dialysis. Among them, the history of hip fracture has never been surveyed and is a new survey item.

We used the survey data that were available when this report was being prepared (in November 2008); therefore, the values tabulated in this report are slightly different from those reported in "An Overview of Regular Dialysis in Japan (As of 31 December 2007)" (2), which was published as a rapid report in June 2008.

METHODS

This survey is conducted every year by sending questionnaires to target dialysis facilities. The 4098 facilities surveyed in this study consisted of the member facilities of the Japanese Society for Dialysis Therapy as of 31 December 2007, and additional non-member facilities offering dialysis for patients with chronic kidney diseases. The number of facilities in the present survey increased by 47 (1.2%) from that in the preceding year's survey. The questionnaires were mainly sent and collected by mail; some were also faxed. Moreover, a floppy disk instead of the paper questionnaire was sent to the facilities that had earlier indicated a preference for it.

This survey consisted of two types. One was a facility survey, in which items related to the details of dialysis facilities, such as the number of patients, staff members, and patient stations at individual facilities, were investigated (using the questionnaire referred to as "sheet I"). The other was a patient survey, in which the epidemiological background, treatment conditions, and outcome of treatment of individual dialysis patients were investigated (using the questionnaires referred to as "sheets II, III, and IV").

The collection rate of the questionnaire (sheet I) at the end of 2007 was 98.88% (4052 facilities), which was higher than that for the 2006 survey (98.37%). The number of facilities from which both questionnaires (i.e. facility survey and patient survey) were collected was 3899 facilities (95.14%), which was also higher than that in the 2006 survey (93.98%). In addition, the number of facilities that responded via an electronic file on a floppy disk was 2935 facilities (75.28%), an increase of at least 6% from the 2006 survey.

I. Tabulation of basic data on chronic dialysis patients at the end of 2007

Data on the dialysis patient population dynamics for the year 2007 were tabulated mainly on the basis of the results of the facility survey. The data included the number of new patients begun on dialysis, the number of patients who died, the crude death rate for the year 2007, and the total number of dialysis patients at the end of 2007. The cumulative survival rate after introduction to dialysis was calculated using a life table method (2).

II. Tabulation of data on new items surveyed

The following items were investigated with the survey on the dialysis patient population dynamics: the current status of dialysate solution quality control, hepatitis virus infection, and renal anemia therapy; the history of hip fracture; and the clinical conditions of patients at introduction to dialysis.

RESULTS AND DISCUSSION

I. Tabulation of basic data on chronic dialysis patients at the end of 2007

1. Number of patients

Table 1 shows a summary of the dynamics of the dialysis patient population in Japan at the end of 2007 obtained from the present survey. Only the data on the durations of dialysis and the longest dialysis shown in this table were obtained from the patient survey, whereas the totals of other parameters were obtained from the facility survey.

The total number of dialysis patients in Japan at the end of 2007 was 275 242, as determined from the facility survey. The number of dialysis patients in Japan at the end of 2006 was 264 473, showing an increase of 4.1% (10 769 patients) from the end of 2006 to the end of 2007.

In the 2006 report, the change in the rate of annual increase in the number of dialysis patients at the end of each year (hereafter, the rate of annual increase in the dialysis patient population) was shown in a graph, and it was pointed out that the rate may reach 0% by around 2014. The rate shown in the 2006 report was calculated using the following equation:

Rate of annual increase in the dialysis patient population (%) = (Dialysis patient population at the end of the target year – Dialysis patient population at the end of the previous year) ÷ Dialysis patient population at the end of the previous year (%)

The dialysis patient population at the end of each year, the denominator of the above equation, increases every year by the difference in the patient population between the target and previous years; therefore, the rate of annual increase in the dialysis patient population decreases even if the annual increase in the number of dialysis patients is constant because the dialysis patient population, which is the denominator of the equation, increases every year. If

TABLE 1. *Current status of chronic dialysis therapy in Japan (as of 31 December 2007)*

Number of facilities		4 052	Increase of 67 (1.7%)			
Equipment Capacity	Number of patient station	108 583	Increase of 4201 (4.0%)			
	Simultaneous dialysis (patients)	107 466	Increase of 3893 (3.8%)			
	Maximum accommodation capacity (patients)	364 286	Increase of 13 343 (3.8%)			
Chronic dialysis patients†		275 242	Increase of 10 769 (4.1%)			
Daytime dialysis		223 953	(81.4%)			
Nighttime dialysis		41 742	(15.2%)			
Home dialysis		187	(0.1%)			
Peritoneal dialysis		9 362	(3.4%)			
Patients (per million)		2 154.2	Increase of 84.3			
Number of patients newly introduced to dialysis		36 934	Increase of 561 (1.5%)			
Number of deceased patients		25 253	Increase of 1219 (5.1%)			
Duration of dialysis‡ (years)		Male	Female	Unknown	Total	
0–4		83 516	47 173	19	130 708	(49.4%)
5–9		40 371	25 704	1	66 076	(25.0%)
10–14		18 803	13 467	0	32 270	(12.2%)
15–19		9 108	7 364	0	16 472	(6.2%)
20–24		5 241	4 362	0	9 603	(3.6%)
≥25		5 184	4 042	1	9 227	(3.5%)
Total		162 223	102 112	21	264 356	(100.0%)
Longest dialysis history		39 years, 8 months				

†The total number of chronic dialysis patients is the total of the column for the number of patients in sheet I, and does not necessarily agree with the total number of patients counted according to the method of treatment. ‡The number of dialysis patients was calculated from questionnaire sheets II to IV.

this is correct, the rate of annual increase approaches 0% with increasing dialysis patient population; however, it will never reach 0%.

To demonstrate the above prediction, the increases in the dialysis patient population at the end of each year were calculated. The annual trend is shown in Figure 1a. The annual increase in the dialysis patient population is approximately 10 000, and has tended to decrease over the past 10 years; however, it would still take a long time for the rate of annual increase in the dialysis patient population to reach 0%.

An estimated trend in the annual increase in the number of new patients begun on dialysis (hereafter, the annual increase in the number of new patients) is shown in Figure 1b. The annual increase in the number of new patients is approximately 1000, similarly showing a decreasing trend over the past 10 years.

The number of facilities that responded to the questionnaire at the end of 2007 was 4052, which increased by 67 (1.7%) from the previous year. The number of patient stations at the end of 2007 was 108 583, which increased by 4201 (4.0%) from the previous year. The rates of increase in the number of patient stations and dialysis patients were higher than that in the number of dialysis facilities. This finding indicates that the number of patients treated at one facility has been increasing. The total number of patients who can simultaneously receive dialysis was 107 466, and the maximum capacity of all the

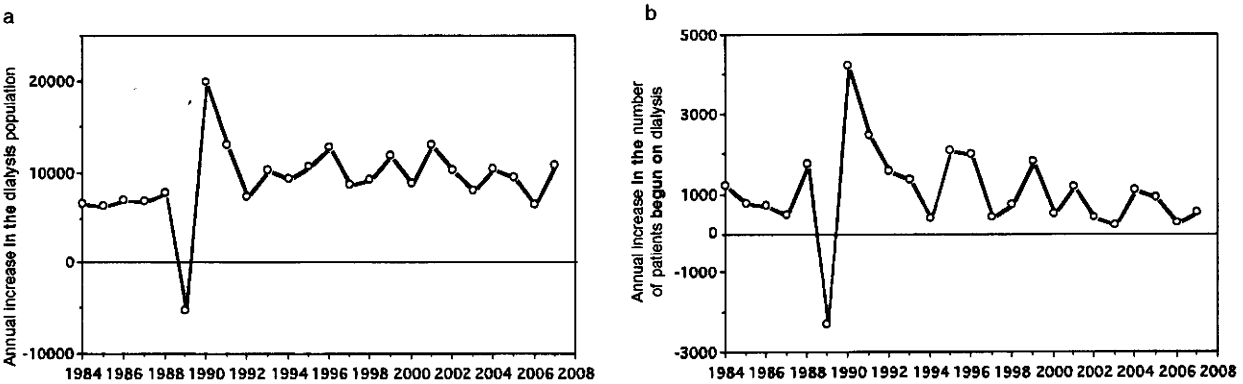

FIG. 1. Changes in the annual increase in (a) the dialysis population, and (b) the number of patients begun on dialysis.

facilities to provide dialysis was 364 286; both numbers increased in 2007.

The percentage of patients who received dialysis during the daytime further increased to 81.4%, whereas those receiving it during the nighttime decreased to 15.2%. The trends of the increasing number of daytime dialysis patients and the decreasing number of nighttime dialysis patients were the same as those in the 2006 survey.

The longest dialysis duration was 39 years and 8 months. The longest dialysis durations in the past 10 years were 31 years at the end of 1997, 32 years at the end of 1998, 33 years at the end of 1999, 34 years at the end of 2000, 35 years and 10 months at the end of 2001, 36 years and 8 months at the end of 2002, 37 years and 6 months at the end of 2003, 37 years and 3 months at the end of 2004, 38 years at the end of 2005, 39 years at the end of 2006, and 39 years and 8 months at the end of 2007. Thus, the longest dialysis duration has increased by approximately one year every survey up to the end of 2003, but the rate of increase in the longest dialysis duration has decreased since 2004. These long-term dialysis patients were begun on dialysis in the early stage of dialysis therapy in Japan; therefore, the above-described finding may indicate that 40 years have passed since these patients were begun on dialysis during this early stage of dialysis therapy and many of them have died of old age.

Table 2 shows the total number of dialysis patients in each prefecture of Japan determined from the facility survey. The number of dialysis patients per million at the end of 2007 was 2154.2 (Table 1). Table 3 shows changes in the number of dialysis patients per million.

2. Mean age

The dialysis patient population in Japan is aging yearly. The patient survey showed that the mean age of new patients begun on dialysis in 2007 was 66.8 years (±13.3, SD, here and throughout), and the mean age of the entire dialysis patient population in 2007 was 64.9 years (±12.7) (Table 4). The dialysis patient population aged by 7.2 years from the end of 1987 to the end of 1997, but aged by 5.6 years from the end of 1997 to the end of 2007. Thus, the rate of aging of the dialysis patient population has decreased. Similarly, the mean age of new patients begun on dialysis increased by 6.3 years from the end of 1987 to the end of 1997, but increased by only 4.6 years from the end of 1997 to the end of 2007. These findings show that the rate of aging of new patients begun on dialysis has also decreased.

Table 5 shows the gender and age distributions of new patients begun on dialysis in 2007. Table 6 shows the gender and age distributions of all dialysis patients in 2007. Tables 7 and 8 show the age distribution according to the primary disease. The data in these tables were obtained from the patient survey.

3. Primary disease of new patients begun on dialysis

Table 7 shows a summary of the primary diseases of new patients begun on dialysis in 2007. Table 8 shows a summary of the primary diseases of all the patients at the end of 2007.

Table 9 shows changes in the percentage of patients according to the main primary disease of renal failure for the new patients begun on dialysis each year. Since 1983, when the patient survey was first conducted, the number of new patients with diabetic nephropathy as the primary disease has continuously increased. In 1998 the number of patients with diabetic nephropathy as the primary disease became the highest among the new patients begun on dialysis, instead of the former top primary disease, chronic glomerulonephritis, and has been continuously increasing. Among the new patients begun on dialysis in 2007, the numbers of patients with diabetic nephropathy and those with chronic glomerulonephritis as the primary diseases were 43.4% and 23.8%, respectively. The number of patients with an "unspecified" primary disease newly begun on dialysis has increased yearly, and the percentage was 10.2% in 2007. Following these three diseases, the percentage of patients with nephrosclerosis as the primary disease has been increasing, accounting for 10.0%. This increase is considered to be related to the aging of the new dialysis patients. The number of patients with polycystic kidney disease, rapidly progressive glomerulonephritis, chronic pyelonephritis, and systemic lupus erythematosus (SLE) nephritis as the primary diseases were also observed, and the percentages of these patients were nearly the same as those in the previous years.

Table 10 shows changes in the percentage of patients according to the primary disease of renal failure for all the dialysis patients each year. Reflecting the trend among new patients begun on dialysis each year, the number of patients with chronic glomerulonephritis as the primary disease of renal failure has continuously decreased yearly. Instead, the number of patients with diabetic nephropathy as the primary disease has continuously increased (chronic glomerulonephritis, 40.4%; diabetic nephropathy, 33.4% in 2007). Assuming that the dynamics of the dialysis patient population in Japan continues to show this trend, the percentage of patients with

TABLE 2. *Numbers of chronic dialysis patients by prefecture*

Names of administrative divisions	Daytime	Nighttime	Home hemodialysis	Peritoneal dialysis	Total†
Hokkaido	11 535	1 438	5	450	13 429
Aomori Prefecture	2 676	221	0	121	3 018
Iwate Prefecture	2 269	360	0	144	2 773
Miyagi Prefecture	3 548	832	0	89	4 469
Akita Prefecture	1 639	145	0	63	1 847
Yamagata Prefecture	1 808	256	0	139	2 204
Fukushima Prefecture	3 641	497	1	230	4 368
Ibaraki Prefecture	5 335	854	1	154	6 344
Tochigi Prefecture	4 326	719	0	62	5 108
Gunma Prefecture	3 949	751	19	133	4 833
Saitama Prefecture	11 355	1 961	0	449	13 784
Chiba Prefecture	9 410	1 851	4	232	11 493
Tokyo	20 771	5 039	9	852	26 665
Kanagawa Prefecture	12 955	2 985	1	524	16 474
Niigata Prefecture	3 402	993	1	139	4 535
Toyama Prefecture	1 837	279	0	67	2 184
Ishikawa Prefecture	1 904	381	0	86	2 372
Fukui Prefecture	1 398	214	1	79	1 691
Yamanashi Prefecture	1 759	210	1	20	1 990
Nagano Prefecture	3 481	646	0	133	4 260
Gifu Prefecture	3 386	613	3	161	4 160
Shizuoka Prefecture	7259	1 355	52	290	8 908
Aichi Prefecture	11 200	3 108	3	573	14 931
Mie Prefecture	2 921	656	9	137	3 717
Shiga Prefecture	1 950	504	2	92	2 555
Kyoto Prefecture	4 091	957	2	170	5 220
Osaka Prefecture	16 707	2 741	9	657	20 154
Hyogo Prefecture	8 798	1 757	3	332	10 896
Nara Prefecture	2 507	222	1	113	2 845
Wakayama Prefecture	2 298	293	0	27	2 619
Tottori Prefecture	993	124	0	116	1 233
Shimane Prefecture	1 140	145	0	87	1 372
Okayama Prefecture	3 398	489	0	243	4 130
Hiroshima Prefecture	5 536	527	0	441	6 504
Yamaguchi Prefecture	2 660	359	0	133	3 152
Tokushima Prefecture	1 954	287	0	178	2 419
Kagawa Prefecture	1 919	247	7	239	2 412
Ehime Prefecture	2 661	439	1	166	3 267
Kochi Prefecture	1 806	202	0	45	2 052
Fukuoka Prefecture	9 729	2 218	1	336	12 283
Saga Prefecture	1 586	289	0	13	1 888
Nagasaki Prefecture	2 828	522	1	136	3 487
Kumamoto Prefecture	4 492	949	0	150	5 591
Oita Prefecture	3 045	361	1	120	3 527
Miyazaki Prefecture	2 804	537	0	55	3 396
Kagoshima Prefecture	4 147	529	2	115	4 792
Okinawa Prefecture	3 140	680	0	71	3 891
Total	223 953	41 742	187	9362	275 242

†The total number of chronic dialysis patients is the total of the column for the number of patients in sheet I, and does not necessarily agree with the total number of patients counted according to the method of treatment. The number of dialysis patients was calculated based on facility survey data.

chronic glomerulonephritis as the primary disease and that with diabetic nephropathy will reverse in a few years; it is considered that the percentage of patients with diabetic nephropathy as the primary disease will become the largest also for all the dialysis patients. Patients with an unspecified primary disease accounted for 7.4% of all the dialysis patients. Following these three diseases, nephrosclerosis had the fourth largest number of patients.

4. Causes of death

Table 11 shows the classification of the causes of death of new patients who were begun on dialysis in 2007 and who died by the end of 2007. Table 12 shows the classification of the causes of death of patients who died in 2007 in the entire dialysis patient population. Table 13 shows the changes in the percentages of the leading causes of death in the entire dialysis patient population. The classification of the causes of

TABLE 3. *Changes in the number of patients per million*

Year	Patients per million	Year	Patients per million
1983	443.7	1996	1328.4
1984	497.5	1997	1394.9
1985	547.8	1998	1472.5
1986	604.4	1999	1556.7
1987	658.8	2000	1624.1
1988	721.1	2001	1721.9
1989†	790.0	2002	1801.2
1990	835.7	2003	1862.7
1991	937.6	2004	1943.5
1992	995.8	2005	2017.6
1993	1076.4	2006	2069.9
1994	1149.4	2007	2154.2
1995	1229.7		

†The collection rate is corrected at 86%, that is, rounded off at the 100th order. The number of dialysis patients was calculated based on facility survey data.

death was changed on the basis of the tenth revision of the international statistical classification of diseases and related health problems (ICD-10) starting with the survey at the end of 2003.

The causes of death of new patients begun on dialysis in 2007 were infectious diseases (24.2%), cardiac failure (23.2%), malignant tumors (10.3%), cerebrovascular disorder (5.5%), and cardiac infarction (3.5%). The major cause of death of new patients begun on dialysis was cardiac failure until 2002. The percentage of dialysis patients who died of infectious diseases has increased and become as large as that of dialysis patients who died of cardiac failure since 2003; this trend has continued until 2007. The increases in the numbers of elderly patients and diabetic patients who easily develop infectious diseases are considered to account for the increasing percentage of patients who died of infectious diseases.

The leading cause of death among the entire dialysis patient population was cardiac failure, accounting for 24.0% of all the patients who died. The percentage of death from cardiac failure among all the patients who died decreased between 1990 and around 1996, and remained nearly constant afterwards. The second leading cause of death was infectious diseases, accounting for 18.9% of all the patients who died. The percentage of death from infectious diseases has tended to increase since 1990. These trends were similar to those observed for the causes of death of new patients begun on dialysis, which was mentioned above.

Following the causes of death mentioned above, the percentages of patients who died of cerebrovascular disorder and malignant tumors were high, at 8.9% and 9.2%, respectively. The percentage of patients who died of cerebrovascular disorder has tended to decrease since 1994; moreover, the percentage of patients who died of cardiac infarction has also tended to decrease since 2002.

5. Annual crude death rate

The annual crude death rate was calculated from the facility survey data. It shows the percentage of the number of patients who died in a given year with respect to the mean annual number of dialysis patients. The annual crude death rate in 2007 was 9.4%. Table 14 shows the trend of annual crude death rates from 1983, which have ranged between 9.2–9.7% since 1992. Despite the increase in the numbers of diabetic patients, who have a low life expectancy, and elderly patients, the annual crude death rate remains nearly constant, which suggests an improvement in dialysis control technology in Japan.

6. Cumulative survival rate of new patients begun on dialysis each year

The cumulative survival rates of new patients begun on dialysis from 1983 are summarized by the year of introduction (Table 15). Moreover, the 1-, 5-, 10-, 15-, and 20-year survival rates of patients begun on dialysis are extracted from the table and plotted in

TABLE 4. *Changes in the mean age of new patients begun on dialysis and in that of patients at the end of each year*

	Mean age of patients newly begun on dialysis treatment		Mean age of patients at the end of each year	
Year	Mean	±SD	Mean	±SD
1983	51.9	15.5	48.3	13.8
1984	53.2	15.3	49.2	13.8
1985	54.4	15.4	50.3	13.7
1986	55.1	15.2	51.1	13.6
1987	55.9	14.9	52.1	13.7
1988	56.9	14.9	52.9	13.6
1989	57.4	14.7	53.8	13.5
1990	58.1	14.6	54.5	13.5
1991	58.1	14.6	55.3	13.5
1992	59.5	14.5	56.0	13.5
1993	59.8	14.4	56.6	13.5
1994	60.4	14.3	57.3	13.5
1995	61.0	14.2	58.0	13.4
1996	61.5	14.2	58.6	13.4
1997	62.2	14.0	59.2	13.4
1998	62.7	13.9	59.9	13.3
1999	63.4	13.9	60.6	13.3
2000	63.8	13.9	61.2	13.2
2001	64.2	13.7	61.6	13.1
2002	64.7	13.6	62.2	13.0
2003	65.4	13.5	62.8	12.9
2004	65.8	13.4	63.3	12.9
2005	66.2	13.4	63.9	12.8
2006	66.4	13.4	64.4	12.8
2007	66.8	13.3	64.9	12.7

TABLE 5. *Number of new patients begun on dialysis in 2007 according to age and gender*

Age of the patients when newly begun on dialysis (years)	Male	(%)†	Female	(%)†	Subtotal	(%)†	No information available	Total	(%)†
<5	9	(0.0)	10	(0.1)	19	(0.1)	0	19	(0.1)
5–9	6	(0.0)	4	(0.0)	10	(0.0)	0	10	(0.0)
10–14	12	(0.1)	6	(0.0)	18	(0.0)	0	18	(0.0)
15–19	20	(0.1)	12	(0.1)	32	(0.1)	0	32	(0.1)
20–24	71	(0.3)	34	(0.3)	105	(0.3)	0	105	(0.3)
25–29	120	(0.5)	69	(0.5)	189	(0.5)	0	189	(0.5)
30–34	247	(1.1)	123	(1.0)	370	(1.0)	0	370	(1.0)
35–39	464	(2.0)	215	(1.7)	679	(1.9)	0	679	(1.9)
40–44	671	(2.9)	253	(2.0)	924	(2.6)	0	924	(2.6)
45–49	989	(4.2)	419	(3.3)	1 408	(3.9)	0	1 408	(3.9)
50–54	1 458	(6.2)	611	(4.8)	2 069	(5.7)	0	2 069	(5.7)
55–59	2 819	(12.0)	1 187	(9.4)	4 006	(11.1)	1	4 007	(11.1)
60–64	2 852	(12.2)	1 272	(10.0)	4 124	(11.4)	3	4 127	(11.4)
65–69	3 281	(14.0)	1 639	(12.9)	4 920	(13.6)	7	4 927	(13.7)
70–74	3 775	(16.1)	1 947	(15.4)	5 722	(15.9)	2	5 724	(15.9)
75–79	3 372	(14.4)	2 067	(16.3)	5 439	(15.1)	1	5 440	(15.1)
80–84	2 221	(9.5)	1 671	(13.2)	3 892	(10.8)	0	3 892	(10.8)
85–89	832	(3.6)	890	(7.0)	1 722	(4.8)	1	1 723	(4.8)
90–94	152	(0.6)	216	(1.7)	368	(1.0)	0	368	(1.0)
≥95	26	(0.1)	24	(0.2)	50	(0.1)	0	50	(0.1)
Total	23 397	(100.0)	12 669	(100.0)	36 066	(100.0)	15	36 081	(100.0)
No information available	60		32		92			92	
Total	23 457		12 701		36 158		15	36 173	
Mean	65.84		68.60		66.81		67.73	66.81	
SD	13.07		13.55		13.31		7.40	13.30	

†The value in parentheses on the right-hand side of each number is the percentage of patients with respect to the total of the column.

TABLE 6. *Number of all dialysis patients in 2007 according to age and gender*

Age (years)	Male	(%)†	Female	(%)†	Subtotal	(%)†	No information available	Total	(%)†
<5	21	(0.0)	20	(0.0)	41	(0.0)	0	41	(0.0)
5–9	18	(0.0)	14	(0.0)	32	(0.0)	0	32	(0.0)
10–14	19	(0.0)	14	(0.0)	33	(0.0)	0	33	(0.0)
15–19	77	(0.0)	49	(0.0)	126	(0.0)	0	126	(0.0)
20–24	291	(0.2)	167	(0.2)	458	(0.2)	0	458	(0.2)
25–29	713	(0.4)	400	(0.4)	1 113	(0.4)	0	1 113	(0.4)
30–34	1 859	(1.1)	969	(0.9)	2 828	(1.1)	0	2 828	(1.1)
35–39	3 575	(2.2)	1 832	(1.8)	5 407	(2.0)	0	5 407	(2.0)
40–44	5 400	(3.3)	2 786	(2.7)	8 186	(3.1)	0	8 186	(3.1)
45–49	7 783	(4.8)	4 233	(4.1)	12 016	(4.5)	1	12 017	(4.5)
50–54	12 364	(7.6)	7 053	(6.9)	19 417	(7.3)	1	19 418	(7.3)
55–59	22 862	(14.1)	13 142	(12.9)	36 004	(13.6)	2	36 006	(13.6)
60–64	23 361	(14.4)	13 576	(13.3)	36 937	(14.0)	2	36 939	(14.0)
65–69	24 719	(15.2)	14 793	(14.5)	39 512	(14.9)	9	39 521	(15.0)
70–74	24 225	(14.9)	14 633	(14.3)	38 858	(14.7)	3	38 861	(14.7)
75–79	18 799	(11.6)	12 837	(12.6)	31 636	(12.0)	2	31 638	(12.0)
80–84	10 874	(6.7)	9 437	(9.2)	20 311	(7.7)	0	20 311	(7.7)
85–89	4 115	(2.5)	4 663	(4.6)	8 778	(3.3)	1	8 779	(3.3)
90–94	1 005	(0.6)	1 334	(1.3)	2 339	(0.9)	0	2 339	(0.9)
≥95	139	(0.1)	158	(0.2)	297	(0.1)	0	297	(0.1)
Total	162 219	(100.0)	102 110	(100.0)	264 329	(100.0)	21	264 350	(100.0)
No information available	4		2		6			6	
Total	162 223		102 112		264 335		21	264 356	
Mean	64.16		65.98		64.87		66.33	64.87	
SD	12.52		12.92		12.71		8.51	12.71	

†The value in parentheses on the right-hand side of each number is the percentage of patients with respect to the total of the column.

TABLE 7. *Number of new patients begun on dialysis in 2007 (and their mean ages) according to primary disease*

Primary disease	Number of patients	(%)†	No information available	(%)†	Total	(%)†	Mean age	SD
Chronic glomerulonephritis	8 561	(23.8)	41	(45.1)	8 602	(23.8)	66.45	14.31
Chronic pyelonephritis	278	(0.8)	2	(2.2)	280	(0.8)	64.42	15.06
Rapidly progressive glomerulonephritis	468	(1.3)	0	(0.0)	468	(1.3)	69.99	14.30
Nephropathy of pregnancy/pregnancy toxemia	68	(0.2)	0	(0.0)	68	(0.2)	57.56	13.60
Other nephritides that cannot be classified	148	(0.4)	0	(0.0)	148	(0.4)	61.32	20.35
Polycystic kidney	827	(2.3)	0	(0.0)	827	(2.3)	61.31	13.41
Nephrosclerosis	3 621	(10.1)	5	(5.5)	3 626	(10.0)	73.67	11.54
Malignant hypertension	248	(0.7)	0	(0.0)	248	(0.7)	61.10	16.56
Diabetic nephropathy	15 663	(43.5)	18	(19.8)	15 681	(43.4)	65.44	11.49
Systemic lupus erythematosus nephritis	302	(0.8)	4	(4.4)	306	(0.8)	60.50	15.67
Amyloidal kidney	170	(0.5)	0	(0.0)	170	(0.5)	68.20	9.28
Gouty kidney	107	(0.3)	1	(1.1)	108	(0.3)	65.82	12.60
Renal failure due to congenital abnormality of metabolism	33	(0.1)	0	(0.0)	33	(0.1)	47.24	21.85
Kidney and urinary tract tuberculosis	22	(0.1)	0	(0.0)	22	(0.1)	72.23	9.95
Kidney and urinary tract stone	67	(0.2)	0	(0.0)	67	(0.2)	68.36	12.52
Kidney and urinary tract tumor	162	(0.4)	1	(1.1)	163	(0.5)	70.96	11.82
Obstructive urinary tract disease	99	(0.3)	1	(1.1)	100	(0.3)	66.89	16.22
Myeloma	140	(0.4)		(0.0)	140	(0.4)	70.40	9.33
Hypoplastic kidney	59	(0.2)	1	(1.1)	60	(0.2)	35.14	27.81
Undetermined	3 664	(10.2)	9	(9.9)	3 673	(10.2)	69.84	13.43
Reintroduction after transplantation	273	(0.8)	4	(4.4)	277	(0.8)	56.67	17.28
Others	1 037	(2.9)	4	(4.4)	1 041	(2.9)	67.47	15.25
Total	36 017	(100.0)	91	(100.0)	36 108	(100.0)	66.80	13.31
No information available	64		1		65		70.53	11.65
Total	36 081		92		36 173		66.81	13.30

†The value in parentheses on the right-hand side of each number is the percentage of patients with respect to the total of the column.

Figure 2. The survival rates were calculated using a life table method (3).

The 1- to 10-year survival rates have been increasing since 1992 for patients begun on dialysis in 1992 or later. A significant change employed from around 1992 was the start of the clinical application of erythropoietin. This trend of increasing survival rate for the patients begun on dialysis after 1992 may be due to the improvement of anemia therapy using erythropoietin from the initial phase of dialysis.

The 15-year survival rate of patients begun on dialysis after 1992 is still unclear because only the data from the patients begun on dialysis before 1992 are used for calculating the 15-year survival rate. It will be interesting to determine whether the survival rates for 15 years and longer will also increase for the patients begun on dialysis after 1992.

II. Tabulation of data on new items surveyed

A. Current status of dialysate solution quality control

Following the previous survey, the surveyed items included the measurement frequency and endotoxin concentration in the dialysate solution, measurement frequency and bacterial count in the dialysate solution, the medium used for bacterial cultivation of dialysate solution, and the installation of endotoxin retentive filters (ETRFs). The amount of the sample for the measurement of bacterial count in the dialysate solution was also added to these items in the present survey.

1. Measurement of endotoxin concentration in dialysate solution

a. Measurement frequency. There were 3664 facilities that responded to questions regarding the measurement frequency of endotoxin concentration in the dialysate solution (Table 16). The endotoxin concentration in the dialysate solution was measured at 87.5% of the facilities that responded to the questionnaire, an increase of 5% from the percentage in the 2006 survey. According to the quality control standard by the Japanese Society for Dialysis Therapy, it is recommended that the endotoxin concentration in the dialysate solution be measured more than once a month; however, the percentage of facilities that carried out the measurement more than once a month was only 31.5%, indicating that compliance with the recommendation needs improvement.

TABLE 8. *Number of all dialysis patients in 2007 (and their mean ages) according to primary disease*

Primary disease	Number of patients	(%)†	No information available	(%)†	Total	(%)†	Mean age	SD
Chronic glomerulonephritis	106 702	(40.4)	2	(33.3)	106 704	(40.4)	63.50	12.84
Chronic pyelonephritis	3 138	(1.2)	0	(0.0)	3 138	(1.2)	62.83	14.26
Rapidly progressive glomerulonephritis	1 742	(0.7)	0	(0.0)	1 742	(0.7)	64.95	14.30
Nephropathy of pregnancy/pregnancy toxemia	1 775	(0.7)	0	(0.0)	1 775	(0.7)	59.71	9.96
Other nephritides that cannot be classified	1 214	(0.5)	0	(0.0)	1 214	(0.5)	58.05	17.03
Polycystic kidney	8 920	(3.4)	0	(0.0)	8 920	(3.4)	62.93	11.03
Nephrosclerosis	17 144	(6.5)	0	(0.0)	17 144	(6.5)	72.91	11.96
Malignant hypertension	1 956	(0.7)	0	(0.0)	1 956	(0.7)	62.55	14.41
Diabetic nephropathy	88 257	(33.4)	1	(16.7)	88 258	(33.4)	65.69	10.96
Systemic lupus erythematosus nephritis	2 261	(0.9)	0	(0.0)	2 261	(0.9)	56.85	13.77
Amyloidal kidney	513	(0.2)	0	(0.0)	513	(0.2)	65.47	11.26
Gouty kidney	1 256	(0.5)	1	(16.7)	1 257	(0.5)	65.56	11.61
Renal failure due to congenital abnormality of metabolism	262	(0.1)	0	(0.0)	262	(0.1)	47.31	17.90
Kidney and urinary tract tuberculosis	392	(0.1)	0	(0.0)	392	(0.1)	69.59	9.68
Kidney and urinary tract stone	552	(0.2)	0	(0.0)	552	(0.2)	68.23	11.43
Kidney and urinary tract tumor	644	(0.2)	0	(0.0)	644	(0.2)	69.18	12.08
Obstructive urinary tract disease	692	(0.3)	0	(0.0)	692	(0.3)	60.76	18.23
Myeloma	207	(0.1)	0	(0.0)	207	(0.1)	70.06	10.78
Hypoplastic kidney	548	(0.2)	0	(0.0)	548	(0.2)	39.73	19.41
Undetermined	19 451	(7.4)	2	(33.3)	19 453	(7.4)	67.14	13.42
Reintroduction after transplantation	1 894	(0.7)	0	(0.0)	1 894	(0.7)	52.98	12.79
Others	4 725	(1.8)	0	(0.0)	4 725	(1.8)	62.66	16.11
Total	264 245	(100.0)	6	(100.0)	264 251	(100.0)	64.87	12.71
No information available	105		0		105		68.05	12.39
Total	264 350		6		264 356		64.87	12.71

†The value in parentheses on the right-hand side of each number is the percentage of patients with respect to the total of the column.

b. Dialysate solution endotoxin concentration. Measured endotoxin concentrations in the dialysate solution were obtained from 3186 facilities (Table 17). The quality control standard of endotoxin concentration in the dialysate solution reported by the Japanese Society for Dialysis Therapy is <0.05 EU/mL. The percentage of facilities that satisfied this standard was 93.6%, an increase of approximately 5%

TABLE 9. *Changes in the percentage of new patients begun on dialysis each year in terms of primary disease*

Year	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Diabetic nephropathy	15.6	17.4	19.6	21.3	22.1	24.3	26.5	26.2	28.1	28.4	29.9	30.7	31.9
Chronic glomerulonephritis	60.5	58.7	56.0	54.8	54.2	49.9	47.4	46.1	44.2	42.2	41.4	40.5	39.4
Nephrosclerosis	3.0	3.3	3.5	3.7	3.9	3.9	4.1	5.4	5.5	5.9	6.2	6.1	6.3
Polycystic kidney	2.8	2.8	3.1	2.9	3.2	3.1	3.1	2.9	3.0	2.7	2.6	2.5	2.4
Chronic pyelonephritis	2.4	2.2	2.1	2.0	1.8	1.8	1.5	1.5	1.7	1.6	1.1	1.4	1.2
Rapidly progressive glomerulonephritis	0.9	0.7	0.9	1.0	0.8	0.9	0.8	0.7	0.6	0.7	0.8	0.8	0.8
Systemic lupus erythematosus nephritis	1.1	1.1	1.1	1.2	0.9	0.9	1.0	1.1	1.3	1.3	1.2	1.2	1.1
Undetermined	4.4	4.0	4.8	4.2	4.1	3.8	4.0	3.3	3.7	3.7	3.3	3.9	4.5

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Diabetic nephropathy	33.1	33.9	35.7	36.2	36.6	38.1	39.1	41.0	41.3	42.0	42.9	43.4
Chronic glomerulonephritis	38.9	36.6	35.0	33.6	32.5	32.4	31.9	29.1	28.1	27.4	25.6	23.8
Nephrosclerosis	6.4	6.8	6.7	7.0	7.6	7.6	7.8	8.5	8.8	9.0	9.4	10.0
Polycystic kidney	2.5	2.4	2.4	2.2	2.4	2.3	2.4	2.3	2.7	2.3	2.4	2.3
Chronic pyelonephritis	1.1	1.2	1.1	1.1	1.0	1.1	0.9	1.0	0.9	1.0	0.8	0.8
Rapidly progressive glomerulonephritis	0.8	1.1	0.9	0.9	1.0	1.0	1.1	1.2	1.1	1.1	1.2	1.3
Systemic lupus erythematosus nephritis	1.3	1.0	1.1	1.2	0.9	1.0	0.9	0.7	0.8	0.8	0.8	0.8
Undetermined	5.0	5.5	5.6	6.1	7.6	9.0	8.4	8.8	9.3	9.5	9.9	10.2

TABLE 10. *Changes in the percentage of patients at the end of each year in terms of primary disease*

Year	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Diabetic nephropathy	7.4	8.4	9.4	10.5	11.7	12.8	14.0	14.9	16.4	17.1	18.2	19.2	20.4
Chronic glomerulonephritis	74.5	72.1	72.3	70.6	69.4	67.9	65.9	64.1	61.7	60.4	58.8	57.7	56.6
Nephrosclerosis	1.5	1.7	1.9	2.0	2.1	2.1	2.3	2.6	2.9	3.1	3.4	3.6	3.8
Polycystic kidney	2.7	2.9	3.0	3.1	3.1	3.2	3.2	3.3	3.3	3.3	3.3	3.2	3.2
Chronic pyelonephritis	3.1	3.3	2.6	2.4	2.4	2.3	2.2	2.2	2.1	2.0	1.9	1.8	1.7
Rapidly progressive glomerulonephritis	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Systemic lupus erythematosus nephritis	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.1	1.1
Undetermined	2.2	2.3	2.3	2.5	2.6	2.5	2.6	2.6	2.9	2.9	2.9	3.1	3.2

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Diabetic nephropathy	21.6	22.7	24.0	25.1	26.0	27.2	28.1	29.2	30.2	31.4	32.3	33.4
Chronic glomerulonephritis	55.4	54.1	52.5	51.1	49.7	49.6	48.2	46.6	45.1	43.6	42.2	40.4
Nephrosclerosis	4.0	4.2	4.4	4.5	4.8	5.0	5.1	5.3	5.7	5.9	6.2	6.5
Polycystic kidney	3.2	3.2	3.2	3.2	3.2	3.3	3.3	3.3	3.4	3.3	3.4	3.4
Chronic pyelonephritis	1.6	1.6	1.5	1.5	1.4	1.4	1.3	1.3	1.3	1.2	1.2	1.2
Rapidly progressive glomerulonephritis	0.5	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7
Systemic lupus erythematosus nephritis	1.1	1.1	1.1	1.1	1.0	1.0	1.0	0.9	0.9	0.9	0.9	0.9
Undetermined	3.6	3.9	4.2	4.4	5.0	5.6	5.9	6.3	6.4	6.6	7.0	7.4

from that in the 2006 survey. The percentage of facilities that satisfied the endotoxin concentration of <0.001 EU/mL, which is required for an ultrapure dialysate solution, was 53.0%, a marked increase from 29.8% in the 2006 survey, showing a considerable improvement in solution cleanliness.

2. *Bacterial test of dialysate solution*

a. Measurement frequency. There were 3441 facilities that responded to questions regarding the frequency of the bacterial test of the dialysate solution (Table 18). The test was carried out at 50.1% of these facilities, showing a marked increase from 37.1% at the end of 2006. In accordance with the quality control standard by the Japanese Society for Dialysis Therapy, it is recommended to measure the bacterial count in the dialysate solution more than once a month; however, the percentage of facilities that carried out the test more than once a month was only 16.9%, indicating the need to improve the practice of carrying out bacterial tests as a routine task.

TABLE 11. *Classification of the causes of death of new patients begun on dialysis in 2007*

Cause of death	Male	(%)	Female	(%)	Total	(%)	No information available	Total	(%)
Cardiac failure	460	(22.9)	260	(23.9)	720	(23.2)	0	720	(23.2)
Cerebrovascular disease	102	(5.1)	69	(6.3)	171	(5.5)	0	171	(5.5)
Infectious disease	479	(23.8)	270	(24.8)	749	(24.2)	0	749	(24.2)
Hemorrhage	59	(2.9)	26	(2.4)	85	(2.7)	0	85	(2.7)
Malignant tumor	239	(11.9)	80	(7.3)	319	(10.3)	0	319	(10.3)
Cachexia/uremia	62	(3.1)	51	(4.7)	113	(3.6)	0	113	(3.6)
Cardiac infarction	68	(3.4)	42	(3.9)	110	(3.5)	0	110	(3.5)
Potassium poisoning/moribund	55	(2.7)	30	(2.8)	85	(2.7)	0	85	(2.7)
Chronic hepatitis/cirrhosis	44	(2.2)	10	(0.9)	54	(1.7)	0	54	(1.7)
Encephalopathy	2	(0.1)	3	(0.3)	5	(0.2)	0	5	(0.2)
Suicide/refusal of treatment	23	(1.1)	6	(0.6)	29	(0.9)	0	29	(0.9)
Intestinal obstruction	9	(0.4)	13	(1.2)	22	(0.7)	0	22	(0.7)
Lung thrombus/pulmonary embolus	7	(0.3)	2	(0.2)	9	(0.3)	0	9	(0.3)
Death due to disaster	10	(0.5)	2	(0.2)	12	(0.4)	0	12	(0.4)
Others	229	(11.4)	117	(10.7)	346	(11.2)	0	346	(11.2)
Undetermined	162	(8.1)	108	(9.9)	270	(8.7)	0	270	(8.7)
Total	2010	(100.0)	1089	(100.0)	3099	(100.0)	0	3099	(100.0)
No information available			1		1		0	1	
Total	2010		1090		3100		0	3100	

TABLE 12. *Classification of the causes of death of patients who died in 2007*

Cause of death	Male	(%)	Female	(%)	Total	(%)	No information available	Total	(%)
Cardiac failure	3 387	(22.5)	2333	(26.5)	5 720	(24.0)	1	5 721	(24.0)
Cerebrovascular disease	1 288	(8.6)	841	(9.6)	2 129	(8.9)	0	2 129	(8.9)
Infectious disease	2 879	(19.1)	1637	(18.6)	4 516	(18.9)	1	4 517	(18.9)
Hemorrhage	304	(2.0)	179	(2.0)	483	(2.0)	0	483	(2.0)
Malignant tumor	1 558	(10.4)	626	(7.1)	2 184	(9.2)	0	2 184	(9.2)
Cachexia/uremia	430	(2.9)	318	(3.6)	748	(3.1)	0	748	(3.1)
Cardiac infarction	704	(4.7)	344	(3.9)	1 048	(4.4)	0	1 048	(4.4)
Potassium poisoning/moribund	809	(5.4)	394	(4.5)	1 203	(5.0)	0	1 203	(5.0)
Chronic hepatitis/cirrhosis	209	(1.4)	82	(0.9)	291	(1.2)	0	291	(1.2)
Encephalopathy	12	(0.1)	10	(0.1)	22	(0.1)	0	22	(0.1)
Suicide/refusal of treatment	154	(1.0)	58	(0.7)	212	(0.9)	0	212	(0.9)
Intestinal obstruction	144	(1.0)	100	(1.1)	244	(1.0)	0	244	(1.0)
Lung thrombus/pulmonary embolus	44	(0.3)	38	(0.4)	82	(0.3)	0	82	(0.3)
Death due to disaster	120	(0.8)	56	(0.6)	176	(0.7)	0	176	(0.7)
Others	1 428	(9.5)	888	(10.1)	2 316	(9.7)	0	2 316	(9.7)
Undetermined	1 576	(10.5)	885	(10.1)	2 461	(10.3)	3	2 464	(10.3)
Total	15 046	(100.0)	8789	(100.0)	23 835	(100.0)	5	23 840	(100.0)
No information available	20		8		28		0	28	
Total	15 066		8797		23 863		5	23 868	

b. Dialysate solution bacterial count. Measured bacterial counts in the dialysate solution were reported by 1565 facilities, 97.4% of which satisfied the quality control standard by the Japanese Society for Dialysis Therapy, which is <100 cfu/mL (Table 19). The percentage of facilities that satisfied the ultrapure dialysate solution level of <0.1 cfu/mL was 47.9%.

c. Medium used for bacterial cultivation of the dialysate solution. The use of an oligotrophic medium is recommended for the cultivation of bacteria in the dialysate solution. According to the survey result, an oligotrophic medium of Reasoner's No 2 agar (R2A) or tryptone glucose extract agar (TGEA) was used at 73.4% of the facilities. The percentage of facilities that used R2A was the highest at 66.3% (Table 20).

d. Amount of sample for the measurement of the dialysate solution bacterial count. Generally, the amount of a sample used to measure the bacterial count in plate media was <1 mL; however, at least 10 mL of a sample is required to accurately measure a bacterial count of <0.1 cfu/mL in the dialysate solution, which is the count required to maintain an ultrapure dialysate solution. From the survey, the amount of the sample dialysate solution was 10 mL or more in 46.5% of the facilities (Table 21).

TABLE 13. *Annual changes in the major causes of death*

Year	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995
Cardiac failure	30.3	30.5	31.3	33.2	32.7	36.5	33.4	30.4	30.5	31.1	29.9	28.2	25.4
Infectious disease	11.0	11.5	11.5	12.0	12.0	12.2	11.7	11.6	12.1	11.3	12.2	12.6	13.8
Cerebrovascular disease	14.2	15.4	14.2	14.0	14.2	12.9	13.2	13.9	13.7	13.6	13.5	14.1	13.5
Malignant tumor	7.7	6.9	6.4	6.9	5.8	6.9	7.6	8.2	7.6	7.1	7.4	7.3	7.2
Cardiac infarction	5.3	4.8	5.3	6.1	6.0	5.4	5.3	5.8	5.8	5.8	5.7	7.1	7.5
Others	5.1	4.9	5.7	4.7	5.2	4.8	4.4	4.6	4.4	4.5	4.1	4.5	5.8

Year	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Cardiac failure	24.1	23.9	24.1	24.3	23.2	25.5	25.1	25.0	25.1	25.8	24.9	24.0
Infectious disease	14.6	14.9	15.0	16.3	16.6	16.3	15.9	18.5	18.8	19.2	19.9	18.9
Cerebrovascular disease	12.9	12.6	12.1	11.3	11.3	11.6	11.2	10.7	10.6	9.8	9.4	8.9
Malignant tumor	7.7	8.1	7.7	7.6	8.3	8.5	8.5	8.5	9.0	9.0	9.2	9.2
Cardiac infarction	7.4	8.4	7.9	7.4	7.0	7.4	7.4	6.2	5.4	5.1	4.4	4.4
Others	6.3	6.7	7.0	7.7	7.9	9.1	9.0	9.7	10.3	9.1	9.5	9.7

TABLE 14. *Change in the annual crude death rate*

Year	Crude death rate (%)	Year	Crude death rate (%)
1983	9.0	1996	9.4
1984	8.9	1997	9.4
1985	9.1	1998	9.2
1986	9.0	1999	9.7
1987	8.5	2000	9.2
1988	9.2	2001	9.3
1989	7.9	2002	9.2
1990	9.6	2003	9.3
1991	8.9	2004	9.4
1992	9.7	2005	9.5
1993	9.4	2006	9.2
1994	9.5	2007	9.4
1995	9.7		

B. Current status of hepatitis virus infection

1. Hepatitis C virus antibody prevalence

The hepatitis C virus antibody (HCVAb) prevalence was calculated using the following equation:

HCVAb prevalence (%) = Number of HCVAb-positive patients ÷ (Number of HCVAb-positive patients + Number of HCVAb-negative patients)

In this equation, HCV-RNA was not taken into consideration.

a. Changes over the past eight years. The HCVAb prevalence of chronic dialysis patients at the end of each year was summarized on the basis of the results of the survey by the Statistical Survey Committee (4–9). The HCVAb prevalence decreased yearly from 15.95% in 1999 to <10% at the end of 2007 (9.83%; Table 22). The previous activities carried out to prevent in-hospital infection from 1999 until today include the publication of the "Manual for prevention of in-hospital infection in dialysis therapy (initial version)" (10) in 1999, the start of the sale of erythropoietin-prefilled syringes in 2001, and the publication of the "Manual for prevention of in-hospital infection in dialysis therapy (revised version)" (11) in 2006.

b. Treatment method. Table 23 shows the relationship between HCVAb prevalence and the treatment method. The HCVAb prevalence in patients treated by hemoabsorption was the highest, followed by those in patients treated by hemodiafiltration and home hemodialysis. As explained later, patients with a longer dialysis duration showed a higher HCVAb prevalence. The duration of dialysis in patients treated by the above methods was long and thereby considered to account for the high HCVAb prevalence (the mean durations of dialysis for patients treated by different methods obtained from this survey are: 6.46 ± 6.57 (±SD) years for facility hemodialysis, 11.45 ± 9.03 years for hemodiafiltration, 6.06 ± 6.77 years for hemofiltration, 24.68 ± 6.59 years for hemoabsorption, 12.42 ± 9.38 years for home hemodialysis, and 3.54 ± 4.17 years for peritoneal dialysis). The HCVAb prevalence in patients treated by peritoneal dialysis was lower than that in patients treated by facility hemodialysis, which was probably because the duration of dialysis was short in patients treated by peritoneal dialysis. These trends were almost similar to those in the 2006 survey.

c. Gender. Table 24 shows the relationship between HCVAb prevalence and gender. The HCVAb prevalence in male patients was higher than that in female patients.

d. Duration of dialysis. Table 25 shows the relationship between HCVAb prevalence and the duration of dialysis. Before reaching the duration of 15 years, the HCVAb prevalence was approximately 7.7% and showed no particular relationship with the duration of dialysis; however, the HCVAb prevalence tended to increase when the duration of dialysis was 15 years or longer, and it markedly increased with increasing dialysis duration of >20 years. The HCV virus was first detected and HCVAb tests therefore performed in the clinical setting about 20 years ago, which may account for the increase in HCVAb prevalence in patients who have undergone dialysis for 20 years or longer.

e. Age. Table 26 shows the relationship between HCVAb prevalence and age. The HCVAb prevalence was relatively high in the 45–89 age group, whereas that in patients outside this age group, younger or older, was low. This age group includes many patients with a relatively long duration of dialysis, which may account for such a high HCVAb prevalence.

f. Primary disease. Table 27 shows the relationship between HCVAb prevalence and primary disease. To easily understand HCVAb prevalence in relation to the primary disease, the primary diseases are listed in descending order of HCVAb prevalence. The HCVAb prevalence in patients who had been reintroduced to dialysis after transplantation and who had renal or urinary tract tuberculosis as the primary

TABLE 15. *Survival rates of new patients begun on dialysis since 1983*

Year when patients were newly introduced to dialysis	Number of patients	1-year survival rate	2-year survival rate	3-year survival rate	4-year survival rate	5-year survival rate	6-year survival rate	7-year survival rate	8-year survival rate	9-year survival rate	10-year survival rate	11-year survival rate	12-year survival rate	13-year survival rate	14-year survival rate	15-year survival rate	16-year survival rate	17-year survival rate	18-year survival rate	19-year survival rate	20-year survival rate	21-year survival rate	22-year survival rate	23-year survival rate	24-year survival rate
1983	9923	0.819	0.748	0.683	0.634	0.590	0.557	0.525	0.486	0.457	0.426	0.397	0.373	0.349	0.330	0.309	0.290	0.274	0.257	0.244	0.229	0.216	0.202	0.191	0.181
1984	10 764	0.818	0.736	0.671	0.621	0.578	0.539	0.500	0.467	0.437	0.409	0.380	0.355	0.331	0.310	0.290	0.273	0.255	0.241	0.229	0.214	0.201	0.191	0.182	
1985	11 676	0.796	0.721	0.662	0.611	0.565	0.523	0.487	0.447	0.416	0.388	0.363	0.339	0.314	0.292	0.274	0.256	0.239	0.224	0.211	0.195	0.183	0.172		
1986	12 676	0.799	0.725	0.667	0.619	0.566	0.521	0.480	0.446	0.410	0.380	0.353	0.329	0.307	0.286	0.269	0.252	0.235	0.222	0.210	0.198	0.185			
1987	13 618	0.816	0.739	0.673	0.609	0.558	0.509	0.464	0.428	0.396	0.367	0.341	0.317	0.296	0.274	0.256	0.241	0.223	0.206	0.193	0.183				
1988	14 828	0.825	0.741	0.668	0.605	0.549	0.501	0.458	0.421	0.386	0.355	0.329	0.305	0.283	0.262	0.244	0.227	0.213	0.198	0.188					
1989	14 663	0.850	0.762	0.689	0.620	0.564	0.515	0.470	0.431	0.396	0.364	0.338	0.313	0.291	0.271	0.253	0.237	0.221	0.208						
1990	16 600	0.839	0.750	0.675	0.610	0.556	0.503	0.461	0.421	0.386	0.355	0.327	0.302	0.280	0.263	0.246	0.230	0.213							
1991	18 305	0.829	0.736	0.663	0.599	0.540	0.489	0.446	0.408	0.377	0.347	0.320	0.295	0.275	0.256	0.239	0.223								
1992	19 991	0.822	0.728	0.652	0.589	0.532	0.484	0.440	0.402	0.370	0.342	0.317	0.293	0.273	0.252	0.234									
1993	20 990	0.833	0.743	0.667	0.599	0.543	0.492	0.448	0.410	0.377	0.347	0.320	0.296	0.273	0.255										
1994	21 548	0.831	0.745	0.672	0.606	0.547	0.495	0.452	0.414	0.378	0.347	0.318	0.295	0.273											
1995	23 053	0.842	0.755	0.682	0.613	0.556	0.508	0.465	0.426	0.391	0.359	0.330	0.306												
1996	25 109	0.833	0.751	0.676	0.613	0.559	0.512	0.462	0.424	0.389	0.357	0.329													
1997	25 780	0.840	0.754	0.684	0.624	0.567	0.518	0.474	0.431	0.396	0.364														
1998	27 073	0.846	0.767	0.701	0.640	0.579	0.529	0.481	0.440	0.405															
1999	28 094	0.852	0.775	0.709	0.643	0.586	0.534	0.488	0.448																
2000	29 619	0.858	0.780	0.714	0.652	0.596	0.543	0.497																	
2001	31 344	0.857	0.778	0.710	0.646	0.592	0.541																		
2002	32 107	0.861	0.784	0.718	0.657	0.598																			
2003	33 269	0.863	0.787	0.721	0.660																				
2004	34 474	0.869	0.793	0.729																					
2005	35 594	0.865	0.792																						
2006	36 629	0.874																							

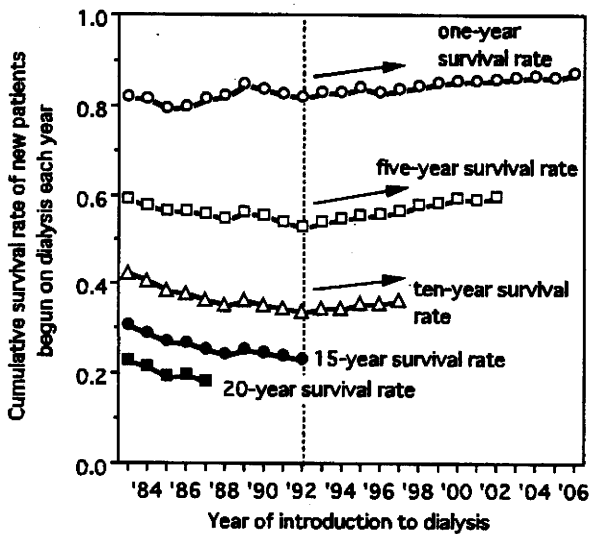

FIG. 2. Changes in the cumulative survival rate of patients begun on dialysis.

disease were 20% or higher. In contrast, the HCVAb prevalence in patients with myeloma as the primary disease was as low as 4.52%. The HCVAb prevalence in patients with other primary diseases ranged between 6% and 13%, showing a continuous distribution without a marked difference.

The HCVAb prevalence in patients with chronic glomerulonephritis as the primary disease, the number of which is largest among all the patients, was 10.35%, and that in patients with diabetic nephropathy, which is the second largest in number, was 10.29%; these prevalences were not significantly different. For the third largest number of patients with nephrosclerosis as the primary disease, the HCVAb prevalence was 6.89% and lower than that for the patients with the two above-mentioned primary diseases.

2. Hepatitis B virus surface antigen prevalence

The hepatitis B virus surface antigen (HBsAg) prevalence was calculated using the following equation:

HBsAg prevalence (%) = Number of HBsAg-positive patients ÷ (Number of HBsAg-positive patients + Number of HBsAg-negative patients)

The mean HBsAg prevalence of all the patients surveyed in this study was 1.94%.

a. Treatment method. Table 28 shows the relationship between HBsAg prevalence and treatment method. The HBsAg prevalence in patients treated by hemoabsorption was as high as 3.69%, whereas those in patients treated by hemofiltration and peritoneal dialysis were slightly low (approximately 1.5%). Following these treatment methods, the HBsAg prevalence in patients treated by home hemodialysis was as low as 1.71%. The HBsAg prevalence in patients treated by hemodialysis and hemodiafiltration were nearly equal to the mean in all the dialysis patients.

b. Gender. Table 29 shows the relationship between HBsAg prevalence and gender. Similarly to HCVAb prevalence, the HBsAg prevalence was higher in male patients than in female patients.

c. Duration of dialysis. Table 30 shows the relationship between HBsAg prevalence and duration of dialysis. For the patients with the duration longer than 10 years, the HBsAg prevalence tended to increase with increasing duration of dialysis.

d. Age. Table 31 shows the relationship between HBsAg prevalence and age. The HBsAg prevalence was high in patients in the 45–74 age group, whereas that in patients outside this age group, that is, younger or older patients, was low.

e. Primary disease. Table 32 shows the relationship between HBsAg prevalence and primary disease. To easily understand the relationship between them, primary diseases are listed in the descending order of HBsAg prevalence. From this list, the primary diseases with HBsAg prevalence are renal or urinary tract tuberculosis and nephropathy of pregnancy or pregnancy toxemia, whereas those with low HBsAg prevalence include renal or urinary tract calculosis, rapidly progressive glomerulonephritis, and amyloid nephropathy.

The HBsAg prevalence in patients with chronic glomerulonephritis as the primary disease, whose number was largest among all the patients, was 2.08%. That in patients with diabetic nephropathy, whose number was the second largest, was 1.85%.

C. Current status of renal anemia therapy

In the survey conducted at the end of 2007, hemoglobin concentration, serum iron concentration, total iron-binding capacity, and serum ferritin concentration (all of these are pre-dialysis values) were investigated as indices regarding renal anemia therapy. The relationships between hemoglobin concentration and other related indices are reported below.

TABLE 16. *Measurement frequency of the dialysate solution endotoxin concentration (according to the type of facility)*

Kind of facility	Measurement frequency of endotoxin concentration: None	Every day	Every week	Every two weeks	Every month	Several times per year	Once a year	Subtotal	Unspecified	No information available	Total
National public university hospital	2	0	0	1	17	23	5	48	1	2	51
(%)	(4.2)	(0.0)	(0.0)	(2.1)	(35.4)	(47.9)	(10.4)	(100.0)			
Private university hospital	6	0	1	6	23	20	2	58	3	1	62
(%)	(10.3)	(0.0)	(1.7)	(10.3)	(39.7)	(34.5)	(3.4)	(100.0)			
National hospital	4	0	1	0	5	13	6	29	5	6	40
(%)	(13.8)	(0.0)	(3.4)	(0.0)	(17.2)	(44.8)	(20.7)	(100.0)			
Prefectural municipal village hospital	48	1	2	7	88	173	64	383	32	22	437
(%)	(12.5)	(0.3)	(0.5)	(1.8)	(23.0)	(45.2)	(16.7)	(100.0)			
Social insurance hospital	7	0	0	3	13	27	10	60	2	1	63
(%)	(11.7)	(0.0)	(0.0)	(5.0)	(21.7)	(45.0)	(16.7)	(100.0)			
"Kouseiren"† hospital	5	0	1	6	28	48	23	111	5	3	119
(%)	(4.5)	(0.0)	(0.9)	(5.4)	(25.2)	(43.2)	(20.7)	(100.0)			
Other public hospital	21	1	5	7	43	67	30	174	4	6	184
(%)	(12.1)	(0.6)	(2.9)	(4.0)	(24.7)	(38.5)	(17.2)	(100.0)			
Private general hospital	12	1		5	25	42	14	99	8	1	108
(%)	(12.1)	(1.0)		(5.1)	(25.3)	(42.4)	(14.1)	(100.0)			
Private hospital	138	6	26	46	234	386	175	1011	57	44	1112
(%)	(13.6)	(0.6)	(2.6)	(4.5)	(23.1)	(38.2)	(17.3)	(100.0)			
Private clinic	216	12	45	128	366	658	266	1691	92	93	1876
(%)	(12.8)	(0.7)	(2.7)	(7.6)	(21.6)	(38.9)	(15.7)	(100.0)			
Total	459	21	81	209	842	1457	595	3664	209	179	4052
(%)	(12.5)	(0.6)	(2.2)	(5.7)	(23.0)	(39.8)	(16.2)	(100.0)			

†Kouseiren: a welfare association belonging to agricultural cooperative associations.

TABLE 17. *Dialysate solution endotoxin concentrations (according to the type of facility)*

Kind of facility	Dialysate solution endotoxin concentration (EU/mL): <0.001	0.001–0.009	0.010–0.049	0.050–0.099	0.100–0.249	0.250–0.499	≥0.500	Subtotal	Unspecified	No information available	Total
National public university hospital	30	10	4	1	0	0	0	45	2	4	51
(%)	(66.7)	(22.2)	(8.9)	(2.2)	(0.0)	(0.0)	(0.0)	(100.0)			
Private university hospital	24	17	10	0	1	0	0	52	3	7	62
(%)	(46.2)	(32.7)	(19.2)	(0.0)	(1.9)	(0.0)	(0.0)	(100.0)			
National hospital	14	7	4	0	1	0	0	26	5	9	40
(%)	(53.8)	(26.9)	(15.4)	(0.0)	(3.8)	(0.0)	(0.0)	(100.0)			
Prefectural municipal village hospital	197	87	42	6	2	2	3	339	26	72	437
(%)	(58.1)	(25.7)	(12.4)	(1.8)	(0.6)	(0.6)	(0.9)	(100.0)			
Social insurance hospital	25	17	7	3	0	0	0	52	3	8	63
(%)	(48.1)	(32.7)	(13.5)	(5.8)	(0.0)	(0.0)	(0.0)	(100.0)			
"Kouseiren"† hospital	53	30	13	4	2	1	2	105	6	8	119
(%)	(50.5)	(28.6)	(12.4)	(3.8)	(1.9)	(1.0)	(1.9)	(100.0)			
Other public hospital	89	43	15	4	1	0	0	152	5	27	184
(%)	(58.6)	(28.3)	(9.9)	(2.6)	(0.7)	(0.0)	(0.0)	(100.0)			
Private general hospital	44	24	13	3	2	1	0	87	7	14	108
(%)	(50.6)	(27.6)	(14.9)	(3.4)	(2.3)	(1.1)	(0.0)	(100.0)			
Private hospital	423	231	140	36	26	8	4	868	60	184	1112
(%)	(48.7)	(26.6)	(16.1)	(4.1)	(3.0)	(0.9)	(0.5)	(100.0)			
Private clinic	789	399	182	50	28	9	3	1460	98	318	1876
(%)	(54.0)	(27.3)	(12.5)	(3.4)	(1.9)	(0.6)	(0.2)	(100.0)			
Total	1688	865	430	107	63	21	12	3186	215	651	4052
(%)	(53.0)	(27.2)	(13.5)	(3.4)	(2.0)	(0.7)	(0.4)	(100.0)			

†Kouseiren: a welfare association belonging to agricultural cooperative associations.

TABLE 18. *Measurement frequency of the dialysate solution bacterial count (according to the type of facility)*

Kind of facility	Measurement frequency of the dialysate solution bacterial count										
	None	Every day	Every week	Every two weeks	Every month	Several times per year	Once a year	Subtotal	Unspecified	No information available	Total
National public university hospital	21	0	0	0	9	15	1	46	3	2	51
(%)	(45.7)	(0.0)	(0.0)	(0.0)	(19.6)	(32.6)	(2.2)	(100.0)			
Private university hospital	18	0	1	3	8	19	3	52	9	1	62
(%)	(34.6)	(0.0)	(1.9)	(5.8)	(15.4)	(36.5)	(5.8)	(100.0)			
National hospital	19	0	0	1	1	5	4	30	4	6	40
(%)	(63.3)	(0.0)	(0.0)	(3.3)	(3.3)	(16.7)	(13.3)	(100.0)			
Prefectural municipal village hospital	199	1	1	2	45	76	39	363	48	26	437
(%)	(54.8)	(0.3)	(0.3)	(0.6)	(12.4)	(20.9)	(10.7)	(100.0)			
Social insurance hospital	25	0	2	0	6	17	5	55	7	1	63
(%)	(45.5)	(0.0)	(3.6)	(0.0)	(10.9)	(30.9)	(9.1)	(100.0)			
"Kouseiren"† hospital	40	0	0	2	18	27	13	100	16	3	119
(%)	(40.0)	(0.0)	(0.0)	(2.0)	(18.0)	(27.0)	(13.0)	(100.0)			
Other public hospital	84	0	2	3	28	31	20	168	8	8	184
(%)	(50.0)	(0.0)	(1.2)	(1.8)	(16.7)	(18.5)	(11.9)	(100.0)			
Private general hospital	60	2	0	2	14	10	7	95	12	1	108
(%)	(63.2)	(2.1)	(0.0)	(2.1)	(14.7)	(10.5)	(7.4)	(100.0)			
Private hospital	462	4	14	21	130	180	124	935	129	48	1112
(%)	(49.4)	(0.4)	(1.5)	(2.2)	(13.9)	(19.3)	(13.3)	(100.0)			
Private clinic	788	3	13	64	180	361	188	1597	176	103	1876
(%)	(49.3)	(0.2)	(0.8)	(4.0)	(11.3)	(22.6)	(11.8)	(100.0)			
Total	1716	10	33	98	439	741	404	3441	412	199	4052
(%)	(49.9)	(0.3)	(1.0)	(2.8)	(12.8)	(21.5)	(11.7)	(100.0)			

†Kouseiren: a welfare association belonging to agricultural cooperative associations.

TABLE 19. *Dialysate solution bacterial counts (according to the type of facility)*

Kind of facility	Dialysate solution bacterial count (cfu/mL) <0.1	0.1–0.9	1–9	10–99	≥100	Subtotal	Unspecified	No information available	Total
National public university hospital	8	7	4	4	0	23	5	23	51
(%)	(34.8)	(30.4)	(17.4)	(17.4)	(0.0)	(100.0)			
Private university hospital	11	10	8	3	0	32	10	20	62
(%)	(34.4)	(31.3)	(25.0)	(9.4)	(0.0)	(100.0)			
National hospital	8	0	2	1	0	11	4	25	40
(%)	(72.7)	(0.0)	(18.2)	(9.1)	(0.0)	(100.0)			
Prefectural municipal village hospital	79	20	24	22	4	149	62	226	437
(%)	(53.0)	(13.4)	(16.1)	(14.8)	(2.7)	(100.0)			
Social insurance hospital	10	6	5	6	0	27	10	26	63
(%)	(37.0)	(22.2)	(18.5)	(22.2)	(0.0)	(100.0)			
"Kouseiren"† hospital	28	10	10	6	2	56	18	45	119
(%)	(50.0)	(17.9)	(17.9)	(10.7)	(3.6)	(100.0)			
Other public hospital	44	14	13	4	2	77	15	92	184
(%)	(57.1)	(18.2)	(16.9)	(5.2)	(2.6)	(100.0)			
Private general hospital	15	4	6	4	2	31	15	62	108
(%)	(48.4)	(12.9)	(19.4)	(12.9)	(6.5)	(100.0)			
Private hospital	179	80	90	60	15	424	174	514	1112
(%)	(42.2)	(18.9)	(21.2)	(14.2)	(3.5)	(100.0)			
Private clinic	368	137	136	79	15	735	239	902	1876
(%)	(50.1)	(18.6)	(18.5)	(10.7)	(2.0)	(100.0)			
Total	750	288	298	189	40	1565	552	1935	4052
(%)	(47.9)	(18.4)	(19.0)	(12.1)	(2.6)	(100.0)			

†Kouseiren: a welfare association belonging to agricultural cooperative associations.

1. Changes over the past three years

Table 33 shows the distribution of hemoglobin concentrations in all the dialysis patients from the end of 2005 to the end of 2007. The mean hemoglobin concentrations in all the dialysis patients at the end of 2005, 2006, and 2007 were 10.23, 10.23, and 10.27 g/dL, respectively, showing negligible change over these three years; however, the percentages of patients with hemoglobin concentrations <10.0 g/dL at the end of 2005, 2006, and 2007 were 39.0, 39.8, and 37.8%, respectively, showing a slight decrease in 2007. The percentages of patients with hemoglobin

TABLE 20. *Media used for bacterial cultivation of the dialysate solution (according to the dialysate solution bacterial count)*

Media used for bacterial cultivation of the dialysate solution	Dialysate solution bacterial count (cfu/mL) <0.1	0.1–0.9	1–9	10–99	≥100	Subtotal	Unspecified	No information available	Total
General agar medium	122	33	27	14	3	199	21	0	220
(%)	(61.3)	(16.6)	(13.6)	(7.0)	(1.5)	(100.0)			
R2A medium	410	189	211	141	29	980	44	4	1028
(%)	(41.8)	(19.3)	(21.5)	(14.4)	(3.0)	(100.0)			
TGEA medium	55	24	23	7	1	110	1	0	111
(%)	(50.0)	(21.8)	(20.9)	(6.4)	(0.9)	(100.0)			
Blood agar medium	26	5	4	4	1	40	8	4	52
(%)	(65.0)	(12.5)	(10.0)	(10.0)	(2.5)	(100.0)			
TSA medium	4	1	1	2	1	9	0	0	9
(%)	(44.4)	(11.1)	(11.1)	(22.2)	(11.1)	(100.0)			
Other media	59	15	17	6	1	98	33	0	131
(%)	(60.2)	(15.3)	(17.3)	(6.1)	(1.0)	(100.0)			
Subtotal	676	267	283	174	36	1436	107	8	1551
(%)	(47.1)	(18.6)	(19.7)	(12.1)	(2.5)	(100.0)			
Unspecified	73	20	14	15	4	126	443	1151	1720
(%)	(57.9)	(15.9)	(11.1)	(11.9)	(3.2)	(100.0)			
No information available	1	1	1			3	2	776	781
(%)	(33.3)	(33.3)	(33.3)			(100.0)			
Total	750	288	298	189	40	1565	552	1935	4052
(%)	(47.9)	(18.4)	(19.0)	(12.1)	(2.6)	(100.0)			

R2A, Reasoner's No 2 agar; TGEA, tryptone glucose extract agar; TSA, tryptic soy agar.

TABLE 21. *Amount of sample used for measuring dialysate solution bacterial count (according to the dialysate solution bacterial count)*

Amount of sample	Dialysate solution bacterial count (cfu/mL)					Subtotal	Unspecified	No information available	Total
	<0.1	0.1–0.9	1–9	10–99	≥100				
<1 mL	141	28	22	10	3	204	20	2	226
(%)	(69.1)	(13.7)	(10.8)	(4.9)	(1.5)	(100.0)			
1–9 mL	253	113	132	68	16	582	74	4	660
(%)	(43.5)	(19.4)	(22.7)	(11.7)	(2.7)	(100.0)			
10–49 mL	152	64	71	58	9	354	21	1	376
(%)	(42.9)	(18.1)	(20.1)	(16.4)	(2.5)	(100.0)			
50–99 mL	114	44	47	36	7	248	7	1	256
(%)	(46.0)	(17.7)	(19.0)	(14.5)	(2.8)	(100.0)			
100 499 mL	43	19	14	7	1	84	4	1	89
(%)	(51.2)	(22.6)	(16.7)	(8.3)	(1.2)	(100.0)			
500–999 mL	4	5	5	2	2	18	4	0	22
(%)	(22.2)	(27.8)	(27.8)	(11.1)	(11.1)	(100.0)			
1–9 L	14	3	1	6	0	24	1	0	25
(%)	(58.3)	(12.5)	(4.2)	(25.0)	(0.0)	(100.0)			
≥10 L	3	0	0	0	0	3	0	0	3
(%)	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)			
Subtotal	724	276	292	187	38	1517	131	9	1657
(%)	(47.7)	(18.2)	(19.2)	(12.3)	(2.5)	(100.0)			
Unspecified	24	12	5	2	2	45	420	1138	1603
(%)	(53.3)	(26.7)	(11.1)	(4.4)	(4.4)	(100.0)			
No information available	2	0	1	0	0	3	3	788	792
(%)	(66.7)	(0.0)	(33.3)	(0.0)	(0.0)	(100.0)			
Total	750	288	298	189	40	1565	552	1935	4052
(%)	(47.9)	(18.4)	(19.0)	(12.1)	(2.6)	(100.0)			

concentrations of ≥10.0 g/dL and <12.0 g/dL at the end of 2005, 2006, and 2007 were 52.7, 51.9, and 53.9%, respectively, showing a slight increase in 2007. The percentage of patients with a hemoglobin concentration of ≥12.0 g/dL remained at 8.3% from the end of 2005 to the end of 2007.

2. Gender

Table 34 shows the relationship between hemoglobin concentration and gender. The mean hemoglobin concentration in male patients was 10.36 g/dL, whereas that in female patients was 10.13 g/dL, which was slightly lower than that in male patients. The percentage of patients with hemoglobin concentrations <10 g/dL was 35.1% in male patients and 42.2% in female patients, indicating that the number of patients with a low hemoglobin concentration is great in female patients.

3. Age

Table 35 shows the relationship between hemoglobin concentration and age. The hemoglobin concentration in young patients aged 15 years or older and younger than 45 years was high, whereas that in patients older than this age group decreased with increasing age. Patients younger than 15 years also tended to have low hemoglobin concentrations.

4. Primary disease

Table 36 shows the relationship between hemoglobin concentration and primary disease. The mean hemoglobin concentrations in patients with leading primary diseases were 10.33 g/dL (chronic glomerulonephritis), 10.22 g/dL (diabetic nephropathy), 10.20 g/dL (nephrosclerosis), and 10.45 g/dL (polycystic kidney disease). Patients with polycystic kidney disease tended to have a high hemoglobin concentration. No clear difference in hemoglobin concentration was found between other main primary diseases.

5. Change in iron metabolism-related indices over the past three years

Table 37 shows the changes in mean hemoglobin concentration, serum iron concentration, total

TABLE 22. *Changes in hepatitis C virus (HCV) antibody prevalence*

Year	1999	2000	2001	2002	2003	2006	2007
HCVAb prevalence (%)	15.95	14.56	13.88	13.06	12.37	10.22	9.83

TABLE 23. *Hepatitis C virus (HCV) antibody (HCVAb) prevalence and treatment methods (all dialysis patients)*

Method of dialysis	HCVAb: −					HCVAb: +							HCVAb: unspecified				HCVAb: no information available					
	HCV-RNA: −	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	Subtotal-1	HCV-RNA: −	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	Subtotal-2	Subtotal-1 + Subtotal-2	HCVAb prevalence† (%)	HCV-RNA: −	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	HCV-RNA: −	HCV-RNA: +	HCV-RNA: unspecified	Subtotal	No information available	Total
Facility hemodialysis	48 867	209	85 241	35 980	170 297	2801	4707	6706	3193	17 407	187 704	9.27	1044	196	1974	100	880	148	619	192 665	43 295	235 960
Hemodiafiltration	3 722	35	5 763	2 524	12 044	268	742	813	474	2 297	14 341	16.02	33	31	64	2	74	21	101	14 667	3 092	17 759
Hemofiltration	14	0	19	131	164	2	4	5	10	21	185	11.35	4	0	0	0	0	0	1	190	113	303
Hemoadsorption	200	4	391	149	744	60	171	212	102	545	1 289	42.28	1	15	10	0	7	8	12	1 342	201	1 543
Home hemodialysis	46	0	46	9	101	1	5	9	2	17	118	14.41	0	0	4	0	0	0	0	122	39	161
Peritoneal dialysis	1 164	2	2 681	966	4813	46	28	110	46	230	5 043	4.56	4	0	211	99	6	1	61	5 425	3 205	8 630
Total	54 013	250	94 141	39 759	188 163	3178	5657	7855	3827	20 517	208 680	9.83	1086	242	2263	201	967	178	794	214 411	49 945	264 356

†HCVAb prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

TABLE 24. *Hepatitis C virus (HCV) antibody (HCVAb) prevalence and gender (all dialysis patients)*

Genders	HCVAb: −					HCVAb: +							HCVAb: unspecified				HCVAb: no information available					
	HCV-RNA: −	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	Subtotal-1	HCV-RNA: −	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	Subtotal-2	Subtotal-1 + Subtotal-2	HCVAb prevalence† (%)	HCV-RNA: −	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	HCV-RNA: −	HCV-RNA: +	HCV-RNA: unspecified	Subtotal	No information available	Total
Male	32 940	142	57 299	24 223	114 604	2007	3746	5207	2516	13 476	128 080	10.52	619	150	1421	131	594	116	501	131 612	30 611	162 223
Female	21 073	108	36 840	15 517	73 538	1171	1911	2648	1311	7 041	80 579	8.74	467	92	842	70	373	62	293	82 778	19 334	102 112
Subtotal	54 013	250	94 139	39 740	188 142	3178	5657	7855	3827	20 517	208 659	9.83	1086	242	2263	201	967	178	794	214 390	49 945	264 335
No information available	0	0	2	19	21	0	0	0	0	0	21	0.00	0	0	0	0	0	0	0	21	0	21
Total	54 013	250	94 141	39 759	188 163	3178	5657	7855	3827	20 517	208 680	9.83	1086	242	2263	201	967	178	794	214 411	49 945	264 356

†HCVAb prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

TABLE 25. *Hepatitis C virus (HCV) antibody (HCVAb) prevalence and duration of dialysis (all dialysis patients)*

Duration of dialysis (years)	HCVAb: –					HCVAb: +							HCVAb: unspecified				HCVAb: no information available					
	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	Subtotal-1	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	Subtotal-2	Subtotal-1 + Subtotal-2	HCVAb prevalence† (%)	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	Subtotal	No information available	Total
<2	13 113	52	22 936	9271	45 372	565	847	1600	701	3 713	49 085	7.56	177	27	687	82	260	32	121	50 471	11 667	62 138
2–4	14 226	57	24 849	10 581	49 713	711	1114	1661	772	4 258	53 971	7.89	265	41	564	57	229	38	203	55 368	13 202	68 570
5–9	13 816	52	24 042	10 077	47 987	702	1084	1548	753	4 087	52 074	7.85	343	51	531	28	210	37	168	53 442	12 634	66 076
10–14	6 771	30	11 844	4 857	23 502	332	571	734	346	1 983	25 485	7.78	158	24	247	14	124	14	101	26 167	6 103	32 270
15–19	3 243	16	5 711	2 672	11 642	219	417	511	250	1 397	13 039	10.71	86	24	127	10	67	12	66	13 431	3 041	16 472
20–24	1 691	15	2 794	1 366	5 866	264	555	622	341	1 782	7 648	23.30	33	19	58	7	30	16	59	7 870	1 733	9 603
≥25	1 153	28	1 965	935	4 081	385	1069	1179	664	3 297	7 378	44.69	24	56	49	3	47	29	76	7 662	1 565	9 227
Total	54 013	250	94 141	39 759	188 163	3178	5657	7855	3827	20 517	208 680	9.83	1086	242	2263	201	967	178	794	214 411	49 945	264 356
Mean	6.35	9.26	6.32	6.56		9.99	12.09	10.38	11.25				7.28	13.63	5.77	4.64	6.93	10.84	9.59	6.84	6.68	6.81
SD	6.35	9.34	6.31	6.51		9.64	10.63	10.26	10.58				6.24	11.11	6.33	6.22	7.43	10.37	9.05	7.02	6.82	6.98

†HCVAb prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

TABLE 26. *Hepatitis C virus (HCV) antibody (HCVAb) prevalence and age (all dialysis patients)*

Age (years)	HCVAb: –					HCVAb: +							HCVAb: unspecified				HCVAb: no information available					
	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	Subtotal-1	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	Subtotal-2	Subtotal-1 + Subtotal-2	HCVAb prevalence† (%)	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	Subtotal	No information available	Total
<15	12	0	29	19	60	0	0	0	0	0	60	0.00	0	0	8	0	0	0	0	68	38	106
15–29	356	2	620	294	1 272	10	7	10	2	29	1 301	2.23	9	0	19	3	7	0	5	1 344	353	1 697
30–44	3 469	6	6 083	2 619	12 177	115	226	226	138	705	12 882	5.47	70	4	149	15	64	7	43	13 234	3 187	16 421
45–59	13 550	58	23 765	10 126	47 499	778	1676	2005	1119	5 578	53 077	10.51	255	71	555	63	243	51	236	54 551	12 890	67 441
60–74	23 456	115	40 903	17 153	81 627	1477	2626	3823	1838	9 764	91 391	10.68	482	115	961	85	420	74	316	93 844	21 477	115 321
75–89	12 598	68	21 774	9 149	43 589	773	1101	1744	717	4 335	47 924	9.05	251	50	547	32	225	46	188	49 263	11 465	60 728
≥90	572	1	966	398	1 937	25	21	47	12	105	2 042	5.14	19	2	24	3	8	0	6	2 104	532	2 636
Subtotal	54 013	250	94 140	39 758	188 161	3178	5657	7855	3826	20 516	208 677	9.83	1086	242	2263	201	967	178	794	214 408	49 942	264 350
No information available	0	0	1	1	2	0	0	0	1	1	3	33.33	0	0	0	0	0	0	0	3	3	6
Total	54 013	250	94 141	39 759	188 163	3178	5657	7855	3827	20 517	208 680	9.83	1086	242	2263	201	967	178	794	214 411	49 945	264 356
Mean	64.96	66.36	64.85	64.66		66.15	64.52	65.90	64.68				65.45	65.47	64.57	62.57	64.91	65.76	64.42	64.89	64.76	64.87
SD	12.80	11.76	12.82	12.91		11.36	10.93	10.69	10.65				12.92	10.07	13.53	13.12	12.74	11.08	12.52	12.66	12.90	12.71

†HCVAb prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).

TABLE 27. *Hepatitis C virus (HCV) antibody (HCVAb) prevalence and primary disease (all dialysis patients)*

Primary disease	HCVAb: –					HCVAb: +							HCVAb: unspecified				HCVAb: no information available					
	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	Subtotal-1	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	Subtotal-2	Subtotal-1 + Subtotal-2	HCVAb prevalence† (%)	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	HCV-RNA: no information available	HCV-RNA: –	HCV-RNA: +	HCV-RNA: unspecified	Subtotal	No information available	Total
Reintroduction after transplantation	303	5	602	247	1 157	31	94	113	66	304	1 461	20.81	1	2	18	14	7	5	5	1 513	381	1894
Kidney and urinary tract tuberculosis	68	1	136	38	243	11	18	22	10	61	304	20.07	0	2	5	0	0	0	1	312	80	392
Nephropathy of pregnancy/ pregnancy toxemia	340	2	604	288	1 234	34	55	65	46	200	1 434	13.95	2	3	13	2	5	2	3	1 464	311	1 775
Other nephritides that cannot be classified	242	1	386	186	815	23	34	40	21	118	933	12.65	5	2	9	2	5	0	1	957	257	1 214
Kidney and urinary tract stone	118	0	192	91	401	10	16	18	8	52	453	11.48	2	0	8	0	1	0	2	466	86	552
Chronic pyelonephritis	655	3	1 028	515	2 201	57	74	95	55	281	2 482	11.32	13	0	15	2	9	3	16	2 540	598	3 138
Obstructive urinary tract disease	129	1	255	92	477	12	14	21	11	58	535	10.84	4	1	8	0	2	1	4	555	137	692
Renal failure due to congenital abnormality of metabolism	41	0	101	37	179	5	6	7	3	21	200	10.50	0	0	2	0	0	0	0	202	60	262
Chronic glomerulonephritis	21 986	100	37 281	15 979	75 346	1344	2531	3236	1584	8 695	84 041	10.35	491	123	900	62	394	72	411	86 494	20 210	106 704
Diabetic nephropathy	18 151	91	31 464	13 097	62 803	1050	1909	2838	1409	7 206	70 009	10.29	386	81	731	72	348	69	236	71 932	16 326	88 258
Hypoplastic kidney	98	1	200	87	386	9	12	14	5	40	426	9.39	2	1	11	0	1	0	0	441	107	548
Others	976	7	1 700	662	3 345	48	94	136	61	339	3 684	9.20	15	5	42	5	8	2	10	3 771	954	4 725
Undetermined	3 801	18	6 918	2 924	13 661	230	317	518	224	1 289	14 950	8.62	58	11	220	24	63	10	45	15 381	4 072	19 453
Kidney and urinary tract tumor	150	2	230	114	496	10	11	16	4	41	537	7.64	2	0	4	2	4	0	0	549	95	644
Gouty kidney	261	1	474	197	933	15	21	27	12	75	1 008	7.44	7	1	10	0	7	2	3	1 038	219	1 257
Nephrosclerosis	3 489	9	6 720	2 627	12 845	167	239	389	155	950	13 795	6.89	40	6	142	10	58	6	22	14 079	3 065	17 144
Amyloidal kidney	83	0	197	90	370	3	11	6	7	27	397	6.80	1	0	3	1	2	0	3	407	106	513
Rapidly progressive glomerulonephritis	322	1	649	276	1 248	16	16	33	24	89	1 337	6.66	1	1	15	0	4	0	7	1 365	377	1 742
Malignant hypertension	410	0	661	346	1 417	13	29	37	20	99	1 516	6.53	9	0	11	0	11	0	4	1 551	405	1 956
Systemic lupus erythematosus nephritis	435	1	835	360	1 631	16	35	37	21	109	1 740	6.26	2	2	19	0	8	1	5	1 777	484	2 261
Polycystic kidney	1 908	6	3 408	1 456	6 778	74	119	180	74	447	7 225	6.19	44	1	75	3	29	5	14	7 396	1 524	8 920
Myeloma	38	0	74	36	148	0	1	4	2	7	155	4.52	1	0	2	0	1	0	2	161	46	207
Subtotal	54 004	250	94 115	39 745	188 114	3178	5656	7852	3822	20 508	208 622	9.83	1086	242	2263	199	967	178	794	214 351	49 900	264 251
No information available	9	0	26	14	49	0	1	3	5	9	58	15.52	0	0	0	2	0	0	0	60	45	105
Total	54 013	250	94 141	39 759	188 163	3178	5657	7855	3827	20 517	208 680	9.83	1086	242	2263	201	967	178	794	214 411	49 945	264 356

†HCVAb prevalence (%) = Subtotal-2 ÷ (Subtotal-1 + Subtotal-2).