

Chapter 4

QUALITY OF LIFE AND REHABILITATION OUTCOMES OF PATIENTS ON DIALYSIS

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SECTION A: QoL INDEX SCORE

A total of 28999 dialysis patients who were alive at 31st December 2014 and entered dialysis between 2005-2014 were analysed. Of these, 26001 HD patients and 2998 PD patients both reported median QoL index score of 9 and 10 respectively (Table & Figure 4.1) Diabetics have a lower median QoL index score than non-diabetics (8 versus 10) (Table & Figure 4. 2). Females and males had comparative median QoL core of 9 (Table & Figure 4.3). Lower median QoL index score of 8 was found in >60 years old age group (Table & Figure 4.4). Median QoL index score according to year of entering HD had decreased from 10 in 2005 to 8 in 2014 (Table & Figure 4.5). For PD patients, the median QoL index score remains at 10 for all entering at 2005-2013 and 9 in 2014 (Table & Figure 4.6).

Table 4.1: Cumulative distribution of QoL-Index score in relation to dialysis modality, all dialysis patients 2005-2014

Dialysis modality	PD	HD
Number of patients	2998	26001
Centile		
0	0	0
0.05	5	4
0.1	6	5
0.25 (LQ)	8	7
0.5 (median)	10	9
0.75 (UQ)	10	10
0.9	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 2005-2014

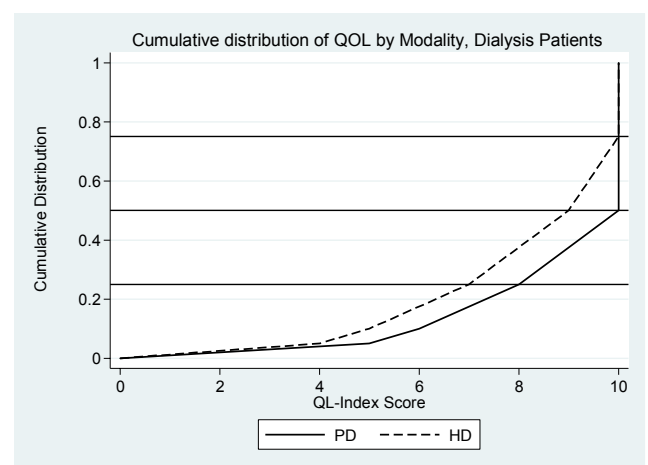


Table 4.2: Cumulative distribution of QoL-Index score in relation to DM, all dialysis patients 2005-2014

Diabetes mellitus	No	Yes
Number of patients	15423	13576
Centile		
0	0	0
0.05	5	4
0.1	6	5
0.25 (LQ)	8	7
0.5 (median)	10	8
0.75 (UQ)	10	10
0.9	10	10
0.95	10	10
1	10	10

Figure 4.2: Cumulative distribution of QoL-Index score in relation to DM, All Dialysis patients, 2005-2014

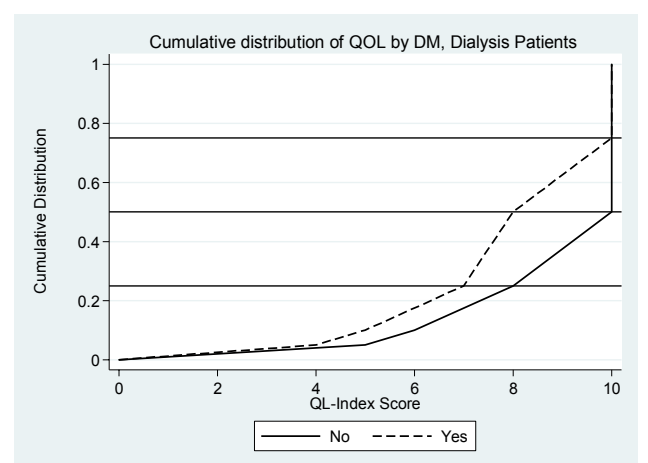


Table 4.3: Cumulative distribution of QoL-index score in relation to gender, all dialysis patients 2005-2014

Gender	Male	Female
Number of patients	15908	13091
Centile		
0	0	0
0.05	5	4
0.1	6	5
0.25 (LQ)	8	7
0.5 (median)	9	9
0.75 (UQ)	10	10
0.9	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, 2005-2014

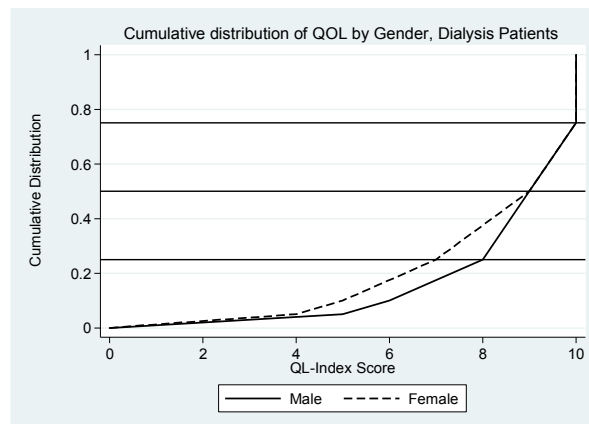


Table 4.4: Cumulative distribution of QoL-index score in relation to age, all dialysis patients 2005-2014

Age group (years)	<20	20-39	40-59	>=60
Number of patients	614	4633	14086	9666
Centile				
0	0	0	0	0
0.05	6	6	5	4
0.1	7	7	6	5
0.25 (LQ)	9	9	8	6
0.5 (median)	10	10	9	8
0.75 (UQ)	10	10	10	10
0.9	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, 2005-2014

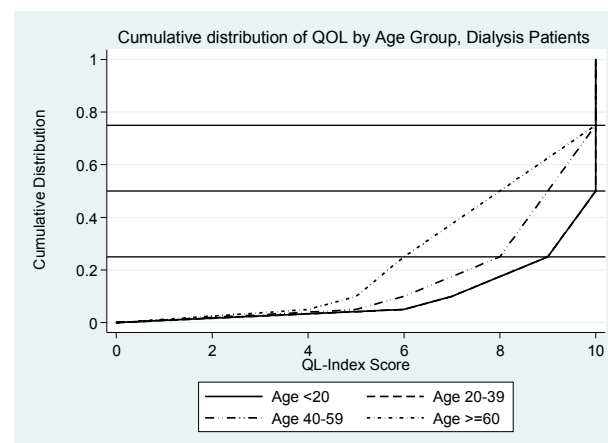


Table 4.5: Cumulative distribution of QoL-Index score in relation to year of entry, HD patients 2005-2014

Year of Entry	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of patients	770	1035	1269	1656	2088	2540	3310	4035	4793	4505
Centile										
0	0	0	0	0	0	0	0	0	0	0
0.05	5	5	5	5	5	5	4	4	4	4
0.1	7	6	6	6	6	6	5	5	5	5
0.25 (LQ)	8	8	8	8	8	7	7	7	7	6
0.5 (median)	10	10	10	10	9	9	9	9	9	8
0.75 (UQ)	10	10	10	10	10	10	10	10	10	10
0.9	10	10	10	10	10	10	10	10	10	10
0.95	10	10	10	10	10	10	10	10	10	10
1	10	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 2005-2014

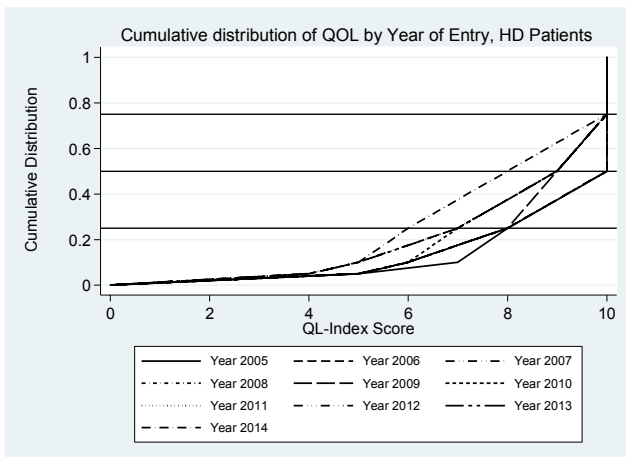


Figure 4.6: Cumulative distribution of QoL-Index score in relation to year of entry, PD patients 2005-2014

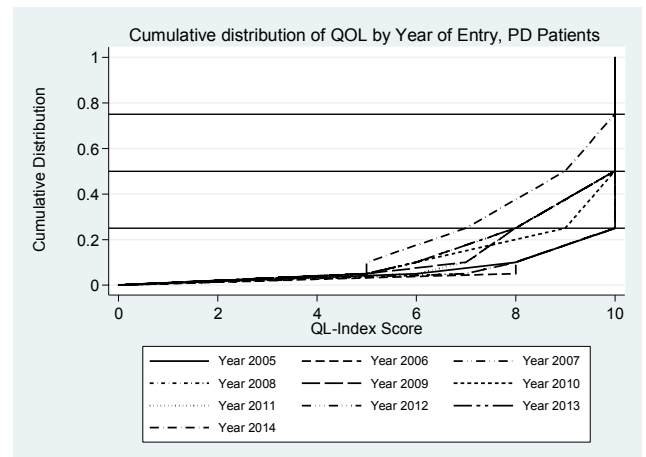


Table 4.6: Cumulative distribution of QoL-Index score in relation to year of entry, PD patients 2005-2014

Year of Entry	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of patients	27	39	65	88	155	174	311	521	686	932
Centile										
0	0	0	0	0	0	0	0	0	0	0
0.05	6	8	7	7	5	5	6	5	5	5
0.1	8	8	8	8	7	6	7	6	6	5
0.25 (LQ)	10	10	10	10	8	9	8	8	8	7
0.5 (median)	10	10	10	10	10	10	10	10	10	9
0.75 (UQ)	10	10	10	10	10	10	10	10	10	10
0.9	10	10	10	10	10	10	10	10	10	10
0.95	10	10	10	10	10	10	10	10	10	10
1	10	10	10	10	10	10	10	10	10	10

SECTION B: WORK RELATED REHABILITATION

Analysis was done on HD patients (n=15604) and PD patients (n=1424) who entered dialysis between 2005-2014 (Table 4.7). Only patients who are working for pay and those who are unable to work for pay due to health reasons are included. Employment of PD group has improved compared to previous years. This is reflected by higher proportion of patients on employment in PD compared to HD group (PD 68% vs HD 65%).

Amongst HD patients, the proportion on employment was 79% in those who began dialysis in 2004. The percentage of employment fell steadily each year to 48% in 2013 (Table 4.8). This may be confounded by the healthier HD patients who survived longer and therefore spuriously increased the proportion on employment. In the PD cohort, no specific trend of employment was seen over the last 10 years (Table 4.9).

Table 4.7: Work related rehabilitation in relation to modality, dialysis patients, 2005-2014

Modality	PD		HD	
	n	%	n	%
Number of patients	1424		15604	
Able to return for Full or Part time for pay*	962	68	10111	65
Unable to work for pay	462	32	5493	35

Table 4.8: Work related rehabilitation in relation to year of entry, HD patients 2005-2014

Year		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of patients		589	765	901	1169	1359	1686	2035	2325	2576	2199
Able to return for Full or Part time for pay*	n	466	587	672	850	980	1146	1339	1482	1541	1048
	%	79	77	75	73	72	68	66	64	60	48
Unable to work for pay	n	123	178	229	319	379	540	696	843	1035	1151
	%	21	23	25	27	28	32	34	36	40	52

*analysis based on living patient only (alive as at 31/12/2014)

Table 4.9: Work related rehabilitation in relation to year of entry, PD patients 2005-2014

Year		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Number of patients		13	27	33	55	91	97	166	259	300	383
Able to return for Full or Part time for pay*	n	11	22	28	44	59	79	117	180	183	239
	%	85	81	85	80	65	81	70	69	61	62
Unable to work for pay	n	2	5	5	11	32	18	49	79	117	144
	%	15	19	15	20	35	19	30	31	39	38

*analysis based on living patient only (alive as at 31/12/2014)

SUMMARY :

Median QoL index scores are higher in PD than HD patients (score of 10 and 9 respectively). Diabetes Mellitus and older age group are factors associated with lower median QoL index scores. Higher prevalence of employment amongst HD patients who started dialysis earlier may be confounded by these healthier individuals who survived longer.