

QUALITY OF LIFE ASSESSMENT

(KARNOVSKY SCALE)

The current activity based scale for assessment of the quality of life is that described by Karnovsky which has been used for some years in Australia and New Zealand.

AUSTRALIA

DIALYSIS DEPENDENT

See Table 27-29.

In the main, those self dialysing with home haemodialysis had better activity ratings than those in a satellite haemodialysis centre or self dialysis with CAPD at home. Hospital haemodialysis patients were less active in each age group.

Very limited activity (code 10-59) was reported in only a small proportion of young patients: (<1%) home haemodialysis, 3% CAPD and satellite haemodialysis, 9% hospital haemodialysis. In the age group 45-64 years, dependence on others for considerable assistance (code 10-59) was limited to 2% home and satellite haemodialysis, 6% CAPD, 12% hospital haemodialysis.

For young patients, 25-44 years, normal effort with home haemodialysis (81%) was distinctly more common than for those in a satellite haemodialysis centre or at home with CAPD. This difference in favour of home haemodialysis was retained in both the middle-aged 45-64 years, and the elderly 65-84 years.

While there were not many elderly patients capable of normal activity, all but a small group would care for themselves, or manage daily activities with moderate effort.

TRANSPLANT DEPENDENT

See Table 27 and 30.

Once again there was no notable change from the high levels of capability for normal activity without excess effort which were previously reported for most patients with a functioning transplant.

NEW ZEALAND

DIALYSIS DEPENDENT

See Table 31 and 32.

Fifty two per cent of all patients were capable of near normal activity. A further 24% required moderate effort, and 12% were capable of self care.

In relation to age and type of dialysis (Table 32) the level of effort understandably declined especially amongst those requiring hospital based dialysis.

TRANSPLANT DEPENDENT

See Table 31.

Ninety one per cent were capable of near normal effort, 2% were capable only of self care.

AUSTRALIA AND NEW ZEALAND

QUALITY OF LIFE OF AGE GROUPS 25-44 YEARS AND 45-64 YEARS: DIABETIC AND RACIAL CLASSIFICATION See Table 33 and 34.

In these age groups there was a much lower level of independence amongst those with diabetic nephropathy compared to non diabetics. Many of the diabetic patients were able only to care for self.

Table 27

Australia

Quality of Life Assessment 31-Mar-97

Mode of Treatment	100	90	80	70	60	50	40	30	20	10	00	Total
Dialysis												
IPD Hospital	1	3	2	4	1	5	1	1	0	0	0	18
IPD Home	16	41	23	7	6	13	2	0	0	0	0	108
IPD Satellite	0	0	0	0	0	0	0	0	0	0	0	0
HD Hospital	134	335	316	230	141	127	44	14	8	1	0	1350
HD Home	160	293	110	39	18	10	4	1	0	0	0	635
HD Satellite	120	590	321	207	71	42	5	1	0	0	0	1357
CAPD Hospital	1	2	9	7	3	2	3	2	0	0	0	29
CAPD Home	165	523	360	158	101	59	24	4	4	0	0	1398
Total	597	1787	1141	652	341	258	83	23	12	1	0	4895
	12%	37%	23%	13%	7%	5%	2%	<1%	<1%	<1%	0	100%
Functioning Transplants												
	2251	1612	396	160	32	20	11	3	0	2	12	4499
	50%	36%	9%	6%	1%	<1%	<1%	<1%	0	<1%	<1%	100%
Total	2848	3399	1537	812	373	278	94	26	12	3	12	9394
	30%	36%	16%	9%	4%	3%	1%	<1%	<1%	<1%	<1%	100%

100	Normal; no complaints, no evidence of disease.	40	Disabled; requires special medical care and assistance.
90	Able to carry on normal activity, minor signs or symptoms of disease.	30	Severely disabled; hospital care indicated, death not imminent.
80	Normal activity with effort; moderate signs or symptoms of disease.	20	Very sick, hospital care needed.
70	Care for self; unable to carry on normal activity or do active work.	10	Moribund. Fatal process progressing rapidly.
60	Requires occasional assistance but able to care for most needs.	00	Unknown or lost to follow up.
50	Requires considerable assistance and frequent medical care.		

Table 28

Australia

Quality of Life of Dialysis Patients 1991 - 1996

Categories	1991	1992	1993	1994	1995	1996
100 Normal; no complaints, no evidence of disease.	12%	12%	12%	12%	12%	12%
90-95 Able to carry on normal activity, minor signs or symptoms of disease.	37%	38%	37%	36%	37%	37%
80-85 Normal activity with effort; moderate signs or symptoms of disease.	25%	25%	25%	25%	23%	23%
70-75 Care for self; unable to carry on normal activity or do active work.	12%	12%	12%	12%	13%	13%
60-65 Requires occasional assistance but able to care for most needs.	7%	6%	7%	7%	7%	7%
50-55 Requires considerable assistance and frequent medical care.	5%	4%	5%	5%	5%	5%
40-45 Disabled; requires special medical care and assistance.	1%	2%	1%	1%	2%	2%
30 Severely disabled, hospital care indicated but death not imminent.	<1%	<1%	<1%	<1%	<1%	<1%
20 Very sick, hospital care needed.	<1%	1%	<1%	<1%	<1%	<1%
10 Moribund. Fatal process progressing rapidly.	<1%	<1%	<1%	<1%	<1%	<1%
00 Unknown or lost to follow up.	0	0	0	0	0	0
Total	100%	100%	100%	100%	100%	100%

Table 29

Australia

Quality of Life Related to Age and Method of Dialysis 31-Mar-97

	CAPD	IPD/CCPD	Home HD	Hosp.HD	Sat.HD	Total
25 - 44 years	(241)	(22)	(215)	(217)	(330)	(1025)
Normal / mild effort (90-100)	67%	50%	81%	50%	69%	67%
Moderate effort (80-89)	20%	23%	13%	23%	19%	19%
Care for self (60-79)	10%	13.5%	6%	18%	10%	11%
Disabled (10-59)	3%	13.5%	<1%	9%	2%	3%
45 - 64 years	(562)	(42)	(308)	(503)	(506)	(1921)
Normal / mild effort (90-100)	53%	60%	74%	39%	55%	54%
Moderate effort (80-89)	24%	24%	17%	25%	25%	23%
Care for self (60-79)	17%	12%	7%	24%	17%	17%
Disabled (10-59)	6%	4%	2%	12%	3%	6%
65-84 years	(585)	(34)	(92)	(585)	(471)	(1767)
Normal / mild effort (90-100)	35%	21%	37%	23%	35%	31%
Moderate effort (80-89)	30%	15%	32%	23%	27%	27%
Care for self (60-79)	25%	23%	25%	36%	32%	30%
Disabled (10-59)	10%	41%	6%	18%	6%	12%

() = Number of Patients

Table 30

Australia

Quality of Life of Transplant Patients 1991 - 1996

Categories	1991	1992	1993	1994	1995	1996
100 Normal; no complaints, no evidence of disease.	54%	52%	54%	52%	51%	50%
90-99 Able to carry on normal activity, minor signs or symptoms of disease.	31%	33%	31%	33%	35%	36%
80-85 Normal activity with effort: moderate signs or symptoms of disease.	7%	10%	10%	10%	9%	9%
70-75 Care for self; unable to carry on normal activity or do active work.	2%	2%	2%	3%	2%	6%
60-65 Requires occasional assistance but able to care for most needs.	1%	1%	1%	<1%	1%	1%
50-55 Requires considerable assistance and frequent medical care.	1%	1%	1%	<1%	1%	<1%
40 Disabled; requires special medical care and assistance.	<1%	<1%	<1%	<1%	<1%	<1%
30 Severely disabled, hospital care indicated but death not imminent.	<1%	<1%	<1%	<1%	<1%	<1%
20 Very sick, hospital care needed.	<1%	<1%	<1%	<1%	<1%	0
10 Moribund. Fatal process progressing rapidly.	0	<1%	<1%	<1%	<1%	<1%
00 Unknown or lost to follow up.	3%	<1%	<1%	<1%	<1%	<1%
Total	100%	100%	100%	100%	100%	100%

Table 31

New Zealand

Quality of Life Assessment 31-Mar-97

Mode of Treatment	100	90	80	70	60	50	40	30	20	10	00	Total
Dialysis												
IPD Hospital	0	0	1	0	0	0	0	0	0	0	0	1
IPD Home	8	6	5	2	1	4	0	0	0	0	0	26
HD Hospital	33	45	54	36	19	9	4	0	2	0	0	202
HD Home	59	58	42	15	6	3	1	0	0	0	0	184
HD Satellite	2	1	1	0	0	0	0	0	0	0	0	4
CAPD Hospital	0	1	2	2	1	1	2	0	0	0	0	9
CAPD Home	97	182	126	62	27	25	5	3	1	0	0	528
Total	199	293	231	117	54	42	12	3	3	0	0	954
	21%	31%	24%	12%	6%	4%	1%	<1%	<1%	0	0	100%
Functioning Transplants												
	514	229	45	19	4	6	2	1	0	0	1	821
	63%	28%	5%	2%	<1%	1%	<1%	<1%	0	0	<1%	100%
Total	713	522	276	136	58	48	14	4	3	0	1	1775
	40%	29%	16%	8%	3%	3%	1%	<1%	<1%	0	<1%	100%

100	Normal: no complaints, no evidence of disease.	40	Disabled; requires special medical care and assistance.
90	Able to carry on normal activity, minor signs or symptoms of disease.	30	Severely disabled; hospital care indicated, death not imminent.
80	Normal activity with effort; moderate signs or symptoms of disease.	20	Very sick, hospital care needed.
70	Care for self; unable to carry on normal activity or do active work.	10	Moribund. Fatal process progressing rapidly.
60	Requires occasional assistance but able to care for most needs.	00	Unknown or lost to follow up.
50	Requires considerable assistance and frequent medical care.		

Table 32

New Zealand

Quality of Life Related to Age and Method of Dialysis 31-Mar-97

	CAPD	IPD/CCPD	Home HD	Hosp.HD	* Total
25 - 44 years	(101)	(4)	(65)	(50)	(222)
Normal / mild effort (90-100)	61%	75%	76%	56%	66%
Moderate effort (80-89)	17%	0	15%	22%	17%
Care for self (60-79)	18%	25%	6%	18%	14%
Disabled (10-59)	4%	0	3%	4%	3%
45 - 64 years	(284)	(7)	(92)	(99)	(483)
Normal / mild effort (90-100)	53%	29%	61%	35%	50%
Moderate effort (80-89)	26%	43%	24%	27%	26%
Care for self (60-79)	14%	14%	13%	28%	17%
Disabled (10-59)	7%	14%	2%	10%	7%
65 - 84 years	(129)	(2)	(18)	(44)	(194)
Normal / mild effort (90-100)	37%	0	22%	23%	32%
Moderate effort (80-89)	27%	50%	50%	32%	31%
Care for self (60-79)	26%	50%	28%	39%	29%
Disabled (10-59)	10%	0	0	6%	8%

() = Number of Patients
 * Total Includes Satellite HD

Table 33**Australia**

**Impaired Quality of Life
Related to a) Diabetes, b) Race 31-Mar-97**

Age Group	Non Diabetic	Diabetic	Caucasoid	Aboriginal
25 - 44 years	(880)	(145)	(746)	(141)
Care for self (Code 60-79)	9%	21%	12%	12%
Disabled (Code 10-59)	2%	12%	3%	9%
45 - 64 years	(1549)	(372)	(1511)	(165)
Care for self (Code 60-79)	14%	28%	18%	16%
Disabled (Code 10-59)	5%	12%	6%	10%

() = Number of Patients

Table 34**New Zealand**

**Impaired Quality of Life
Related to a) Diabetes, b) Race 31-Mar-97**

Age Group	Non Diabetic	Diabetic	Caucasoid	Maori	Pacific Islander
25 - 44 years	(180)	(42)	(110)	(63)	(39)
Care for self (Code 60-79)	11%	29%	16%	14%	13%
Disabled (Code 10-59)	3%	7%	3%	5%	5%
45 - 64 years	(275)	(208)	(183)	(196)	(76)
Care for self (Code 60-79)	14%	21%	15%	15%	28%
Disabled (Code 10-59)	4%	10%	6%	10%	3%

() = Number of Patients