

# Validation of the EuroQol (EQ-5D-Y) Health-Related Quality of Life Questionnaire (QoL) in Pediatric Inflammatory Bowel Disease (IBD)

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## BACKGROUND

- IBD are non-curable immune mediated disorders characterized by recurring remissions and relapses that severely affects one's QoL (1).
- As such, assessing QoL has been integrated as part of standard clinical care.
- Currently, there exist two QoL questionnaires among pediatric IBD settings: IMPACT-III and EQ-5D-Y., which consists of 35 and 5-items, respectively (2, 3).
- Unlike IMPACT-III, EQ-5D-Y has yet to be validated, however the shorter measure will have great utility in clinical settings

## AIM

- The aim of the present study is to validate the EQ-5D-Y in the pediatric IBD population. We hypothesized that the EQ-5D-Y will demonstrate good psychometric properties (validity, reliability, responsiveness).

## METHODS

- Data were prospectively collected from two longitudinal cohorts: the local Manitoba pediatric IBD (MALPID) and the national pediatric IBD network (CIDsCaNN).
- Due to the lack of validated measure of clinical disease activity for patients with bowel stoma following a colectomy procedure, these patients were excluded in the study.
- Age, sex, clinical disease activity (remission or relapse), EQ-5D-Y, and IMPACT-III scores were collected in each visit. Over 900 records were obtained from 148 patients.
- Data were analyzed with Spearman Correlation, Wilcoxon Signed Rank test, and Cronbach's alpha ( $\alpha$ ).

## RESULTS

Table 1: Baseline Demographics

Age at Diagnosis		Gender	
Mean	11.12	Male	75 (50.7%)
SD	4.56	Female	63 (42.6%)
		Unknown	10 (6.8%)

Table 3: Responsiveness

Wilcoxon Signed Rank Test		EQ-5D-Y
Remission (Active – Inactive Disease)	Z-score	<b>-4.119</b>
	P-value	<b>&lt;0.001</b>
	n	76
	Median Diff	8.63
Relapse (Inactive – Active Disease)	Z-score	<b>-2.197</b>
	P-value	<b>.028</b>
	n	50
	Median Diff	-6.58

Table 2: Criterion Validity

Spearman Correlation		EQ-5D-Y
IMPACT-III	Spearman-rho	.053
	P-value	.793
	n	27

Table 4: Reliability

Reliability Analysis	EQ-5D-Y
Cronbach's Alpha	.701
n	572

## CONCLUSION

- Findings suggested that the EQ-5D-Y is a reliable and accurate tool to measure QoL. The criterion validity, however, remained doubtful due to non-significant association and insufficient data. More data collection is needed to validate the EQ-5D-Y.

## REFERENCES

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