

## Quality of life outcomes in patients with pulmonary hypertension receiving prostacyclin therapy: impact of anxiety, depression, sociodemographic and treatment-related factors

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**Background:** Pulmonary hypertension (PH) is a rare and difficult disease to diagnose and the treatment process. The aim of this study to determine the quality of life (QoL) and the factors affecting it in patients with PH receiving prostacyclin therapy.

**Methods:** The data of this cross-sectional and correlational study was conducted between July 2023 and September 2024 with outpatients in the PH center of a training and research hospital in Istanbul. The sample of the study consisted of 58 individuals, which were all patients receiving prostacyclin. Data were collected using a sociodemographic and disease-related characteristics form, Pulmonary Arterial Hypertension Symptom Scale (PAHSS), Hospital Anxiety Depression Scale (HADS) and EmPHasis-10 Questionnaire.

**Results:** The mean age of the patients was 48.89±16.17 years, 69% were female, 69% had a comorbid chronic disease, 81% received continuous oxygen, the mean duration of diagnosis was 7.45±6.84 years and the mean duration of prostacyclin treatment was 30.86±47.57 months. The mean PAHSS total score was 71.52±36.40, HADS-Anxiety 8.70±5.23, HADS-Depression 7.82±5.32 and EmPHasis-10 30.05±41.92. Patients who were not working, had comorbid chronic diseases, had a higher functional classification stage and needed continuous oxygen had higher PAHSS and HADS scores and lower EmPHasis-10 scores. There was a moderate positive correlation between EmPHasis-10 score and PAHSS, HADS and six-minute walk test scores. Age, PAHSS, anxiety, depression and vomiting symptom explained 80% of the variation in EmPHasis-10 level. Graphic 1 shows the distribution of symptoms experienced by patients related to prostacyclin treatment.

**Table 4.** The Relationship Between Some Characteristics of the Participants and EmPHasis-10, PAHSS and HADS Scores (n=58)

Scales and Characteristics	*	PAHSS	EmPHasis-10	HADS-Anxiety	HADS-Depression
EmPHasis-10	r	0.72	-	0.61	0.57
	p	<0.001	-	<0.001	<0.001
HADS-Anxiety	r	0.39	0.61	-	0.73
	p	0.03	<0.001	-	<0.001
HADS-Depression	r	0.28	0.57	0.73	-
	p	0.03	<0.001	<0.001	-
Age	r	0.32	0.60	0.43	0.45
	p	0.01	<0.001	0.001	<0.001
Saturation	r	-0.30	-0.28	-0.08	-0.06
	p	0.02	0.03	0.51	0.63
Probnp	r	0.20	0.20	-0.08	0.08
	p	0.13	0.13	0.55	0.54
Ejection Fraction	r	-0.01	0.002	0.27	0.22
	p	0.91	0.98	0.04	0.09
6 Minute Walk	r	-0.50	-0.60	-0.61	-0.49
	p	<0.001	<0.001	<0.001	<0.001

