

FAMILY WEALTH INEQUALITIES IN PORTUGUESE CHILDREN'S HEALTH-RELATED QUALITY OF LIFE ACCORDING TO WEIGHT STATUS - FINDINGS FROM COSI/WHO EUROPE STUDY

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INTRODUCTION

Health-Related Quality of Life (HRQoL) is a multidimensional concept encompassing aspects of quality of life that directly or indirectly relate to health, such as physical, psychological, and social well-being (1).

The interplay between socioeconomic factors, like family earnings and weight status, impacts children's HRQoL, highlighting the importance of addressing these factors to promote health equity from an early age (1,2).



AIM

This study aims to evaluate the association between HRQoL of portuguese children and family perceived wealth, according to children's weight status.

METHODS

This **observational cross-sectional study** analyzed data from the 6th WHO European Childhood Obesity Surveillance Initiative (COSI) in Portugal (2021/2022), targeting primary school-age children. Children Nutritional status was calculated using WHO Growth Reference Charts (5–19 years)(3), and data on children's HRQoL and family perceived wealth was obtained through a family Questionnaire.

HRQoL was assessed using the KIDSCREEN-10 parent report (4,5) with Rasch scores calculated and transformed into T-scores (1,2). Higher values indicate higher levels of HRQoL (1).

Family perceived wealth was measured considering how easily a family meets monthly expenses using their earnings. It is categorized as "low" (combining the answers "we have trouble meeting the end of the month with our earnings" and "we barely meet the end of the month with our earnings"), "medium" ("we meet the end of the month with their own earnings without serious problems"), and "high" ("we easily met the end of the month with their own earnings").

RESULTS

Among the 3279 children analysed, **12.0% were classified as having obesity**, with a higher proportion of boys (51.8%) than girls.

After adjusting for sex and age, linear regression coefficients showed that **high family perceived wealth was positively associated with HRQoL**

The Association was stronger, in **children without obesity** in families with a **high perceived wealth** compared with low perceived wealth (**4.240, 95% CI: 2.953; 5.527, p<0.001**)

General linear regression also showed that **higher HRQoL scores were associated with higher family perceived wealth**, in children with or without obesity.

In children not having obesity, the differences in mean HRQoL scores, between the lowest, medium and higher family perceived wealth were statistically significant, for all categories.

ASSOCIATION FROM A LINEAR REGRESSION MODEL:

		Coefficient (95% CI)
Family perceived wealth (medium vs low)	Not having obesity	2.548 (1.398; 3.699)**
	Having obesity	3.671 (0.810; 6.532)*
Family perceived wealth (high vs low)	Not having obesity	4.240 (2.953; 5.527)**
	Having obesity	3.850 (0.516; 7.184)*

Adjusted for sex and age of children. In bold are the values with a p-value of less than 0.05, which are of statistical significance. (**p<0.001; *p<0.05)

Abbreviations: CI - Confidence Interval.

ASSOCIATION FROM A GENERALIZED LINEAR REGRESSION MODEL:

		Mean (SE)	Mean (SE)
Family perceived wealth	High	47.64 (0.67) **	48.04 (1.80)
	Medium	45.93 (0.62) *	47.85 (1.63)
	Low	43.38 (0.66) **	44.19 (1.64) *

*Adjusted for sex and age of children. In bold are the values with a p-value of less than 0.05, which are of statistical significance. (**p<0.001; *p<0.05)

Abbreviations: SE - Standard error.

CONCLUSIONS

Findings suggest that **higher family perceived wealth significantly influences children's Health related Quality of Life**, regardless their nutritional status. The association between this factor and HRQoL emphasizes the need for multifaceted interventions that address family socioeconomic circumstances to improve children's health and well-being.

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