

**Table 2.1.1: Stock and Flow, Dialysis Patients 1997 – 2006**

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
New Dialysis patients	1136	1252	1544	1840	2085	2348	2597	2858	3054	3152
Died	316	376	492	594	816	925	1153	1265	1403	1575
Transplanted	59	61	69	106	132	143	122	149	120	115
Lost to Follow-up	3	8	7	7	8	17	26	36	54	136
Dialysing at 31st December	3698	4539	5538	6691	7839	9114	10429	11855	13337	14647

**Table 2.1.2: Dialysis Treatment Rate per million population 1997 – 2006**

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Acceptance rate	52	56	68	78	87	96	104	112	117	118
Prevalence rate	171	205	244	285	326	372	416	463	510	550

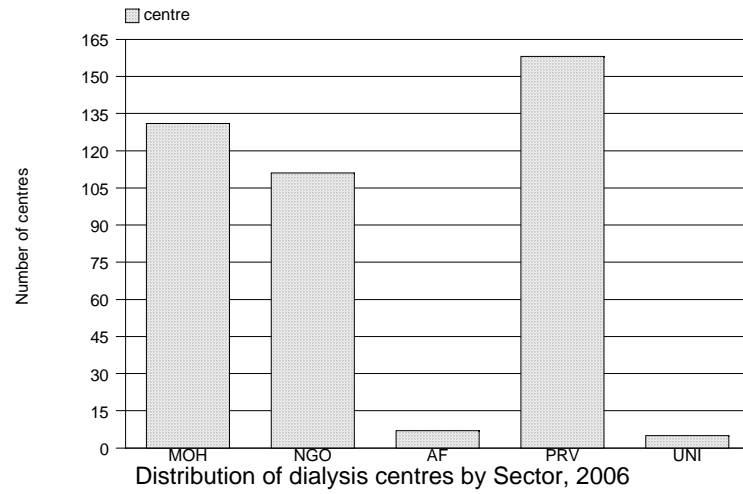
**Table 2.1.3: Dialysis Treatment Rate by State, per million state population 1997 – 2006**

State	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
P Pinang	85	113	124	110	126	160	145	212	197	181
Melaka	95	107	88	150	156	171	185	210	168	171
Johor	79	71	104	131	138	148	146	156	165	180
Perak n	61	64	75	105	103	114	129	144	164	162
Selangor & Kuala Lumpur	76	91	102	121	119	126	137	142	147	144
Negeri Sembilan	73	95	97	116	110	131	147	158	146	139
Kedah & Perlis	55	47	59	69	68	89	106	96	106	96
Terengganu	36	34	36	37	75	89	67	80	99	97
Pahang	46	36	47	49	52	53	66	72	90	104
Kelantan	12	15	27	31	60	62	74	64	79	72
Sarawak	46	33	44	50	67	59	62	73	72	85
Sabah	16	24	32	26	35	37	43	48	46	56

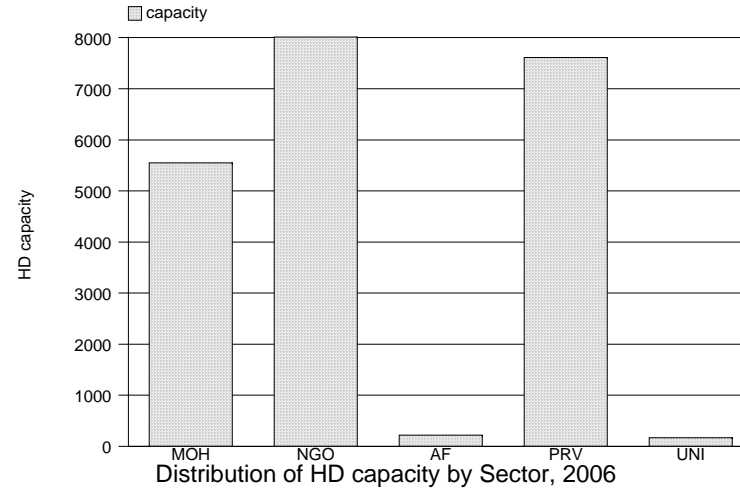
**Table 2.2.1: Number of dialysis centres, HD machines and treatment capacity by sector, December 2006**

Sector	HD Centre (No.)	Centre HD machines (No.)	Centre HD capacity (No.)	Centre HD patients (No.)	Centre HD capacity: patient ratio	CAPD Centre (No.)	CAPD patients (No.)	All dialysis patients (No.)
MOH	131	1133	5665	3841	1.47	20	1200	5041
NGO	111	1603	8015	4648	1.72	0	0	4648
Private (PRV))	158	1533	7665	4882	1.57	7	19	4901
University (UNI)	5	41	205	128	1.6	3	129	257
Armed Forces (AF)	7	44	220	96	2.29	1	3	99
TOTAL	412	4354	21770	13595		31	1351	14946

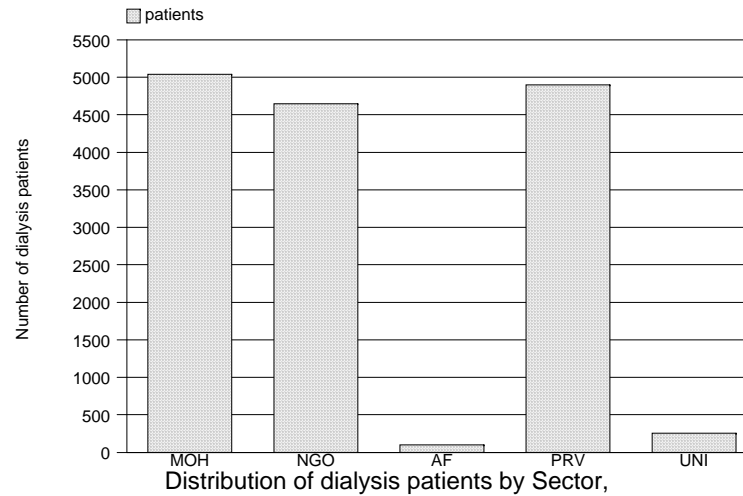
**Figure 2.2.1(a): Distribution of dialysis centres by Sector, December 2006**



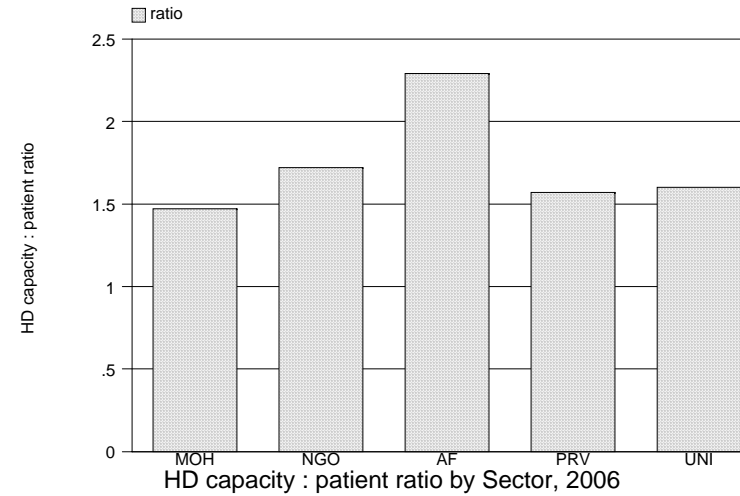
**Figure 2.2.1(b): Distribution of HD capacity by Sector, December 2006**



**Figure 2.2.1(c): Distribution of dialysis patients by Sector, December 2006**



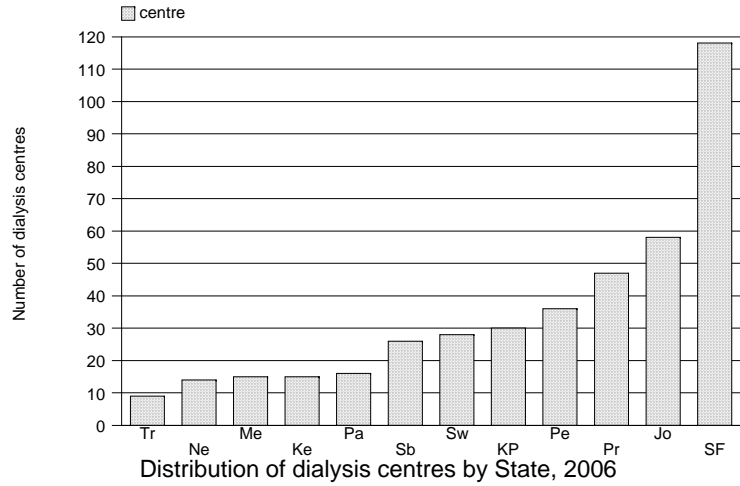
**Figure 2.2.1(d): HD capacity: patient ratio by Sector, December 2006**



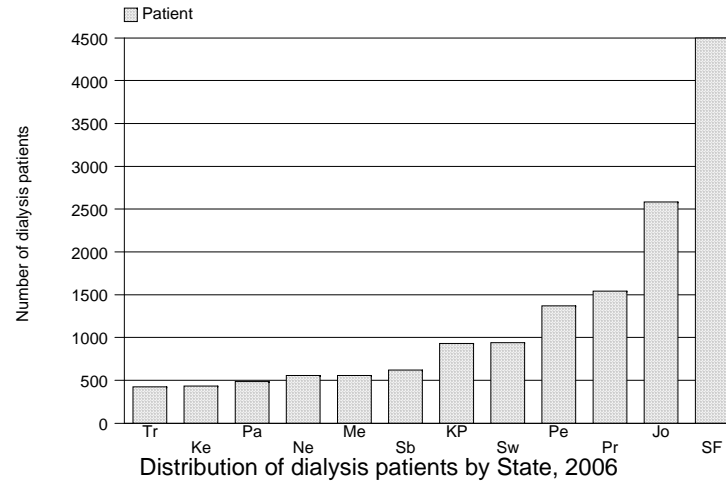
**Table 2.2.2: Number of dialysis centres, number of HD machines and treatment capacity, HD capacity to patients ratio and number of dialysis patients by state in December 2006**

State	Centre HD (No.)	Centre HD machines	Centre HD machines pmp	Centre HD capacity (No.)	Centre HD capacity pmp	Centre HD patient (No.)	Centre HD patient pmp	HD capacity patient ratio	All dialysis patients (No.)	Dialysis treatment rate pmp
Pulau Pinang (Pe)	36	424	284	2120	1421	1247	836	1.7	1369	917
Johor (Jo)	58	667	210	3335	1052	2332	736	1.43	2585	815
Melaka (Me)	15	189	261	945	1303	532	733	1.78	557	768
Selangor & W.Persekutuan (SF)	118	1349	210	6745	1049	3990	621	1.69	4500	700
Perak (Pr)	47	476	208	2380	1042	1487	651	1.6	1541	675
Negeri Sembilan (Ne)	14	154	160	770	801	493	513	1.56	556	578
Kedah & Perlis (KP)	30	302	143	1510	716	904	428	1.67	929	440
Trengganu (Tr)	9	85	82	425	408	350	336	1.21	425	408
Sarawak (Sw)	28	268	114	1340	568	884	375	1.52	942	400
Pahang (Pa)	16	147	101	735	505	427	293	1.72	487	335
Kelantan (Ke)	15	105	69	525	343	386	252	1.36	433	283
Sabah (Sa)	26	188	61	940	305	563	183	1.67	622	202
Malaysia	412	4354	167	21770	833	13595	520	1.6	14946	572

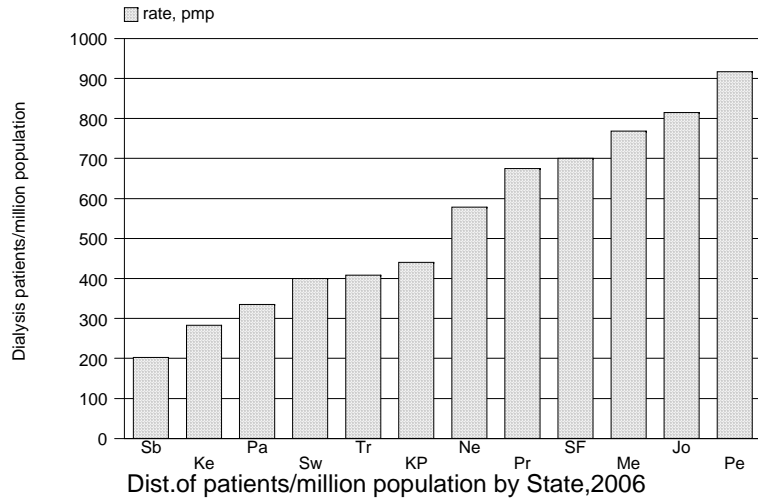
**Figure 2.2.2(a): Distribution of dialysis centres by State, December 2006**



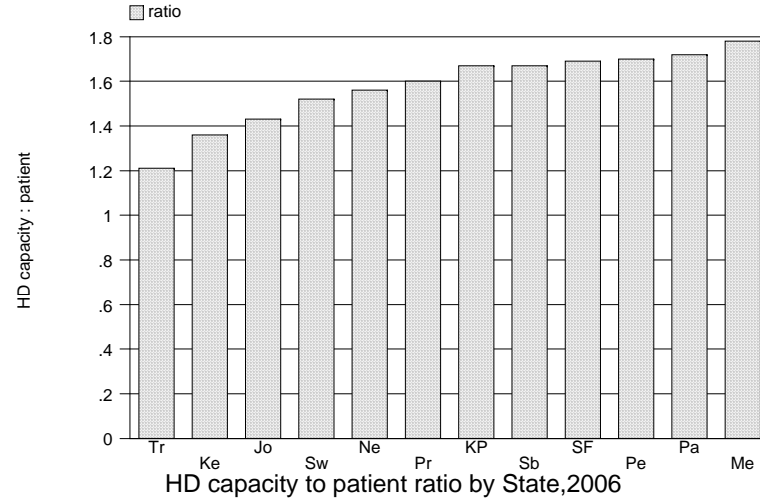
**Figure 2.2.2(b): Distribution of dialysis patients by State, December 2006**



**Figure 2.2.2(c): Distribution of dialysis treatment by State, December 2006**



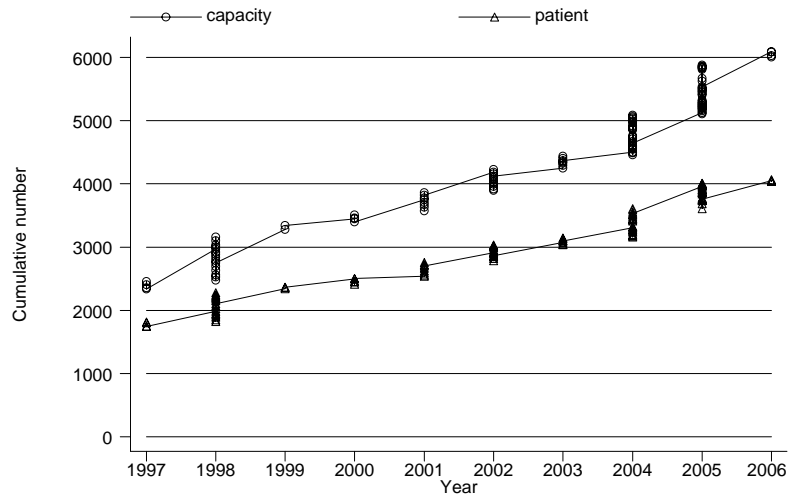
**Figure 2.2.2(d): HD capacity to patient ratio by State, December 2006**



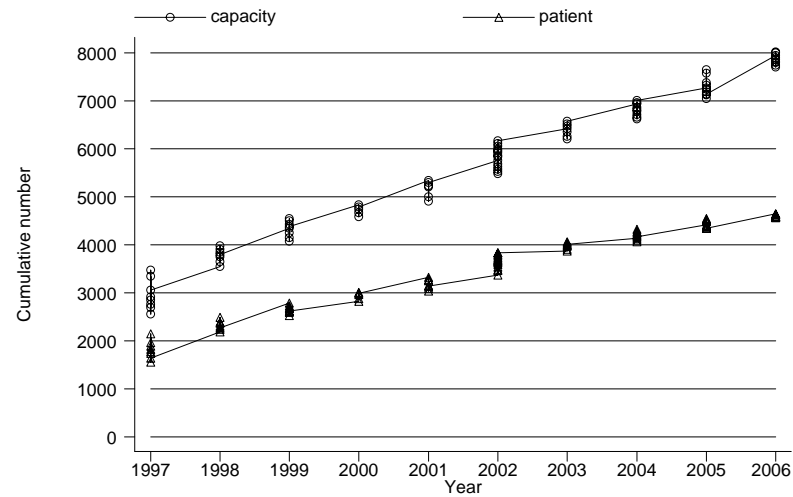
**Table 2.2.3: Growth in HD capacity and HD patient in Private, NGO and MOH sectors, 1997 – 2006**

Sector	Private		NGO		MOH	
	Cumulative HD capacity	Cumulative HD patients	Cumulative HD capacity	Cumulative HD patients	Cumulative HD capacity	Cumulative HD patients
1997	3115	1872	3475	2148	2460	1817
1998	3545	2188	3985	2490	3160	2281
1999	3960	2502	4545	2792	3340	2365
2000	4105	2585	4835	3012	3510	2505
2001	4345	2697	5345	3328	3865	2758
2002	4670	2902	6165	3837	4225	3036
2003	5360	3292	6570	4063	4440	3148
2004	6260	3928	7005	4324	5085	3607
2005	7260	4655	7650	4544	5880	4009
2006	7665	4882	8015	4648	6090	4065

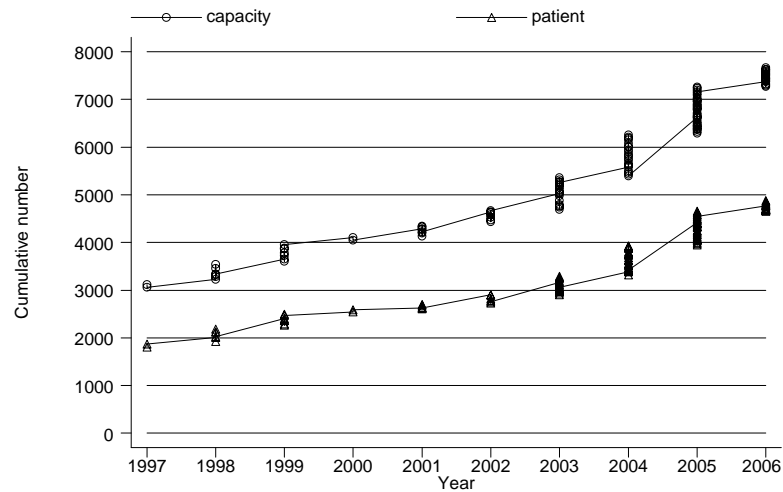
**Figure 2.2.3: Growth in HD capacity and HD patients in Private, NGO and MOH sectors, 1997 – 2006**



Growth in HD capacity and patient, MOH sector 1997-2006



Growth in HD capacity and patient, NGO sector 1997-2006



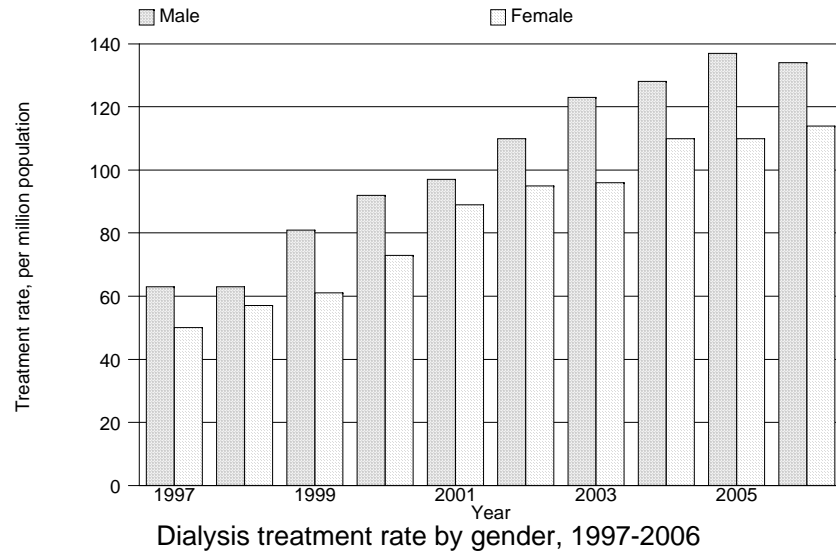
Growth in HD capacity and patient, private sector 1997-2006



**Table 2.3.1(a): Dialysis Treatment Rate by Gender, per million male or female population 1997 – 2006**

Gender	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
Male	51	63	63	81	92	97	110	123	128	137
Female	45	50	57	61	73	89	95	96	110	110

**Figure 2.3.1: Dialysis Treatment by Gender 1997 – 2006**

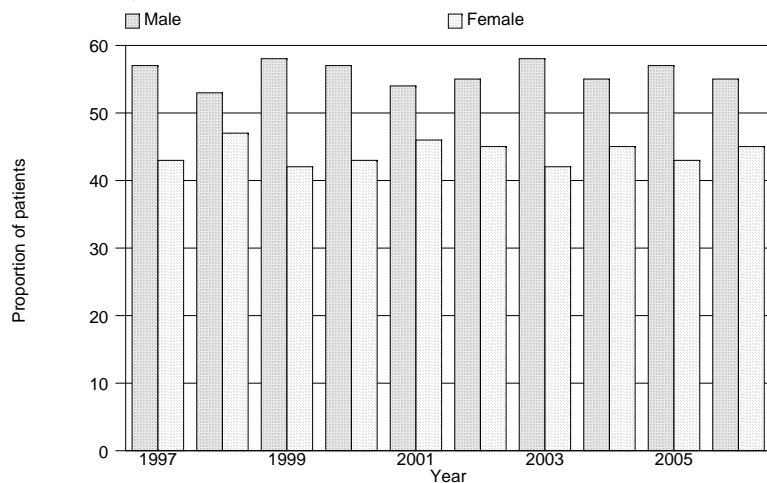


**Table 2.3.1(b): Gender distribution of Dialysis Patients 1997 – 2006**

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
New Dialysis patients	1136	1252	1544	1840	2085	2348	2597	2858	3054	3152
% Male	57	53	58	57	54	55	58	55	57	55
% Female	43	47	42	43	46	45	42	45	43	45
Dialysing at 31st December	3698	4539	5538	6691	7839	9114	10429	11855	13337	14647
% Male	57	56	56	56	55	55	55	55	55	55
% Female	43	44	44	44	45	45	45	45	45	45

**Figure 2.3.1(b): Gender Distribution of Dialysis patients 1997 – 2006**

(i) New Dialysis patients



Gender distribution of new dialysis patients, 1997-2006

(ii) Dialysing patients at 31<sup>st</sup> December

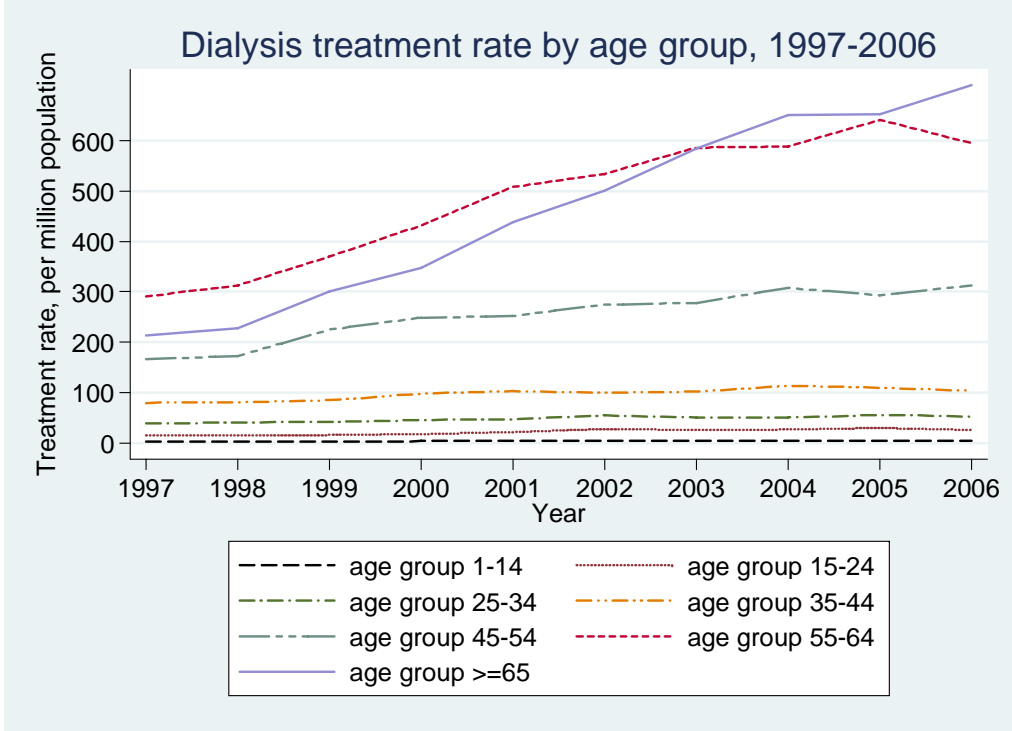


Gender distribution of dialysing patients at 31st Dec, 1997-2006

**Table 2.3.2(a): Dialysis Treatment Rate by Age Group, per million age group population 1997 – 2006**

Age groups (years)	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
1-14	3	3	3	4	4	5	4	5	5	5
15-24	15	15	16	18	22	28	26	27	30	26
25-34	39	41	42	46	47	55	51	51	56	53
35-44	80	81	85	98	103	100	102	114	110	104
45-54	166	173	225	249	252	275	278	308	293	313
55-64	291	313	30	432	508	534	586	588	641	595
>=65	213	228	301	347	438	501	584	651	652	710

**Figure 2.3.2(a): Dialysis Treatment Rate by Age Group 1997 - 2006**

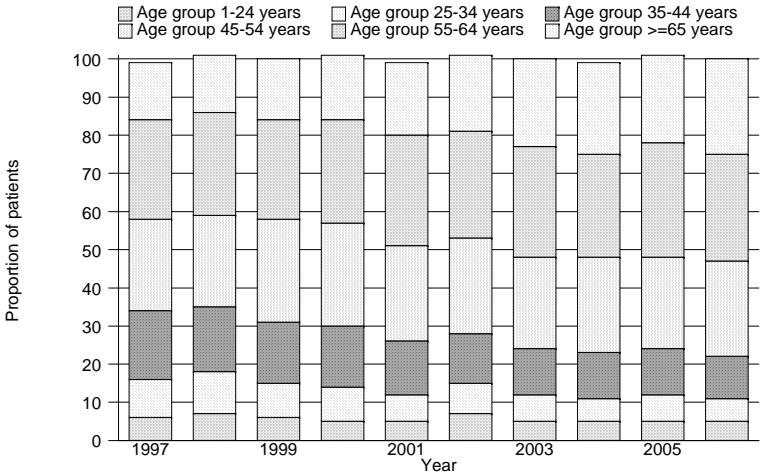


**Table 2.3.2(b): Percentage Age Distribution of Dialysis Patients 1997 – 2006**

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
New Dialysis patients	1136	1252	1544	1840	2085	2348	2597	2858	3054	3152
% 1-14 years	1	2	2	1	1	2	1	1	1	1
% 15-24 years	5	5	4	4	4	5	4	4	4	4
% 25-34 years	10	11	9	9	7	8	7	6	7	6
% 35-44 years	18	17	16	16	14	13	12	12	12	11
% 45-54 years	24	24	27	27	25	25	24	25	24	25
% 55-64 years	26	27	26	27	29	28	29	27	30	28
% >=65 years	15	15	16	17	19	20	23	24	23	25
Dialysing at 31st December	3698	4539	5538	6691	7839	9114	10429	11855	13337	14647
% 1-14 years	2	2	2	1	1	1	1	1	1	1
% 15-24 years	5	5	5	5	5	5	5	5	5	5
% 25-34 years	16	15	14	14	13	12	12	11	10	10
% 35-44 years	23	22	21	20	20	19	18	17	17	16
% 45-54 years	24	24	25	25	25	25	26	26	26	26
% 55-64 years	20	21	22	22	23	24	24	24	25	24
% >=65 years	9	10	11	12	13	14	14	15	16	17

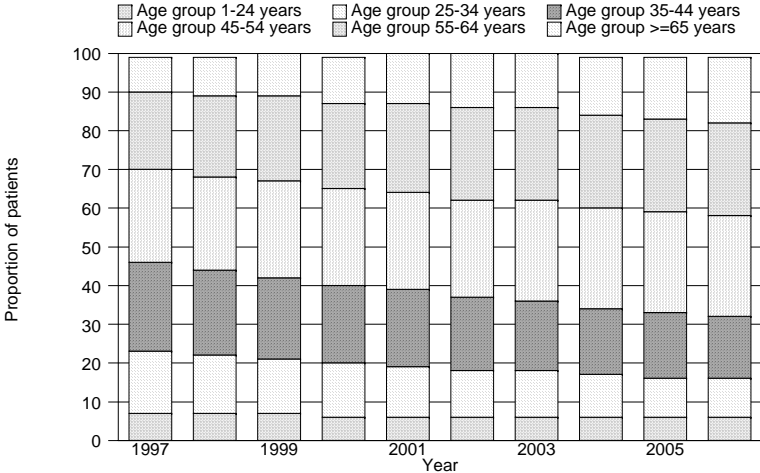
**Figure 2.3.2(b): Age Distribution of New Dialysis patients 1997 – 2006**

(i) New Dialysis patients



Age Distribution of New Dialysis patients, 1997-2006

(ii) Dialysing patients at 31<sup>st</sup> December



Age Distribution of Dialysing Patients at 31st Dec, 1997-2006

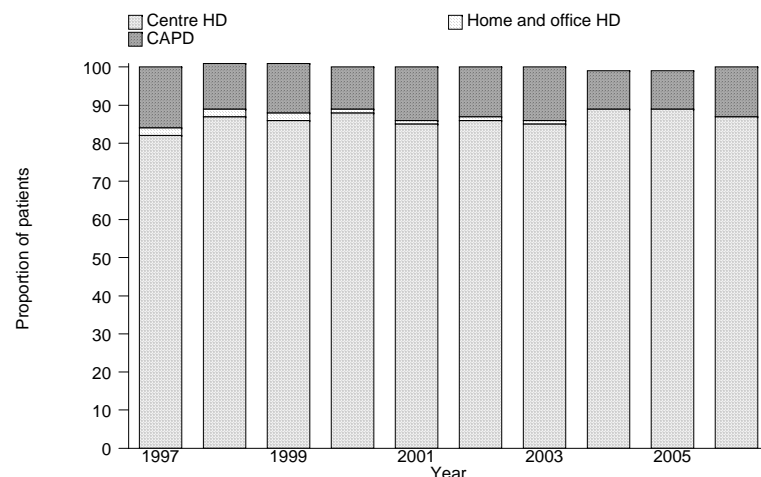
**Table 2.3.3: Method and Location of Dialysis 1997 – 2006**

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
New Dialysis patients	1136	1252	1544	1840	2085	2348	2597	2858	3054	3152
% Centre HD	82	87	86	88	85	86	85	89	89	87
% Home and office HD	2	2	2	1	1	1	1	0	0	0
% CAPD	16	12	13	11	14	13	14	10	10	12
Dialysing at 31st December	3181	3908	4785	5817	6869	8072	9243	10477	11739	12566
% Centre HD	85	87	88	89	89	88	87	88	89	89
% Home and office HD	1	1	1	1	1	1	1	1	1	1
% CAPD	14	12	11	10	10	11	11	11	10	10

\* Analysis of Dialysing at 31st December is analyzed base on patient annual return

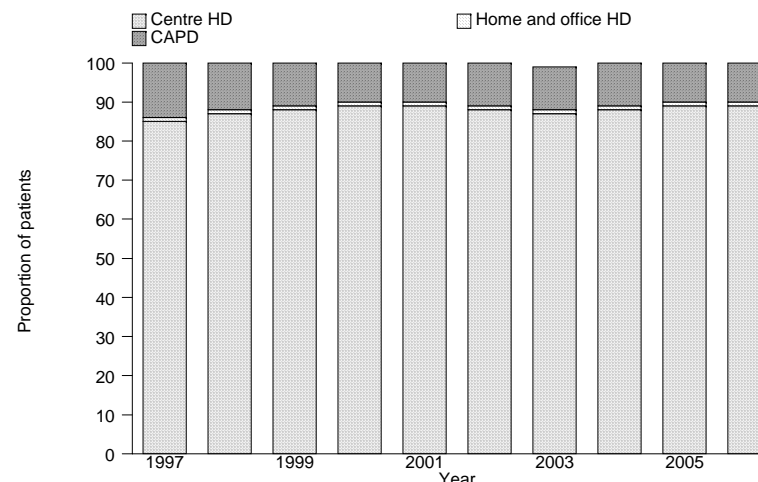
**Figure 2.3.3: Method and Location of Dialysis Patients 1997– 2006**

(a) New Dialysis patients



Method and Location of New Dialysis Patients, 1997-2006

(b) Dialysing patients at 31<sup>st</sup> December



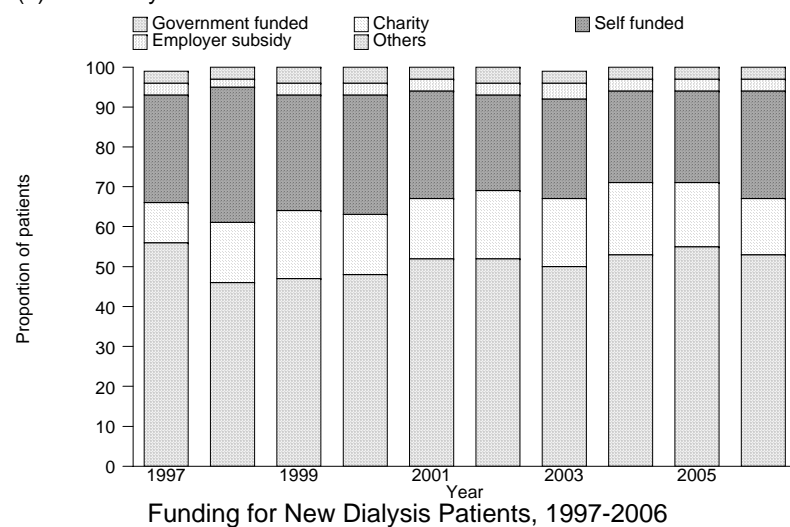
Method and Location of Dialysing Patients at 31st Dec, 1997-2006

**Table 2.3.4: Funding for Dialysis Treatment 1997 – 2006**

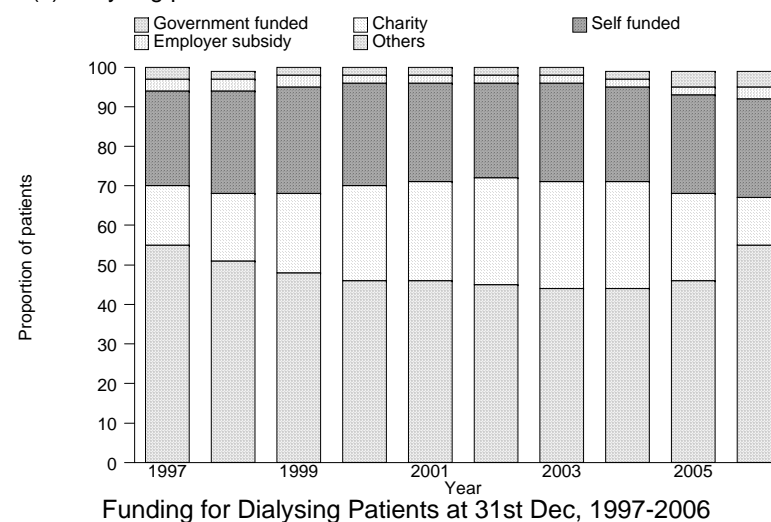
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
New Dialysis patients	1136	1252	1544	1840	2085	2348	2597	2858	3054	3152
% by Government	56	46	47	48	52	52	50	53	55	53
% by Charity	10	15	17	15	15	17	17	18	16	14
% self funded	27	34	29	30	27	24	25	23	23	27
% subsidized by Employer	3	2	3	3	3	3	4	3	3	3
% Others	3	3	4	4	3	4	3	3	3	3
Dialysing at 31st December	3389	4194	5151	6246	7305	8497	9766	11136	12693	14062
% by Government	55	51	48	46	46	45	44	44	46	55
% by Charity	15	17	20	24	25	27	27	27	22	12
% self funded	24	26	27	26	25	24	25	24	25	25
% subsidized by Employer	3	3	3	2	2	2	2	2	2	3
% Others	3	2	2	2	2	2	2	2	4	4

**Figure 2.3.4: Funding for Dialysis Treatment 1997 – 2006**

(a) New Dialysis Patients



(b) Dialysing patients at 31st December

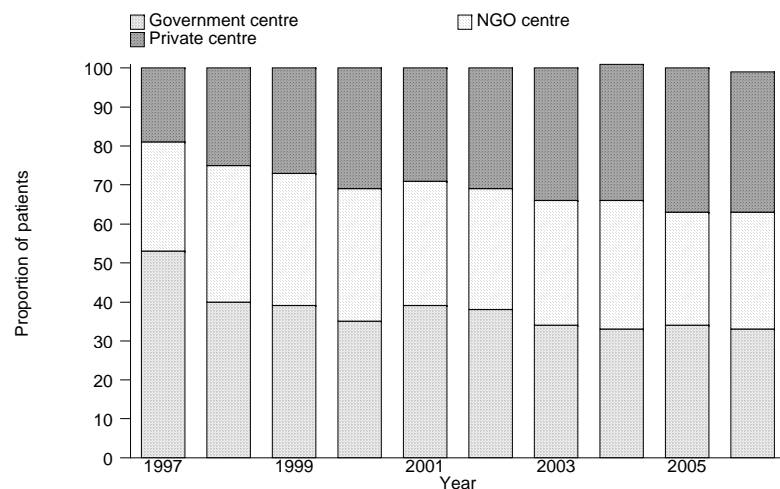


**Table 2.3.5: Distribution of Dialysis Patients by Sector 1997 – 2006**

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
New Dialysis patients	1136	1252	1544	1840	2085	2348	2597	2858	3054	3151
% Government centre	53	40	39	35	39	38	34	33	34	33
% NGO centre	28	35	34	34	32	31	32	33	29	31
% Private centre	19	25	27	31	29	31	34	35	37	36
Dialysing at 31st December	3698	4539	5538	6691	7839	9114	10429	11855	13337	14646
% Government centre	56	51	46	43	42	41	40	38	37	37
% NGO centre	26	29	31	32	33	33	33	33	32	32
% Private centre	18	20	23	25	25	26	27	29	30	31

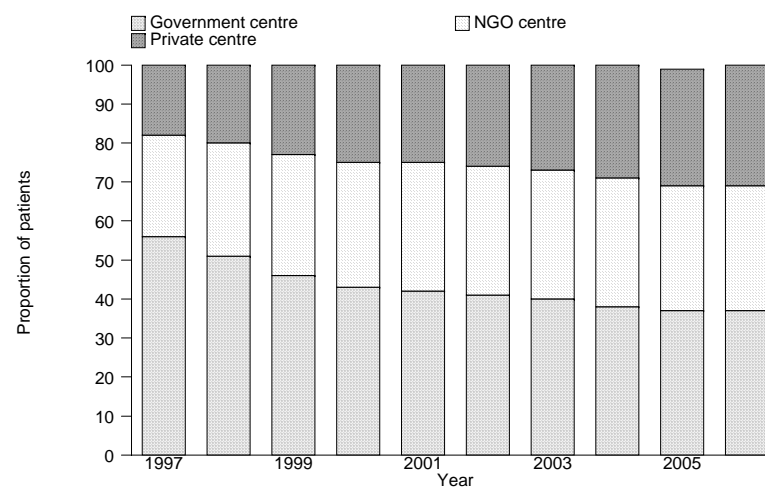
**Figure 2.3.5: Distribution of Dialysis Patients by Sector 1997 – 2006**

(a) New Dialysis Patients



Distribution of New Dialysis Patients by sector, 1997-2006

(b) Dialysing patients at 31st December



Distribution of Dialysing Patients at 31st Dec by sector, 1997-2006



**Table 2.4.1: Primary Renal Disease 1997 – 2006**

Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
New Dialysis patients	1136	1252	1544	1840	2085	2348	2597	2858	3054	3152
% Unknown cause	33	32	29	28	30	30	28	28	26	27
% Diabetes Mellitus	36	41	41	45	46	50	53	54	55	57
% GN	13	10	10	9	6	6	5	4	5	3
% SLE	1	1	2	2	1	1	1	1	1	1
% Polycystic kidney	2	1	1	1	2	1	1	1	1	1
% Obstructive Nephropathy	5	5	4	3	3	3	3	2	2	2
% Toxic	0	0	1	0	1	0	0	0	0	0
Nephropathy	9	8	11	12	9	7	7	7	7	6
% Hypertension	1	1	1	1	1	1	1	1	1	1

**Figure 2.4.1: Primary Renal Disease for New Dialysis Patients 1997 – 2006**

