

CHAPTER 4

**QUALITY OF LIFE
AND
REHABILITATION OUTCOMES
OF DIALYSIS PATIENTS
IN MALAYSIA**

Liu Wen Jiun
Zaki Morad b. Mohd Zaher

A: QUALITY OF LIFE ON DIALYSIS

13594 patients who entered dialysis between 1997-2005 were analysed. 11424 HD patients and 2170 CAPD patients reported median QoL index score of 9 and 10 respectively (Table 4.1, Figure 4.1) Diabetics have a lower median QoL index score (8 versus 10) than nondiabetics (Table 4.2, Figure 4. 2) whilst there was no difference seen between gender (Table 4.3, Figure 4.3). There is a trend of lower median QoL index score being associated with older dialysis patients (Table 4.4, Figure 4.4). There are no obvious trends in QoL index seen either in the HD or CAPD cohort over the last 8 years. (Table 4.5, Table 4.6, Fig 4.5 and Figure 4.6)

Table 4.1: Cumulative distribution of QoL-Index score in relation to dialysis modality, All Dialysis patients 1997-2005

Dialysis modality	CAPD	HD
Number of patients	2170	11424
Centile		
0	0	0
0.05	5	4
0.10	6	5
0.25 (LQ)	8	7
0.5 (median)	10	9
0.75 (UQ)	10	10
0.90	10	10
0.95	10	10
1	10	10

Figure 4.1: Cumulative distribution of QoL-Index score in relation to Dialysis modality, All Dialysis patients 1997-2005

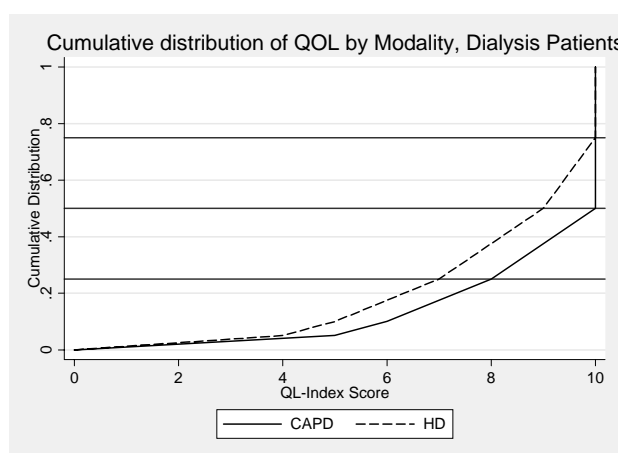


Table 4.2: Cumulative distribution of QoL-Index score in relation to Diabetes mellitus, All Dialysis patients 1997-2005

Diabetes mellitus	No	Yes
Number of patients	7480	6114
Centile		
0	0	0
0.05	6	4
0.10	7	5
0.25 (LQ)	9	6
0.5 (median)	10	8
0.75 (UQ)	10	10
0.90	10	10
0.95	10	10
1	10	10

Figure 4.2: Cumulative distribution of QoL-Index score in relation to Diabetes mellitus, All Dialysis patients 1997-2005

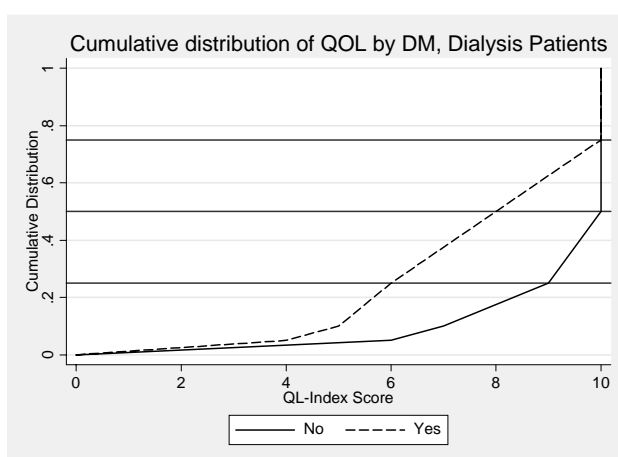


Table 4.3: Cumulative distribution of QoL-Index score in relation to Gender, All Dialysis patients 1997-2005

Gender	Male	Female
Number of patients	7523	6071
Centile		
0	0	0
0.05	5	4
0.10	6	5
0.25 (LQ)	8	7
0.5 (median)	9	9
0.75 (UQ)	10	10
0.90	10	10
0.95	10	10
1	10	10

Figure 4.3: Cumulative distribution of QoL-Index score in relation to Gender, All Dialysis patients 1997-2005

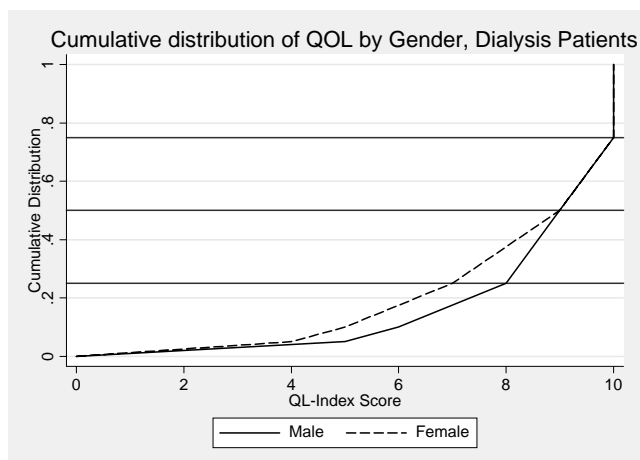


Table 4.4: Cumulative distribution of QoL-Index score in relation to Age, All Dialysis patients 1997-2005

Age group (years)	<20	20-39	40-59	>=60
Number of patients	567	2494	6635	3898
Centile				
0	0	0	0	0
0.05	6	7	5	4
0.10	8	8	6	5
0.25 (LQ)	9	9	8	6
0.5 (median)	10	10	9	8
0.75 (UQ)	10	10	10	9
0.90	10	10	10	10
0.95	10	10	10	10
1	10	10	10	10

Figure 4.4: Cumulative distribution of QoL-Index score in relation to Age, All Dialysis patients 1997-2005

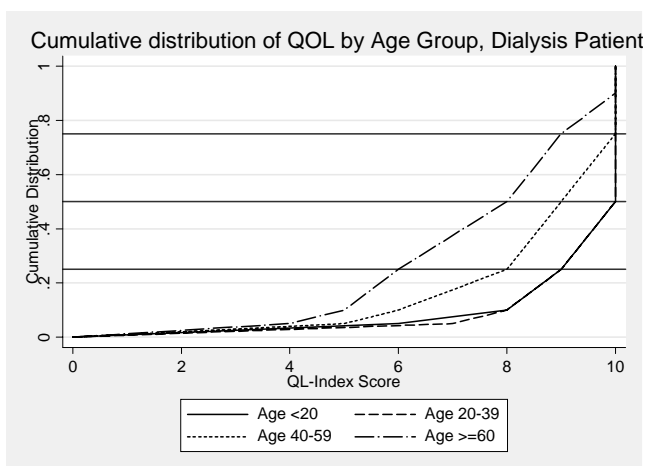


Table 4.5: Cumulative distribution of QoL-Index score in relation to Year of entry, HD patients 1997-2005

Year of Entry	1997	1998	1999	2000	2001	2002	2003	2004	2005
Number of patients	728	821	1021	1236	1384	1579	1563	1770	1322
Centile									
0	0	0	0	0	0	0	0	0	0
0.05	5	5	5	5	5	4	5	4	4
0.10	6	6	6	6	5	5	5	5	5
0.25 (LQ)	8	8	7	7	7	7	7	7	7
0.5 (median)	9	9	9	9	9	9	9	9	9
0.75 (UQ)	10	10	10	10	10	10	10	10	10
0.90	10	10	10	10	10	10	10	10	10
0.95	10	10	10	10	10	10	10	10	10
1	10	10	10	10	10	10	10	10	10

Figure 4.5: Cumulative distribution of QoL-Index score in relation to Year of entry, HD patients 1997-2005

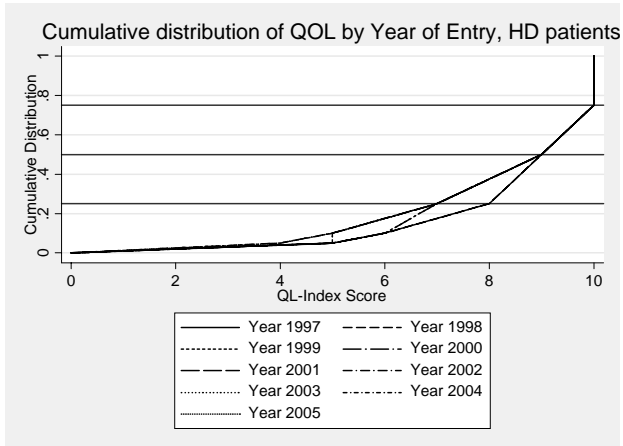


Figure 4.6: Cumulative distribution of QoL-Index score in relation to Year of entry, CAPD patients 1997-2005

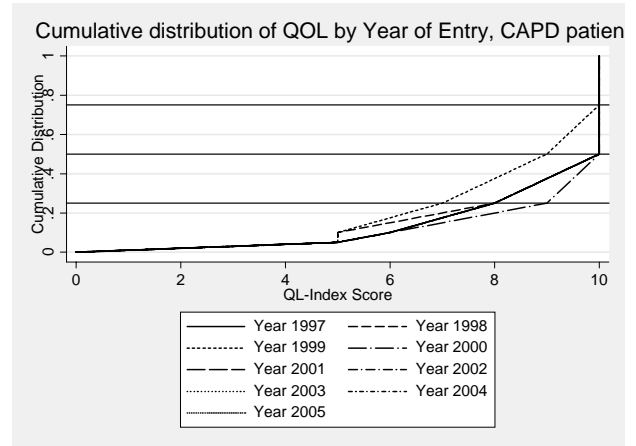


Table 4.6: Cumulative distribution of QoL-Index score in relation to Year of entry, CAPD patients 1997-2005

Year of Entry	1997	1998	1999	2000	2001	2002	2003	2004	2005
Number of patients	164	117	166	188	269	319	368	302	277
Centile									
0	0	0	0	0	0	0	0	0	0
0.05	5	5	5	5	5	5	5	5	5
0.10	6	5	5	6	6	6	6	6	6
0.25 (LQ)	8	8	7	9	8	8	8	8	8
0.5 (median)	10	10	9	10	10	10	10	10	10
0.75 (UQ)	10	10	10	10	10	10	10	10	10
0.90	10	10	10	10	10	10	10	10	10
0.95	10	10	10	10	10	10	10	10	10
1	10	10	10	10	10	10	10	10	10

B: WORK RELATED REHABILITATION

Analysis was done on HD patients (n=4728) and CAPD patients (n=722) who entered dialysis between 1997 –2005, (Table 4.7). Only patients who were working for pay and those who were unable to work for pay due to health reasons are included. The proportion of patients on employment were comparable between the two modalities (HD = 72% vs CAPD 73%)

Amongst HD as well as CAPD patients, the proportion on employment increased with longer duration on dialysis. (Table 4.8 and Table 4.9) This may be confounded by the healthier individuals who survived longer in the earlier cohort and therefore spuriously increased the proportion on employment.

Table 4.7: Work related rehabilitation in relation to Modality, Dialysis patients 1997-2005

Modality	CAPD		HD	
	N	%	N	%
Number of patients	722		4728	
Able to return for Full or Part time for pay	529	73	3386	72
Unable to work for pay*	193	27	1342	28

* Exclude patients unable to find employment for non-health related reason

Table 4.8: Work related rehabilitation in relation to Year of Entry, HD patients 1997-2005

Year	1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Number of patients	371		417		508		556		560		620		607		650		439	
Able to return for Full or Part time for pay	308	83	332	80	385	76	425	76	389	69	450	73	429	71	413	64	255	58
Unable to work for pay*	63	17	85	20	123	24	131	24	171	31	170	27	178	29	237	36	184	42

* Exclude patients unable to find employment for non-health related reasons

Table 4.9: Work related rehabilitation in relation to Year of Entry, CAPD patients 1997-2005

Year	1997		1998		1999		2000		2001		2002		2003		2004		2005	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Number of patients	70		38		47		62		81		114		132		86		92	
Able to return for Full or Part time for pay	51	73	31	82	35	74	41	66	66	81	87	76	100	76	60	70	58	63
Unable to work for pay*	19	27	7	18	12	26	21	34	15	19	27	24	32	24	26	30	34	37

* Exclude patients unable to find employment for non-health related reasons