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SHOULD WE USE THE SHORTER QUALITY OF LIFE AND SYMPTOMS QUESTIONNAIRES IN WOMEN OVERACTIVE BLADDER (OAB)?

Hypothesis

OAB is defined as a symptom syndrome of urinary urgency, with or without urgency incontinence, usually with urinary frequency and nocturia, in the absence of infection or other obvious pathologic features. Many self-administered questionnaires are used to help in screening, such as the The OAB-v8 (1) and the new shorter form of OAB-v8, OAB v3 (2), and the questionnaires to measure the patient's perspective, i.e. symptoms and their impact on QOL such as the OABq (3) etc. The Asian OAB study group is formed by the Asian Urologists and Urogynecologists in Asia that interest in improving the OAB treatment care in Asia. Our group proposes the idea of using short screening questionnaires and short question for quality of life in clinical practice by choosing the OABv3 with a single-question quality of life questionnaire (1-qol) instead of using the OAB-v8 and OABq in clinical practice.

Aims of this study:

1) To test the cross cultural validation and reliability of Thai version -Overactive Bladder screening Questionnaires(OAB-V8, OAB-V3) and the quality of life questionnaire (OABq and 1 qol) in Thai women with OAB disease and 2) To test the correlation of the OAB-V8, OAB-V3, 1-qol scores with the OABq scores

Study design, materials and method

During 1 Jan to 30 March 2011, 36 Thai women attending Urogynecology clinic at an university hospital and diagnosed as having OAB (Symptoms of OAB included: urinary frequency, urgency with or without urge incontinence for ≥ 3 months and at least 1 episode of urgency with or without incontinence in last 3 days) were recruited in the study. The OAB questionnaires: OAB-v8, OAB-v3, OABq and 1-qol were given. The 1-qol is a single question asking about the quality of life that is interfered by the OAB. The 1-qol is proposed by our group for using in clinic with less time spent than the standard OABq. The scale is 0-5(0 as not interfered and 5 the most interfered). The questionnaires were translated by a linguist from Language institute from an university in Thailand and will be translated back into Thai by the other linguists. Test-retest reliability was examined using the internal correlation coefficient (ICC), Chronbach's Alpha and weighted Kappa coefficients between first and second applications of the questionnaires. Pearson or Spearman correlation coefficients were used to test the correlation of OAB-v8, OAB-v3 and OAB-q. Kruskal Wallis test is used to test difference of OABq within 1-qol level. The sample size calculation was done from pilot study, using alpha chronbach of OAB-v8 from pilot study that yields the highest number(alpha=0.10, P= 0.5, Q=0.5, d=0.15). The sample size required is 29.8 cases. The addition of 20 per cent (6 cases) are added for the loss to follow up cases. The total sample size require is 36 cases.

Results

Table 1: Reliability Statistic, Cronbach's alpha

	week 0	week 2
OAB-v3	0.59	0.33
OAB-v8	0.86	0.82
QoL	0.95	0.95

Figure 1 The test-retest reliability coefficient (ICC r) of the same questionnaire at 0 and 2 weeks

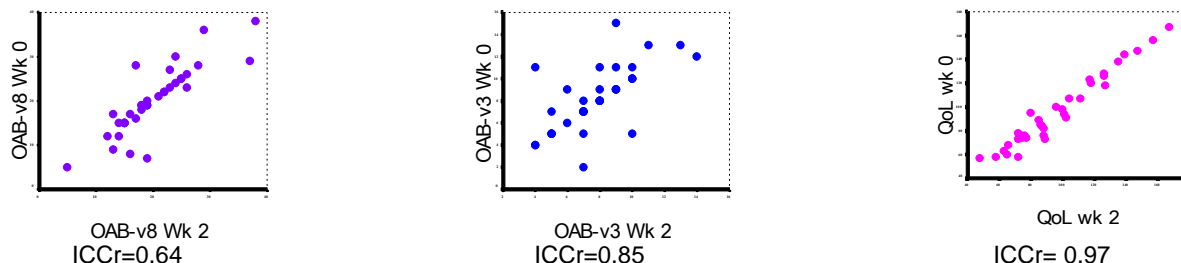


Table 2 The correlation coefficient (r) of OAB-v8 and OAB-v3 with OABq at 0 and 2nd week

	week 0	week 2
OAB-v3 vs OABq	0.40	0.49
OAB-v8 vs OABq	0.62	0.62

Table 3 Agreement by item at 0 and 2 weeks (Weighted Kappa)

OAB-v3 (Item number)	Weight Kappa
1,2,3	0.59,0.68,0.68
OAB-v8(Item number)	

1,2,3,4,5,6,7,8	0.59,0.65,0.75,0.71,0.68,0.78,0.83,0.69
<u>OABq(Item number)</u>	
1,2,3,4,5,6,7,8,9,10,11 12,13,14,15,16,17,18,19,20,21,22 23,24,25,26,27,28,29,30,31,32,33	0.72,0.67,0.67,0.41,0.61,0.56,0.65,0.68,0.73,0.74,0.72 0.73,0.76,0.78,0.78,0.70,0.75,0.67,0.68,0.83,0.80,0.77 0.80,0.76,0.86,0.86,0.80,0.61,0.61,0.68,0.64,0.83,0.83
<u>1-qol (Item number)</u>	
1	0.54

Table 4 OABq score for each 1-qol level at both 0 week.(p= 0.12)and 2nd week .(p= 0.29)

1-qol score level	0 week				2 nd week				N
	Mean	SD	Media n	Min-Max	Mean	SD	Median	Min-Max	
0= Very happy	-	-	-	-	-	-	-	-	-
1= Happy	87.83	37.76	70.50	58-147	85.00	31.92	72	58-147	6
2=Average	71.60	13.74	73.00	57-91	87.87	27.20	91	48-127	5
3=Unhappy	97.00	29.86	90.00	50-167	97.13	22.26	88	63-135	18
4=Terrible	113.4 0	33.86	94.00	84-156	114.00	40.15	112	75-157	5
5=Terrible most	108.0 0	14.14	108.0 0	98-118	134.00	47.38	134	100-167	2
Total	94.83	30.70	87.00	50-167	96.94	29.53	88	48-167	36

Interpretation of results

The Cronbach 's alpha (Table 1) and the intraclass correlation coefficient(ICCr) of OAB-v3 is lower than the OAB-v8 and OABq (Figure 1). OAB-v3 is less correlated to OABq than OAB-v8 (table2). All of the weighted kappa of each item of OAB-v3 are less than 0.7 (table 3). The 1-qol question can not differentiate the OABq score in both 0 and 2 week (table4).

Concluding message

We found that Thai version of OAB-v8 and OABq have good reliability. All reliability statistic parameters of OAB-v3 is poorer than OABv-8. The only single-question quality of life questionnaire (1-qol) that our group proposed has poorer reliability than standard OABq and should not be used to differentiate the quality of life for OAB. OAB-v3 and 1-qol has poor reliability and poor correlation to OABq and should not be used to replace the standard questionnaires like OABq and OAB-v8.

References

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Disclosures

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