HEALTH-RELATED QUALITY OF LIFE OF CHILDREN WITH CEREBRAL PALSY AT A TERTIARY HOSPITAL IN NIGERIA

Hamza N[#], Shatima DR[#], Mukhtar Yola M[#], Anyiam JO[*]

[#] Department of Paediatrics, National Hospital Abuja, Plot 132 Central Business District, Garki, Abuja, Nigeria., [*] Department of paediatrics, College of Medical sciences, Ahmadu Bello University teaching Hospital, Samaru Campus, Zaria, Nigeria.

ICNC 2022
17th INTERNATIONAL CHILD NEUROLOGY CONGRESS
ANTALYA, TURKEY I OCTOBER 3-7, 2022

Introduction

Globally, the focus of care for children with chronic illnesses has shifted to maintaining a good quality of life rather than survival alone. Health-Related Quality of Life (HRQoL) measures the effect of the disease and therapy on the life of the patient

Studies in Nigeria and a lot of African countries have focused on classification and/or comorbidities without relating them to quality of life in children with Cerebral Palsy (CP).

Objectives

①Determine the HRQoL in children with CP in a tertiary hospital in Nigeria, ② compare with that of typically developing children and ③determine comorbidities and sociodemographic variables that affect it.

Methods

In this cross-sectional study, a total of 120 children (CP, 60 and TD, 60) aged 2-14 years had HRQoL assessed using PedsQL™ generic questionnaire with an additional CP module for children with CP. The Gross Motor Function Classification System (GMFCS) was used to classify severity of CP. Multiple regression determined the relationship between the interpreted HRQoL and social class, gender, Gross Motor Function Classification System (GMFCS) level, and type of comorbidities; with statistical significance set at $p \leq 0.05$.

Results

The mean (SD) total HRQoL score for children with CP was 57.4 (18.2) while that for the typically developing children was 90.2 (9.0). Comorbidities were present in 51 (85%) subjects, the commonest being speech impairment in 50 (83.3%) followed by epilepsy in 24 (40%), and feeding problems in 21 (35%).

Table-I: Interpreted HRQoL for all participants

Scales (N)	Mean (SD)	Interpreted HRQoL	TD (%)	CP (%)	Chi-square	P (<0.05)
Total (120)	73.83 (21.83)	Impaired	0(0.0)	42(70.0)	64.2	0.000
		Not impaired	60(100.0)	18(30.0)		
Physical (120)	64.16 (34.62)	Impaired	5(8.3)	49(81.7)	65.6	0.000
		Not impaired	55(91.7)	11(18.3)		
Emotional (120)	81.00 (15.20)	Impaired	3(5.0)	10(16.7)	4.2	0.075
		Not impaired	57(95.0)	50(83.3)		
Social (120)	82.46 (20.92)	Impaired	2(3.3)	22(36.7)	20.8	0.000
		Not impaired	58(96.7)	38(63.3)		
School Functioning (81)	83.82 (17.75)	Impaired	3(5.2)	5(21.7)	5.1	0.038
		Not impaired	55(94.8)	18(78.3)		
Psychosocial (120)	81.11 (14.87)	Impaired	2(3.3)	12(20)	8.1	0.008
		Not impaired	58(96.7)	48(80)		

SD=standard deviation, *statistically significant, TD= typically developing children, CP= cerebral palsy

TABLE II: Comorbidities and demographics associated with HRQoL of children with CP

Co-morbidities	β	SE	P (≤0.05)	Exp (β)	95% CI for Exp(β)	
					Lower	Upper
Epilepsy	1.77	0.87	0.043*	5.84	1.06	32.21
Speech impairment	0.78	0.82	0.340	2.18	0.44	10.77
Feeding problems	2.38	1.11	0.033*	10.78	1.22	95.35
Hearing impairment	0.73	0.31	0.577	2.078	0.16	27.15
Demographics						
Social class	0.21	0.35	0.54	1.23	0.63	2.43
Sex	0.15	0.82	0.86	1.16	0.24	5.73
GMFCS	2.08	0.72	0.004*	8.00	1.97	33.33
Child's Age	0.16	0.13	0.22	1.18	0.91	1.52
Constant	2.393	2.15	0.27	10.95		

*Statistically significant, SE= Standard Error, CI= Confidence Interval

Conclusions

- The overall HRQoL was lower in children with CP compared to TD.
- Scores were lower on the CP module.
- Higher GMFCS level, epilepsy and feeding problems predicted impaired HRQoL.
- The major predictors of poor quality of life are modifiable.

References

1. WHO. Development of the World Health Organization WHOQOL-BREF quality of life assessment. The WHOQOL Group. Psychol Med. 1998;28:551–8.

2. Lim MSY, Wong CP. Impact of cerebral palsy on the quality of life in patients and their families. Neurol Asia. 2009;14:27–33.

3. Selber P, Graham HK. Musculoskeletal aspects of cerebral palsy. J bone Jt Surg. 2003;85:157–66.

4. Krigger KW. Cerebral Palsy : An Overview. Am Fam Physician. 2006;73:91–100.

5. Lagunju I., Okafor O. An Analysis of Disorders seen at the Paediatric Neurology Clinic, University College Hospital, Ibadan, Nigeria. West Afr J Med . 2009 ;28:328–33.

6. Varni JW, Burwinkle TM, Berrin SJ, Sherman SA, Artavia K, Malcarne VL, et al. The PedsQL in pediatric cerebral palsy: Reliability, validity, and sensitivity of the Generic Core Scales and Cerebral Palsy Module. Dev Med Child Neurol. 2006;48:442–9.

Contact

Email: hamzanajaatu@gmail.com
Phone: +234(0)8090755511