

Chapter - 4

**QUALITY OF LIFE AND REHABILITATION
OUTCOMES OF PATIENTS ON DIALYSIS**

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SECTION A: QoL INDEX SCORE

25439 dialysis patients who were alive at 31st December 2013 and entered dialysis between 2004-2013 were analysed. 22841 HD patients and 2598 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). Lower median QoL index score of 9 was seen in HD patients entering at 2009-2013 compared to 10 in those entering at 2004-2008 (Table & Figure 4.5). For PD patients, the median QoL index score remains consistently 10 for all entering at 2004-2013 (Table & Figure 4.6).

Table 4.1: Cumulative distribution of QoL-Index score in relation to dialysis modality, all dialysis patients 2004-2013

Dialysis modality	PD	HD
Number of patients	2598	22841
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 2004-2013

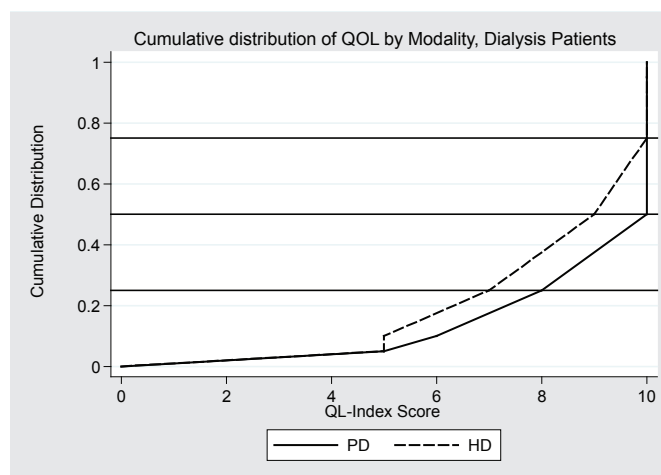


Table 4.2: Cumulative distribution of QoL-Index score in relation to DM, all dialysis patients 2004-2013

Diabetes mellitus	No	Yes
Number of patients	13523	11916
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, 2004-2013

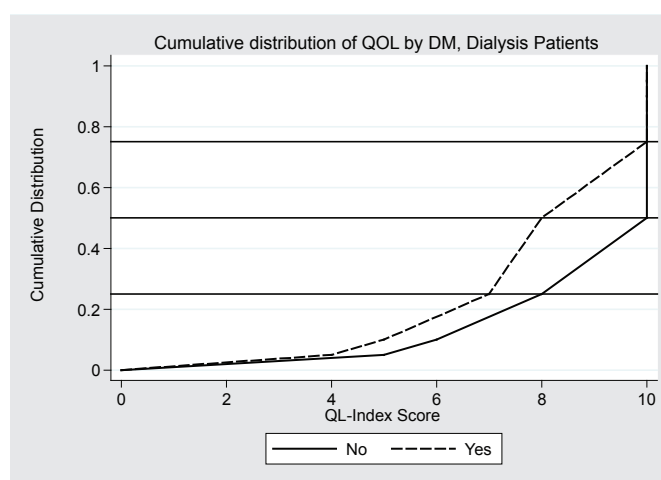


Table 4.3: Cumulative distribution of QoL-index score in relation to gender, all dialysis patients 2004-2013

Gender	Male	Female
Number of patients	13900	11539
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, 2004-2013

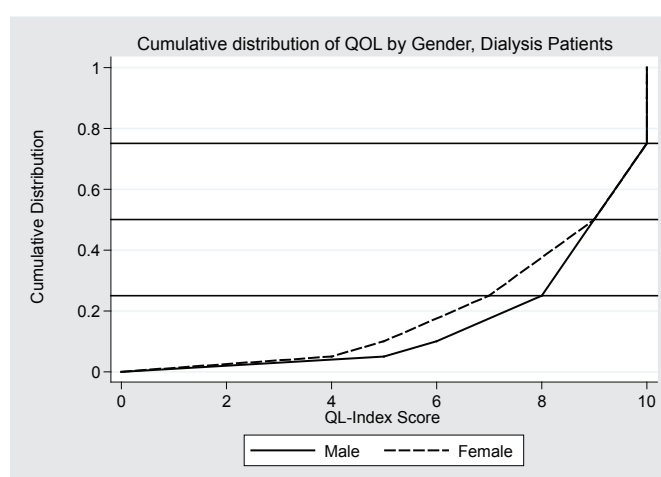


Table 4.4: Cumulative distribution of QoL-index score in relation to age, all dialysis patients 2004-2013

Age group (years)	<20	20-39	40-59	>=60
Number of patients	600	4189	12327	8323
Centile				
0	0	0	0	0
0.05	5	6	5	4
0.1	6	7	6	5
0.25 (LQ)	8	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, 2004-2013

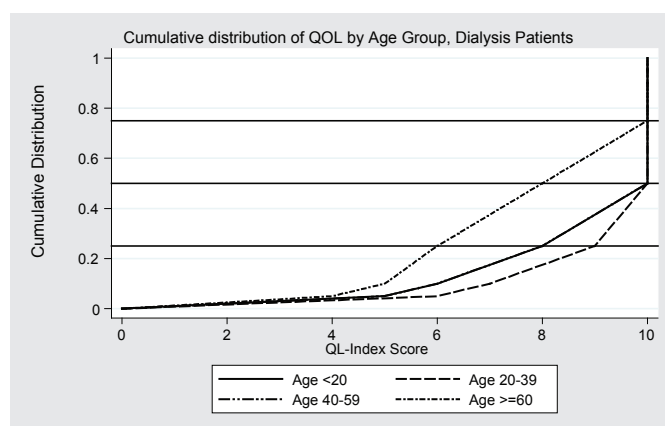


Table 4.5: Cumulative distribution of QoL-Index score in relation to year of entry, HD patients 2004-2013

Year of Entry	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of patients	709	855	1187	1428	1873	2314	2743	3607	4254	3871
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	6	6	6	6	6	6	5	5	5
0.25 (LQ)	8	8	8	8	8	7	7	7	7	7
0.5 (median)	10	10	10	10	10	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

Table 4.5: Cumulative distribution of QoL-Index score in relation to year of entry, HD patients 2004-2013

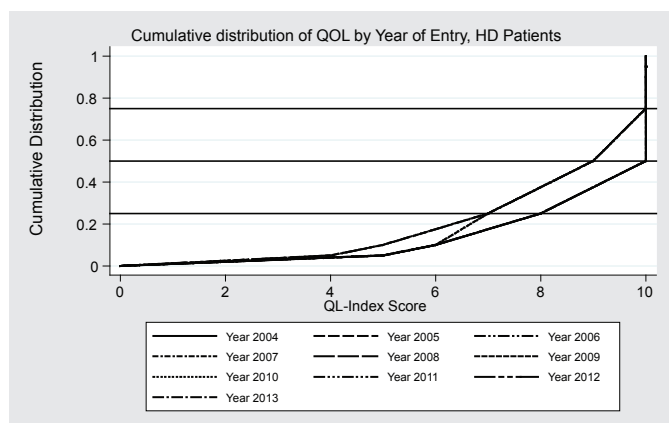


Figure 4.6: Cumulative distribution of QoL-Index score in relation to year of entry, PD patients 2004-2013

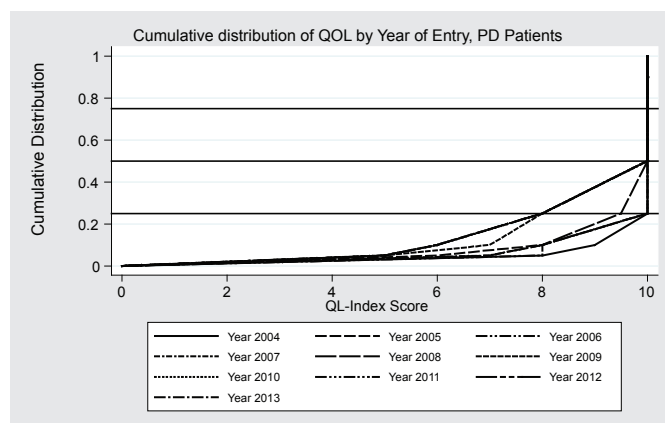


Table 4.6: Cumulative distribution of QoL-Index score in relation to year of entry, HD patients 2004-2013

Year of Entry	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of patients	37	35	55	88	124	202	230	418	675	734
Centile										
0	0	0	0	0	0	0	0	0	0	0
0.05	8	6	8	7	7	5	5	5	5	5
0.1	9	8	8	8	8	7	6	6	6	6
0.25 (LQ)	10	10	10	10	9.5	8	8	8	8	8
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=11339) and PD patients (n=1210) who entered dialysis between 2004-2013 (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 higher proportion of patients on employment compared to PD group (HD 60% vs PD 56%).

Amongst HD patients, the proportion on employment was 76% in those who began dialysis in 2004. Percentage of employment fell steadily each year to 41% 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 seen over the last 10 years (Table 4.9).

Table 4.7: Work related rehabilitation in relation to modality, dialysis patients, 2004-2013

Modality	PD		HD	
	n	%	n	%
Number of patients	1210		11339	
Able to return for Full or Part time for pay*	677	56	6750	60
Unable to work for pay	533	44	4589	40

Table 4.8: Work related rehabilitation in relation to year of entry, HD patients 2004-2013

Year		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of patients		467	541	739	815	1064	1167	1383	1650	1856	1657
Able to return for Full or Part time for pay*	n	356	399	526	576	698	758	852	953	956	676
	%	76	74	71	71	66	65	62	58	52	41
Unable to work for pay	n	111	142	213	239	366	409	531	697	900	981
	%	24	26	29	29	34	35	38	42	48	59

*analysis based on living patient only (alive as at 31/12/2013)

Table 4.9: Work related rehabilitation in relation to year of entry, PD patients 2004-2013

Year		2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Number of patients		21	22	32	45	67	107	110	200	292	314
Able to return for Full or Part time for pay*	n	13	13	21	32	51	62	73	118	160	134
	%	62	59	66	71	76	58	66	59	55	43
Unable to work for pay	n	8	9	11	13	16	45	37	82	132	180
	%	38	41	34	29	24	42	34	41	45	57

*analysis based on living patient only (alive as at 31/12/2013)

SUMMARY :

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