

Validation of the OAB-questionnaire on quality of life of Greek patients with overactive bladder



Stavros Kontogiannis^{1, 2}, Anastasios Athanasopoulos¹,
Michail Tsagkarakis¹, Nikolaos Kontodimopoulos²
1. Department of Urology, University Hospital of Patras,
Greece, 2. Hellenic Open University, Patras, Greece



Aims of the study

The aim of this study was to validate the Overactive Bladder questionnaire (OAB-q) and assess its psychometric properties in Greek patients with overactive bladder.

Study design, materials and methods

In total, 107 patients with overactive bladder were recruited consecutively in our Clinic. The diagnosis was made according to the definition of overactive bladder acquired by the International Continence Society [1]. They had to fill in the OAB-q and the Short Form-36 questionnaire

(SF-36) two times, three months apart. In the meantime, they initiated lifestyle changes and drug therapy. The reliability was assessed by Cronbach's α . The validity was assessed by comparing OAB-q with SF-36. SF-36 has been officially translated in Greek and already validated in Greek patients [2]. Furthermore, SF-36 has shown good psychometric properties for symptoms of lower urinary tract [3]. The present study was approved by the Committee of our Hospital and all the patients signed an informed consent.

Results

Patients had a mean age of 62.1 years and 74.8 % of them were women. The results concerning validity and reliability are shown in Table 1 and 2, respectively. Interpretation of results Cronbach's α was more than 0.7 in all OAB-q subscales, which shows the internal consistency of the questionnaire, and therefore its reliability. OAB-q subscales showed a strong correlation (Pearson's $r > 0.3$) with the already validated SF-36 subscales therefore showing its validity.

Conclusion

The Greek version of OAB-q has shown strong psychometric properties of reliability and validity in our study. We hope that the validation of this version of OAB-q will motivate more doctors to use it for both clinical and academic purposes in Greece.

Table 1. Reliability Evaluation of OAB-q and SF-36: internal consistency, Cronbach's α at the beginning and at the end of the study.

OAB-q Categories	Beginning	End	SF-36 Categories	Beginning	End
Symptom bother	0,785	0,916	Physical function	0,889	0,909
Coping behaviours	0,779	0,872	Physical role limitations	0,915	0,906
Concern/Worry	0,817	0,860	Bodily pain	0,917	0,874
Sleep	0,962	0,928	General health	0,826	0,838
Social Interaction	0,853	0,863	Vitality	0,721	0,932
Health Related Quality of Life	0,943	0,967	Social functioning	0,853	0,862
			Emotional role limitations	0,880	0,749
			Mental health	0,714	0,719

Table 2. Validity evaluation: correlation of the OAB-q categories with the SF-36 ones at the beginning and at the end of the study (Pearson's r).

OAB-q \ SF-36		Symptom bother	Coping behaviours	Concern/Worry	Sleep	Social interaction	Health Related Quality of Life
Physical functioning	Beginning	-0.687**	0.053**	0.338**	0.631**	0.345**	0.419**
	End	-0.802**	0.455**	0.644**	0.725**	0.419**	0.616**
Physical role limitations	Beginning	-0.220*	0.152	0.270**	0.215*	0.140	0.239*
	End	-0.616**	0.356**	0.541**	0.484**	0.501**	0.512**
Bodily pain	Beginning	-0.615**	0.137	0.497**	0.612**	0.539**	0.535**
	End	-0.764**	0.413**	0.659**	0.718**	0.521**	0.582**
General health	Beginning	-0.624**	0.413**	0.572**	0.567**	0.726**	0.695**
	End	-0.768**	0.592**	0.774**	0.685**	0.789**	0.773**
Vitality	Beginning	-0.602**	0.401**	0.447**	0.384**	0.025	0.405**
	End	-0.588**	0.234*	0.506**	0.591**	0.326**	0.450**
Social functioning	Beginning	-0.584**	0.299**	0.536**	0.621**	0.517**	0.598**
	End	-0.738**	0.450**	0.662**	0.766**	0.516**	0.653**
Emotional role functioning	Beginning	-0.189	0.056	0.269**	0.387**	0.070	0.249**
	End	-0.613**	0.349**	0.561**	0.622**	0.560**	0.565**
Mental health	Beginning	-0.664**	0.623**	0.706**	0.357**	0.499**	0.662**
	End	-0.568**	0.439**	0.637**	0.575**	0.530**	0.596**
Physical Health Summary Score	Beginning	-0.387**	-0.128	0.116	0.399**	0.185	0.174
	End	-0.678**	0.342**	0.518**	0.583**	0.309**	0.482**
Mental Health Summary Score	Beginning	-0.482**	0.468**	0.598**	0.436**	0.298**	0.557**
	End	-0.566**	0.378**	0.620**	0.651**	0.585**	0.604**

*: $p < 0,01$
**: $p < 0,001$

References

1. Abrams P et al. The standardisation of terminology of lower urinary tract function: report from the Standardisation Sub-committee of the International Continence Society. Neurourol Urodyn. 2002;21(2):167–78.
2. Pappa E, Kontodimopoulos N, Niakas D. Validating and norming of the Greek SF-36 Health Survey. Qual Life Res Int J Qual Life Asp Treat Care Rehabil. 2005 Jun;14(5):1433–8
3. Milsom I, et al.. Effect of bothersome overactive bladder symptoms on health-related quality of life, anxiety, depression, and treatment seeking in the United States: results from EpiLUTS. Urology. 2012 Jul;80(1):90–6