

CHAPTER 4

Quality of Life and Rehabilitation Outcomes of Patients on Dialysis

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SECTION A: QoL INDEX SCORE

Analysis was performed in all 33911 dialysis patients who were alive at 31st December 2016 and entered dialysis between 2007-2016. Thirty thousand two hundred and fifty nine HD patients and 3652 PD patients both reported median Quality of Life (QoL) index score of 9 and 10 respectively (Table & Figure 4.1) Diabetics have a lower median QoL index score than non-diabetics (9 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). Lower median QoL index score of 9 was seen in HD patients entering at 2010-2016 compared to 10 in those entering at 2007-2009 (Table & Figure 4.5). For PD patients, the median QoL index score remains consistently 10 for all entering at 2007-2016 (Table & Figure 4.6).

Table 4.1: Cumulative distribution of QoL-Index score in relation to dialysis modality, all dialysis patients 2007-2016

Dialysis modality	PD	HD
Number of patients	3652	30259
Centile		
0	0	0
0.05	5	5
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 2007-2016

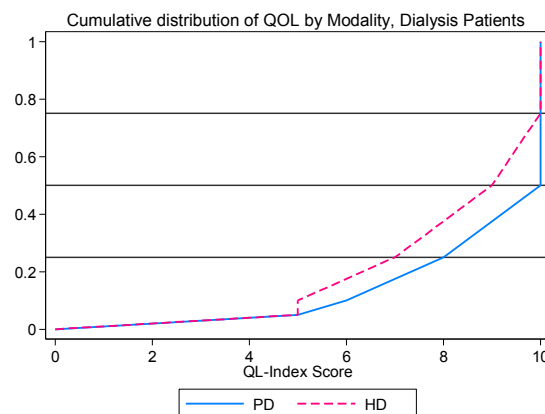


Table 4.2: Cumulative distribution of QoL-Index score in relation to DM, all dialysis patients 2007-2016

Diabetes mellitus	No	Yes
Number of patients	18445	15466
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 4.2: Cumulative distribution of QoL-Index score in relation to DM, All Dialysis patients, 2007-2016

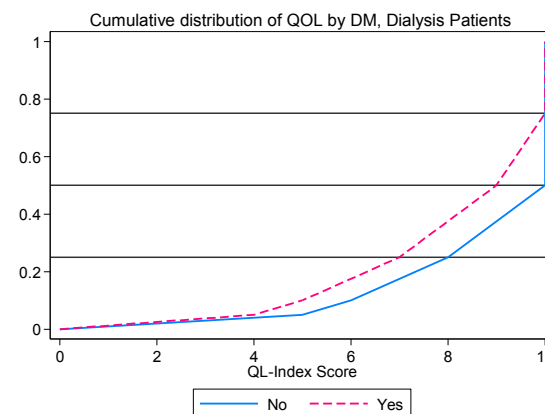


Table 4.3: Cumulative distribution of QoL-index score in relation to gender, all dialysis patients 2007-2016

Gender	Male	Female
Number of patients	18627	15284
Centile		
0	0	0
0.05	5	5
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, 2007-2016

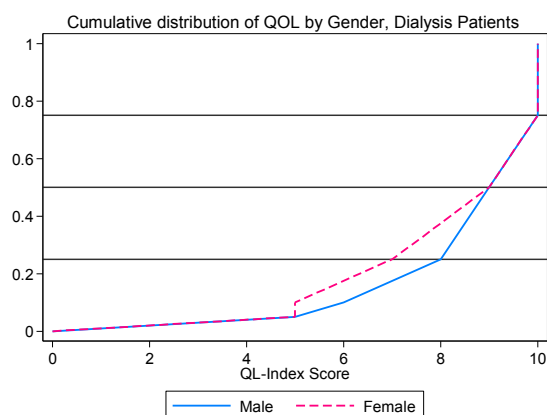


Table 4.4: Cumulative distribution of QoL-index score in relation to age, all dialysis patients 2007-2016

Age group (years)	<20	20-39	40-59	>=60
Number of patients	682	5381	16395	11453
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	10	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, 2007-2016

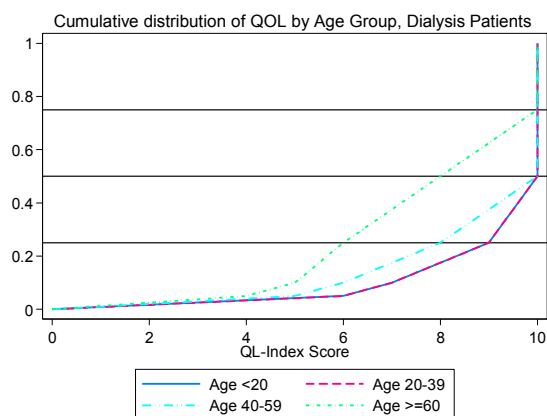


Table 4.5: Cumulative distribution of QoL-Index score in relation to year of entry, HD patients 2007-2016

Year of Entry	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of patients	960	1242	1519	1917	2497	3128	3809	4590	5418	5179
Centile										
0	0	0	0	0	0	0	0	0	0	0
0.05	5	5	5	5	5	5	5	4	4	4
0.1	6	7	6	6	6	6	5	5	5	5
0.25 (LQ)	8	8	8	8	7	7	7	7	7	7
0.5 (median)	10	10	10	9	9	9	9	9	9	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

Figure 4.5: Cumulative distribution of QoL-Index score in relation to year of entry, HD patients 2007-2016

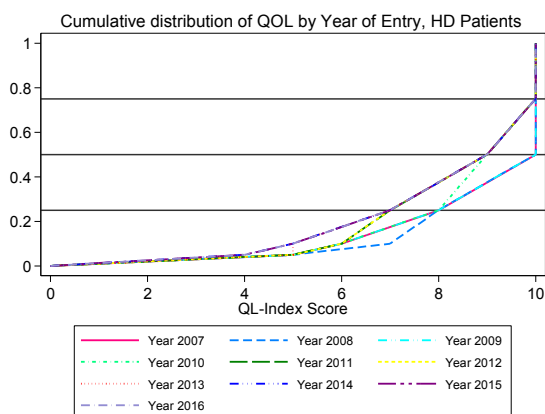


Figure 4.6: Cumulative distribution of QoL-Index score in relation to year of entry, PD patients 2007-2016

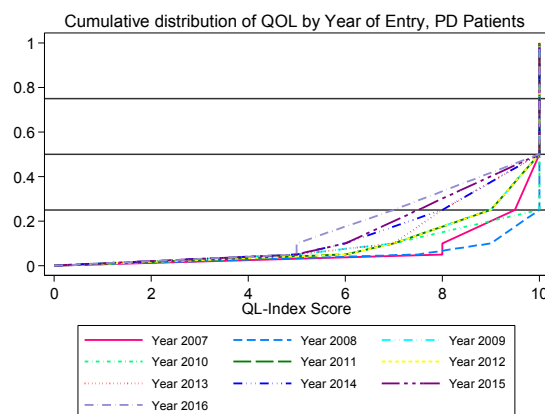


Table 4.6: Cumulative distribution of QoL-Index score in relation to year of entry, PD patients 2007-2016

Year of Entry	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Number of patients	28	40	77	81	158	272	394	628	972	1002
Centile										
0	0	0	0	0	0	0	0	0	0	0
0.05	8	7.5	5	6	6	6	5	5	5	5
0.1	8	9	7	7	7	7	7	6	6	5
0.25 (LQ)	9.5	10	9	10	9	9	8	8	7.5	7
0.5 (median)	10	10	10	10	10	10	10	10	10	10
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=18452) and PD patients (n=1770) who entered dialysis between 2007-2016 (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. HD group has the same proportion of patients on employment compared to PD group (HD 65% vs PD 65%).

Amongst HD patients, the proportion on employment was 78% in those who began dialysis in 2007. Percentage of employment fell steadily each year to 48% in 2016 (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, there was a decline of proportion on employment from 2010-2016 (Table 4.9).

Table 4.7: Work related rehabilitation in relation to modality, dialysis patients, 2007-2016

Modality	PD		HD	
	n	%	n	%
Number of patients	1770		18452	
Able to return for Full or Part time for pay*	1153	65	11904	65
Unable to work for pay	617	35	6548	35

Table 4.8: Work related rehabilitation in relation to year of entry, HD patients 2007-2016

Year		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of patients		726	962	1107	1380	1725	2046	2428	2743	2968	2367
Able to return for Full or Part time for pay*	n	565	717	834	992	1221	1421	1609	1683	1735	1127
	%	78	75	75	72	71	69	66	61	58	48
Unable to work for pay	n	161	245	273	388	504	625	819	1060	1233	1240
	%	22	25	25	28	29	31	34	39	42	52

*analysis based on living patient only (alive as at 31/12/2016)

Table 4.9: Work related rehabilitation in relation to year of entry, PD patients 2007-2016

Year		2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Number of patients		17	28	48	52	90	148	211	320	458	398
Able to return for Full or Part time for pay*	n	15	24	33	44	67	107	146	219	283	215
	%	88	86	69	85	74	72	69	68	62	54
Unable to work for pay	n	2	4	15	8	23	41	65	101	175	183
	%	12	14	31	15	26	28	31	32	38	46

*analysis based on living patient only (alive as at 31/12/2016)