Translation and Cultural Adaptation of the EQ-5D-5L Bolt-On Toolbox into Modern Standard Arabic for Use in Saudi Arabia

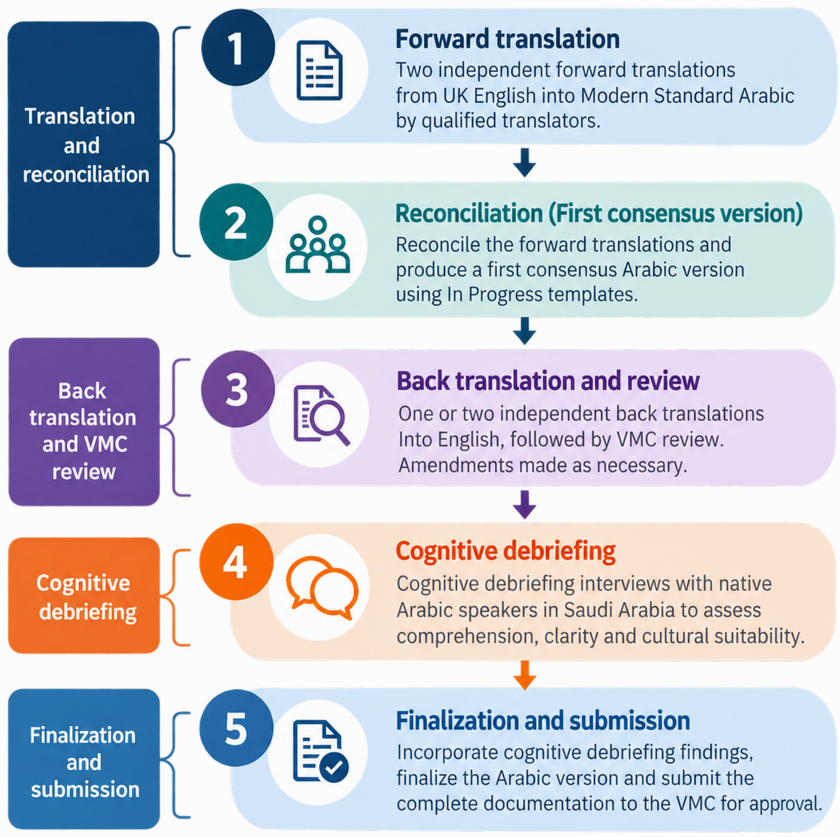
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OBJECTIVE

To translate and culturally adapt 18 items from the EQ-5D-5L Bolt-On Toolbox into Modern Standard Arabic for use in Saudi Arabia, following EuroQol standards, to support their application in clinical research, health technology assessment (HTA), and population health studies.



METHODS

- This study followed the standardized translation and linguistic validation protocol established by the EuroQol Research Foundation, under the guidance of the Version Management Committee (VMC) throughout the translation and cultural adaptation process.
- The best set of eight items (breathing; cognition; fatigue; sleep; hearing; vision; self-confidence; skin irritation) along with 10 corresponding items (or varying terminology) from the exploratory set were translated into Standard Arabic, and culturally adapted to the Saudi context.

RESULTS



- The translation process resulted in conceptually equivalent and culturally appropriate Modern Standard Arabic versions of all 18 EQ-5D-5L bolt-on items.
- Cognitive debriefing was conducted with eight Saudi adults, including healthy individuals and participants with asthma, obesity, skin disease, and older adults.
- Overall, participants demonstrated a clear understanding of the translated items and response options, and reported that the wording was relevant, acceptable, and easy to interpret.
- Minor revisions were made to improve clarity and cultural appropriateness while preserving conceptual equivalence with the source version.
- The final translations are being reviewed by the EuroQol VMC.

English Source Wording and Arabic Forward Translation Consensus for the Eight Best Available EQ-5D Bolt-ons (EV1.0)

	Bolt-on item (English) (Best Available version, EV1.0)	Arabic wording (FT Consensus)
	Breathing problems (shortness of breath, wheezing, coughing)	**مشاكل في التنفس** (ضيق التنفس، الصفير، السعال)
	Cognition (concentrating, remembering things, thinking clearly, making decisions)	**الإدراك** (التركيز، تذكر الأشياء، التفكير بوضوح، اتخاذ القرارات)
	Fatigue (feeling tired, exhausted, worn out)	**الإرهاق** (الشعور بالتعب، الإنهاك، الإجهاد)
	Hearing	**السمع**
	Self-confidence	**الثقة بالنفس**
	Skin irritation (e.g. itching)	**تهيج الجلد** (مثل الحكة)
	Sleep	**النوم**
	Vision	**الرؤية**

CONCLUSIONS

This study represents the first translation and cultural adaptation of the EQ-5D-5L Bolt-On Toolbox into Modern Standard Arabic for use in Saudi Arabia. The availability of these validated bolt-on items expands opportunities to enhance the content validity and sensitivity of the EQ-5D-5L in populations where additional health dimensions may be relevant. Following registration and approval through the EuroQol Research Foundation, these measures can be used in clinical, population health, and HTA applications across Arabic-speaking settings.

REFERENCES

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