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Hong Kong Primary Care Conference 2025

Translation and validation of the Pharmacy Services Questionnaire (PSQ) in a Chinese population

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PURPOSE

This study aims to develop and validate a Chinese translated Pharmacy Services Questionnaire (PSQ) in the Hong Kong population.

METHODS

- All subjects were recruited from three community pharmacies operated by NGOs in Hong Kong.
- Subjects were recruited to join the study if they were;
 - aged 18 years or older;
 - have used any services offered by the community pharmacies;
 - able to provide written informed consent;
 - able to communicate in Cantonese, and complete the survey.

Translation Original PSQ (English) Translation 1 Translation 2 (Chinese) (Chinese) Forward Translation Review and reconciliation of translations 1 & 2 First draft of PSQ (Chinese) Translation 1 Translation 2 (English) (English) Backward Translation Review and reconciliation of translations 1 & 2 Review by expert panel Expert review Final version of PSQ produced

RESULTS

Psychometric validation

- The Cronbach's alpha coefficient of the Chinese PSQ was 0.98, demonstrating excellent internal consistency.
- All items show relatively high itemtotal correlations (r ≥ 0. 73) after correction for overlap, indicating a strong association between each item and its respective latent construct.
- No meaningful relationship between the Chinese PSQ and EQ-5D-5L HK was observed (r = 0.0675).
- The values for the fit indices generally fall within acceptable ranges, indicating an adequate fit between the observed and hypothesized two-factor structure in the original PSQ.

Think-aloud interview

- Overall, most subjects could interpret all items in the questionnaire.
- All subjects agreed that the **PSQ** Chinese was easy to understand, while adequately representing their views towards pharmacy services.

<u>CONCLUSIONS</u>

This is the first cross-cultural adaptation of PSQ using psychometric validation and think-aloud interview in the Chinese population. Our results have demonstrated the reliability, validity, and semantic equivalence of the Chinese PSQ. The Chinese PSQ is deemed to be a valid instrument in measuring and reporting patient satisfaction towards community pharmacy services in Hong Kong.