

Quality of Life in children on cRRT in the Netherlands and Belgium



Renal Insufficiency Therapy in Children:
Quality assessment and improvement

EWOPA 2009

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Objectives

What is the current quality of life

- compared to healthy children?
- compared to previous studies in children with ESRD?
- Is there a difference between treatment modalities?

Dutch young adults on dialysis

	Pediatric onset ESRD	Adult onset ESRD
Physical	↓	↓
Mental	=	↓

Pediatric ESRD, Texas

	Dialysis	Transplant	Healthy
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Physical



=

Psychosocial



=

Study population

- All prevalent HD & PD patients < 19 years at 01/08/2007.
- Alle incident HD, PD, Tx patients < 19 years.

in the Netherlands and Belgium

Study design QoL

Every 6 months: standardized Quality of Life Questionnaires

- Child or parent
- Paper form

PedsQL

- Parent proxy report in children 5-7 years
Child self report children/teenagers 8-18 years
- Domains:
 - Physical
 - Activity, sports, pain, energy
 - Psychosocial
 - Emotional, social and school functioning

Response rate

Baseline	6 months	12 months
12		
9		
4		
5		
	13	
	10	
		12
30/97	44/95	38/60

Characteristics responders

No significant differences in responder / non responder:

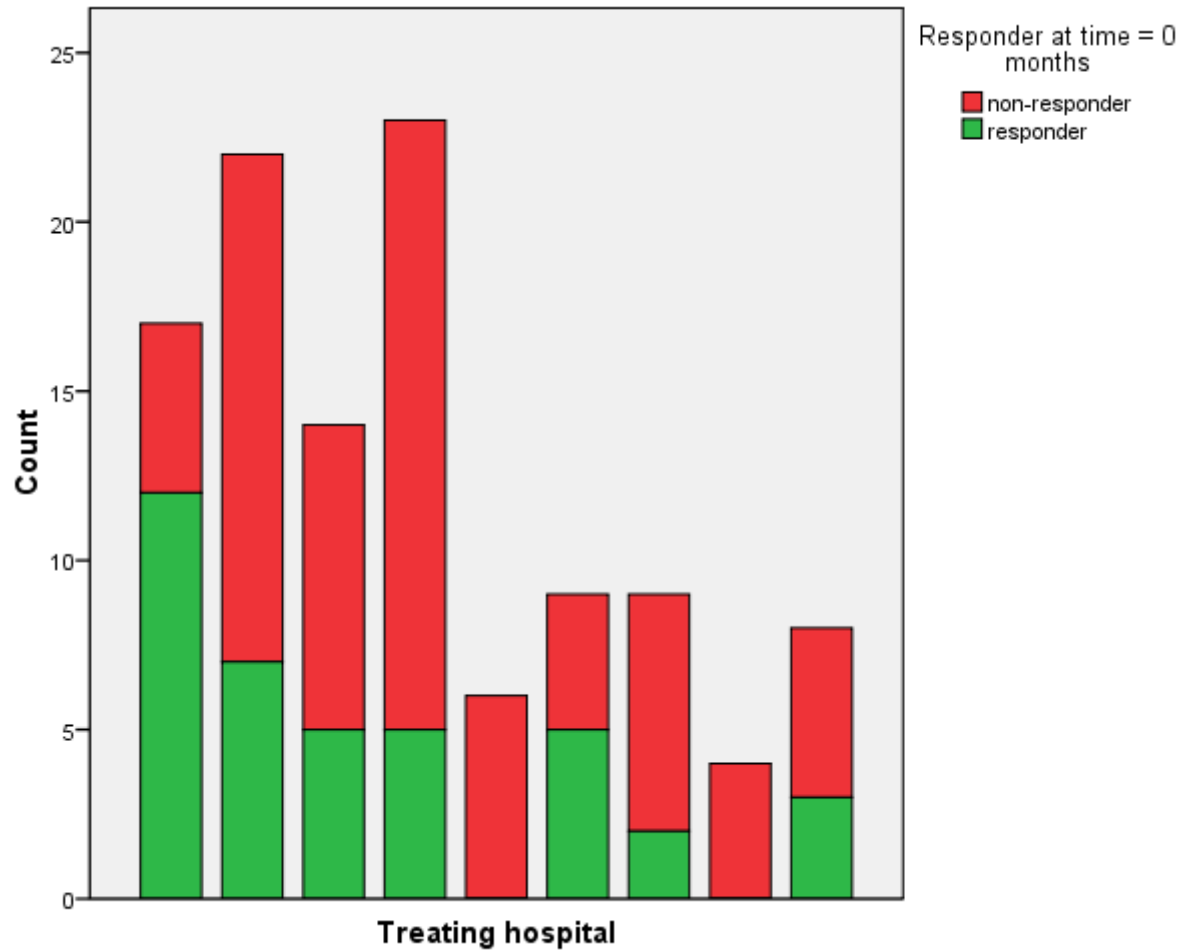
- Treatment modality
- Duration cRRT
 - Median [range] 9 [0-155] months vs. 11.5 [0-209] months, $p= 0.054$
- General condition
- Age
- Race
- Gender

General condition of responders

General condition	responders		non-responders	
	n	%	n	%
excellent	3	9	6	9
very good	4	12	16	25
good	19	57	34	53
poor	3	9	8	13
bad	4	12	16	25
Total	33	100	64	100

P= 0.567

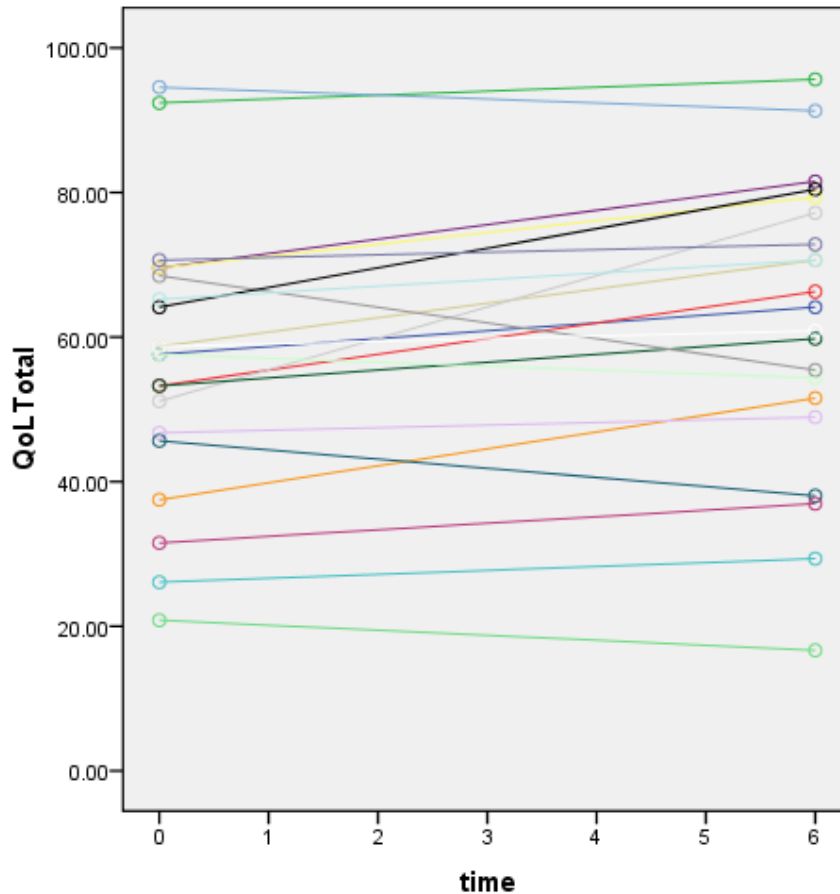
Response baseline per center



Results QoL RICHQ

Scale	RICHQ	Texas 2006	
	(n= 65)	ESRD (n= 85)	Healthy (n=131)
Physical health	61 (25)	75 (20)	91 (10)
Psychosocial health	66 (16)	74 (15)	85 (9)
Total score	64 (18)	74 (15)	87 (8)

Longitudinal effects (0 and 6 months, n=21)

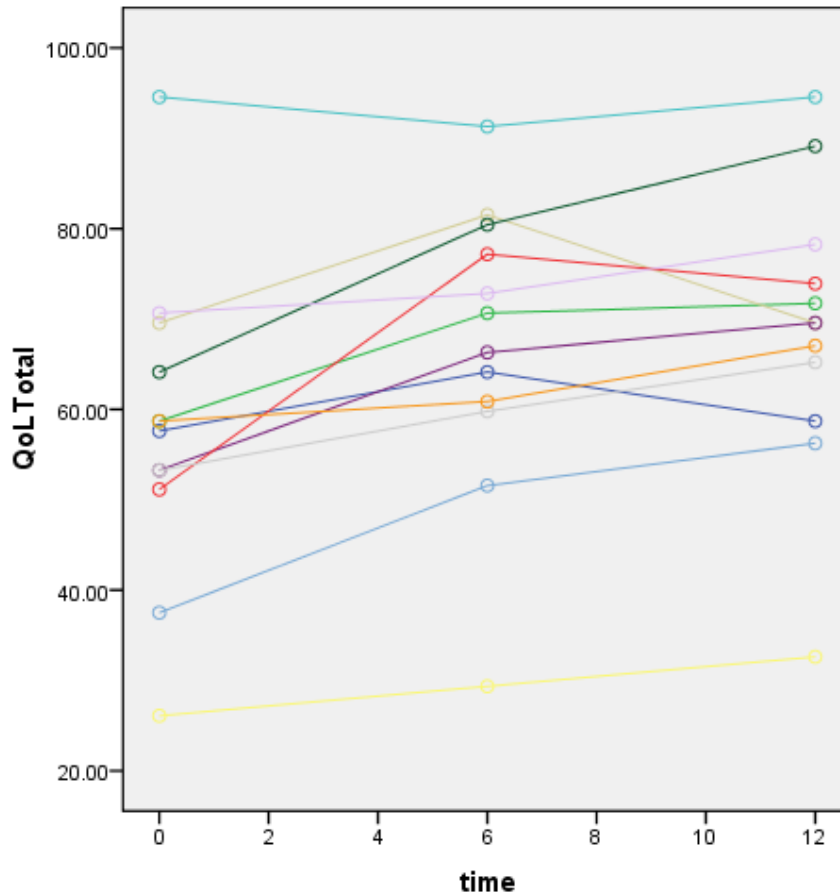


Difference in QoL 0 and
6 months:

Median [range]:

5.43 [-13 – 26]

Longitudinal effects (0,6 and 12 months, n=12)



Difference in QoL 0 and
12 months:

Median [range]:

10.16 [0 - 25]

Results QoL / modality

Time (months)	HD n=16	PD n=25	TX n=24
Physical	60 (28)	67 (22)	56 (27)
Psycho- Social	62 (18)	65 (17)	67 (14)
Total	61 (20)	66 (18)	64 (17)

Determinants of QoL

No significant effect of:

- Duration cRRT
- Treatment modality
- General condition
- Age
- Gender
- Country
- Race

Discussion

- Low response rate
 - Logistic problems
 - Selection bias not excluded
- Impaired Quality of Life
 - compared to healthy children
 - compared to previous studies in children with ESRD
 - no difference between treatment modalities

On behalf of

Advisory Board

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Questions



Remarks

Extra slides

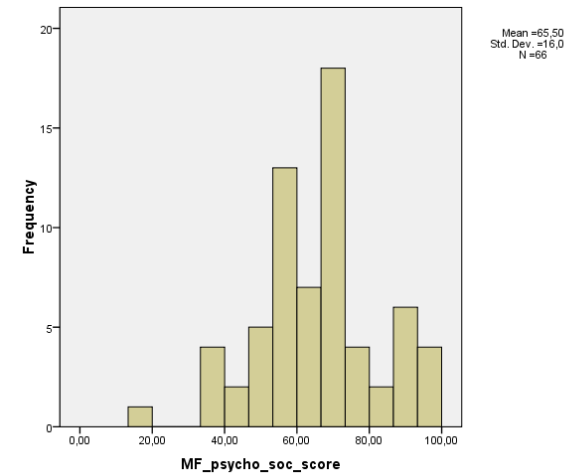
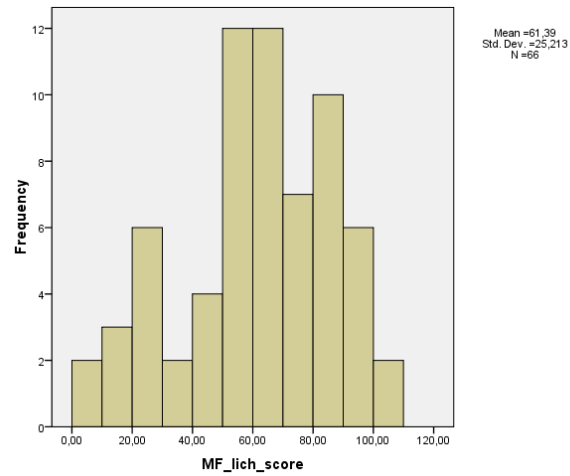
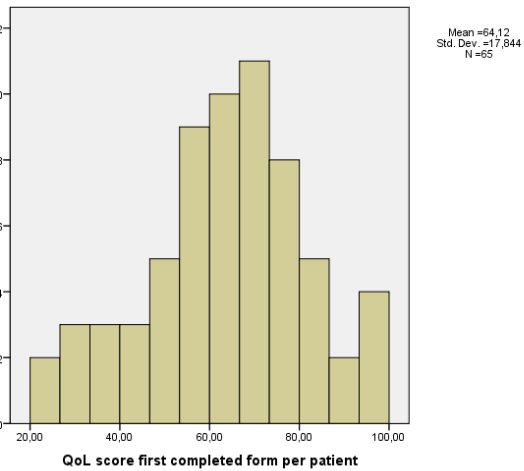
In geval van vragen

Actual number of patients

- Haemodialysis: 26
- Peritoneal dialysis: 19
- Total dialysis: 45
- Total transplanted: 75*
- Total cRRT 120
*treated by Ped Nephrologists
at this moment*

* *since start RICHQ in centers*

Distribution QoL



Determinants of QoL

	test	p
Duration cRRT	Spearman correl	0.668
Treatment modality	Kruskal Wallis	0.78
General condition	Kruskal Wallis	0.482
age	Spearman correl	0.360