Factors influencing Health Related Quality of Life in children/adolescents with Growth Hormone Deficiency

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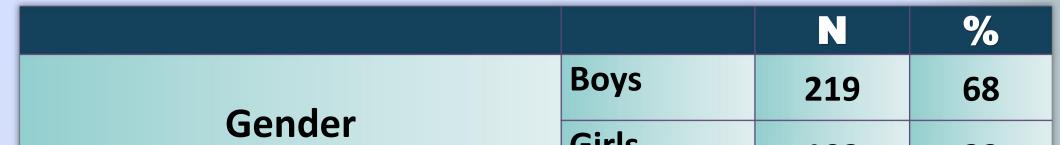


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Introduction

Short stature has been reported to negatively affect children's quality of life. Limited data are available regarding the factors affecting the psychosocial

Demographics



functioning of children with growth hormone deficiency (GHD).

Objective

The evaluation of certain aspects of Health Related Quality of Life (HrQoL) of children with GHD, while controlling the effect of the degree of short stature, the duration of treatment and the sociodemographic characteristics of the patients.

Methods

322 children/adolescents with a clinical diagnosis of GHD, treated with G

Completion of the disease specific, Greek version, of the Quality of Life in Short Stature Youth (QoLISSY) questionnaire from children and parents.

Mann-Whitney or Kruskal-Wallis whenever applicable and spearman's rho

osychosocial			Gender				
					Girls	103	32
		Maternal educational level		<12 years	173	54	
				>12 years	149	46	
QoLISSY Domains			Paternal educational level		<12 years	183	56.9
3 QOL Core Dom- ains Pre- dictor Do- mains Parent addi-	Physical		Paternal education	lai educational level		139	43.1
	Social			>-2.0 SDS	212	63.5	
	Emotional		Height S	Height SD	≤-2.0 SDS	122	36.5
	Coping		Residenc		Rural	81	25,1
	Beliefs		Resident	Residence		241	74,9
	Treatment				Low	13	3,9
	Parents: Future		Family Affluen	ce Scale	Medium	164	50,9
tional Do-	Parents: Effects on parer	nts	(FAS)		High	145	45,2
mains							
			Age (years), median range ±SD				13.1±2,5
h GH.			Duration of GH treatment (years), median range ±SD				3.4±2,6
	•						



correlation coefficient for the evaluation of the associations between QoLISSY questionnaire and demographics.





- **Concerning gender** differences, results showed higher scores for coping efforts for girls (p=0.033) compared to boys. According to parents, girls worry less about their future (p=0.042) than boys.
- **Younger** children self reported better coping efforts (p=0.012) and better experiences regarding GH therapy (p=0.012) than adolescents, whereas their parents rated their children lower in levels of Coping (p=0.003).
- Higher socioeconomic status was positively correlated with children's HrQoL (p=0.049).
- **W** Regarding the degree of short stature, taller children/adolescents had better HrQoL on the scales Physical QoL ($p_c=0.001$, $p_p=0.002$), Social QoL ($p_c=0.001$, $p_p=0.009$), Emotional QoL ($p_c=0.001$), Effects on parents ($p_p=0.027$) and Total QoL ($p_c=0.001$, $p_p=0.007$), both self- and parent-reported.
- Older age at treatment initiation was associated with more limitations on children's perceived Total HrQoL (p=0.001).
- Longer duration of treatment was associated with better self-report Total HrQoL (p=0.002) and with Beliefs (p=0.029) about stature. Children rated themselves as having higher HrQoL as compared to their parents.



Patient-related factors such as gender, age, socioeconomic status and degree of short stature affect the psychosocial functioning of children with GHD. Furthermore, age at initiation and duration of GH treatment play an important role.

Parents report worse levels of HrQoL as compared to their children, possibly due to increased anxiety and/or expectations regarding their children.

Bullinger, M., et al. (2013). "Assessing the quality of life of health-referred children and adolescents with short stature: development and psychometric testing of the QoLISSY instrument." Health Qual Life Outcomes 11: 76.

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