

Chapter 6

Paediatric Renal Replacement Therapy

Lee Ming Lee

Lynster Liaw

Susan Pee

Wan Jazilah Wan Ismail

Lim Yam Ngo

Table 6.01: Stock and Flow of Paediatric Renal Replacement Therapy 1998-2007

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
New HD patients	21	23	12	24	28	33	39	34	51	32
New CAPD patients	28	30	37	39	54	38	41	47	44	46
New Transplants	7	15	18	11	13	11	11	18	22	19
HD deaths	3	2	4	1	11	6	10	9	7	10
CAPD deaths	7	2	3	8	8	9	5	9	16	8
Transplant deaths	2	0	1	0	1	2	1	1	3	3
On HD at 31st Dec	90	106	120	144	162	186	218	242	289	312
On CAPD at 31st Dec	73	92	109	123	152	163	176	192	189	197
Functioning transplant at 31st Dec	70	80	93	101	112	118	126	141	156	166

Figure 6.01a: Incident cases of RRT by modality in children under 20 years old, 1998-2007

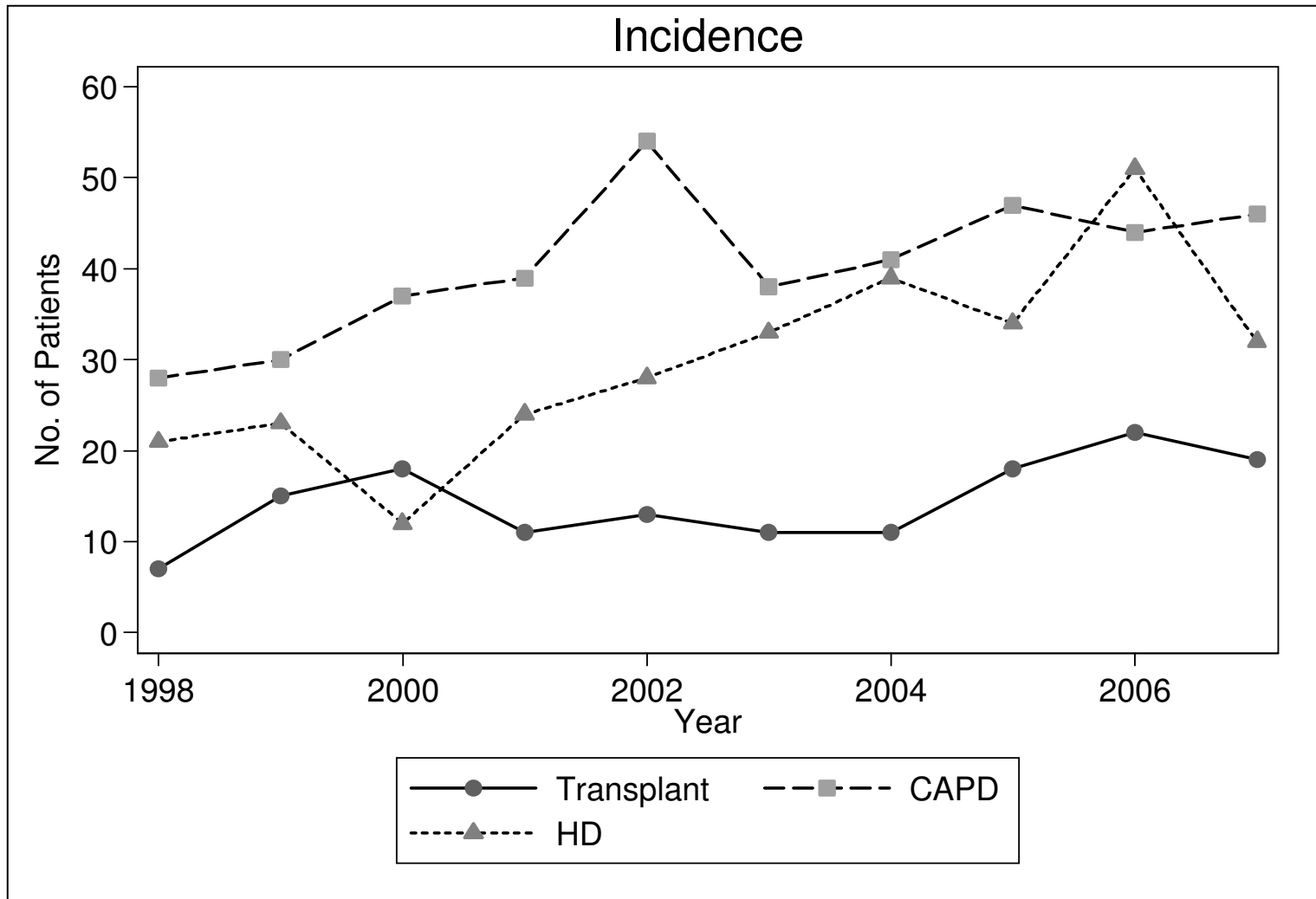


Figure 6.01b: Prevalent cases of RRT by modality in children under 20 years old, 1998-2007

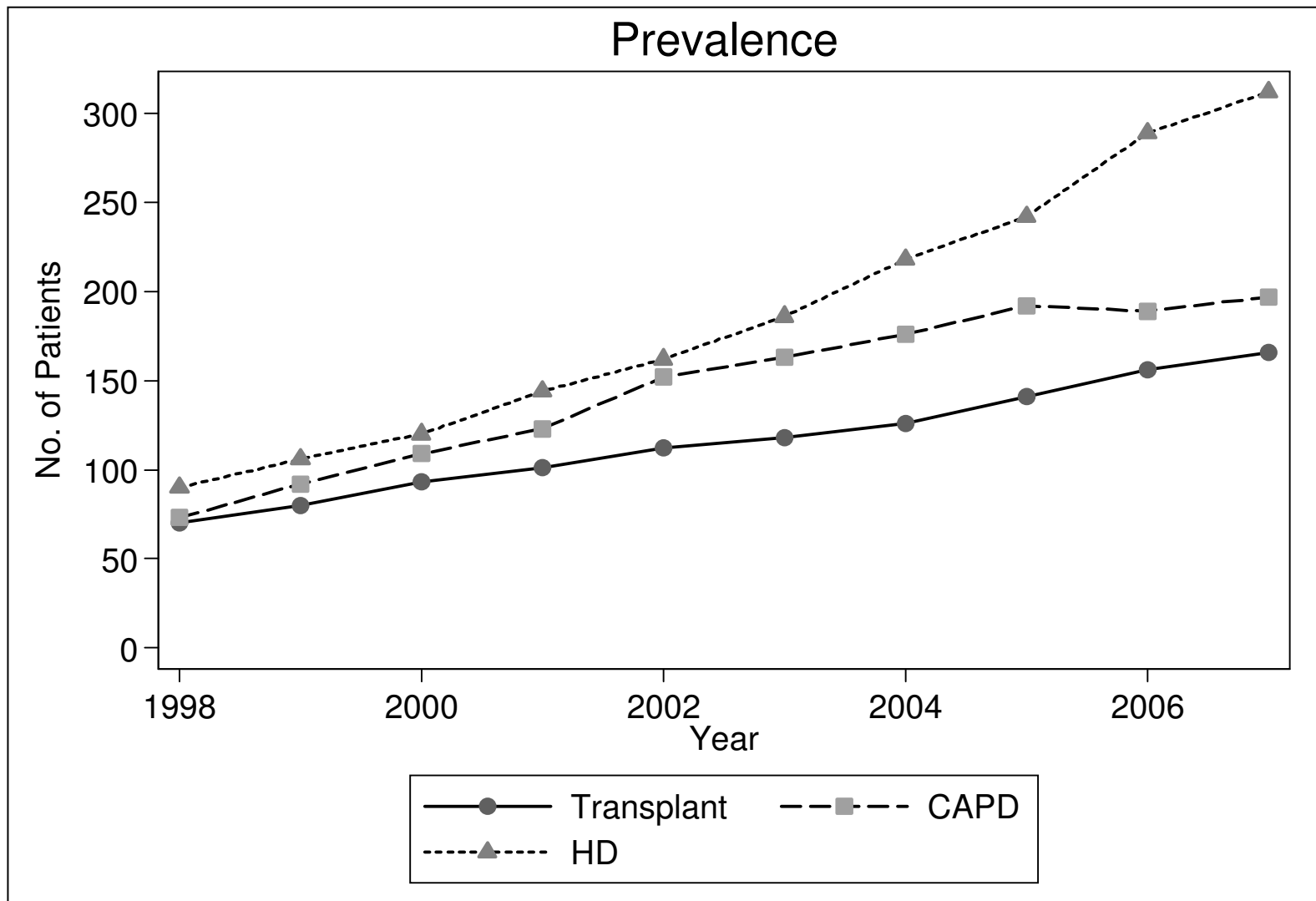


Table 6.02: Paediatric Dialysis and Transplant Rates per million age-group population 1998-2007

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Incidence Rate										
New HD	2	2	1	2	3	3	4	3	5	3
New CAPD	3	3	4	4	5	4	4	4	4	4
New Transplant	1	2	2	1	1	1	1	2	2	2
All RRT	5	6	5	6	8	7	7	8	8	7
Prevalence Rate at 31st December										
On HD	9	11	12	14	15	17	20	22	26	28
On CAPD	7	9	11	12	14	15	16	17	17	17
Functioning Graft	7	8	9	10	11	11	12	13	14	15
All RRT	23	28	32	36	40	43	48	52	57	60

Figure 6.02: Incidence and prevalence rate per million age related population years old on RRT, 1998-2007

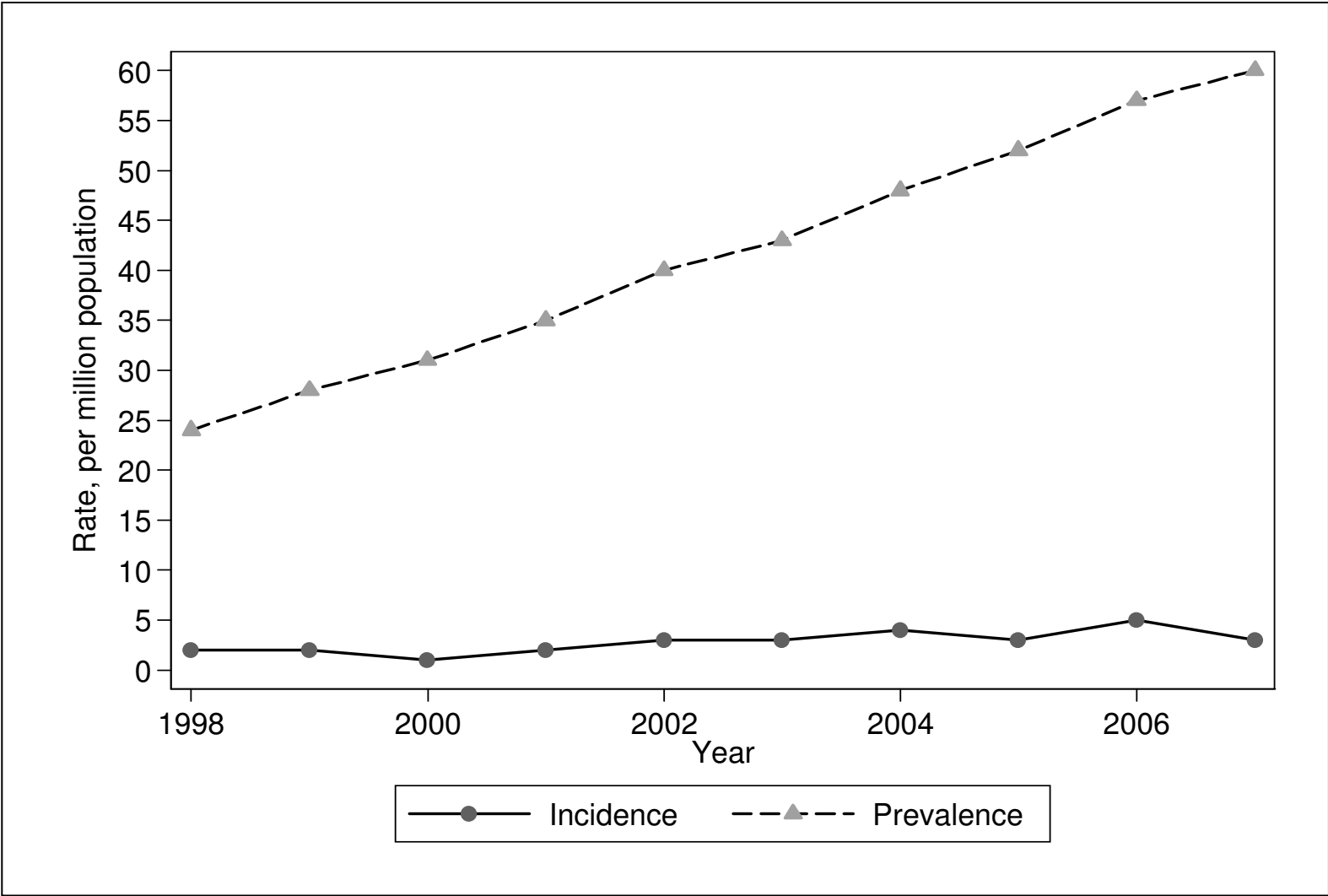


Table 6.03a: Dialysis Treatment Rate by State, per million state age group population; 1998-2007

State	1998-2002	2003-2007
Pulau Pinang	9	15
Melaka	8	15
Johor	8	10
Perak	5	10
Selangor &Putrajaya	9	7
Kuala Lumpur	12	11
Negeri Sembilan	10	12
Kedah	8	7
Perlis	14	8
Terengganu	9	9
Pahang	7	8
Kelantan	4	8
Sarawak	5	7
Sabah & WP Labuan	2	6

Table 6.03b: New Dialysis Patients by State, 1998-2007

State	1998-2002	2003-2007
Pulau Pinang	21	39
Melaka	11	22
Johor	49	62
Perak	22	47
Selangor & Putrajaya	65	65
Kuala Lumpur	31	33
Negeri Sembilan	18	24
Kedah	31	29
Perlis	7	4
Terengganu	21	23
Pahang	20	26
Kelantan	16	31
Sarawak	22	35
Sabah & WP Labuan	16	40

Figure 6.04: Number of New Dialysis and Transplant Patients by gender 1998-2007

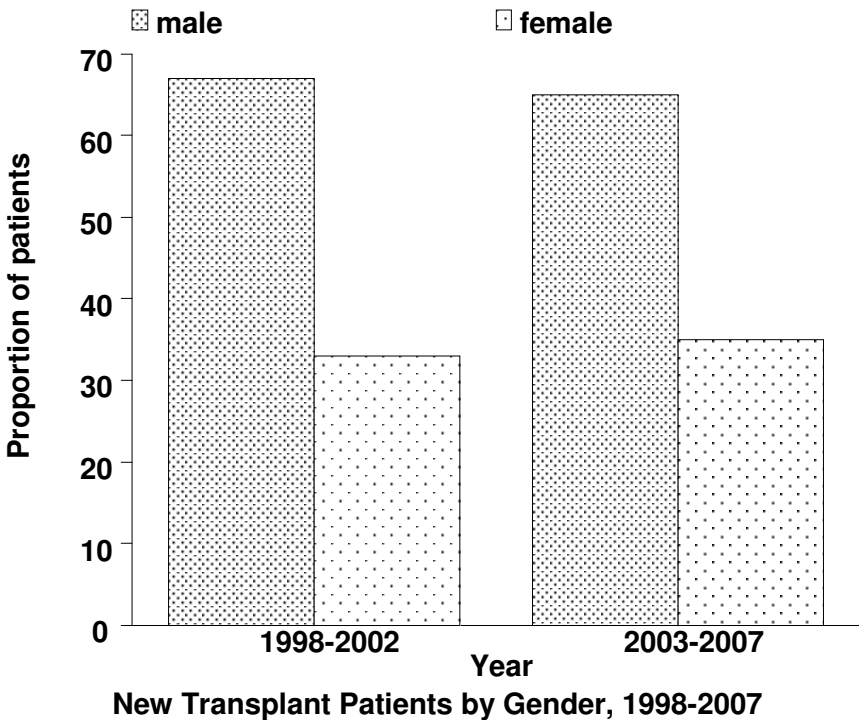
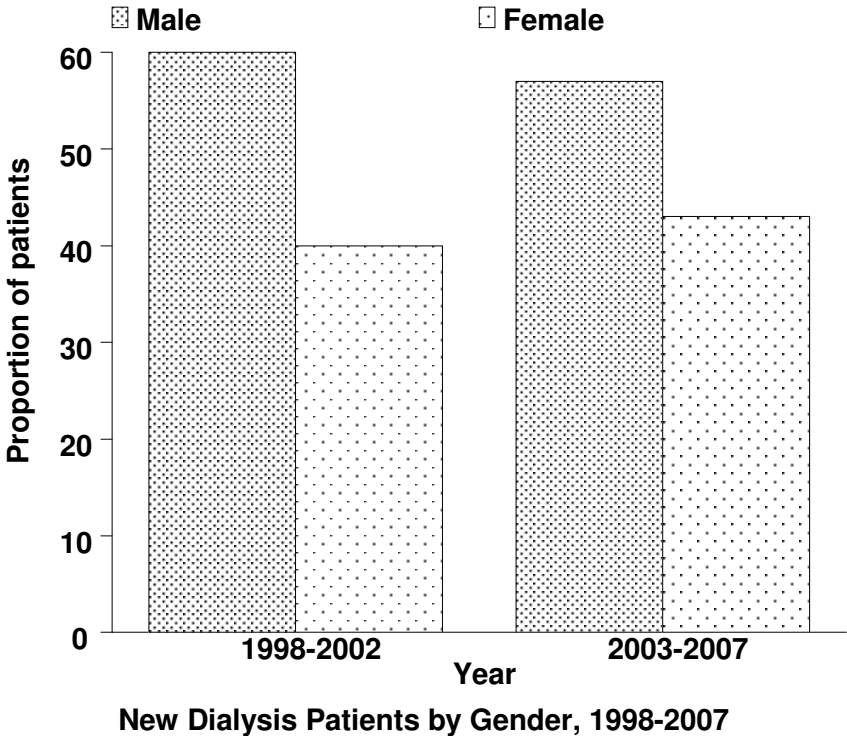


Figure 6.05: Dialysis and Transplant Treatment Rate by Age group 1998-2007

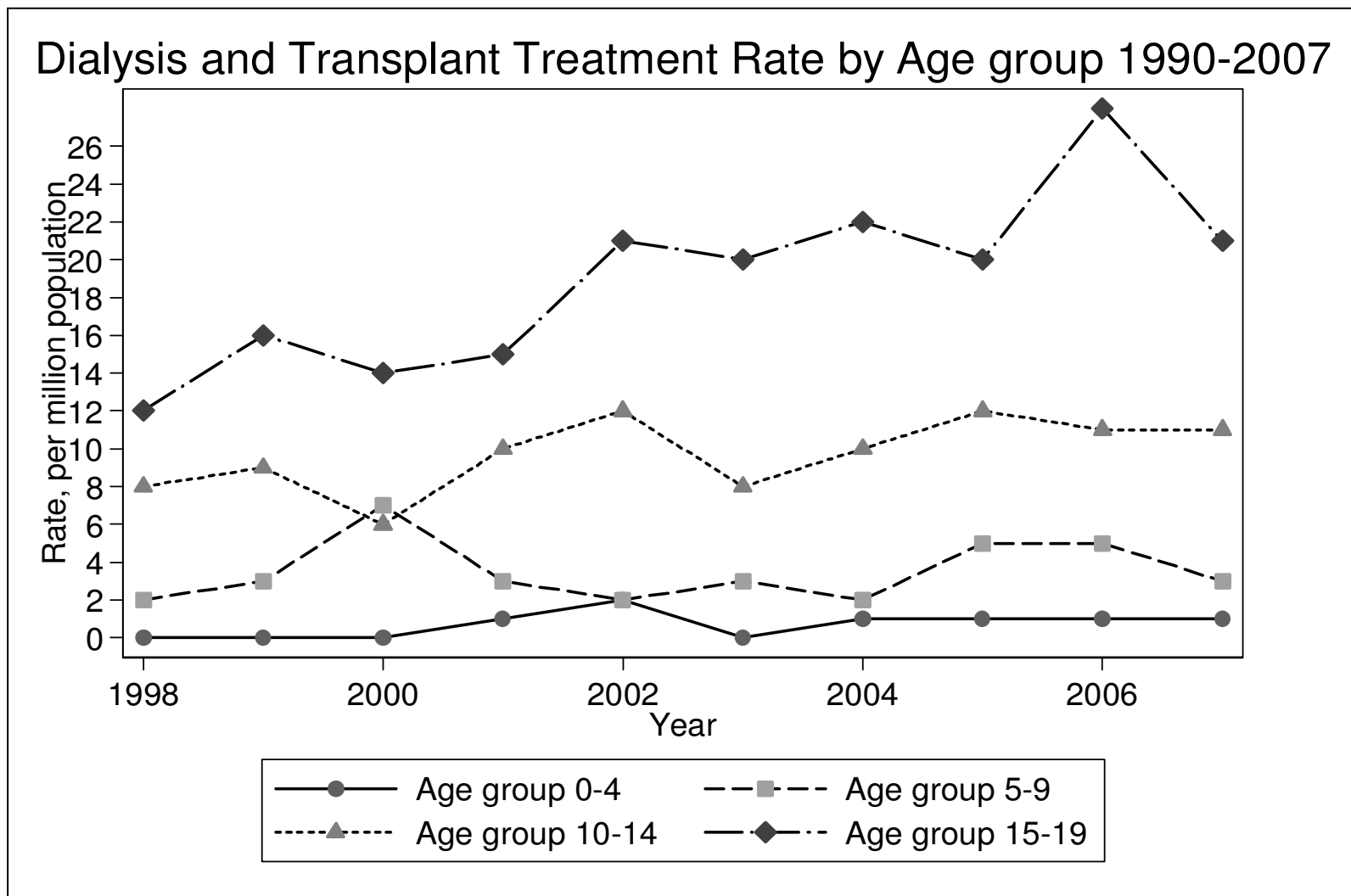
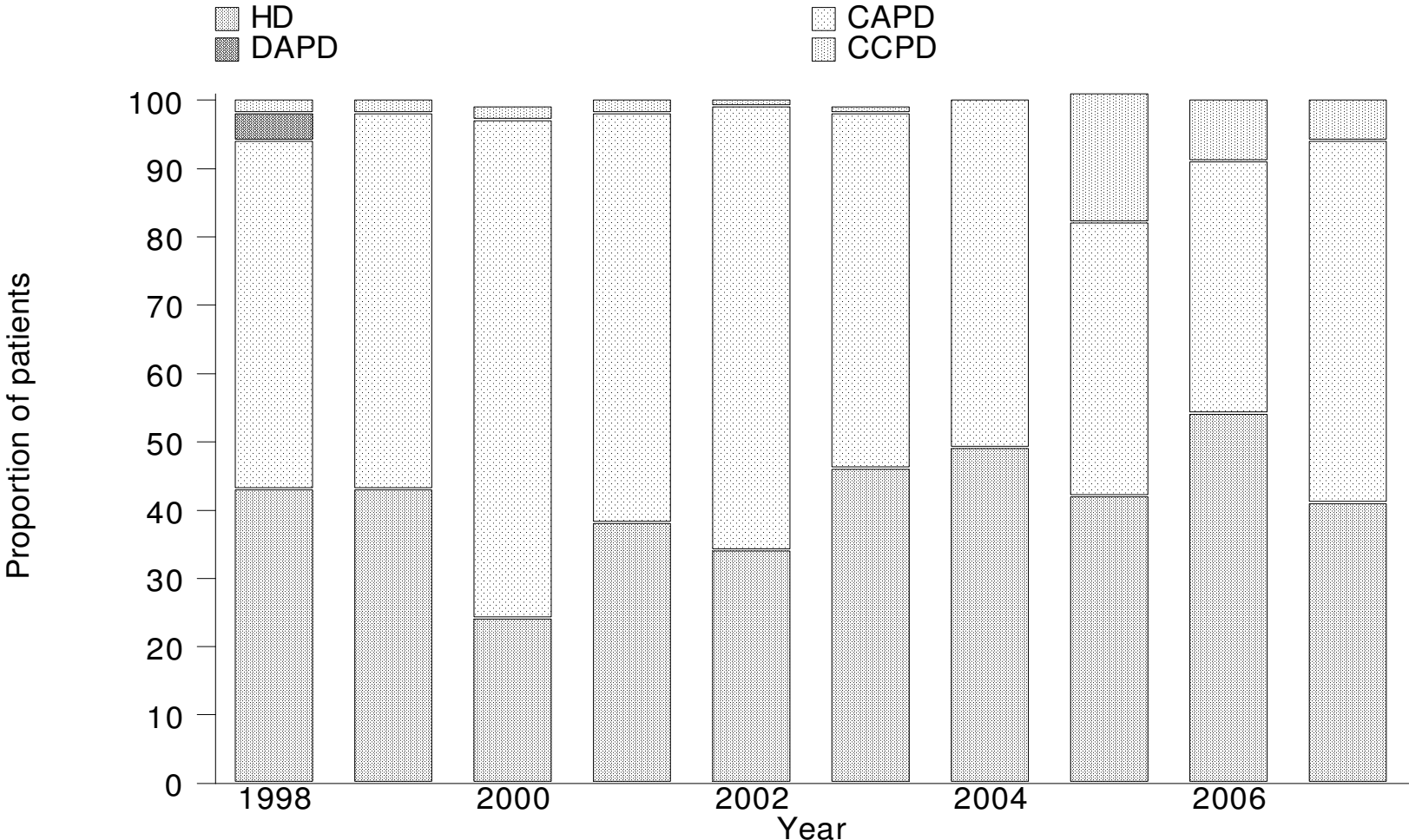


Figure 6.06: New Dialysis by treatment modality 1998-2007



New Dialysis Patients by modality, 1998-2007

Figure 6.07: New Dialysis by sector 1998-2007

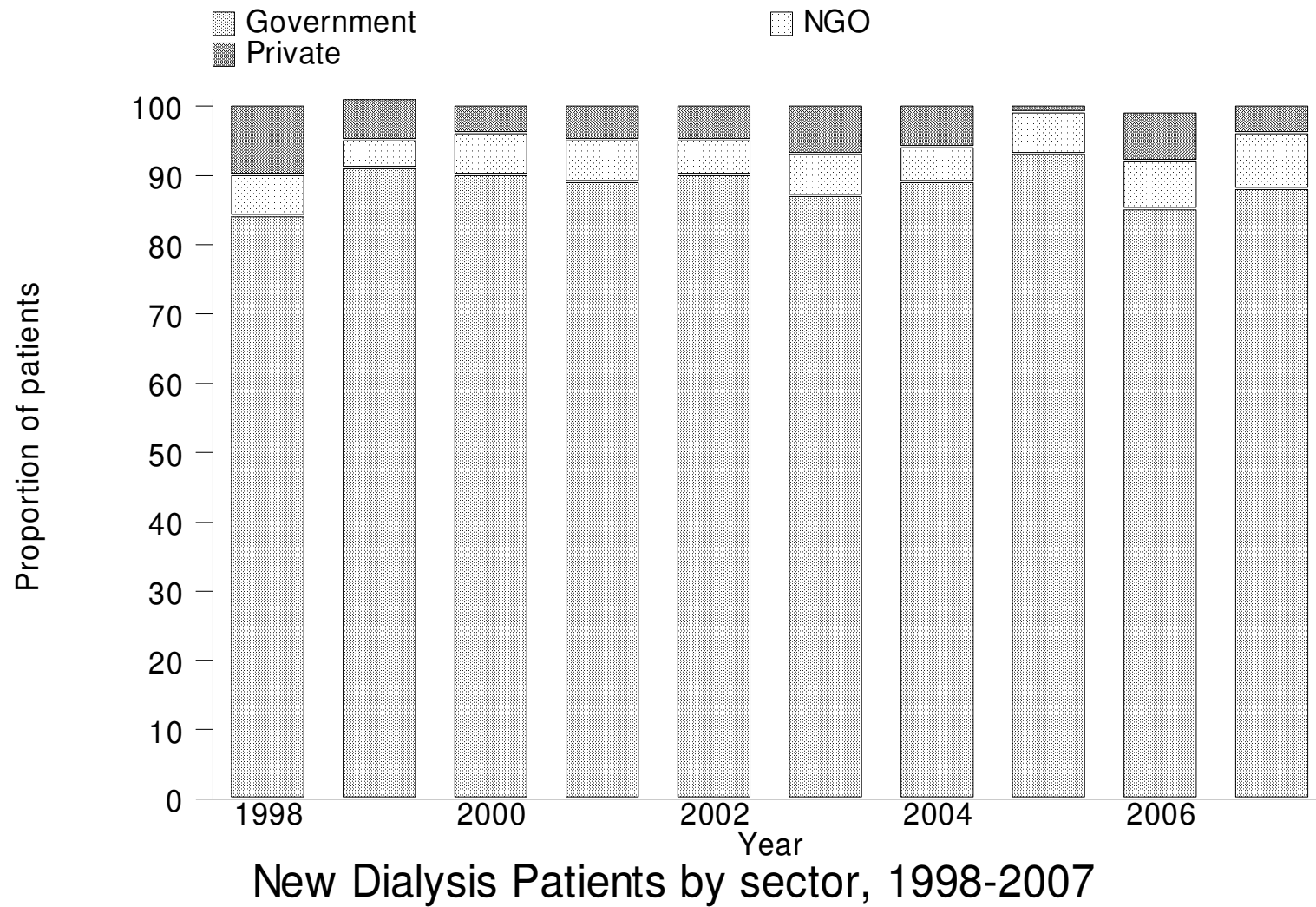


Table 6.08: Primary renal disease by sex, 1998-2007

Primary Renal Disease	Male		Female		All	
	N	%	N	%	N	%
Glomerulonephritis	93	22	57	19	150	21
FSGS	33	8	26	9	59	8
Refux nephropathy	20	5	6	2	26	4
SLE	12	3	36	12	48	7
Obstructive uropathy	32	8	8	3	40	6
Renal dysplasia	12	3	6	2	18	3
Others	8	2	10	3	18	3
Hereditary nephritis	10	2	1	0	11	2
Cystic kidney disease	3	1	4	1	7	1
Drug induced nephropathy	0	0	1	0	1	0
Metabolic	3	1	1	0	4	1
Unknown	192	46	142	48	334	47

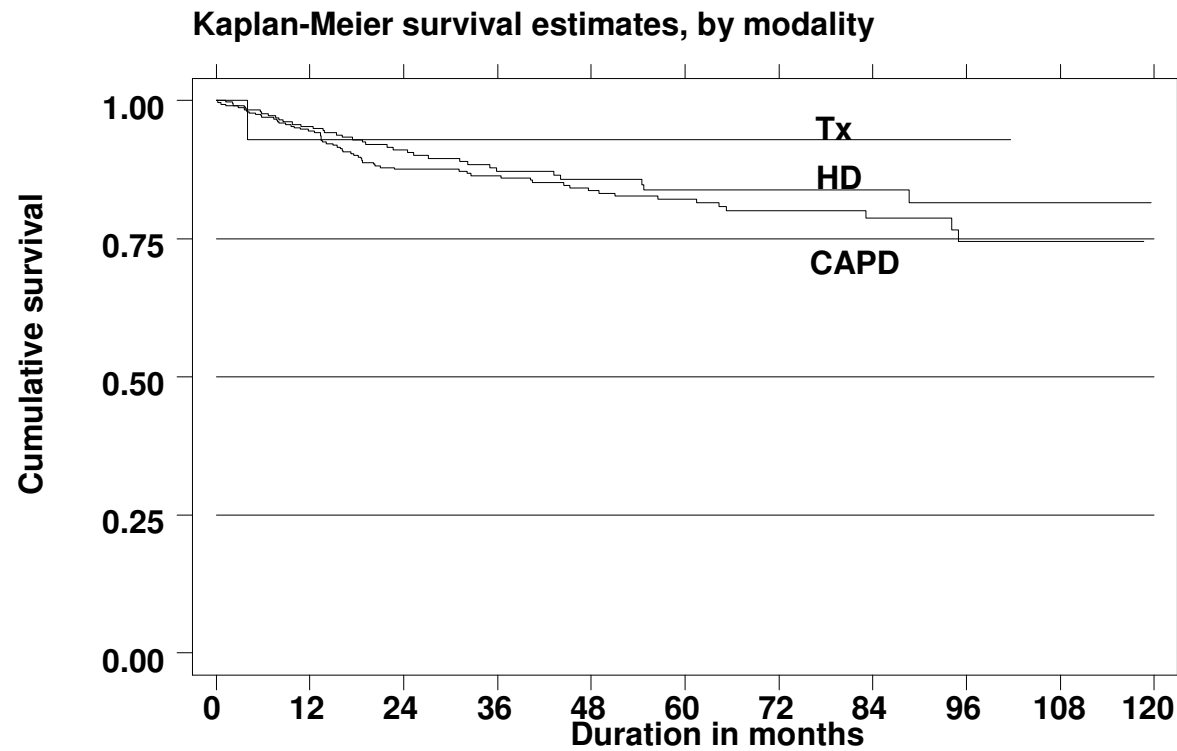
Table 6.09: Types of Renal Transplant 1998 – 2007

Year	1998-2002		2003-2007	
	No.	%	No.	%
Commercial Cadaver	8	13	19	23
Commercial Living donor	3	5	1	1
Living related donor	34	54	30	38
Cadaver	18	28	30	38
Living emotionally related	0	0	0	0
TOTAL	63	100	80	100

Table 6.10(i): Patient survival by dialysis modality analysis as per ITT

Modality Interval (years)	Tx			CAPD			HD		
	No.	% Survival	SE	No.	% Survival	SE	No.	% Survival	SE
1	14	93	7	331	94	1	247	95	1
5	10	93	7	136	82	2	74	84	3
10	-	-	-	-	-	-	-	-	-

Figure 6.10 (i): Patient survival by dialysis modality analysis as per ITT

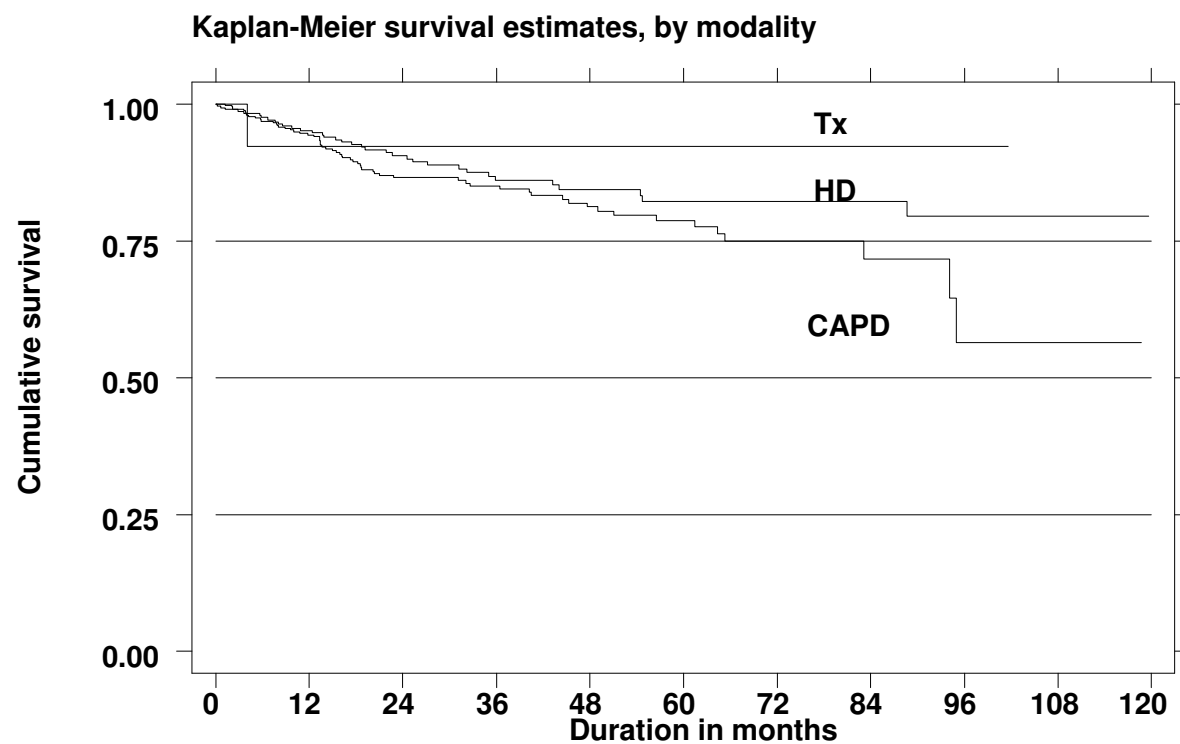


Dialysis Patient survival by Year of entry 1998-2007

Table 6.10(ii): Patient survival by dialysis modality analysis censored with change of modality

Modality Interval (years)	Tx			CAPD			HD		
	No.	% Survival	SE	No.	% Survival	SE	No.	% Survival	SE
12	12	92	7	309	94	1	231	95	1
60	8	92	7	77	79	3	63	82	3
120	-	-	-	-	-	-	-	-	-

Figure 6.10(ii): Patient survival by dialysis modality analysis censored with change of modality



Dialysis Patient Survival by Dialysis Modality 1998-2007

Table 6.11: Dialysis Technique Survival by Modality, 1998-2007

Modality Interval (years)	CAPD			HD		
	No.	% Survival	SE	No.	% Survival	SE
1	327	90	1	309	91	1
5	80	51	3	86	78	3
10	-	-	-	-	-	-

Figure 6.11: Dialysis Technique Survival by Modality, 1998-2007

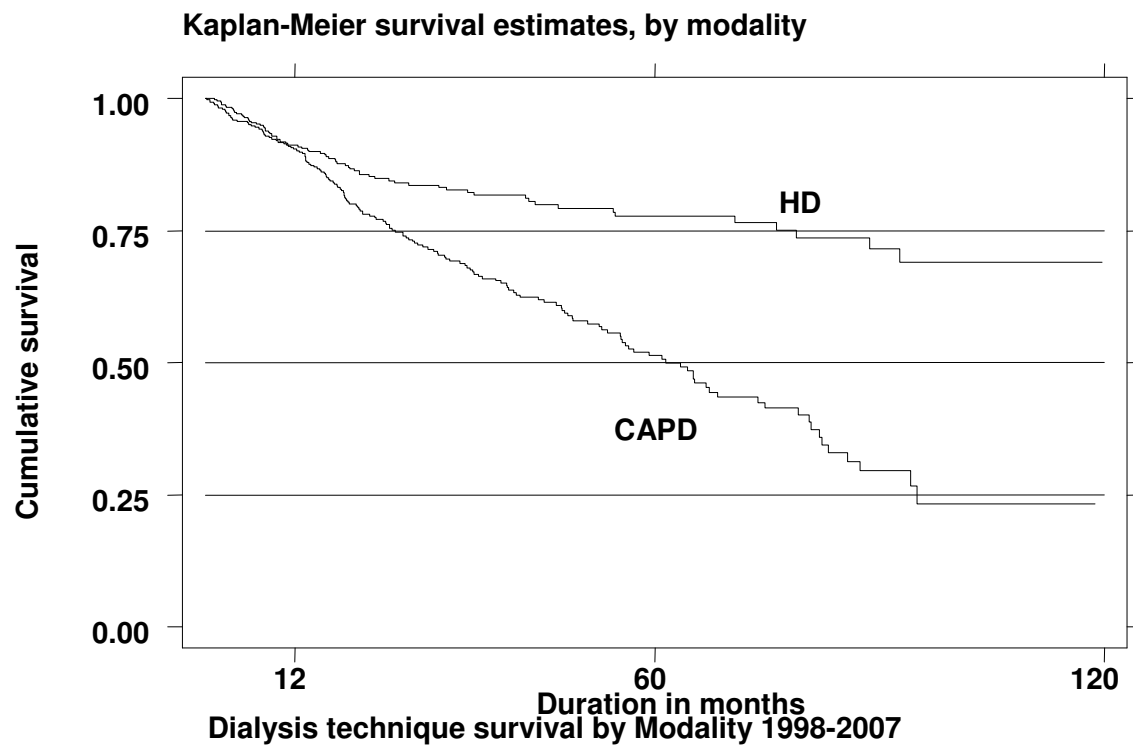


Table 6.12: Transplant Graft Survival, 1998- 2007

Interval (year)	No.	% survival	SE
1	114	91	2
5	53	82	4
10	-	-	-

Figure 6.12: Transplant Graft Survival, 1998 – 2007

