

Quality of life in Uruguayan children with cerebral palsy assessed by CPQoL questionnaire.

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Introduction

Quality of life (QoL) is increasingly included as an outcome variable to evaluate the effectiveness of interventions in children with cerebral palsy (CP). QoL is a multidimensional construct defined as an individual perception of their own situation in life in the context of the cultural value systems in which they live, and in relation to their objectives, expectations, standards and concerns.

The Cerebral Palsy – Quality of Life (CP-QoL) questionnaire is based on the International Classification of Functioning, Disability and Health framework and is specific for children and adolescents with CP.

Objetives

To assess the QoL in children with CP using CP-QoL questionnaires.

To compare the QoL scores between patients with different types of CP, topography, GMFCS, BFMF, CFSC, and associated pathologies.

Materials & Methods

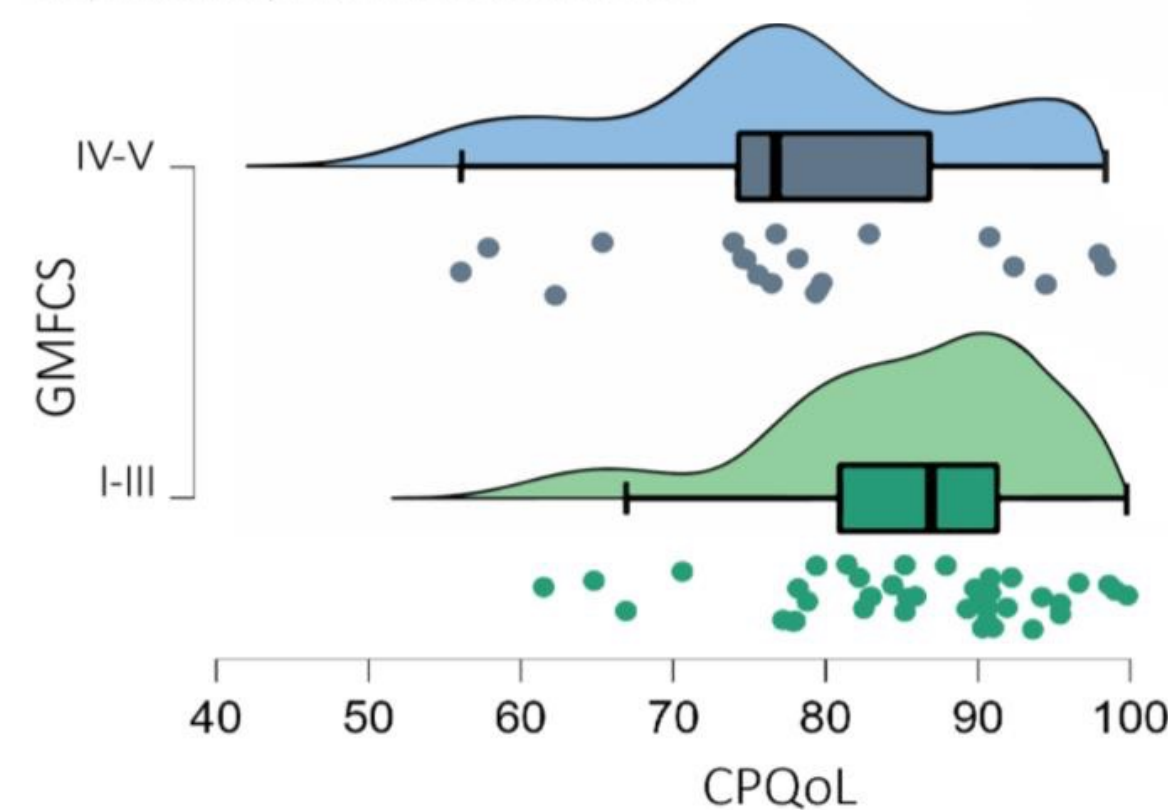
Descriptive cross-sectional study, based on review of medical records and the application of the CP-QoL questionnaire to children between 4-12 years old with CP or to their caregivers, in Teletón Rehabilitation Center of Montevideo, Uruguay, between July and September 2022.

Results

In total, 60 children with CP aged between 4 and 12 years old (mean age 7.2 years) were included: 47 CP-QoL questionnaires were answered by caregivers and 13 were answered by the children themselves.

	CPQoL	p value
<i>Global GMFCS</i>	83.468 ± 10,769	
I-III	85.846 ± 9.065	0.018
IV-V	78.337 ± 12.523	
<i>BFMF</i>	84.973 ± 10.137	0.015
I-III	84.973 ± 10.137	
IV-V	76.764 ± 11.420	
<i>CFCS</i>	84.289 ± 10.108	0.161
I-III	84.289 ± 10.108	
IV-V	79.358 ± 12.767	
<i>PC type</i>	77.309 ± 10.432	0.037
D	77.309 ± 10.432	
E	84.735 ± 10.530	
<i>Topography</i>	83.912 ± 9.513	0.961
Uni	83.912 ± 9.513	
Bi	83.293 ± 11.328	
<i>Sex</i>	84.129 ± 10.310	0.646
F	84.129 ± 10.310	
M	82.921 ± 11.208	
<i>Epilepsy</i>	84.812 ± 9.353	0.100
No	84.812 ± 9.353	
Yes	76.750 ± 14.961	
<i>Swallowing disorders</i>	84.902 ± 10.224	0.045
No	84.902 ± 10.224	
Yes	78.285 ± 11.502	
<i>Intellectual disability</i>	83.953 ± 10.510	0.578
No	83.953 ± 10.510	
Yes	82.500 ± 11.485	
<i>Orthopedic disorders</i>	83.258 ± 10.793	0.988
No	83.258 ± 10.793	
Yes	83.832 ± 10.971	
<i>Sleep disorders</i>	83.817 ± 10.544	0.284
No	83.817 ± 10.544	
Yes	73.350 ± 16.758	
<i>Sensory visual deficit</i>	84.426 ± 10.215	0.298
No	84.426 ± 10.215	
Yes	81.233 ± 11.970	
<i>Sensory auditory deficit</i>	83.170 ± 10.780	0.495
No	83.170 ± 10.780	
Yes	87.650 ± 5.595	

D: dyskinetic. E: espastic. Uni: unilateral. Bi: bilateral.



Linear regressions between CPQoL and GMFSC for caregiver reporting (n:47)

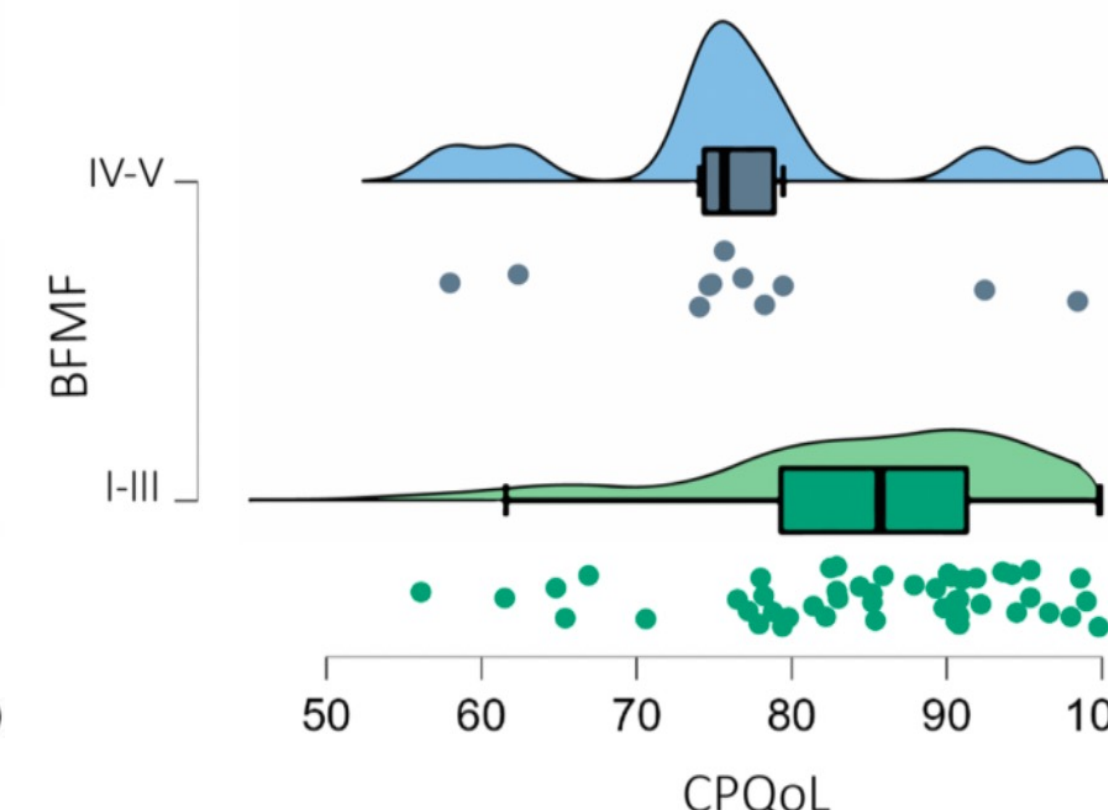
	Beta	Standard error	IC95%	p	R ²
Social wellbeing and acceptance	-6,52	2,97	-12,50 a -0,54	0,043*	0,097
Feelings about functioning	-8,91	4,02	-17,00 a -0,83	0,031*	0,099
Participation and physical health	-5,39	4,26	-13,96 a 3,18	0,212	0,034
Emotional wellbeing and self-esteem	-0,315	2,84	-6,03 a 5,40	0,912	0,000
Pain and impact of disability	-7,15	5,15	-17,52 a 3,22	0,172	0,041
Access to services	-10,48	5,29	-21,13 a 0,17	0,054	0,060
Family health	-9,71	6,81	-23,43 a 4,01	0,161	0,043

p<0.5. CPQoL considered as a continuous variable (range 0 to 100). GMFSC 0 = GMFSC 1 to 3, 1 = 4 to 5.

Linear regressions between CPQoL and GMFSC for children reporting (n:13)

	Beta	Standard error	IC95%	p	R ²
Social wellbeing and acceptance	0,21	6,28	-13,60 a 14,03	0,974	0,000
Feelings about functioning	-12,67	5,45	-24,66 a -0,68	0,040*	0,330
Participation and physical health	-13,93	7,40	-30,22 a 2,36	0,087	0,493
Emotional wellbeing and self-esteem	-11,46	5,36	-23,25 a 0,033	0,056	0,294
Pain and impact of disability	0,05	9,90	-21,74 a 21,84	0,996	0,000

p<0.5. CPQoL considered as a continuous variable (range 0 to 100). GMFSC 0 = GMFSC 1 to 3, 1 = 4 to 5.



GMFCS = Gross Motor Function Classification System

BFMF = Bimanual Fine Motor Function

CFCS = Communication Function Classification System

Conclusions

QoL of children is quite good in this group of Uruguayan patients with CP.

QoL was worse in patients with low level of functioning (GMFCS IV-V, BFMF IV-V), dyskinetic CP, and with swallowing disorders, compared with high level of functioning (GMFCS I-III, BFMF I-III), spastic CP and without swallowing disorders.

References

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