# CULTURAL ADAPTATION AND SOCIOMETRIC ANALYSIS OF ABERDEEN VARICOSE VEIN QUESTIONNAIRE

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#### **OBJECTIVES**

The purpose of our study was to translate and adapt the Aberdeen Varicose Vein Questionnaire (AVVQ) into Hungarian language, and to investigate the sociometric properties of the Hungarian AVVQ, as well as to assess the health-related quality of life of patients suffering from varicose vein disease.

#### **METHODS**

374 adults  $(39.54\pm16.84)$ yrs) participated in this study who were divided into two groups (varicose vein, healthy). Internal consistency, convergent validity (using 36-item Short Form Survey, SF-36), repeatability, intra-class correlation coefficient of the Hungarian AVVQ were calculated. Regarding discriminant validity, we determined the scores of the Hungarian AVVQ in both groups, using the Mann-Whitney U-test. Statistical analysis of all data was performed using IBM SPSS Version 27.0. The level of significance was set at p<0.05.

### **RESULTS**

The Cronbach-alpha value was 0.890, while the correlation coefficient was R=1.000. According to the results of the convergent validation, we registered significant relationship between the total score of the AVVQ and some **SF-36** the (physical scores functioning: R=-0.735, p<0.001; rolephysical: R=-0.450, p<0.001; vitality, bodily pain: R=-0.120, p=0.020; general health: R=-0.591, p<0.001). The total score of the Hungarian AVVQ showed a significant difference between both groups (healthy: 1.73±3.57, varicose vein: 17.11±10.89; p<0.001)

## **CONCLUSIONS**

The Hungarian AVVQ was a reliable and a valid tool to assess health-related quality of life among patients with varicose veins and a useful tool to justify further treatments of the patients.

	Healthy (n=	y group 206)	Patient group (n=168)		
	Mean	SD	Mean	SD	
Age	30.22	14.48	50.96	11.73	
BMI (kg/m2)	24.48	4.80	27.84	5.73	
Years of disease	-	-	7.69	7.79	

Table 1. Main characteristics of the sample

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		PF	RP	RE	EF	EWB	SF	PN	GH
Pain and dysfunction	R	735**	485**	147**	087	.019	080	- .674**	524**
	p	<.001	<.001	.004	.092	.708	.193	<.001	<.001
Cosmetic appearance	R	534**	300**	075	046	.017	.001	- .467**	416**
	p	<.001	<.001	.149	.379	.739	.991	<.001	<.001
Extent of varicosity	R	672**	384**	015	113*	.024	005	- .546**	566**
	p	<.001	<.001	.777	.029	.638	.937	<.001	<.001
Complication s	R	705**	507**	046	126*	.008	078	- .605**	535**
	p	<.001	<.001	.374	.014	.873	.208	<.001	<.001
AVVQ-H score	R	735**	450**	077	120*	003	074	- .621**	591**
	p	<.001	<.001	.135	.020	.953	.230	<.001	<.001

Table 2. Spearman's rank correlation analysis between the AVVQ-H subscales and SF-36 scales

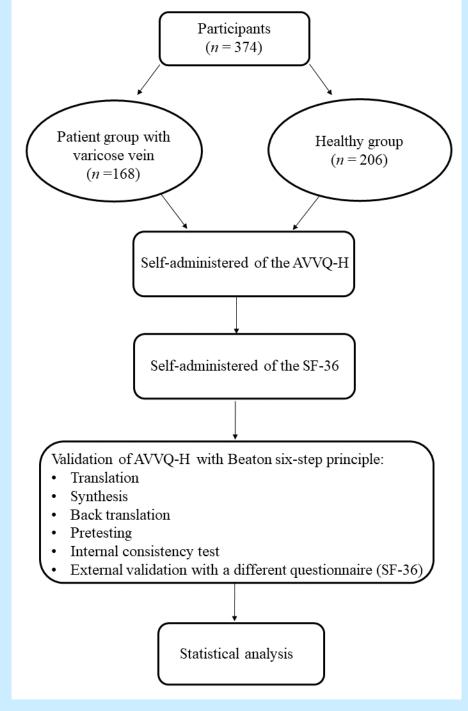


Figure 1. The study protocol AVVQ-H: Hungarian version of Aberdeen Varicose Vein Questionnaire, SF-36: 36-Item Short Form Survey

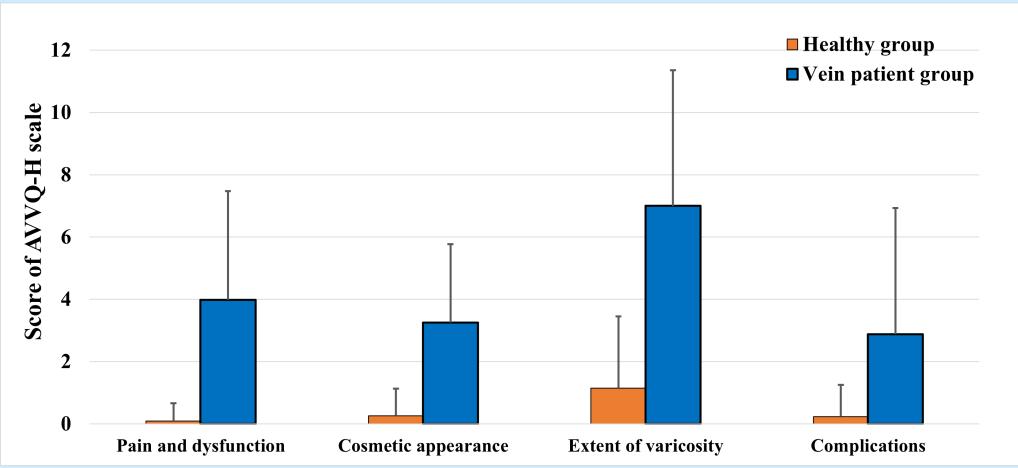


Figure 2. Discriminant validity of the AVVQ-H scores among the healthy and patient groups Mean  $\pm$  SD, \*\*Significant difference (P<0.001) between healthy and vein patient group



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