Validation of the Malay version of the Pelvic Floor Impact Questionnaire (M-PFIQ-7)

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Introduction

The Pelvic Floor Impact Questionnaire 7 (PFIQ-7) is a psychometrically valid and reliable instrument for measuring the extent to which pelvic floor disorders affect the quality of life, however, there was no validated version in the Malay language.

Objective

This study aimed to translate and validate the PFIQ-7 questionnaires in Malay language

Methodology

The PFIQ-7 questionnaires have undergone forward and backward translation by two independent translators at each stage.

The final preliminary version underwent a face validity test among five subjects and was piloted among 30 subjects before the final version was used in the study.

A cross-sectional study was performed among women aged 20 years old and above who understand the Malay language. Women who were pregnant or with no history of sexual intercourse before were excluded. Test-retest reliability was performed in 31 subjects after four weeks.

Psychometric properties were examined using principal axis factoring with Promax rotation, Scree plot, construct validity and internal consistency.

Results

A total of 196 women participated in this study.

All the items in M-PFIQ-7 had inter-item correlation between 0.40 and 0.90 and extraction communalities were more than 0.3, which indicates that all the extracted components represent the variables well.

There was also no correlation between factors that exceed 0.7, therefore discriminant validity was achieved, and no multicollinearity issue was present.

The construct validity was adequate at all correlation between clinical symptoms and subscales in the M-PFIQ-7 questionnaires.

The internal consistency for M-PFIQ-7 was excellent with Cronbach's alpha of 0.976 with the subscales bladder or urine, bowel or rectum and vagina or pelvis were 0.947, 0.9967 and 0.960 respectively.

The test-retest analysis showed consistently low Cronbach's alpha value for the questionnaires (0.580) and each subscale (range from 0.512 to 0.653).

Conclusion:

The Malay version of the PFIQ-7 is a valid and reliable tool to assess pelvic floor disorder among women, however it was not stable over time.

Please scan here for more details

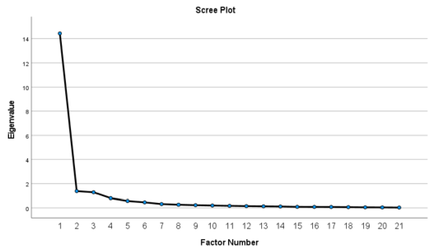


Figure 1: Scree plot for M-PFIQ-7

Factor Correlation Matrix

Factor	1	2	3	4
1	1.000	.696	.686	.439
2	.696	1.000	.678	.424
3	.686	.678	1.000	.408
4	.439	.424	.408	1.000

Extraction Method: Principal Axis Factoring.
Rotation Method: Promax with Kaiser Normalization.

Table 1 : Factor Correlation Matrix for M-PFIQ-7

	Cronbach's Alpha (test) n=196	Mean (sd)	Intraclass Correlation	95% CI	p-value	Cronbach's Alpha (retest) n=31	Mean (sd)	Intraclass Correlation	95% CI	p-value
M-PFIQ-7										
Total	0.976	5.83 (10.169)	0.976	(0.971, 0.981)	<0.001*	0.580	6.42(10.214)	0.585	(0.135, 0.800)	0.010*
Bladder or Urine	0.947	2.62 (3.918)	0.947	(0.935, 0.(58)	<0.001*	0.653	2.90(3.581)	0.660	(0.286, 0.837)	0.002*
Bowel or Rectum	0.967	1.42 (3.397)	0.967	(0.959, 0.973)	<0.001*	0.512	1.97(4.378)	0.518	(-0.010, 0.768)	0.027*
Vagina or Pelvis	0.960	1.79 (13.574)	0.960	(0.950, 0.968)	<0.001*	0.543	1.55(2.931)	0.540	(0.059, 0.777)	0.018*

Table 2 : Test-retest analysis for M-PFIQ-7

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