (OA),
- Conjoint analysis (CA) methods have been employed to elicit patients' preferences for OA treatment,
- Adaptive choice-based conjoint (ACBC) is the most recent and advanced CA technique to quantify patients' preferences,
- ACBC helps in empowering patients to make better healthcare decisions,
- ACBC helps in improving treatment adherence, and patient prognosis and contributes to the delivery of patient-centered care.

To employ ACBC to elicit patients' preferences for pharmaceutical treatments for OA.

## Aims

To evaluate the potential contribution of ACBC to the shared decision-making (SDM) process.

## Methods

- Establishing a patient and public involvement (PPI) group based in the United Arab Emirates (UAE) to assist in the development of an Arabic version of the ACBC questionnaire,
- Recruited adult OA patients (18 years of age and older) from the rheumatology and orthopedics outpatients' clinics,
- Patients completed the ACBC questionnaire about pharmaceutical treatment for OA, followed by a pen-and-paper feedback questionnaire about ACBC completion experience,
- SPSS V22.0 was implemented to analyze the descriptive statistics and ACBC feedback, Z-scores used to standardize the utilities,
- Hierarchical Bayesian (HB) analysis was applied to quantify patients' preferences.

## ACBC questionnaire

Attributes	Levels
Availability	<ul style="list-style-type: none"> <li>Prescription drug</li> <li>Over-the-counter drug</li> <li>Internet purchase drug</li> </ul>
Way of taking the medicine	<ul style="list-style-type: none"> <li>Cream/Gel</li> <li>Oral</li> </ul>
Frequency	<ul style="list-style-type: none"> <li>Once a day</li> <li>Twice a day</li> <li>3-4 times a day</li> <li>As needed</li> </ul>
How much you would expect mobility improvement	<ul style="list-style-type: none"> <li>Expect 25% mobility improvement</li> <li>Expect 50% mobility improvement</li> <li>Expect 75% mobility improvement</li> </ul>
How much you would expect pain reduction	<ul style="list-style-type: none"> <li>Expect 25% pain reduction</li> <li>Expect 50% pain reduction</li> <li>Expect 75% pain reduction</li> </ul>
Risk of gastric ulcer	<ul style="list-style-type: none"> <li>No risk of gastric ulcer</li> <li>Low risk of gastric ulcer</li> <li>Moderate risk of gastric ulcer</li> <li>High risk of gastric ulcer</li> </ul>
Risk of addiction	<ul style="list-style-type: none"> <li>No risk of gastric ulcer</li> <li>Low risk of gastric ulcer</li> <li>Moderate risk of gastric ulcer</li> <li>High risk of gastric ulcer</li> </ul>
Risk of kidney and liver impairment	<ul style="list-style-type: none"> <li>No risk of kidney and liver impairment</li> <li>Low risk of kidney and liver impairment</li> <li>Moderate risk of kidney and liver impairment</li> <li>High risk of kidney and liver impairment</li> </ul>
Risk of heart attacks and strokes	<ul style="list-style-type: none"> <li>No risk of heart attacks and strokes</li> <li>Low risk of heart attacks and strokes</li> <li>Moderate risk of heart attacks and strokes</li> <li>High risk of heart attacks and strokes</li> </ul>
Cost	<ul style="list-style-type: none"> <li>Fully covered by the insurance</li> <li>Partially covered by the insurance</li> <li>Not covered by the insurance</li> </ul>

### Build-your-own (BYO)

All attributes are presented to participants to choose their most preferred level of each attribute.

### Screening section

Several hypothetical scenarios are presented to participants to indicate if they are acceptable or not.

### Unacceptables

Using non-compensatory screening rules, participants are presented with several levels to choose one level that is completely unacceptable.

### Must Haves

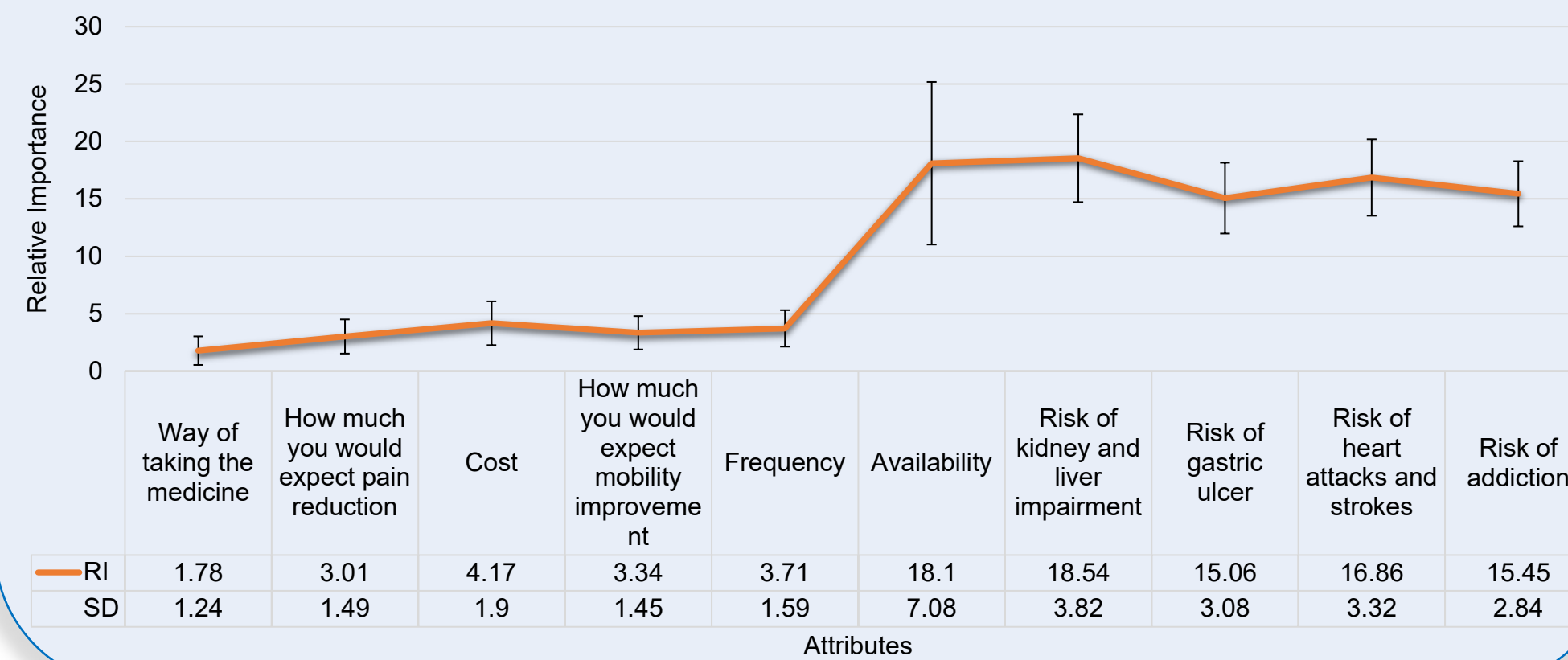
Based on subsequent cutoff rule, participants are presented with several levels to choose the level that can't be compensated by any other level.

### Choice-based tasks

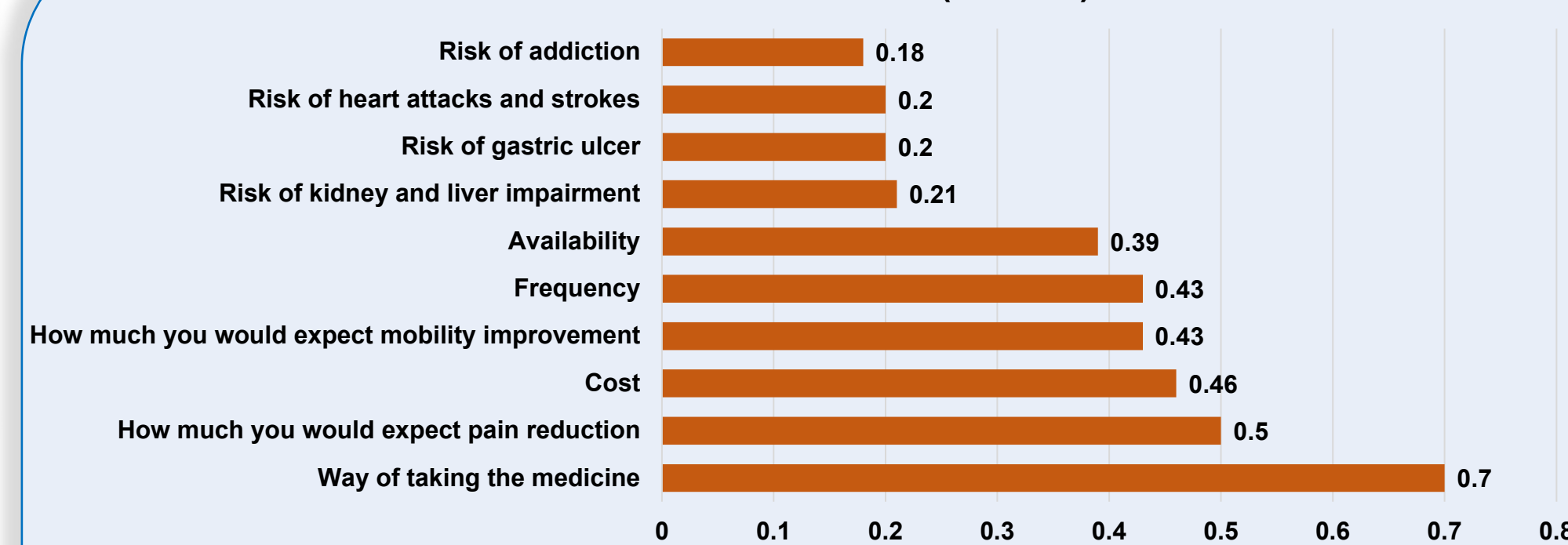
Participants are presented with 3-5 scenarios to choose their preferred one.

## Attributes results

Relative importance for all attributes (n=1030)



## Coefficient of variation (n=1030)



## Utilities and SDM results

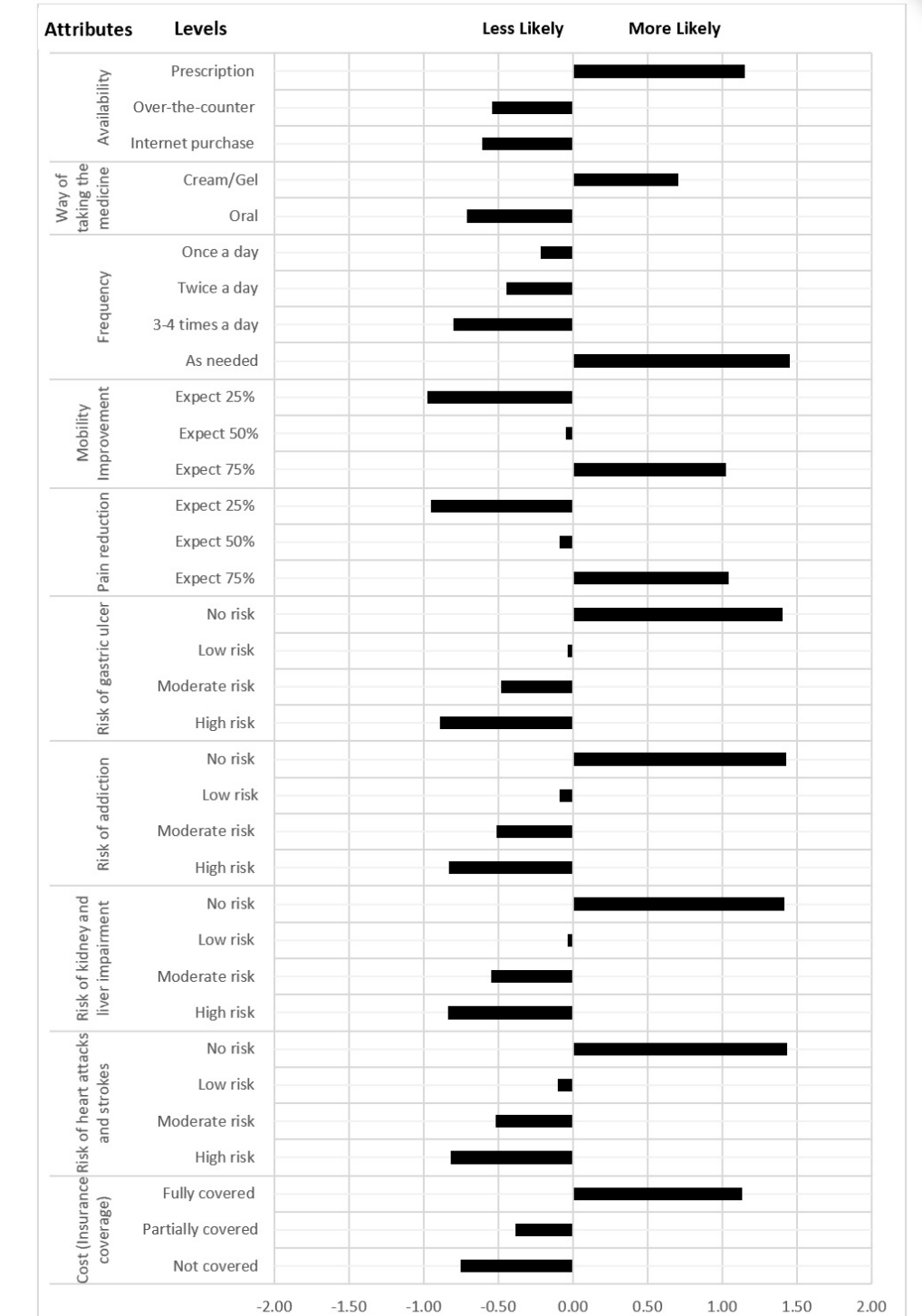
### ACBC contribution to SDM (n=500)

I recommend the use of ACBC to aid the SDM between patients and their GPs.

ACBC may help doctors to understand patients' preferences for OA treatments

ACBC results predicted my preference for OA treatment

- Strongly disagree
- Disagree
- Neither agree or disagree
- Agree
- Strongly agree



### Presenter:

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