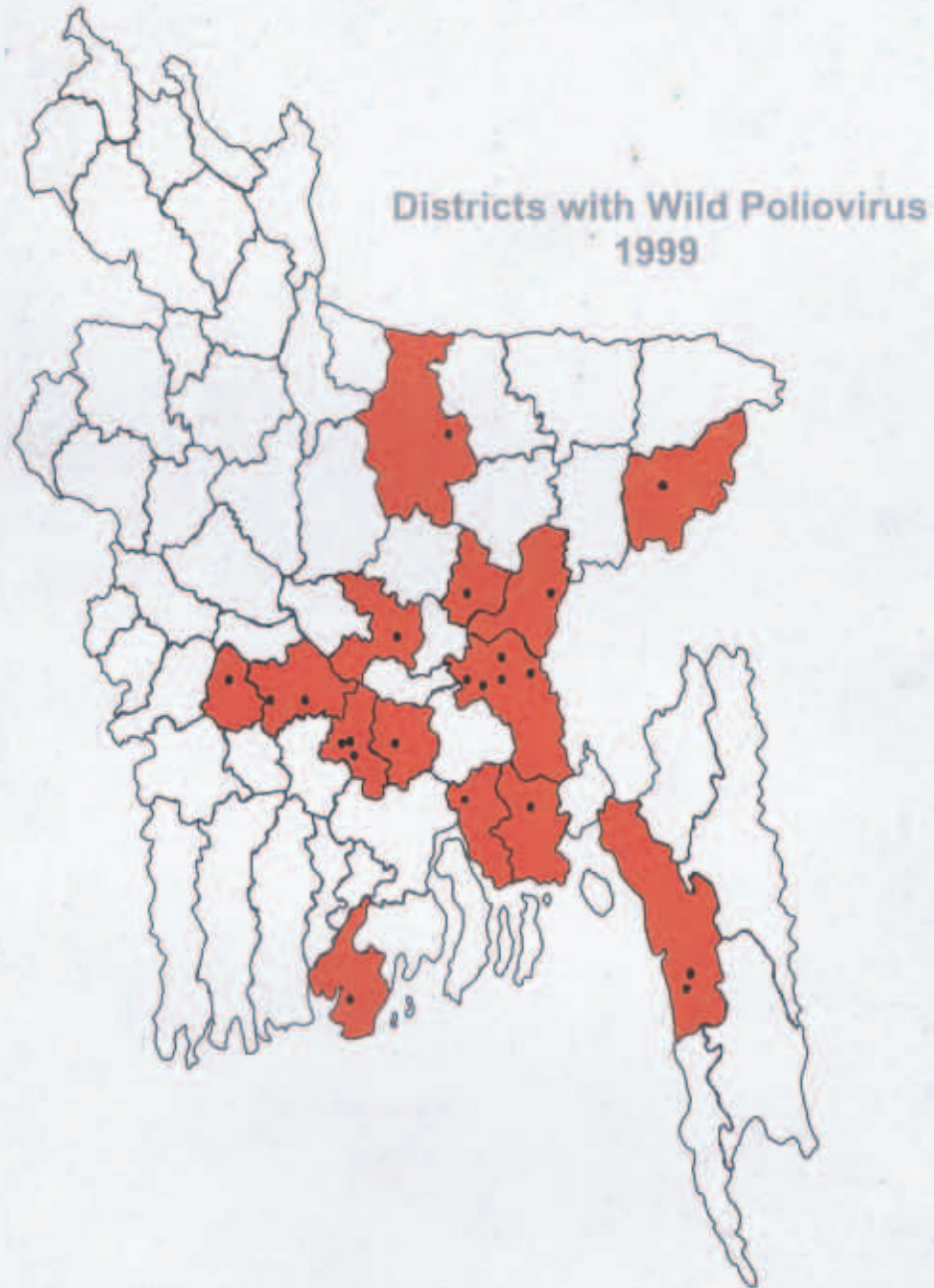




**Ministry of Health and Family Welfare
Government of Bangladesh**



Bangladesh Health Bulletin 1997

December 1999

BANGLADESH HEALTH BULLETIN
1997

UNIFIED MANAGEMENT INFORMATION SYSTEM
DIRECTORATE GENERAL OF HEALTH SERVICES
MINISTRY OF HEALTH & FAMILY WELFARE

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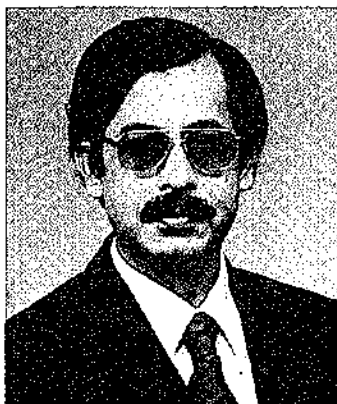
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Message

I am very pleased to see that the Bangladesh Health Bulletin-1997 is going to be published by the UMIS of Directorate General of Health Services. I am indeed happy to see that this bulletin has made a lot of improvements over the past one year through incorporating the suggestions and recommendations made by its readers. This information will serve as a basic tool to improve the health status of the people of Bangladesh. Our problems, resources constraints and inadequacies need to be prioritised with the help of an appropriate database information. I hope that this bulletin will help our health managers, policy makers and health workers in planning, implementation and monitoring their programmes on a day to day basis.

I wish the publication serves the pursuits of its countless readers.

Joy Bangla, Joy Bangabandhu,
Bangladesh Live Forever.

Sheikh Fazlul Karim Selim
Minister
Ministry of Health & Family Welfare



Message

The need for accurate data collection and consolidation, appropriate data processing and their use is now well recognized in the field of public health in order to meet future health requirements of a country. I am very pleased to see that the Health Bulletin, 1997 has been a right step towards that direction.

This Health Bulletin is intended to serve as the basis upon which health managers in our country can assess health trends and situations and monitor the progress of various health interventions in our country.

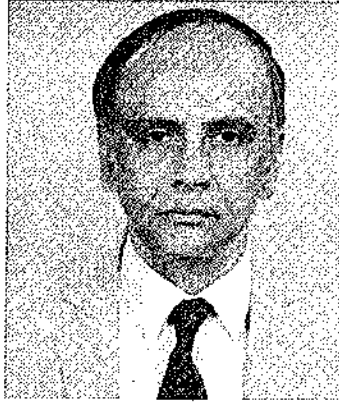
I am also very happy to see that, drawing from the experience of the Health Bulletin, 1996, the present bulletin has been revised and updated in both content and orientation. The Health Bulletin, 1997 has not only covered the conventional topics of data collection, presentation and analysis in the health information system in Bangladesh, but it has also highlighted issues and indicators which often influence and contribute to the outcomes and assessment in our health system and services.

I am sure, the concepts and subjects highlighted in the Health Bulletin, 1997 should be useful to all concerned in the health field, particularly those who are endeavouring to change the quality of our life through the use and application of epidemiological tools and techniques in the public health.

Prof. Dr. M. Amanullah

State Minister

Ministry of Health & Family Welfare



Message

I am pleased to see that the Health Bulletin 1997 has been published with an up-to-date information on our health programs and health services. The regular compilation, collection and dissemination of the health statistics is an important function of the Unified MIS of the Directorate of Health Services. I believe that there are still challenges to overcome and scopes to further improve the quality of information in terms of their timeliness, coverage and reliability. We should try our best to collect more valid and accurate information on time. This is not possible if the managers are not in the habit of using their information at their own level. Information generated by them needs to be interpreted and compared with the set indicators in order to measure the range of achievements in improving the health status of the people of Bangladesh.

Sayed Alamgir Farrouk Chowdhury

Secretary

Ministry of Health and Family Welfare



Foreword

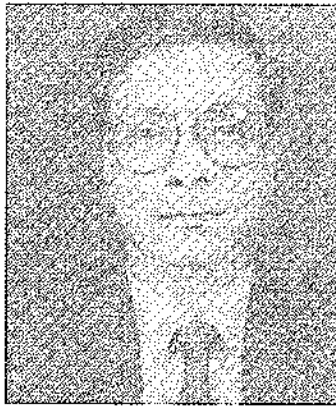
Since the publication of the Health Bulletin, 1996 last year, we have received many positive responses and suggestions from many valuable readers. Many of the suggestions and recommendations have now been incorporated into the Health Bulletin, 1997. We hope that the reader finds this latest report a more satisfactory one.

In the Health Bulletin, 1997 major improvements have been made in the areas of human resources for health and health related activities of the private sector. However, there remain a number of areas which are still of concern to all of us. Information on the performance of individual health and family planning programmes and vital statistics remain to be difficult to collect and verify. Although we have tried very hard to compile various health related data at district level, we have yet to achieve our goal.

With the completion and publication of the Health Bulletin, 1997, DGHS will, from this year, embark on putting the 1998 Health Bulletin on the internet. We are hoping that this major task could be finished by the third quarter of 2000. We also anticipate that the 1998 Health Bulletin will be a further improvement of the Health Bulletin, 1997.

ABM Ahsanullah
29/5/2000

Professor ABM Ahsanullah
Director General of Health Services



Preface

I would like to thank and congratulate those who were involved in the preparation of the Health Bulletin, 1997. The task of compiling national health information for this Bulletin has been a complicated and difficult one.

The Health Bulletin, 1997 has made substantial improvement over the previous issue, Health Bulletin 1996 which was published in last year. We have been very encouraged by the positive feedback sent to us by the readers. We are hoping that this report will be able to meet more of your needs.

One of the key objectives for publishing the Health Bulletin annually is to make the document a useful tool for planning, monitoring and evaluation. Although the information incorporated in the Health Bulletin, 1997 is mostly two years old, we are putting our efforts to closing the time lag. We are hoping that by the year 2000-2001, the most up-to-date health information of Bangladesh could be published on the internet.

Separately, we are also embarking on compiling accurate and timely information concerning district health. This will serve as a useful tool for decentralized district and lower level programme planning, management and monitoring. To serve you better, your valuable suggestions to improve the Bulletin will be highly appreciated.

Dr. Nurul Anwar

Director, UMIS, DGHS

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BANGLADESH: BASIC INFORMATION¹ 1997

A. GEOGRAPHY	
Location	between 20°34' and 26°38'
Area (Sq. Km.)	147,570 sq. km. (56977 sq. miles)
Forest Area (in %)	14.0
Total Cropped Area (in %)	71.4
Standard Time	GMT + 6 hrs
Rainfall (Annual Variation in Cm.)	119 - 147
B. ADMINISTRATION	
1. Division	6
2. Districts	64
3. Thana:	491
Urban	20
Rural	471
4. Union	4,403
5. Mouza	60,315
6. Village (approximately)	68,000
7. Household (in million)	21.7
8. Average size of Household	5.5
C. DEMOGRAPHY	
1. Population (1996 estimate)	123.8 million
Male	63.5 million
Female	60.3 million
2. Sex Ratio (M/F X 100)	105
3. Under 5 Population (in %)	12.3
4. Under 15 Population (in %)	40.0
5. Female Population (15-49 yrs in %)	27.44
6. Population (60 Yrs+) in millions	5.9
7. Population Density per sq. km.	819
8. Crude Birth Rate (per 1,000 pop.)	23.6 per 1000 population
9. Crude Death Rate (per 1,000 pop.)	8.0 per 1000 population
10. Population Growth Rate (%)	1.56%
11. Total Fertility Rate	3.10 per woman
12. Life Expectancy at Birth (yrs.)	59.6
13. Mean Age at First Marriage (yrs.)	
Male:	26.6
Female:	19.2

D. HEALTH STATUS		
1.	Neonatal Mortality Rate (per 1,000 live births), 1996	47.9
2.	Infant Mortality Rate (per 1,000 live births)	72.8
3.	Under Five Mortality Rate (per 1,000 live births)	82.35
4.	Maternal Mortality Ratio (per 1,000 live births)	4.2
5.	Percent of population using safe drinking water	96.6
	Rural	95.1
	Urban	99.1
6.	Percent of population using water seal latrines	20.8
7.	Nutrition (calorie intake)	2,258
E. EDUCATION AND ECONOMY		
1.	Per Capita GDP (in U.S.\$)	254
2.	Literacy Rate (Pop.7+) *	41.5%
3.	Adult Literacy Rate (Pop. 15+))	46.9%
	Male	48.6%
	Female	45.2%
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1.	No. of Hospital Beds	41,514
2.	No. of Beds in Public Sector	30,143
3.	No. of Beds in Private Sector	11,371
4.	No. of Hospitals in Public Sector	651
5.	No. of Registered Hospitals/ clinics/ nursing homes in private sector	613
6.	No. of Government Medical Colleges	13
7.	No. of Private Medical Colleges	9
8.	No. of Registered Physicians (as on December, 1997)	26,608
9.	No. of Physicians under BCS health cadre (incl. 536 dentists)	7,833
10.	No. of doctors under Health Services	8,616
11.	No. of Registered Nurses as on December, 1997	15,408
12.	No. of Nurses in Public Sector	10,668

13.	No. of Registered Mid-wives as on December, 1997	13,211
14.	No. of Dentists under BCS health cadre	536
15.	No. of Medical Assistants	2,069
16.	No. of Pharmacists	2,752
17.	No. of Radiographers	752
18.	No. of Sanitary Inspectors	491
19.	No. of Health Inspectors	1,400
20.	No. of Assistant Health Inspectors	4,200
21.	No. of Health Assistants	21,000
22.	No. of Civil Surgeons	64
23.	No. of Medical Technologists (Laboratory)	1,311
24.	No. of Medical Technologists (dental)	668
25.	No. of Senior Family Welfare Visitors	445
26.	No. of Family Welfare Visitors	5545
27.	No. of Family Planning Inspectors	4305
28.	No. of Family Welfare Assistants	23,500
G. HEALTH SERVICE		
29.	No. of Patients Treated in OPD	37,859,133
30.	No. of Patients Treated Indoor	1,267,966
31.	EPI Coverage:	
	(a) DPT/Polio	80.0
	(b) BCG	73.0
	(c) Measles	75.0
	(d) TT2	65.4
32.	Population per Physician	4,611
33.	Population per Bed	3,003
34.	Physician Nurse Ratio	2:1
35.	Percent of delivery attended by:	
	(a) Doctors/Nurses	5.4
	(b) Midwives/Trained birth attendants	59.4
	(c) Relatives/Untrained persons	35.2

¹Population Planning Wing, Bangladesh Planning Commission

*1993 figure

GENERAL INFORMATION

1.1 History

The People's Republic of Bangladesh came into being as a sovereign state in 1971. The territory now constituting Bangladesh was under Muslim rule for over five and a half centuries from 1201 to 1757 A.D. Subsequently, after the defeat of Nowab Sirajuddowla at the battle of Palassy on June 23, 1757 it was under British subjugation. The British ruled the entire Indian sub-continent for nearly 190 years from 1757 to 1947. During that period, Bangladesh was part of the British Indian province of Bengal and Assam. With liberation from British rule in August 1947, the sub-continent was partitioned into India and Pakistan. Bangladesh became a part of Pakistan and was known as East Pakistan and remained so for about 24 years from August 14, 1947 to March 25, 1971. Bangladesh gained independence from Pakistan following a nine months War of Liberation in 1971.

1.2 Geography

Bangladesh lies in the north eastern part of South Asia between 20°34' and 26°38' north latitude and 88°01' and 92°41' east longitude. It is bordered on the west, north and north-east by India, on the south-east by Myanmar and on the south, by the Bay of Bengal. The area of the country is 143,999 square kilometers (55,598 square miles).

1.3 Physiography

Except comparatively small areas such as the hilly region in the north-east, the south-east and in part of north and north-west, the country is mainly a low flat and fertile land divided by a network of rivers. The major rivers are: the Padma, the Jamuna, the Teesta, the Brahmanputra, the Surma, the Meghna and the Karnaphuli. Their tributaries crisscross the country covering 24,140 kilometers of waterways which flow into the Bay of Bengal. The alluvial soil is continuously enriched by heavy silt deposits during the rainy season. The total forest area covers about 8% of the land area.

1.4 Climate

Bangladesh enjoys a sub-tropical monsoon climate. While there are six distinctive climates in a year, three dominate - winter, summer and monsoon. Winter which is cool and dry begins in November and ends in February with temperature running from a minimum of 7.22°C-2.77°C (45°F-55°F) to a maximum of 23.88°C-31.11°C (75°F-85°F) Celsius. The maximum temperature recorded in Summer (March-June) ranges from 36.6°C (98°F) to 40.55°C(105°F). The monsoon starts in June and continues to October. The average rainfall varies from 119.38 to 348.16 cm (47" to 136"). The relative humidity is lowest in December (60%) and highest in July (99%).

1.5 Transport and Communication

The country is connected by a network of about 2,858 kilometers of railway, 15,053 km of paved road and 5,896 km of perennial and seasonal water ways. Dhaka, the capital of the country, is linked with several major international cities by her national airline (Biman). Regular domestic air services are

operated by Biman between Dhaka and other major towns in the country. Also, a number of foreign airlines operate international services. The two seaports are Chittagong and Mongla (Khulna).

The country has a network of radio and television broadcasting services. The television system was introduced in 1964 and since then, substations have been set up in Chittagong, Sylhet, Khulna, Rangpur, Mymensingh, Natore and Noakhali. There are three earth satellite ground stations at Betunia in Chittagong Hill Tracts, Talibadad (Kaliakair) in Gazipur district and Mohakhali, Dhaka.

1.6 Agriculture and Main Crops

Agriculture is the main occupation, employing 61% of the labour force. This sector directly contributes about 46% to the gross domestic products. Rice, wheat, jute, sugar cane, tobacco, oilseed, pulse and potatoes are the principal crops. In addition, the country produces 40 million kilograms of tea per year.

2. POPULATION

The last decennial census, held in 1991, recorded a population of 109.9 million. This represented a four-fold increase in Bangladesh's population since the holding of its first census in 1901 which registered a population of 28.9 million. Subsequent censuses were conducted in 1911, 1921, 1931, 1941, 1951, 1961, 1974, 1981 and 1991. The census population from 1901 to 1981 by greater district is shown in Table 2.1 while the census population of 1991 by division and district is presented in Table 2.2.

Table 2.1 shows the population growth trend of the 21 greater districts, from 1901 to 1981. The fastest growing districts over the 80 years period were the greater districts of Chittagong Hill Tracts and Chittagong. Both populations increased by over 400 percent. Dhaka greater district had the third fastest growing population. On the other hand, Mymensingh, which already had a relatively large population (392,200) at the turn of the Century, had the slowest growth rate with an increase of just over 60 percent. This could, perhaps, be due to the saturation of the Mymensingh greater district to absorb more population growth. It could also be attributed to its close proximity to Dhaka where a large number of its population had migrated to the Greater Dhaka district.

Comparing the census statistics of 1991 with those of earlier censuses is not feasible as the greater districts experienced major geographical redefinition. In 1981, the country's 21 greater districts were redivided into 64 districts. This necessitates analysis of the 1991 census information separately.

Table 2.2 shows the distribution of population by division and district in 1991. Of all six divisions in Bangladesh, Rajshahi has the largest geographic area with 34,627 square kilometers. This is followed by Chittagong and Dhaka division. Sylhet division is the smallest division with only 12,388 square kilometers. In 1991, Dhaka division had the largest population (33,593,103). Dhaka division had the largest number of households (6,376,882). Sylhet division had the smallest population size (7,052,132). It also had the fewest households (1,184,388). Dhaka division had the larger average household size with 5.95 persons per household while Sylhet division had the smallest average household

size with only 5.26 persons per household. In all divisions, the sex ratio (M/F) was over 1 indicating that there were more males than females in the whole country.

In 1991, there were 96 municipalities in the country (Table 2.3). Together, they accounted for about 11.79 million population or about 10.7 percent of the national population. Of all these 96 municipalities only one, i.e., Meherpur, had a sex ratio of less than 1. More males than females seemed to be the norm in all the rest of the municipalities which ran as high as 160.0 in the Bandarban Municipality. Greater male than female population in urban areas of Bangladesh is expected given the recent phenomenon of increased rural to urban migration. Young adult males tend to leave their rural homes to search for work in urban areas. After their life is secure which usually takes a relatively long period, then they start bringing their spouses and children to settle in their urban homes. This explanation is supported by the fact (Table 2.4) that the sex ratios in the rural areas among the age groups 20-24, 25-29, 30-34 and 35-39 were below 1.

Table 2.4 shows that, nationally, the sex ratios for age groups 20-24 and 25-29 were also below 1 indicating that in these two age groups, there were more females than males. The statistics gives rise to the theory that international out-migration from Bangladesh among young male adults is significant.

TABLE 2.1
Population Distribution by Greater District from 1901 to 1981

figures in '000

Name of Greater District	1901	1911	1921	1931	1941	1951	1961	1971	1981
Dinajpur	1226	1168	1220	1236	1336	1355	1710	2571	3200
Rangpur	2202	2434	2555	2646	2924	2916	3796	5447	6510
Bogra	884	1017	1083	1122	1260	1278	1574	2231	2728
Rajshahi	1902	2000	2028	1993	2198	2205	2811	4268	5270
Pabna	1418	1425	1385	1438	1696	1584	1950	2815	3424
Kushtia	885	842	783	808	920	884	1166	1884	2292
Jessore	1647	1597	1590	1552	1695	1703	2190	3327	4020
Khulna	1268	1380	1472	1629	1944	2076	2449	3557	4329
Barisal	2485	2613	2844	2194	3811	2636	3068	3928	4667
Patuakhali	**	**	**	**	**	1006	1194	1499	1843
Mymensingh	3922	4531	4842	5135	6030	4558	4083	5508	6568
Tangail	*	*	*	*	*	1227	1487	2078	2444
Jamalpur	*	*	*	*	*	*	1449	2059	2452
Dhaka	2617	2929	3172	3449	4224	4073	5096	7612	10014
Faridpur	1781	1958	2030	2163	2650	2710	3179	4060	4764
Sylhet	2031	2241	2298	2466	2832	3059	3490	4759	5656
Comilla	2139	2455	2696	3056	3860	3792	4389	5819	6881
Noakhali	1143	1303	1473	1707	2217	2274	2383	3234	3816
Chittagong	1353	1508	1611	1797	2153	2309	2983	4315	5491
Chittagong Hill Tracts	125	154	173	213	247	288	299	392	580
Bandarban	+	+	+	+	+	+	86	116	171
Total	28928	31555	33255	35602	41997	41932	50840	71479	87120

** Included in Barisal

* Included in Mymensingh

+ Included in Chittagong Hill Tracts

TABLE 2.2
Distribution of Population by Division and District – 1991*

SL. NO.	NAME OF DISTRICT	AREA SQ. KILOMETER	NUMBER OF				TOTAL HOUSE-HOLD	LITERACY RATE	POPULATION		
			THANA	UNION	MUZZA	VILLAGE			MALE	FEMALE	TOTAL
1	PANCHGARH	1404	5	43	428	1802	141526	23.65	373762	355833	729595
2	THAKURGAON	1810	5	47	647	1183	194381	23.61	527914	497772	1025686
3	DINAJPUR	3543	13	102	2039	2328	441054	22.45	1178749	1110062	2288811
4	RANGPUR	2313	8	81	1191	1626	433904	20.64	1137735	1073977	2211712
5	NILPHAMARI	1639	6	63	390	486	271474	17.09	722096	653330	1405426
6	LALMONIRHAT	1303	5	42	366	500	185686	18.21	495222	465679	960901
7	KURIGRAM	2173	9	74	673	1882	314932	17.32	820911	810375	1631286
8	GAIBANDHA	2157	7	82	1093	1319	388204	18.35	978603	963764	1942367
9	JOYPOURHAT	969	5	31	723	913	156102	23.44	399089	373136	772225
10	BOGRA	2919	11	107	1780	2789	529207	22.04	1376710	1310614	2687324
11	SERAJGANJ	2502	9	79	1463	2145	423169	18.42	1204984	1144239	2349223
12	PABNA	2435	9	71	1305	1677	332850	20.86	1009122	946395	1955517
13	NATORE	1906	6	51	1170	1562	250873	20.43	694218	662649	1356867
14	NAOGAON	3434	11	99	2574	2913	414307	21.95	1096215	1066020	2162235
15	C.NAWABGANJ	1735	5	46	785	1461	202169	17.36	609164	594317	1203481
16	RAJSHAHI	2385	9	70	1719	2097	373347	23.43	1017641	970625	1988266
RAJSHABI DIVISION		34627	123	1088	18345	26593	5953185		13642135	13025778	26667913
17	KUSTIA	1614	6	69	704	954	277907	20.55	791183	741941	1533124
18	MEHERPUR	717	2	18	199	245	94592	18.41	257453	246593	504046
19	CHUDANGA	1145	4	30	367	523	148729	20.43	426140	402023	828162
20	BHENAIJAH	2145	6	65	951	1247	244677	20.65	713266	675126	1388392
21	MAGURA	1147	4	36	536	740	129154	21.63	381594	368639	750233
22	NARAIL	989	3	37	439	681	122453	27.00	346502	329454	685956
23	JESSORE	2411	8	91	1319	1476	390935	26.01	1126807	1054806	2181613
24	SATKHIRA	3748	7	77	963	1433	297156	23.10	839017	813790	1652807
25	KHULNA	4362	9	67	762	1039	395533	34.63	1118363	1031275	2149638
26	BAGERHAT	3532	9	76	726	1075	281099	34.63	753588	723602	1477190
KHULNA DIVISION		22100	58	568	6966	9423	2382235		6753913	6396248	13150161
27	PEROJPUR	1272	6	51	364	622	210594	39.23	554893	548092	1102985
28	JHALKATHI	749	4	29	424	502	131604	40.73	350100	347008	697108
29	BARGUNA	1598	5	39	271	524	150980	31.65	397698	394836	792534
30	PATUAKHALI	2740	6	61	551	875	230769	28.48	651565	646387	1297952
31	BHOLA	2626	7	58	411	537	271976	17.73	764810	724605	1489415
32	BARISAL	2585	10	85	1145	1250	1172455	34.11	1172455	1119705	2292160
BARISAL DIVISION		11570	38	323	3166	4310	1425851		3891521	3789833	7671354
33	SIRIATPUR	1210	6	61	608	940	183337	19.15	494836	488593	983429
34	MADARIPUR	1140	4	58	524	1032	213253	22.67	562581	544355	1106936
35	GOPALGANJ	1484	5	69	621	897	301811	29.92	557170	550129	1107299
36	FARIDPUR	1878	8	79	1042	1946	286356	20.70	791381	763826	1555207
37	RAJBARI	1202	4	42	821	1001	152695	21.17	444247	417887	862134
38	MANIKGANJ	1380	7	65	1359	1722	235335	21.81	608982	604464	1213446
39	DHAKA	1533	5	70	1167	1807	1099659	43.35	3417345	2728209	6145554
40	MUNSHIGANJ	938	6	69	662	976	214980	28.67	624841	597111	1221952
41	NARAYANGANJ	772	5	49	919	1505	334460	32.59	978549	845945	1824494
42	NARSINGDI	1072	6	70	648	1071	325380	23.14	880800	827559	1708359
43	GAZIPUR	1764	5	43	757	1125	331874	28.83	886664	816804	1703468
44	TANGAIL	3390	11	101	2030	2601	585795	23.58	1544624	1499751	3044375
45	JAMALPUR	2023	7	67	842	1559	397412	16.28	991720	945676	1937396
46	SHERPUR	1383	5	43	458	843	245480	14.65	585979	561438	1147417
47	MIYMENSINGH	4279	12	146	2188	2755	789817	19.30	2044881	1967316	4012197
48	KISHOREGANJ	2556	13	105	946	1755	436288	16.42	1152899	1118351	2271250
49	NETROKONA	2875	10	86	1628	2422	318950	18.09	892378	858912	1751290
DHAKA DIVISION		38879	119	1223	17220	25957	6376882		17459777	16133326	33593103

SL. NO.	NAME OF DISTRICT	AREA SQ. KILOMETER	NUMBER OF				TOTAL HOUSE-HOLD	LITERACY RATE	POPULATION		
			THANA	UNION	MOUZA	VILLAGE			MALE	FEMALE	TOTAL
50	SUNAMGANJ	3743	10	81	1452	2741	294322	17.20	902838	868263	1769101
51	SYLHET	3364	11	95	1643	3317	363042	25.42	1158186	1112470	2270656
52	MAULOVI BAZAR	2701	7	66	894	2094	253879	23.06	735629	710505	1446134
53	HOBIGANJ	2580	8	77	1290	2305	273145	18.87	791664	774577	1566241
	SYLHET DIVISION	12388	36	319	5279	10457	1184388		3588317	3463815	7052132
54	BRAHMANBARIA	1917	6	96	1296	1408	380710	19.13	1147544	1111527	2259071
55	COMILLA	3092	12	171	2683	3773	727988	25.28	2146054	2107634	4253728
56	CHANDPUR	1704	7	89	1051	1353	376682	29.02	1067551	1072089	2139640
57	LAXMIPUR	1652	4	48	448	489	250355	25.54	693767	688910	1382677
58	NOAKHALI	2691	6	79	871	1019	407321	28.00	1161466	1184247	2345713
59	FENI	922	5	46	437	486	195663	29.91	579887	576182	1156069
60	KHAGRACHARI	2831	8	34	122	124	71435	20.00	196256	170185	366441
61	RANGAMATI	5778	10	47	158	1694	80888	28.72	231196	192166	423364
62	CHITTAGONG	4939	14	195	1044	1300	998901	33.18	3050515	2679225	5729740
63	BANDARBAN	4571	7	28	96	899	47507	19.61	132740	111169	243909
64	COX'S BAZAR	2277	7	57	188	785	225928	15.01	763104	701918	1465022
	CHITTAGONG DIVISION	32374	86	899	8394	12022	3765378		11164122	10898192	21759314
	TOTAL	143998	460	4493	59378	88762	20187119		56499785	53395192	109854977

TABLE 2.3
Population Distribution by Municipalities – 1991

Code No.	Name of Municipality	Ward	Mahallah	House-Hold No.	Population			Sex
					Male	Female	Total	Ratio (M/F)
1	Bera	3	25	6958	21163	19581	40744	108.1
2	Bogra	4	40	16326	49564	43550	93114	113.8
3	Dinajpur	4	97	25586	71044	65613	136657	108.3
4	Fulbari	3	11	5023	13250	12159	25409	109.0
5	Gaibanda	3	19	7755	22990	20860	43850	110.2
6	Ishwardi	3	22	10843	26620	24062	50682	110.6
7	Joypurhat	3	14	9363	25942	21942	47884	118.2
8	Kurigram	3	96	11931	32593	29482	62075	110.6
9	Lalmonirhat	3	44	9627	27260	23787	51047	114.6
10	Nilphamari	3	6	8360	18291	16442	34733	111.2
11	Naogaon	3	44	20273	57397	51759	109156	110.9
12	Natore	3	12	7195	20602	18586	39188	110.8
13	Nowabganj	5	64	22453	65834	65426	131260	100.6
14	Pabna	6	23	19081	59329	53817	113146	110.2
15	Parbatipur	3	15	5125	14423	12285	26708	117.4
16	Panchagarh	3	27	6023	17312	15311	32623	113.1
17	Pirganj	3	7	3812	10536	9284	19820	113.5
18	Rajshahi	30	166	55010	172536	151996	324532	113.5
19	Rangpur	6	64	36931	122459	98390	220849	124.5
20	Sirajganj	8	44	18533	51559	48444	100003	106.4
21	Santahar	3	32	5506	15879	13478	29357	117.8
22	Sherpur	3	13	3360	8862	8169	17031	108.5
23	Saidpur	5	31	19680	59017	51477	110494	114.6
24	Thakurgaon	3	15	6981	20173	17490	37663	115.3
25	Alamdanga	3	8	4654	12206	11472	23678	106.4
26	Bagerhat	3	30	8521	27876	24399	52275	114.3

Code No.	Name of Municipality	Ward	Mahallah	House-Hold No.	Population			Sex
27	Banaripara	3	8	1515	4626	3498	8124	132.2
28	Barisal	10	34	31794	100915	79099	180014	127.6
29	Barguna	3	10	4884	13540	10903	24443	124.2
30	Bheramara	3	9	3605	10245	10016	20261	102.3
31	Bhola	3	20	6491	20282	17034	37316	119.1
32	Chuadanga	3	41	13005	34776	30446	65222	114.2
33	Jessore	3	56	32123	95205	81193	176398	117.3
34	Jhalakati	3	32	5194	13885	13564	27449	102.4
35	Jinaidah	3	24	12603	36835	32666	69501	112.8
36	Kalia	3	17	3339	8883	8456	17339	105.0
37	Khulna	29	163	147901	329741	271310	601051	121.5
38	Kotchandpur	3	33	5050	13940	12665	26605	110.1
39	Kumarkhali	5	5	2318	6943	6439	13382	107.8
40	Kustia	4	23	13158	37280	34426	71706	108.3
41	Magura	3	25	7309	21153	18792	39945	112.6
42	Meherpur	9	41	5545	13366	14331	27697	93.3
43	Moheshpur	3	9	2359	6824	6369	13193	107.1
44	Mongla	3	33	11010	28952	20413	49365	141.8
45	Nalchity	3	16	5195	13886	13678	27564	101.5
46	Narail	3	23	5176	15490	13950	29440	111.0
47	Patuakhali	3	21	8867	26819	23525	50344	114.0
48	Pirojpur	3	18	6348	18073	16214	34287	111.5
49	Satkira	3	27	14624	42558	38641	81199	110.1
50	Bajitpur	3	22	4752	11974	11210	23184	106.8
51	Bhairab	5	3	12933	39671	36076	75747	110.0
52	Dhaka	75	626	644438	2072704	1565188	3637892	132.4
53	Faridpur	3	28	13303	38826	34101	72927	113.9
54	Gazipur	3	50	19748	53780	46910	100690	114.6
55	Gouripur	3	36	3825	10156	9368	19524	108.4
56	Gopalganj	3	27	4388	12770	11316	24086	112.8
57	Gopalpur	3	33	9105	23122	22052	45174	104.9
58	Jamalpur	4	73	21252	56618	51798	108416	109.3
59	Kishoreganj	4	18	11630	35304	29372	64676	120.2
60	Madaripur	3	36	8675	25419	21423	46842	118.7
61	Manikganj	3	31	9146	24363	22249	46612	109.5
62	Mohanganj	3	14	3600	10144	8382	18526	121.0
63	Muktagacha	3	7	4183	12251	10771	23022	113.7
64	Munshiganj	3	33	8076	23793	21728	45521	109.5
65	Mymensingh	7	82	35222	105559	93103	198662	113.4
66	Narayanganj	12	23	55164	159754	128254	288008	124.6
67	Narsingdi	3	26	19293	57487	42633	100120	134.8
68	Netrokona	3	28	9133	24969	21234	46203	117.6
69	Pansha	3	9	3686	11146	10165	21311	109.7
70	Rajbari	3	15	8012	23245	21291	44536	109.2
71	Sarishabair	3	28	8343	19517	17515	37032	111.4
72	Sariatpur	3	23	6908	19378	16683	36061	116.2
73	Sherpur	3	44	13230	34807	28223	63030	123.3
74	Tangail	5	52	20916	58633	53150	111783	110.3
75	Tongi	3	25	33919	93715	71384	165099	131.3

Code No.	Name of Municipality	Ward	Maballah	House-Hold No.	Population			Sex
76	Bandarban	3	45	4982	15735	9833	25568	160.0
77	Brahmanbaria	4	23	19607	60608	53689	114297	112.9
78	Chandpur	4	24	14380	49345	34722	84067	142.1
79	Chittagong	41	123	286107	918560	647510	1566070	141.9
80	Chowmohani	3	12	9745	30924	24706	55630	125.2
81	Comilla	4	30	26249	84941	79568	164509	106.8
82	Companiganj	3	30	3334	10141	8891	19032	114.1
83	Cox's Bazar	3	17	8978	31933	23093	55026	138.3
84	Feni	9	9	6890	22102	16250	38352	136.0
85	Hobiganj	4	44	7180	22991	19907	42898	115.5
86	Hajiganj	3	7	6344	19681	17408	37089	113.1
87	Khagrachhari	3	26	5670	16560	12380	28940	133.8
88	Laksham	3	23	9342	28748	24462	53210	117.5
89	Laxmipur	3	7	8639	26109	23144	49253	112.8
90	Moulavibazar	3	33	6407	19678	15693	35371	125.4
91	Noakhali	3	37	12815	39987	33779	73766	118.4
92	Rangamati	3	25	10473	32254	23962	56216	134.6
93	Srimongal	3	13	3728	11028	8840	19868	124.8
94	Sunamganj	3	24	3821	13388	10910	24298	122.7
95	Sylhet	5	88	16844	63249	51035	114284	123.9
TOTAL		512	3689	2168738	6536001	5252250	11788251	124.4

TABLE 2.4
Census Population adjusted for undercount by age, sex and area

AGE GROUP	(Thousand)								
	BANGLADESH			RURAL			URBAN		
	Both sex	Male	Female	Both sex	Male	Female	Both sex	Male	Female
All Ages	111455	57314	54141	89000	45114	43886	22455	12200	10255
0-4 Yrs	18695	9482	9213	15608	7911	7697	3087	1571	1516
5-9	18391	9505	8886	15235	7885	7350	3156	1620	1536
10-14	13443	7175	6268	10665	5730	4935	2778	1445	1333
15-19	9500	4819	4681	7326	3687	3639	2174	1132	1042
20-24	9364	4356	5008	7014	3122	3892	2350	1234	1116
25-29	9472	4537	4935	7224	3314	3910	2248	1223	1025
30-34	6797	3495	3302	5201	2573	2628	1596	922	674
35-39	6149	3367	2782	4754	2497	2257	1395	870	525
40-44	4734	2519	2215	3709	1881	1828	1025	638	387
45-49	3626	1958	1668	2921	1521	1400	705	437	268
50-54	3224	1687	1537	2619	1333	1286	605	354	251
55-59	2015	1117	898	1673	913	760	342	204	138
60-64	2379	1251	1128	1973	1027	946	406	224	182
65+	3666	2047	1619	3079	1720	1359	587	327	260

2.1 The Demographic Situation of Bangladesh

Over the decade between 1985 and 1995, Bangladesh has experienced a major demographic transition. From a high fertility and high mortality situation in 1985, the population has moved to the second stage of demographic transition of a relatively low mortality and a rapidly declining fertility. Data for the following statistics was collected from the Bangladesh Bureau of Statistics which is primarily responsible for conducting surveys on changes in the demographic indicators of the country.

Table 2.1.1 shows the trends of selected demographic indicators for Bangladesh from 1980 to 1997. In this period, the crude birth rate (CBR) declined rapidly from 33.4 to 23.6 births per 1,000 population, a drop of 9.8 births per 1,000 people. Considering the fact that the CBR in 1975 was 49.9, the decline has been very fast. The rapid decline was due to the very successful implementation of the maternal and child health and family planning (MCH-FP) programme of the 1980s. The CBR is likely to decline further as more and more people are adopting family planning. On the other hand, the crude death rate (CDR) in 1980 was at a moderate level of 10.2 deaths per 1,000 people. The rate was 8.0 in 1997 with an overall reduction of 2.2 deaths per 1,000 population. This reduction can be attributed mainly to the drastic reduction of infant mortality rate (IMR) from 140 per 1,000 live births in 1980 to only 73 in 1997, thanks mostly to the successful implementation of the EPI and other childhood disease intervention programmes. Further large scale reduction in the crude death rate is unlikely to be achieved without interventions that can further reduce maternal, infant and child mortality as well as deaths within other age groups. Assuming very little migration, the natural growth rate of the population was estimated to be around 1.56% in 1997.

Information on maternal mortality has been collected by the Bangladesh Bureau of Statistics since 1985. In that year, the maternal mortality ratio (MMR) was 7.0 maternal deaths per 1,000 live births which was a very high rate. Although reduced, the 1997 ratio of 4.2, still remains at a very high level. Clearly, much needs to be done to accelerate its decline.

With a large drop in infant mortality rate, it is expected that the life expectancy at birth will increase significantly over the period 1980-1997. Table 2.1.1 indicates that life expectancy at birth in 1981 was 55 years. By 1997, it has increased to 59.6 years. Further increase in the life expectancy is likely as more infant deaths are reduced.

TABLE - 2.1.1

Crude Birth, Death, Natural Growth, Infant Mortality and Maternal Mortality Rates

Year	CBR	CDR	NGR	IMR	MMR	Life Expectancy at birth
1980	33.4	10.2	2.32	140	-	55*
1982	34.8	11.9	2.29	122	-	-
1983	35.0	12.3	2.27	117	-	-
1984	34.8	12.3	2.25	119	-	-
1985	34.6	12.0	2.26	112	7.0	55
1986	34.4	11.9	2.25	116	6.5	-
1987	33.3	11.5	2.18	113	6.0	-
1988	33.2	11.3	2.19	116	5.7	-
1989	33.0	11.4	2.16	98	5.2	-
1990	32.8	11.3	2.15	94	4.8	-
1991	31.6	11.0	2.06	91	4.7	56.1
1992	30.8	11.0	1.98	88	4.7	56.3
1993	28.8	10.0	1.88	84	4.5	57.9
1994	27.8	9.0	1.88	77	4.5	58.1
1995	26.9	8.5	1.84	78	4.5	58.1
1996	24.9	7.9	1.70	77	4.36	59.5
1997	23.6	8.0	1.56	73	4.2	59.6

*1981 figure

Source: Bangladesh Bureau of Statistics.

2.2 District Level Demographic Trends

Demographic information on the districts of the country is in general very difficult to collect. The only information available with the Bangladesh Bureau of Statistics on districts was compiled in 1993. With striking social and economic differences in various regions of the country, it is reasonable to expect relatively large differentials in the demographic rates among the country's 64 districts. Table 2.2.1 shows that of the 64 districts, 29 had a birth rate of less than the national level of 28.8 births per 1,000 population. Twelve districts (18.75%) had a birth rate in between 33. The highest birth rates were

found in the five districts of Noakhali, Rajbari, Joypurhat, Narsingdi and Madaripur which were 52.62, 50.0, 48.71, 47.0 and 44.17 respectively.

TABLE – 2.2.1
Distribution of Crude Birth Rate (CBR) by District

CBR Interval	No. of Districts	Name of District
<28.80 per 1,000 population	29	Panchagarh, Thakurgoan, Dinajpur, Sirajgonj, Pabna, Natore, Meherpur, Chuadanga, Narail, Jessore, Satkhira, Khulna, Bagerhat, Jhalakati, Barguna, Bhola, Gopalganj, Manikgonj, Dhaka, Munshigonj, Narayanganj, Gazipur, Tangail, Sunamgonj, Sylhet, Moulvibazar, Hobigonj, Comilla, Chittagong
28.80 – 30.0 births per 1,000 population	6	Lalmonirhat, Kurigram, Rajshahi, Magura, Patuakhali, Brahmanbaria
30.01 – 33.0 per 1,000 population	12	Rangpur, Gaibanda, Naogaon, Nowabgonj, Perojpur, Shariatpur, Mymensing, Kishoregonj, Netrokono, Khagrachari, Bandarban, Cox's Bazar
33.01 – 36.0 per 1,000 population	5	Nilphamari, Kushtia, Barisal, Jamalpur, Sherpur
36.01 – 40.0 per 1,000 population	6	Jhenaidha, Faridpur, Chandpur, Laxmipur, Feni, Rangamati
40.01+ per 1,000 population	6	Joypurhat, Bogra, Madaripur, Rajbari, Narsingdi, Noakhali
Total	64	

Table 2.2.2 shows the mortality level of the districts of Bangladesh in 1993. Of the 64 districts, 33 had a crude death rate (CDR) of under 10 deaths per 1,000 population. A large number (22) of these low mortality districts also had low fertility rates. Thirteen districts have a mortality rate of over 13 deaths per 1,000 population. These districts did not necessarily have high fertility rates. Only seven districts, namely, Joypurhat, Kushtia, Madaripur, Feni, Noakhali, Laxmipur and Rangamati had experienced both high mortality and high fertility levels.

TABLE – 2.2.2
Distribution of Crude Death Rate (CDR) by District

CDR Interval	No. of Districts	Name of District
<10.0 per 1,000 population	33	Panchagrah, Thakurgoan, Dinajpur, Rangpur, Kurigram, Sirajgonj, Pabna, Natore Noagaon, Rajshahi, Meherpur, Chuadanga, Magura, Jessore, Jhalakati, Barguna, Bhola, Barisal, Manikgonj, Dhaka, Narayanganj, Munshigonj, Narsingdi, Gazipur, Tangail, Jamalpur, Mymensing, Sunamgonj, Sylhet, Moulvibazar, Comilla, Chittagong, Cox's Bazar
10.0 – 11.0 per 1,000 population	8	Lalmonirhat, Gaibandha, Naogaon, Satkira, Rajbari, Sherpur, Hobigonj, Chandpur
11.01 – 13.0 per 1,000 population	10	Nilphamari, Bogra, Jhenaidha, Bagerhat, Perojpur, Gopalganj, Faridpur, Kishoregonj, Netrokona, Brahmanbaria
13.01+ per 1,000 population	13	Joypurhat, Kushtia, Narail, Khulna, Patuakhali, Shariatpur, Madaripur, Laxmipur, Noakhali, Feni, Khagrachari, Rangamati, Bandarban
Total	64	

The 1993 natural growth rate at the national level was 1.88 percent. Table 2.2.3 indicates that only 29 districts had a natural growth rate of less than 1.88 percent. Twenty seven district had a growth rate of over 2 percent. Of them, four districts, namely Joypurhat, Rajbari, Narsingdi and Noakhali had a growth rate of over 3 percent. Two of these four districts, i.e., Joypurhat and Noakhali, experienced both high mortality and high birth rates. District CBRs, CDRs and NGRs are provided in Table 2.2.4.

TABLE - 2.2.3
Natural Growth Rate (NGR) by District

NGR Interval	No. of Districts	Name of District
<1.88 percent	29	Thakurgoan, Natore, Rajshahi, Meherpur, Chuadanga, Narail, Satkira, Khulna, Bagerhat, Barguna, Patuakhali, Bhola, Shariatpur, Gopalganj, Manikgonj, Dhaka, Munshigonj, Narayangonj, Gazipur, Tangail, Sunamgonj, Sylhet, Moulvibazar, Hobigonj, Brahmanbaria, Comilla, Khagrachari, Chittagong, Bandarban
1.88-2.0 percent	8	Panchagar, Lalmonirhat, Sirajgonj, Kushtia, Jessore, Perojpur, Jhalakati, Netrokona
2.01-2.50 percent	17	Dinajpur, Rangpur, Nilphamari, Kurigram, Gaibanda, Pabna, Naogaon, Nowabgonj, Jhenaida, Magura, Sherpur, Mymensing, Kishoregonj, Laxmipur, Feni, Rangamati, Cox's Bazar
2.51-3.00 percent	6	Bogra, Barisal, Madaripur, Faridpur, Jamalpur, Chandpur
3.01+ percent	4	Joypurhat, Rajbari, Narsingdi, Noakhali
Total	64	

TABLE - 2.2.4
Crude Birth Rate (CBR), Crude Death Rate (CDR) and Growth Rate (GR) by District, 1993

Sl. No.	District	Crude Birth Rate	Crude Death Rate	Growth Rate
01	Panchgarh	27.49	8.14	1.93
02	Thakurgoan	26.41	8.34	1.81
03	Dinajpur	28.37	7.94	2.04
04	Rangpur	30.21	9.91	2.03
05	Nilphamari	33.81	11.65	2.22
06	Lalmonirhat	29.10	10.05	1.90
07	Kurigram	28.73	6.49	2.22
08	Gaibandha	31.11	10.37	2.07
09	Joypurhat	48.71	14.61	3.41
10	Bogra	40.05	12.41	2.76
11	Sirajgonj	27.30	7.51	1.98
12	Pabna	28.00	7.26	2.07
13	Natore	25.09	7.65	1.74
14	Naogaon	32.28	10.84	2.14
15	Noabgonj	30.30	6.73	2.36
16	Rajshahi	28.37	9.62	1.87
17	Kushtia	33.80	14.20	1.96

Sl. No.	District	Crude Birth Rate	Crude Death Rate	Growth Rate
18	Meherpur	19.47	5.19	1.43
19	Chuadanga	19.69	9.00	1.07
20	Jheidah	36.37	12.22	2.41
21	Magura	29.33	8.21	2.11
22	Narail	26.05	13.36	1.27
23	Jessore	25.38	5.57	1.98
24	Satkhira	28.08	10.20	1.78
25	Khulna	26.67	14.20	1.25
26	Bagerhat	26.12	12.20	1.39
27	Perojpur	31.23	11.19	2.00
28	Jhalakati	25.23	5.23	2.00
29	Barguna	25.05	7.20	1.78
30	Patuakhali	28.82	14.52	1.43
31	Bhola	22.40	7.03	1.54
32	Barisal	33.85	7.99	2.59
33	Shariatpur	32.07	15.67	1.64
34	Madaripur	44.17	14.36	2.98
35	Gopalganj	26.10	12.16	1.39
36	Faridpur	39.47	12.92	2.65
37	Rajbari	50.00	10.79	3.92
38	Manikgonj	16.57	7.62	0.89
39	Dhaka	19.82	8.20	1.16
40	Munshigonj	21.95	8.27	1.37
41	Narayangan	21.77	9.71	1.21
42	Narsingdi	47.00	9.72	3.37
43	Gazipur	23.71	8.34	1.54
44	Tangail	23.00	7.44	1.56
45	Jamalpur	35.59	9.51	2.61
46	Sherpur	33.32	10.16	2.32
47	Mymensingh	31.92	9.53	2.24
48	Kishoregonj	32.46	12.24	2.02
49	Netrokona	30.41	11.38	1.90
50	Sunamgonj	21.57	6.20	1.54
51	Sylhet	25.73	9.65	1.61
52	Moulvibazar	21.22	9.95	1.13
53	Habigonj	27.54	10.08	1.75
54	Brahmanbaria	27.99	12.48	1.55
55	Comilla	24.51	9.92	1.46
56	Chandpur	36.41	10.79	2.56
57	Laxmipur	38.76	15.10	2.37
58	Noakhali	52.62	16.55	3.61
59	Feni	36.01	14.53	2.15
60	Khagrachar	31.04	15.32	1.57
61	Rangamati	38.66	16.32	2.23
62	Chittagong	23.58	9.28	1.43
63	Bandarban	30.08	15.32	1.48
64	Cox's Bazar	32.76	7.95	2.48

3. THE HEALTH SECTOR

Three major parties, namely, the Government, private entrepreneurs and non-government organizations (NGO), operate the health sector of Bangladesh. In addition, a number of bilateral and international agencies are heavily involved in the sector through their support to and influence on the Government and the NGOs. NGOs are mostly involved in the provision of primary health care in both rural and urban areas. Grameen Bank, BRAC and ASA are some of the large NGOs that operate community level health clinics in the country. A significant number of tertiary hospitals are also run by NGOs. Examples of these are the Holy Family Hospital (run by Bangladesh Red Crescent Society), Eye Hospital (run by Lions Club) and the BNSB, Leprosy Hospital (run by Damien), BIRDEM by the Diabetic Foundation (a WHO collaborating centre), and the Cholera Hospital (a WHO collaborating centre run by ICDDR,B).

In the private sector, there are two types of enterprises, those that are for-profit and those that are not-for-profit. The majority of them are for-profit organizations. Examples of private not-for-profit organizations are Kumudini Hospital, which is run by the Kumudini Trust and the Dhaka Community Hospital. There are numerous for-profit private health facilities including National Hospital and Ibne Sina Hospitals. The private sector not only provides health services, it also provides educational and other services such as laboratories and private medical colleges.

The largest service provider in the health sector is the Government. The Ministry of Health and Family Welfare (MOHFW) is the main public authority responsible for providing health care to the entire population. Over the past two decades, MOHFW has established a country-wide network of physical and organizational infrastructure to plan, manage, and deliver health services.

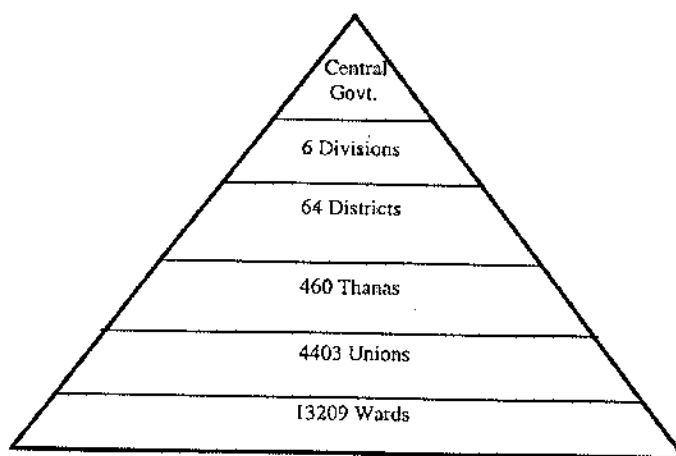
The organizational infrastructure of the health and other sectors established by the Government is quite elaborate, and is a significant vehicle for the Government to mobilize its resources for health care. At the district level, there are a number of committees which deal with the development and management issues concerning programmes of different sectors including health. The Civil Surgeon who is the head of the district health system is represented on all district level committees. The District Coordination Committee, chaired by the Deputy Commissioner (who is the head of the civil administration), deals with issues of coordination between different sectors. Other committees such as the District Population Committee, the MCH Committee, the Water Supply and Sanitation Committee are responsible for matters relating to Health for All Strategies at the district level. Some of the district level committees are also represented by NGOs and international agencies such as UNICEF.

Below the district level are the thanas. The political system at the thana level is called the Thana Parisad (Council). Presently, the Thana Parisad is headed by the Thana Nirbahi Officer and is consists of

the heads of various government sectors including health. The Thana Parisad has the overall responsibility for all development programmes of the Thana. There are a number of health related committees at the thana level like MCH services, population activities, Food for Works programmes, water supply and sanitation. Thana Health and Family Planning Officer (THFPO), the head of the Thana health system, is a member of all the committees and coordinates all health related activities with the other sectors.

4. ORGANIZATION OF THE MINISTRY OF HEALTH AND FAMILY WELFARE

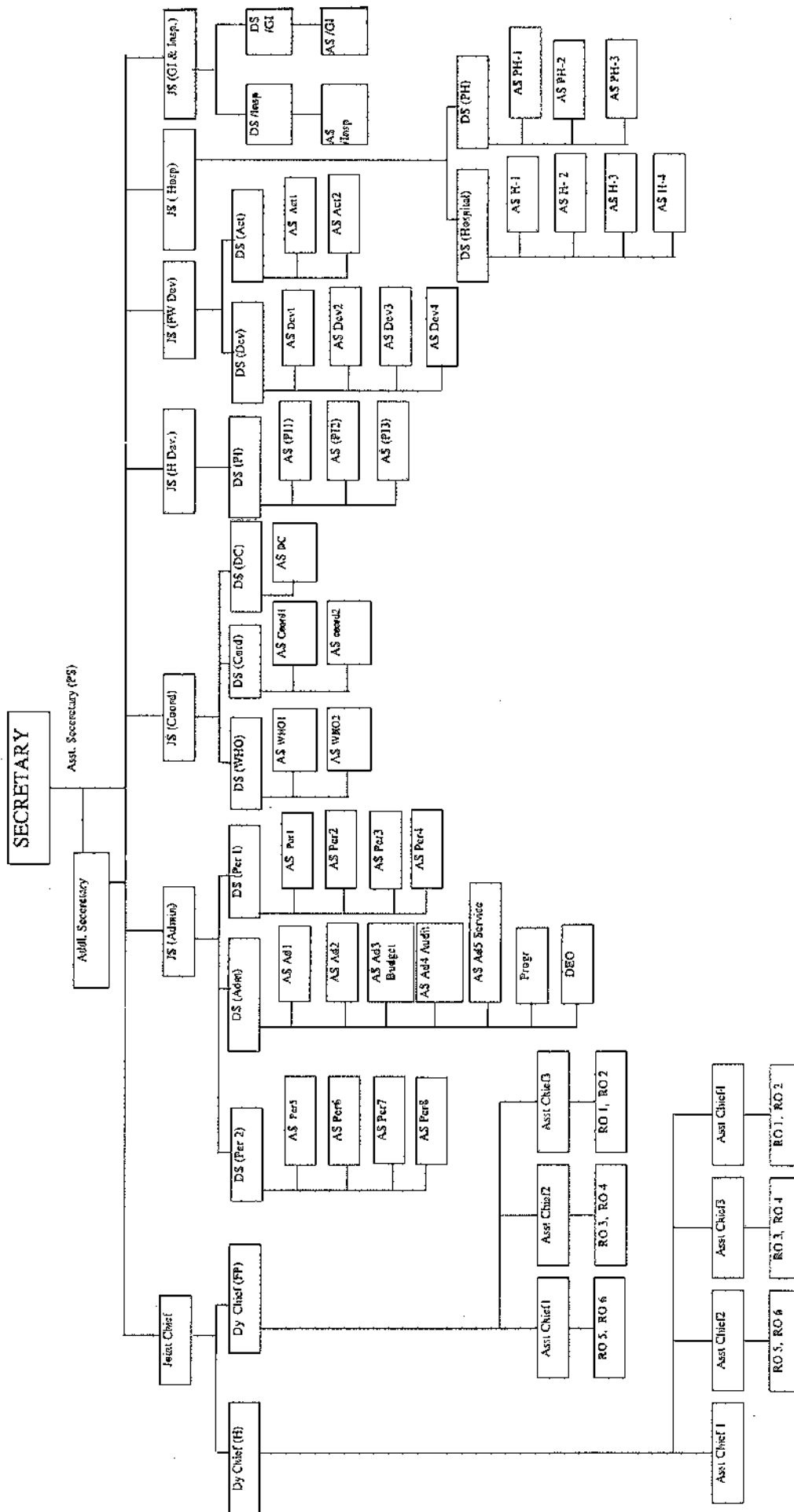
Administratively, the country is divided into 6 divisions, 64 districts, 460 thanas [(formerly upazila) of which 397 are rural (outlying) & remaining 63 are sadar] and 4403 unions. Each union has, on an average 3 wards and four to five villages constitute a ward. A ward has an average of 7,000 population and is the lowest administrative tier of the Government. Each ward has an elected representative.



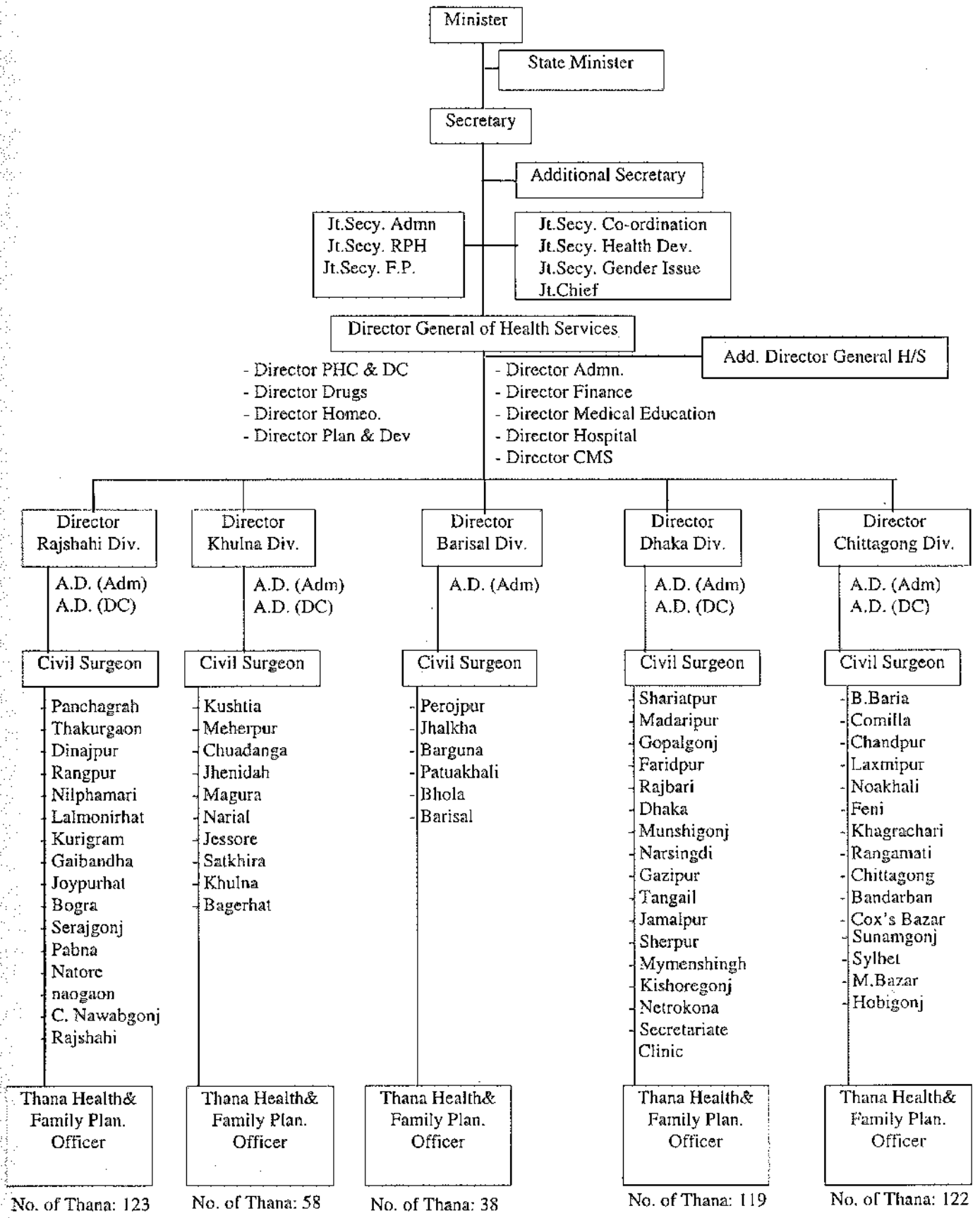
The organizational structure of the Ministry of Health and Family Welfare follows general administrative rules of the country. At the national level, the Ministry of Health and Family Welfare (MOHFW) is responsible for policy, planning and decision making at macro level. Under MOHFW, there are two major implementation wings, the Directorate General of Health Services and the Directorate of Family Planning. The Director General of Health Services is responsible for implementation of all health programmes and providing technical guidance to the Ministry. The Directorate of Family Planning is responsible for implementing family planning programmes and providing family planning related technical assistance to the Ministry.

Separately, there are also a few units/departments which are directly under the administration of MOHFW. Examples are the Construction and Maintenance Management Unit, the Nursing Directorate, and the Drug Administration Unit.

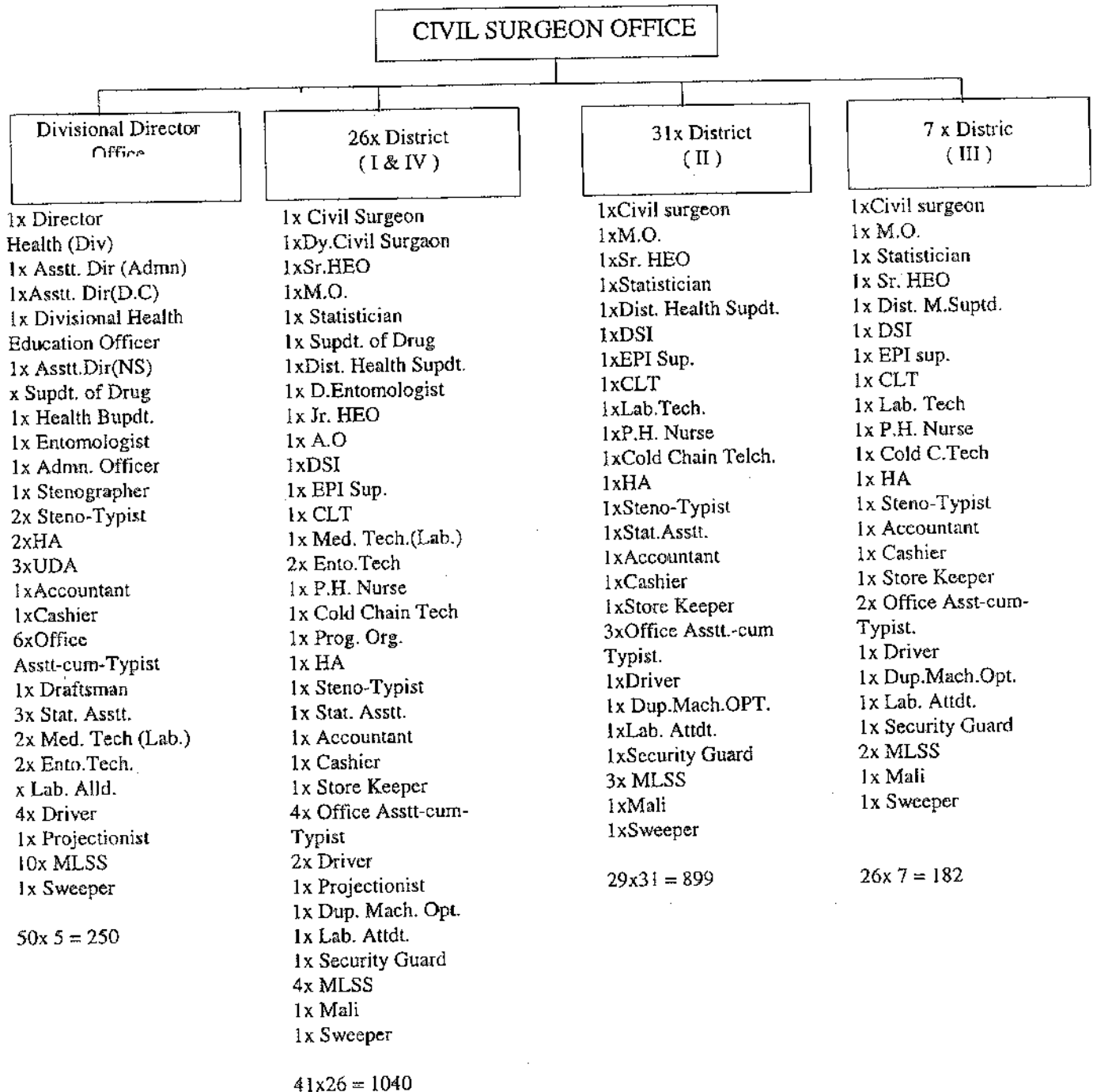
ORGANIZATIONAL SETUP OF THE MINISTRY OF HEALTH & FAMILY WELFARE



ORGANOSTRUCTURE OF HEALTH SECTOR



ORGANOGRAM OF DIVISIONAL DIRETOR OFFICE & OFFICE OF THE CIVIL SURGEON - CATEGORY I, II, III & IV



District:

Category I = 8 or more thanas

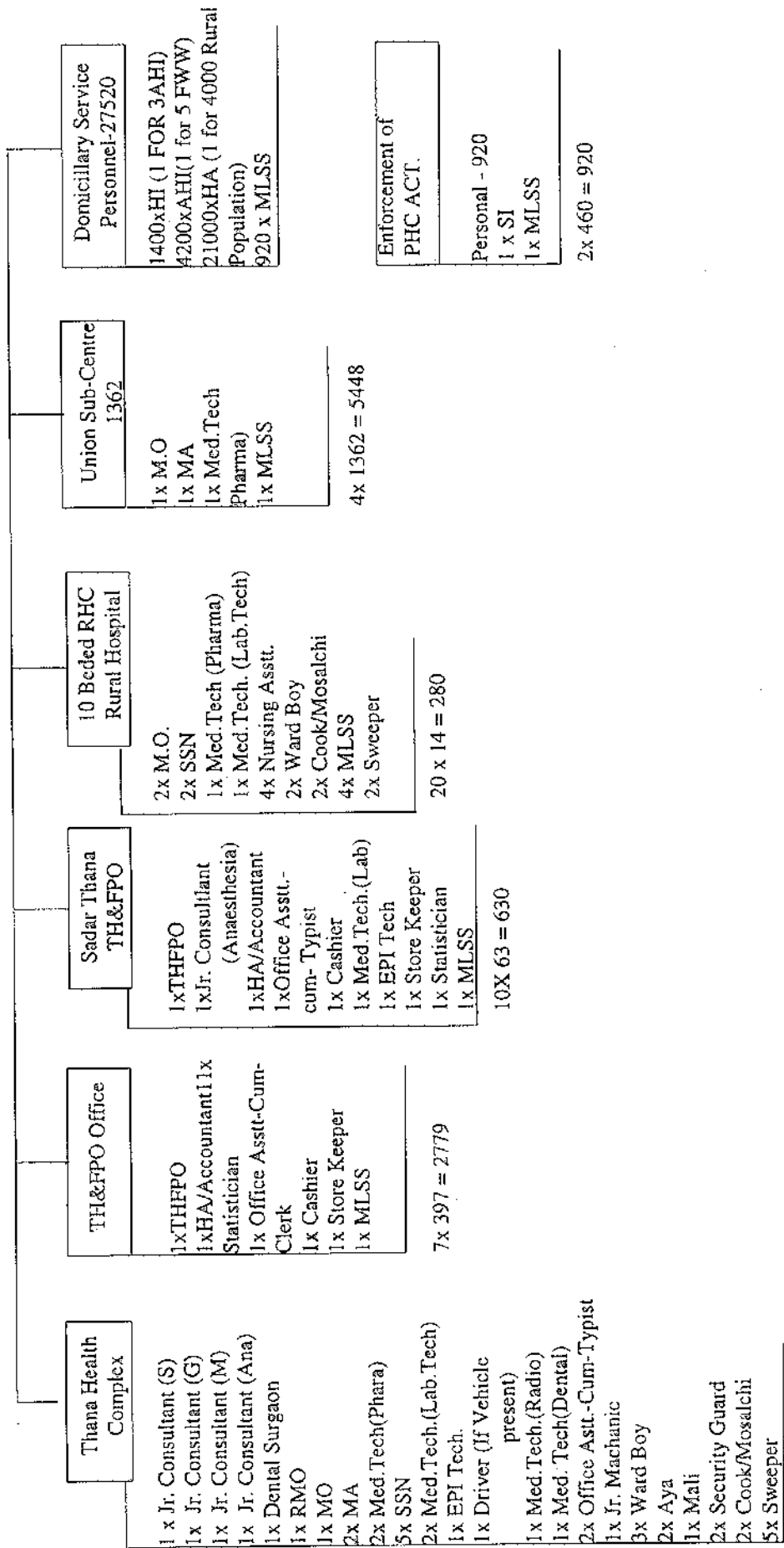
Category II = 5 - 7 thanas

Category III = 4 or less thanas

Category IV = 4 Division & Mymensingh

* There are 51 Jr. HEO in 64 Districts

ORGANOGRAM OF THANA HEALTH COMPLEX



40 x 397 = 15580

4.1 Health and Family Welfare Service Network

As a country with a large population in a small area, Bangladesh's public health system is quite well organized. The first contact the rural population have with public health services is at their households. As the administrative hierarchy rises, the level and sophistication of health services also increases. **Table 4.1** provides a brief summary of the level of care and type of facilities available at every level of public administration in the country and the approximate population coverage each type of facility services.

TABLE – 4.1 Level of Care and Type of Health Facility

Level of Care	Administrative Unit	Health Facility	Population
Tertiary Referral Level	Division (6) or District	Teaching Hospital/Institute (16) 250-1050 beds each	10-15 million
Second Referral Level	District (64)	District Hospital (59) 50-150 beds each	1-2 million
First Referral Level	Thana (460) Rural: 397 Urban thanas do not have THC	Thana Health Complex (THC) with 31 beds each	200,000-450,000
First Level Health Facility	Union (4403) UH&FWCs are not established in 397 Unions where UHCs exist.	Union Health and Family Welfare Centre (UHFWC) Target to be achieved by 2000: 4403	21,000
First Contact With Health Providers	Ward (13,209)	Community-based each with: - One Family Welfare Assistant (FWA) and - One Health Assistant (HA)	7,000
	Village (68,000)	Trained Birth Attendants (TBA) and Village Health Volunteers (VHV)	1,000-1,500

Ward and Village Level

In each ward, there is one Health Assistant (HA) and one Family Welfare Assistant (FWA) posted as mobile health and family planning service providers by DGHS and DGFP respectively. There are currently 22,795 FWAs and 19,524 HAs posted in the wards of the country. All FWAs are women while 16,924 of the HAs are men.

HAs and FWAs are all civil servants and they provide door-step health and family planning services to each household they visit every 4-8 weeks. Under their guidance, there are some volunteers or independent health workers such as Village Health Volunteers (VHV) and trained birth attendants (TBA) providing limited health services at the village level. Almost all the VHVs and TBAs have received limited training under Government programmes.

4.1.1 Union Level

A Union sub-centre (USC) or Health and Family Welfare Centre (HFWC) is located in each union to provide static health and family planning services to the population in the union. Union sub-

centres are under the management of DGHS while HFWCs are run by DGFP. These facilities are also called the Union Health and Family Welfare Centres (UHFWC). An UHFWC is a small organization with health promotive, preventive and family planning services. They are equipped to render PHC services and treatment for simple injuries and ailments. As per Government's plan, every union will have one UHFWC.

A USC is usually managed by one graduate doctor with other health colleagues and support staff. In contrast, a FWC is staffed by one medical assistant, one family welfare visitor and one pharmacist along with other support staff (MLSS, Aya, etc.). In addition, the supervisory staff of field level health workers, namely, Assistant Health Inspector (AHI) and Family Planning Inspector (FPI) have their offices in the UHFWCs.

About 15 health and family planning personnel are posted at this level to manage the static health facilities. It is at this level that semi-domiciliary health services such as EPI outreach and Satellite Clinics are organized. These domiciliary services are provided to ward level communities on a pre-planned schedule by both union and ward level health and family planning workers. Although there is a Population Committee at each union, in most cases, the Committee is not functioning effectively. The field supervisory personnel of the health and family planning sector at the union level attend the monthly meetings of the Union Council and discuss health and family planning issues of the union. Table 4.1.1 shows the number of thanas, unions and union sub-centres in each of the districts of the country.

TABLE 4.1.1 Number of Thanas, Unions and Union Sub-Centres by District and Division

SL. NUMBER	NAME OF DISTRICTS	NO. OF THANAS	NO. OF UNIONS	NO. OF UNION SUB-CENTRES
	Rajshahi Division			
01	Panchagarh	5	43	16
02	Thakurgaon	5	47	13
03	Dinajpur	13	102	31
04	Rangpur	8	81	40
05	Nilphamari	6	63	21
06	Lalmonirhat	5	42	12
07	Kurigram	9	74	21
08	Gaibandah	7	82	38
09	Joypurhat	5	31	12
10	Bogra	11	107	51
11	Serajgonj	9	79	31
12	Pabna	9	71	13
13	Natore	6	51	15
14	Naogaon	11	99	44
15	C.Nawabgonj	5	46	20
16	Rajshahi	9	70	32
sub-total		123	1088	410
	Khulna Division			
17	Kushtia	6	60	25
18	Meherpur	2	18	8
19	Chuadanga	4	30	15

SL. NUMBER	NAME OF DISTRICTS	NO. OF THANAS	NO. OF UNIONS	NO. OF UNION SUB-CENTRES
20	Jhenaidah	6	68	17
21	Magura	4	36	9
22	Narail	3	37	7
23	Jessore	8	91	19
24	Satkhira	7	77	9
25	Khulna	9	67	14
26	Bagerhat	9	76	8
sub-total		58	560	131
	Barisal Division			
27	Perojpur	6	51	6
28	Jhalakathi	4	29	5
29	Barguna	5	39	8
30	Patuakhali	6	61	12
31	Bhola	7	58	7
32	Barisal	10	85	32
sub-total		38	323	70
	Dhaka Division			
33	Shariatpur	6	61	18
34	Madaripur	4	58	13
35	Gopalganj	5	69	22
36	Faridpur	8	79	21
37	Rajbari	4	42	24
38	Manikgonj	7	65	30
39	Dhaka	5	70	18
40	Munshigonj	6	69	26
41	Narayangonj	5	43	17
42	Narsingdi	6	70	20
43	Gazipur	5	43	17
44	Tangail	11	101	59
45	Jamalpur	7	67	25
46	Sherpur	5	43	17
47	Mymensingh	12	146	43
48	Kishoregonj	13	105	17
49	Netrokona	10	86	27
sub-centre		119	1223	409
	Chittagong Division			
50	Sunamgonj	10	81	22
51	Sylhet	11	95	24
52	Moulavibazar	7	66	20
53	Hobigonj	8	77	18
54	Brahmanbaria	6	96	24
55	Comilla	12	171	48
56	Chandpur	7	89	20
57	Laximpur	4	48	15
58	Noakhali	6	79	24
59	Feni	5	46	19
60	Khagrachhari	8	34	11
61	Rangamati	10	47	11
62	Chittagong	14	195	72
63	Bandarban	7	28	1
64	Cox's Bazar	7	57	13
sub-total		122	1209	342
TOTAL		460	4403	1362

4.1.2 Thana Level

The next service level of MOHFW is the Thana Health Complex (THC). THC provides the first level referral services to the population in the thana. The population of a thana ranges between 200,000 to 450,000. There are a total of 397 THCs in the country. Usually 9 doctors are posted in a THC. They include 3 specialists-medical officers (one each in medicine, surgery and gynecology), one medical officer for maternal and child health and one dental surgeon. Their co-workers are 5 nurses as well as para-medical and non-medical personnel. The THC is the health service and administrative centre of a thana. It is headed by a Thana Health and Family Planning Officer. Besides, there is one family planning officer in a thana who is supported by a number of para medical and non-medical staff. Their offices may or may not be located in the THC.

A Thana Health Complex usually has a 31-bed in-patient department, an out-patient department and a family planning unit which together provide promotive, preventive and limited curative services to the thana population.

4.1.3 District Level

At the district level, MOHFW's presence is bifurcated. The DGFP is represented by a Deputy Director while the DGHS is represented by a Civil Surgeon. Each has his/her own administrative office supported by various categories of staff. In the service area, in every district headquarter there is one district hospital with between 50-200 beds. The hospital is under the management of the Civil Surgeon and is capable of providing more sophisticated curative, laboratory and diagnostic services to the population, in addition to PHC services. It is the secondary level referral facility of MOHFW.

Besides hospital services, DGHS also offers school health services at the district level. The School Health Programme is currently operating in 24 districts. One medical officer is in charge of school health services in each of the programme districts.

For family planning facilities, the district hospitals can provide almost any type of family planning service to the clients. Separately, in certain districts, under the management of the deputy director of DGFP, there is a facility called Maternal and Child Welfare Centre (MCWC) which provides maternal and child health services to both in-door and out-door patients. The MCWC is headed by a medical officer.

4.1.4 Division Level

At this administrative level, the DGFP and DGHS are separately represented by a Division Director. Their role is mostly administrative including transfer of staff, personnel management, information compilation, etc. The Division Director is not directly responsible for any health institution/facility or the provision of health services but he has the authority for staff supervision and to monitor the quality of care.

4.1.5 Headquarter/National Level

The Ministry of Health and Family Welfare along with the headquarters of the two Directorates (DGHS and DGFP) is located in the capital city of Dhaka. Each directorate is headed by a Director General who is the executive head for all health service related administrative tasks and health programme implementation. Under DGFP, there are very few service facilities that are located in the

capital city. On the other hand, barring a few exceptions, almost all the tertiary level health facilities of DGHS are located in the capital city. Tertiary referral facilities include post-graduate hospitals, medical college hospitals, specialized hospitals, general hospitals, etc. They provide highly specialized curative services for both in and out patients, laboratory and diagnostic services and various other kinds of training and educational facilities.

4.2 Health Facilities

The Government operates a large number of health facilities at every administrative level of the government, from ward to national headquarters. In addition, a number of non-government organizations (NGO) are operating at almost every level and throughout the country. Unfortunately, the exact number of NGOs operated health facilities in the country is unknown to us. In addition there are a number of private health facilities of which vital data is not available. An inventory of health facilities, institutions and offices under the administration of the Directorate General of Health Services is presented as **Table 4.2.1**.

TABLE - 4.2.1
Inventory of Health Facilities, Institutions and Offices under DGHS at All Levels 1997

Number	Name and type of Facility
Thana and below	
1362	Union sub-centre
14	Rural health centre (10 beds): Raiganj (Nageswari), Kopilmoni (Paikgacha), Chhakar (Banaripara), Khairhat (Kaulatkhan), Kukua (Amtali), Kalikapur (Chaudhagram), Kaitak (Chatak), Guinak (Nasirnagar), Sandwip, Tabalchhari (Matiranga), Ramchandrapur (Gaibandha), Khokshabar (Serajganj), Kirtipasha (Jhalkathi), Gopinathpur (Gopalganj)
397	Thana Health Complex (31 beds)
2	Health Complex (31 beds): Charjabbar, Dohazzari
460	Thana Health and Family Planning Officer (UHFPO): 63 X Sadar and 397 X Rural
District	
64	Civil Surgeons: 25 X (Category I and IV)* 29 X (Category II) 10 X (Category III)
General Hospital	
1 X 200 beds	Narayanganj
4 X 150 beds	Khulna, Patuakhali, Noakhali, Comilla
22X100 beds	Thakurgaon, Dnajpur, Bogra, Serajganj, Pabna, Natore, Noagaon, Kushtia, Meherpur, Jhenaidah, Magura, Jessore, Bagerhat, Barguna, Barisal, Faridpur, Narayanganj, Tangail, Jamalpur, Hobiganj, Chittagong, Rangamati
1X300 beds	Shahid Suhrawardy Hospital, Dhaka
2X 50 beds	Sarkari, Karmachari Hospital (Dhaka), Saidpur (Nilphamari)
33X50beds	Panchagarh, Nilphamari, Lalmonirhat, Kurigram, Gaibandha, Joypurhat, Chapainawabganj, Chudanga, Narail, Satkhira, Perojpur, Jhalakathi, Bhola, Madaripur, Rajbari, Shariatpur, Gopalganj, Manikganj, Munshiganj, Narsingdi, Gazipur, Sherpur, Kishoreganj, Netrokona, Sunamganj, Moulvibazar, Brahmanbaria, Chandpur, Laxmipur, Feni, Khagrachari, Bandarban, Cox's Bazar
2X50beds	Labour Hospital: Tongi, Sreemongol

Number	Name and type of Facility
Medical College Hospitals	
11	Rajshahi (650 beds), Rangpur (650 beds), Sher-e-Bangla, Barisal (650 beds), Dhaka (1050 beds), Sir Salimullah, Dhaka (600 beds), Mymensingh (650 beds), MAG Osmani, Sylhet (500 beds), Chittagong (996 beds), Faridpur (250 beds), Khulna (250 beds), Comilla (250 beds)
Specialized Hospital	
5	Post Graduate Institute Hospital: BSMMU [former IPGMR] (600 beds), ICVD (250 beds), RIHD (450 beds), NIO (100 beds), IDCH (500 beds)
3	Leprosy Hospital: Nilphamari (20 beds), Dhaka (30 beds), Sylhet (80 beds)
5	Infectious Disease Hospital (IDH): Rajshahi (20 beds), Khulna (20 beds), Dhaka (100 beds), Sylhet (20 beds), Chittagong (20 beds)
4	TB Hospital: Rajshahi (150 beds), Khulna (100 beds), Sylhet (56 beds), Chittagong (100 beds)
8	TB Segregation Hospital: Rangpur (20 beds), Bogra (20 beds), Pabna (20 beds), Jessore (20 beds), Barisal (20 beds), Faridpur (20 beds), Brahmanbaria (20 beds), Feni (20 beds)
1	Dental Hospital: Dhaka (20 beds)
1	Mental Hospital: Pabna (400 beds)
1	Cancer Hospital: Dhaka (100 beds)
Library	Chief Librarian, National Health Library and Documentation Centre
TEMO	Manager, Transport Equipment Maintenance Organization
NEMEW	Manager, National Electro Medical Equipment Maintenance Workshop and Training Centre
Institution/Office	
6	Post Graduate Institutions: Bangabandhu Sheik Mujib Medical University (former IPGMR), Institute of Cardio-Vascular Disease (ICVD), Rehabilitation Institute and Hospital for Disabled (RIHD), National Institute of Ophthalmology (NIO), Institute of Chest Disease and Hospital (IDCH), National Institute of Preventive and Social Medicine (NIPSOM)
4	Institutions: Institute of Public Health (IPH), Institute of Public Health Nutrition (IPHN), Institute of Epidemiology Disease Control and Research (IEDCR), Institute of Cancer Research Hospital (CIRH)
13	Medical College: Rajshahi, Rangpur, Dinajpur, Bogra, Sher-e-Bangla (Barisal), Khulna, Sir Salimullah (Dhaka), Dhaka, Faridpur, Mymensingh, Chittagong, MAG Osmani (Sylhet), Comilla
1	Dental College: Dhaka
8	Medical Assistant Training School (MATS): Bogra, Serajganj, Kushtia, Bagerhat, Faridpur, Tangail, Comilla, Noakhali
2	Institute of Health Technology: Rajshahi, Dhaka
3	Medical sub-depot (MSD): Rajshahi, Khulna, Chittagong
1	Airport Health: Dhaka
2	Port Health: Khulna, Chittagong (Sea and Air)
1	Civil Surgeon: Secretariat Clinic, Dhaka
8	Model Family Planning Clinic: attached with 8 medical college hospitals
1	Sher-e-Bangla Nagar Health Office
1	Skin and V.D. Clinic, Chittagong
23	School Health Clinic: Dinajpur, Rajshahi, Saidpur (Nilphamari), Rangpur, Bogra, Pabna, Kushtia, Jessore, Khulna, Barisal, Faridpur, Armanitola (Dhaka), Azimpur (Dhaka), Sher-e-Bangla Nagar (Dhaka), Narayanganj, Tangail, Mymensingh, Comilla, Maijdee (Noakhali), Begumganj, Sylhet,

Number	Name and type of Facility
	Chittagong, Rangamati
35	Urban Dispensaries: Dinajpur - 1, Rajshahi - 5, Khulna - 3, Dhaka - 17, Chittagong - 9
44	Chest Clinics & Chest Hospitals: National chest clinics and chest hospital, Shymoli (Dhaka), Chest clinics and chest hospital training centre (Dhaka), Thakurgaon, Dinajpur, Rajshahi, Chapai Nawabganj, Natore, Rangpur, Gaibandha, Kurigram, Bogra, Serajganj, Pabna, Kushtia, Meherpur, Chuadanga, Jessore, Magura, Khulna, Satkhira, Bagerhat, Barisal, Perojpur, Bhola, Patuakhali, Faridpur, Gopalganj, Madaripur, Munshiganj, Tangail, Jamalpur, Mymensingh, Kishoreganj, Sunamganj, Maulvibazar, Sylhet, Comilla, Brahmanbaria, Chandpur, Feni, Noakhali, Rangamati, Chittagong, Cox's Bazar
1	College of Nursing: Dhaka (125 seats)
8	Nursing Training Centre (530 seats): Attached with 8 medical college hospitals (180 seats in DMC and 50 seats in each of the other medical colleges)
12	Nursing Training Centre (25 seats each): Dinajpur, Bogra, Pabna, Kushtia, Jessore, Khulna, Patuakhali, Faridpur, Tangail, Comilla, Noakhali, Rangamati
18	Nursing Training Centre (20 seats each): Thakurgaon, Chapai-Nawabganj, Kurigram, Serajganj, Joypurhat, Chuadanga, Magura, Satkhira, Bagerhat, Bhola, Rajbari, Munshiganj, Sherpur, Netrokona, Moulvibazar, Brahmanbaria, Feni, Cox's Bazar
6	Divisions: Rajshahi (16 districts - 123 Thanas), Khulna (10-58), Dhaka (17-119), Chittagong(11-87), Barisal (6-38), Sylhet (4-35) (District-Thana)
Health Directorate	Director General of Health Services, Additional Director General of Health Services, Director (Administration), Director (Finance), Director (PHC&DC), Director (ME&MPD), Director (Hospital), Director (Planning, Res.), Director (Indig. Medicine), Director (CMSD), Director (Drugs), Director (Nursing Services), Chief (Health Information Unit), Chief (Bureau of Health Education).
Other Government Supported Health Institutions	(BIRDEM), Shishu Hospital Bangladesh Institute for Research in Diabetic and Endocrine & Metabolic Disorders

* In these two categories, there is one deputy civil surgeon in each district

Tertiary level (national and specialized) health care is available at 11 medical college hospitals, 5 post-graduate hospitals, 4 tuberculosis hospitals, 5 infectious disease hospitals, and 3 leprosy hospitals. In addition, there are five highly specialized institutions providing health services to patients suffering from cardiovascular diseases, eye diseases, orthopedic problems, mental illness, cancer. As mentioned earlier, many NGOs and private companies are also providing tertiary health care through for-profit and not-for-profit hospital and clinical facilities.

Secondary level health care is now being provided in 64 districts. Fifty-nine district hospitals are functioning. Of them, four are 150-bed, 22 are 100-bed and 33 are 50-bed district hospitals. Besides, there is one 200-bed hospitals (Naranganj) at the district level.

The thana health complexes (THC) scheme was launched to build up a health system infrastructure based on the Primary Health Care Approach during the 1970s. Both indoor and outdoor

facilities are available at THCs. Out of 397 rural thanas, 381 THCs are functioning with 31 beds each (25 general and 6 for MCH services).

The lowest level of static health facilities are located at the union level. Country-wide, there are 4,403 unions. By the end of 1996, 4,068 Union Health and Family Welfare Centres (UHFWC) have been established where only outdoor health and family planning services are provided. Of these 4068, 1,362 are Union sub-centres (USC) and the remaining 2706 are FWCs.

Table 4.2.2 shows that the total number of hospital beds available in Government health facilities under DGHS in Bangladesh in 1996 is 26,280. Of these, about 45% are located at the thana or first referral level. Another 17% of the beds are located at the district hospitals which are the second level referral facilities. There are no cabin or paying beds in THCs and district hospitals. The remaining beds are either in large tertiary general hospitals or specialized hospitals. Out of the 26,280 Government beds in the country, 2.27% (597 beds) are cabin or VIP beds while another 9.75% of them are paying beds for patients who can afford to pay to more comfort and privacy. Ninety percent (23,453) of Government beds are classified as general beds. However, except for the ticket fee, the public system is in principle free of cost to the patients.

TABLE 4.2.2
Number of Hospital Beds by Type, 1996 & 1997
(Under Health)

Sl. Number	Name of Hospital	Cabin	Paying	General	Total
1.	Institute of Post Graduate Medicine and Research (IPGMR)	97	200	303	600
2.	Institute of Rehabilitation and Hospital for the Disabled (RIHD)	0	160	290	450
3.	Institute of Ophthalmology (NIO)	2	38	60	100
4.	Institute of Diseases of Chest and Hospital (IDCH)	78	82	340	500
5.	Institute of Cardiovascular Diseases (ICVD)	10	40	200	250
6.	Dhaka Medical College Hospital	84	386	580	1050
7.	Sir Salimullah Medical College Hospital (SSMCH)	17	155	428	600
8.	Rajshahi Medical College Hospital	12	196	292	500
9.	Rangpur Medical college Hospital	46	156	448	650
10.	Mymensingh Medical College Hospital	40	182	428	650
11.	Chittagong Medical College Hospital	96	360	540	996
12.	M.A.G. Osmani Medical College Hospital, Sylhet	41	131	328	500
13.	Sher-e-Bangla Medical College Hospital, Barisal	25	150	475	650
14.	Faridpur Medical College Hospital	13	55	182	250
15.	Comilla Medical College Hospital	10	50	190	250

Sl. Number	Name of Hospital	Cabin	Paying	General	Total
16.	Khulna Medical College Hospital	16	51	183	250
17.	Infectious Diseases Hospital, Dhaka	0	40	60	100
18.	Infectious Diseases Hospital, Rajshahi, Khulna, Sylhet, Chittagong	0	0	80	180
16.	T.B. Hospital, Rajshahi, Khulna, Sylhet, Chittagong	0	0	406	406
17.	T.B. Segregation Hospital, Bogra, Pabna, Jessore, Barisal, Brahmanbaria, Feni, Rangpur	0	0	160	160
18.	Leprosy Hospital, Dhaka, Sylhet, Nilphamari	0	0	130	130
19.	Saheed Suhrawardhee Hospital	0	30	45	75
20.	Mental Hospital, Pabna	0	120	280	400
21.	Cancer Institute and Hospital	0	0	50	50
22.	Narayangonj Hospital (200 bedded)	10	0	190	200
23.	Sarkary Karmachary Hospital	0	-	50	50
23.	Institute of Mental Health	0	0	50	50
24.	Dental College and Hospital	0	0	20	20
25.	District Hospital	0	0	4200	4200
26.	Thana Health Complex	0	0	11811	11811
27.	Rural Health Centre	0	0	202	202
	TOTAL	597	2582	23001	26280

TABLE 4.2.3
Number of Hospitals and Beds not under DGHS

Sl. No.	Name of Hospital	Number of Hospitals	Number of Beds
	Under DGFP, MOHFW:		
1.	Maternity	96	748
	Under Other Ministries:		
1.	Railway Hospital	9	476
2.	Jail Hospital	19	1003
3.	Police Hospital	20	768
4.	Madakashakti (addiction centres)	1	50
	Non-government		
1.	Voluntary Agencies/Clinics	613	11,371
	TOTAL:	758	14,416

Table 4.2.3 shows that 96 maternity centres/units (including MCWC) with a total of 748 beds are operated by DGFP. Outside MOHFW, 49 hospital facilities are run by different ministries. They provide about 2,297 beds. NGOs and voluntary organizations play a prominent role in the provision of health facilities to the public. There are 613 known hospital facilities run by them. Together, they provide 11,371 hospital beds. If both public and private sectors (including NGOs and voluntary organizations) are counted together, a total of 40,696 hospital beds are currently available countrywide.

4.3 Support Services

4.3.1 Supplies and Storage

The national health service functions are facilitated by a number of support services. One of the most important support component is procurement, supplies, storage and distribution. This important function is performed by the Central Medical Stores and Depot (CMSD) which is headed by a Director. The CMSD operates a number of warehouses across the country, the largest one being in the Chittagong seaport. Supplies coming from overseas are usually cleared and stored in the Port Clearance (warehouse).

At the district level, there are four Medical Sub-Depots (MSD) located in Khulna, Sylhet, Rajshahi and Barisal. Each MSD is managed by one Manager, MSD. In districts without any MSD, a District Reserve Store (DRS) is established which is operated by an Officer-in-charge, DRS. In total, there are 60 DRS in the country. In the thana level, a medical supplies store room is established in every THC and staffed by a store keeper.

4.3.2 Transport, Equipment and Transport Maintenance and Installation

With respect to provision of maintenance services to transport and equipment/electro-medical, there are two agencies under MOHFW, namely, Transport Equipment Maintenance Organization (TEMO) and National Electro-medical Equipment Maintenance Workshop (NEMEW). TEMO is responsible for maintenance of vehicles and transport related equipment like trolleys, forklifts, etc. NEMEW is responsible for the repair and maintenance of electro-medical equipment. It has 18 branches operating at the district level.

4.3.3 Construction and Maintenance

Before the establishment of the Building Planning and Design Unit (BPDU) and the Construction Management Cell and their subsequent merger to form the Construction and Maintenance Management Unit (CMMU) in 1992 under MOHFW, all construction and maintenance work was carried out by the Public Works Department (PWD). CMMU has now taken over the construction work financed by development partners from the PWD. The CMMU is headed by the Chief Engineer, CMMU.

4.4 Education

Bangladesh has a large number of educational and training institutes for producing health professionals in various areas. They also provide a congenial environment to those who are interested in conducting research studies. Although most of the educational and training institutes are located in Dhaka, many, particularly those institutes that provide undergraduate education and basic paramedical training are situated in different districts/cities of the country, as shown in **Table 4.4**.

TABLE 4.4
Institutes Health Education and Training Facilities

Type of Facility	Capacity	Location
Post Graduate Institutes: IPGMR ICVD RIHD NIO IDCH NIPSOM	6 Institutes	DHAKA
Institutions: Institute of Public Health (IPH) Institute of Public Health Nutrition (IPHN) Institute of Epidemiology, Disease Control and Research (IEDCR) Cancer Institute	4 Institutes	DHAKA
Medical College:	13 colleges	Rajshahi Rangpur Dinajpur Bogra Sher-e-Bangla (Barisal) Khulna Dhaka Sir Salimullah (Dhaka) Faridpur Mymensingh Chittagong MAG Osmani (Sylhet) Comilla
Dental College	1 college	Dhaka
Medical Assistant Training School (MATS)	8 Schools	Bogra, Serajganj, Kushtia, Bagerhat, Faridpur, Tangail, Comilla, Noakhali
Para Medical Institute	2 Institutes	Dhaka, Rajshahi
College of Nursing	125 Seats	Dhaka
Nursing Training Centre	Total 530 Seats (180 in DMC, others 50 each)	Attached with 8 medical colleges
Nursing Training Centre	Total 300 Seats (25 seats in each of 12 centres)	Dinajpur, Bogra, Pabna, Kushtia, Jessore, Khulna, Patuakhali, Faridpur, Comilla, Noakhali, Rangamati, Tangail
Nursing Training Centre	Total 360 Seats (20 in each of 18 centres)	Thakurgaon, Chapai Nawabganj, Kurigram, Serajganj, Joypurhat, Chuadanga, Magura, Satkhira, Bagerhat, Bhola, Rajbari, Munshiganj, Sherpur, Netrokona, Moulvibazar, Brahmanbaria, Feni, Cox's Bazar

4.4.1 Medical Education

Under-graduate

Some progress has been achieved in the field of medical education. The annual intake of students in 13 medical colleges and the dental college in Dhaka and two other dental colleges attached with Rajshahi and Chittagong medical colleges were 1,450 (Table 4.4.1.1) and 130 respectively with an average output of 1,200 and 60 graduates respectively. By 1996, five private medical colleges have been established in the country. As these colleges were relatively new, the admission capacity was quite small, varying from 30 to 50 seats.

The cumulative numbers of registered doctors and dentists as of November 1997 were 26,120 and 938 respectively. The output of medical colleges for the period 1971-1997 is shown in Table 4.4.1.2. A total of 24,599 were graduated from the medical colleges during that period. Of them, 18,914 (76.89%) were male and 5,685 (23.11%) were female. It may be noted that the number of female graduates has been steadily increasing.

The number of dental surgeons graduated from 1972-1997 is shown in Table 4.4.1.3. A total of 1052 students had graduated during this period, of which 300 (28.5%) were female and 752 (71.48%) were male.

TABLE 4.4.1.1
Enrollment Capacity of 13 Medical Colleges

Sl. No.	Name of Medical College	Year of Establishment	Admission Capacity
1.	Rajshahi Medical College	1958	150
2.	Rangpur Medical College	1969	150
3.	Barisal Medical College	1968	150
4.	Dhaka Medical College	1946	150
5.	Sir Salimullah Medical College	1962	150
6.	Mymensing Medical College	1962	150
7.	Sylhet Medical College	1962	150
8.	Chittagong Medical College	1957	150
9.	Dinajpur Medical College	1992	50
10.	Bogra Medical College	1992	50
11.	Khulna Medical College	1992	50
12.	Faridpur Medical College	1992	50
13.	Comilla Medical College	1992	50

TABLE 4.4.1.2
Graduation of Doctors

Year	Male	Female	Total Passed	Cumulative Total
Up to 1970	-	-	-	4080
1971	141	13	154	154
1972	391	127	518	672
1973	416	73	489	1161
1974	303	43	346	1507
1975	538	120	658	2165
1976	625	154	779	2944
1977	664	138	802	3746
1978	676	75	751	4497
1979	737	121	858	5355
1980	901	146	1047	6402
1981	888	143	1031	7433
1982	1418	274	1692	9125
1983	1104	304	1408	10533
1984	893	237	1130	11663
1985	974	348	1322	12985
1986	619	142	761	13746
1987	805	374	1179	14925
1988	768	309	1077	16002
1989	676	251	927	16929
1990	903	365	1268	18197
1991	509	165	674	18871
1992	569	244	813	19684
1993	704	332	1036	20720
1994	611	274	885	21605
1995	787	337	1124	22729
1996	763	276	1039	23768
1997	531	220	831	24599

TABLE 4.4.1.3
Graduation of Dental Graduates

Year	Number Passed Bachelor of Dental Surgery		Total Passed	Cumulative Total
	Male	Female		
Up to 1971	NA	NA	NA	61
1972	27	4	31	31
1973	17	2	19	50
1974	16	2	18	68
1975	8	1	9	77
1976	12	1	13	90
1977	5	0	5	95
1978	11	7	18	113
1979	20	7	27	140

Year	Number Passed Bachelor of Dental Surgery		Total Passed	Cumulative Total
	Male	Female		
1980	34	5	39	179
1981	56	12	68	247
1982	22	8	30	277
1983	19	9	28	305
1984	54	15	69	374
1985	42	14	56	430
1986	64	21	85	515
1987	36	13	49	564
1988	37	13	50	614
1989	25	11	36	650
1990	15	7	22	672
1991	34	16	50	722
1992	36	16	52	774
1993	39	17	56	830
1994	36	22	58	888
1995	28	34	62	950
1996	29	17	46	996
1997	30	26	56	1052

Post-Graduate

The intake and output of the institutes of post-graduate medicine in Bangladesh for the period 1992-1997 are shown in **Table 4.4.1.4**. In 1997, the Institute of Post-graduate Medicine and Research and the Bangladesh College of Physician and Surgeons offered diploma courses in 13 disciplines, M. Phil courses in 7 disciplines, M.D. courses in 13 disciplines, Master of Science courses in 5 disciplines and FCPS courses in 14 disciplines.

During the same period, 278 students out of 453 admitted had passed diploma courses in different disciplines. The total number of M.Phil. (Medical Graduate) was 96 as against 154 admitted. Only 13 persons had obtained M.D. out of 145 admitted. The situation is worse for M.Sc. Courses where none was awarded any degree out of 84 admitted. The total number of persons who had obtained fellowships (FCPS) was 263 out of the total admission of 622 students. Most of them obtained their fellowship in Medicine (80) and Surgery (60). They were followed by Paediatrics (32) and Gynaecology and Obstetrics (29). None had obtained fellowship under Clinical Pathology, Bio-chemistry and Dermatology and Venerology.

TABLE - 4.4.1.4
Institute of Postgraduate Medicine and Research (IPGMR), Dhaka,
Number of Postgraduates from 1992 To 1997

Sl. No.	Name of Course	1992		1993		1994		1995		1996		1997		Total 1992-1997	
		A	P	A	P	A	P	A	P	A	P	A	P	A	P
A.	Diploma Course														
1.	DBS&T (blood screening and transfusion)	2	4	2	2	5	0	3	3	7	2	2	1	21	12
2.	DCH (child health)	9	4	9	7	9	2	15	11	9	0	16	13	67	37
3.	DDV (Dermatology and Venereology)	11	8	8	12	11	2	11	11	8	5	8	7	57	95
4.	DGO (Gynae. & Obs)	10	13	14	13	12	1	20	10	10	7	12	7	78	51
5.	DLO (Laryngiology & Otology)	5	8	6	0	9	3	10	6	10	2	10	6	50	25
6.	DO (Ophthalmology)	4	0	11	3	9	1	9	9	6	0	9	4	48	17
7.	DA (Anaesthesia)	7	16	5	12	11	6	10	6	12	2	18	13	63	55
8.	DNM (Nuclear Med.)	3	5	0	5	0	0	10	0	3	0	0	0	16	10
9.	DCP (Clinical Pathology)	0	0	0	0	0	0	1	0	3	0	2	2	6	6
10.	D. Bact. (Bacteriology)	1	1	1	1	4	0	0	6	2	1	3	1	11	10
11.	DDS (Dental Surgery)	5	5	7	2	5	7	6	7	3	1	3	3	29	25
12.	DMRD (Radiology)	9	5	10	5	7	0	11	8	10	3	1	1	48	22
13.	DMRT (Radiotherapy)	4	4	6	4	3	4	1	3	7	1	1	1	22	17
14.	DPM (Psychiatric Medicine)	7	1	5	6	3	1	3	1	4	0	4	4	26	13
	Total	77	74	84	72	88	27	110	81	94	24	89	63	542	395
B.	M. Phil (Medical)														
1.	Anatomy	5	3	6	10	4	0	5	2	5	5	5	5	30	25
2.	Biochemistry	13	7	5	6	5	0	5	2	4	2	4	4	36	21
3.	Microbiology	7	1	2	7	5	0	9	9	4	2	5	5	32	22
4.	Pathology	7	7	7	3	5	3	5	7	2	0	5	5	31	25
5.	Physiology	4	3	2	3	4	1	5	1	5	1	5	5	25	14
6.	Pharmacology	1	6	1	6	6	0	3	1	6	0	3	3	20	16
7.	Virology	0	0	0	0	3	0	1	0	7	0	4	3	11	3
	Total	37	27	23	35	32	4	35	22	27	8	31	30	185	126

S. No.	Name of Course	1992		1993		1994		1995		1996		1997		Total 1992-1997	
		A	P	A	P	A	P	A	P	A	P	A	P	A	P
C. M.D. Course															
1.	Nephrology	2	0	3	1	3	0	5	0	3	2	2	1	18	4
2.	Gastroenterology	1	0	9	2	4	0	6	0	4	0	13	5	37	7
3.	Anaesthesiology	3	0	2	1	4	0	5	1	2	0	1	1	17	3
4.	Neurology	2	0	0	0	4	1	5	0	5	0	1	1	17	2
5.	Paediatrics	4	0	6	0	4	1	5	2	4	0	5	3	28	6
6.	Dermatology	0	0	2	0	5	0	5	0	3	0	6	2	21	2
7.	Int. Med.	4	0	4	0	6	0	6	1	2	1	-	-	22	2
8.	Radiology	0	0	0	0	2	0	5	0	3	0	2	2	12	2
9.	Hepatology	0	0	0	0	0	0	0	0	2	0	-	-	2	0
10.	Cardiology	0	0	0	0	0	0	0	0	1	0	-	-	1	0
	Total	16	0	26	4	32	2	42	4	29	3	30	15	175	28
D. MS Courses															
1.	General Surgery	2	1	8	1	5	1	7	0	4	0	-	-	26	3
2.	Gyn. Surgery	2	0	8	0	3	0	5	1	4	4	-	4	22	9
3.	Otolaryngiology	3	0	4	0	3	0	5	0	2	0	-	2	17	2
4.	Ophthalmology	3	0	0	0	2	1	5	0	4	1	-	-	14	2
5.	Paed. Surgery	0	0	0	0	0	0	3	0	2	0	-	-	5	0
6.	Urology	0	0	0	0	0	0	0	0	0	0	-	-	0	0
	Total	10	1	20	1	13	2	25	1	16	5	-	6	84	16
E. F.C.P.S. Course															
1.	Medicine	29	28	29	17	20	12	22	15	24	8	8	15	13	95
2.	Paediatrics	23	7	27	9	17	1	16	12	14	3	4	9	101	41
3.	Surgery	31	12	28	12	21	11	17	17	17	8	-	18	114	78
4.	Obst. & Gynae	20	6	18	5	14	9	16	7	22	2	29	12	119	41
5.	Ophthalmology	14	1	7	5	6	3	7	0	8	0	3	0	45	9
6.	Psychiatry	3	0	3	1	2	1	0	0	2	0	3	1	13	3
7.	Anaesthesiology	8	3	2	3	1	4	1	5	3	4	10	6	25	25
8.	ENT	9	5	3	4	3	1	3	1	4	3	12	3	34	17
9.	Radiology	5	1	3	1	2	0	0	0	0	0	1	1	19	3
10.	Radiotherapy	5	2	2	0	1	0	0	2	6	1	-	-	14	5
11.	Clinical Pathology	0	0	0	0	0	0	0	0	0	0	-	-	0	0
12.	Physical Medicine	5	0	8	2	5	0	4	1	4	1	2	5	28	9
13.	Haematology	3	0	3	1	4	1	6	1	7	2	-	3	23	8
14.	Biochemistry	0	0	0	0	0	1	0	0	3	1	-	1	3	3
15.	Microbiology	0	0	6	0	0	0	0	0	2	0	-	2	8	2
16.	Dermatology and Venerology	0	0	0	0	1	0	0	0	12	0	-	8	13	8
	Total	155	65	139	60	97	44	92	61	128	33	72	84	683	347

Source: Hospital Record Centre (HRC), IPGMR, Dhaka

Cumulative output of Fellows (FCPS Qualified) and Members (MCPS Qualified) in various Specialties up to January 1999

Specialty	FCPS*	MCPS**
Medicine	302	82
Surgery	280	44
Obstetrics and Gynecology	140	263
Paediatrics	143	89
Ophthalmology	76	42
Ear, Nose and Throat Diseases	37	58
Psychiatry	29	20
Anesthesiology	43	78
Radiology	14	17
Radiography	10	4
Clinical Pathology	1	91
Hematology	13	-
Microbiology	3	-
Physical Medicine	18	-
Dermatology and Venereology	-	9
Forensic Medicine	-	39
Dental Surgery	-	25
Family Medicine	-	24
Histopathology	5	-
Biochemistry	4	-
Total	1,118	875

*from 1968 to January 1999

**from 1973 to January 1999

NIPSOM offers post-graduate degrees in eight subject areas, namely, Community Medicine, MCH & FP, Industrial Health, Health Education, Public Health, Hospital Management, Epidemiology and Preventive and Social Medicine (M. Phil.). **Table 4.4.1.5** shows that between 1993 and 1998, a total of 393 MPHs and 27 M. Phils. have been awarded to students who successfully completed their studies in the Institute.

A small number of post-graduate students are admitted in four specialized institutes in Dhaka, namely, the Institute of Ophthalmology, Rehabilitation Institute and Hospital for the Disabled, the Institute of Diseases and Chest Hospital, and the Institute of Cardio-vascular Diseases. In 1997, a total of 26 post-graduate diplomas, 3 FCPS, 13 Master's Degrees and 1 Doctoral Degree were awarded to those who successfully completed their studies in these 4 Institutes. The number of admissions and outputs since the beginning of the four Institutes are presented in **Tables 4.4.1.6a-c**.

TABLE 4.4.1.5
National Institute of Preventive and Social Medicine (NIPSOM)

Session	Community Medicine		MCH&FP		Industrial Health		Health Education		Public Health		Hospital Management		Epidemiology		M.Phil.†	
	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed	Enrolled	Passed
1991-1992⊕	19	17	14	13	12	12	13	12	22	22	11	11	-	-	5	2
1992-1993⊕	13	16	12	12	9	8	15	14	24	22	13	13	-	-	6	4
1993-1994♣	18	15	14	10	10	10	13	12	18	17	12	12	-	-	5	5
1994-1995♣	17	17	14	13	7	5	14	15	18	17	14	14	-	-	6	6
1995-1996♣	16	15	8	9	7	7	15	12	21	20	13	12	8	8	5	5
1996-1997♣	15	13	14	10	8	8	14	9	18	14	13	11	10	7	6	5
1997-1998♣	14	12	16	16	7	5	15	10	19	19	15	12	8	7	6	6
Total	112	105	92	83	60	55	99	84	140	131	91	85	26	22	39	33

†M.Phil. in Preventive and Social Medicine

⊕Diploma conferred for all courses except Health Education (DPH)

♣Degree conferred MPH

TABLE 4.4.1.6a
Institute of Ophthalmology, Dhaka

Sl. No.	Name of Course	1992		1993		1994		1995		1996		1997		Total	
		A	P	A	P	A	P	A	P	A	P	A	P	A	P
1	F.C.P.S. (Eye)	11	6	6	5	3	5	7	2	9	7	6	3	42	28
2	Diploma in Ophthalmology	19	6	15	17	18	17	14	9	13	16	15	10	94	75
3	M.S. (Eye)	2	1	3	1	5	0	7	1	7	3	12	3	36	9
	TOTAL	32	13	24	23	26	22	28	12	29	26	33	16	172	112

A: Admission P: Passed

TABLE 4.4.1.6b
Rehabilitation Institute and Hospital for the Disabled (RIHD), Dhaka

Sl. No.	Name of Course	1991		1992		1993		1994		1995		1996		1997		Total 1991-1997	
		A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P
1	Orthopaedic Surgery (Diploma)	12	5	6	8	17	13	7	6	30	13	NA	NA	4	3	76	48
2	Orthopaedic Surgery (M.S.)	19	5	17	2	15	7	17	6	23	9	NA	NA	16	9	107	38
3	Physiotherapy (B.Sc.)	0	0	0	0	23	0	30	0	-	-	NA	NA	25	0	75	0
	TOTAL	31	10	23	10	55	20	54	12	53	22	NA	NA	45	12	258	86

A: Admission P: Passed

TABLE 4.4.1.6c
Institute of Diseases and Chest Hospital, Dhaka

Sl. No.	Name of Course	1990		1991		1992		1993		1994		1995		1996		1997		TOTAL	
		A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P	A	P
1	Diploma in TB and Chest Dis.	17	1	18	1	21	16	18	18	17	6	13	12	7	10	1	7	12	104
2	Doctor of Medicine	0	0	0	0	0	0	2	0	3	0	7	4	18	0	1	1	40	5
	Total	17	1	18	1	21	16	20	18	20	6	20	16	25	10	2	8	16	106

A: Admission
P: Passed

TABLE 4.4.1.6d
Institute of Cardio-Vascular Diseases (ICVD)

Sl. No.	Type	Name of Course	1992		1993		1994		1995		1996		1997		TOTAL	
			A	P	A	P	A	P	A	P	A	P	A	P		
1	M.D.	Cardiology	2	6	3	10	6	10	11	22	3	18	24	10	49	76
2	M.S.	Cardio-thoracic Surgery	3	6	2	4	5	2	6	13	2	14	15	1	33	40
3	Diplo ma	Cardiology	3	10	3	8	18	3	9	18	7	10	10	6	50	55
		TOTAL	8	22	8	22	29	15	26	53	12	42	49	17	132	171

A: Admission

P: Passed

4.4.2 Paramedical and health technology

The graduation of health technologists during 1965-1997 in the two paramedical institutes is shown in Table 4.4.2.1. It can be concluded from Table 4.4.2.1 that the output of health technologists and paramedical was far below the national requirement.

TABLE - 4.4.2.1
Graduation of Medical Technologists in different disciplines
(1965-1995)

Year	Laboratory Technician	Radiographer	Pharmacist	Sanitary Inspector	Dentist
1965	7	1	16	26	-
1966	6	7	2	26	2
1967	6	2	8	23	3
1968	7	2	17	6	1
1969	10	5	39	18	2
1970	16	11	24	23	7
1971	-	2	21	8	-
1972	9	11	20	27	3
1973	17	6	26	7	7
1974	-	-	7	41	0
1975	-	-	-	21	0
1976	26	14	-	34	2
1977	37	14	-	39	9
1978	31	21	-	28	16
1979	54	19	-	46	10
1980	39	16	-	28	9
1981	39	12	-	30	5
1982	47	18	-	28	7
1983	39	12	-	25	9
1984	33	17	20	31	10

Year	Laboratory Technician	Radiographer	Pharmacist	Sanitary Inspector	Dentist
1985	27	15	20	5	4
1986	219	18	0	58	49
1987	75	24	39	11	13
1988	107	83	70	16	15
1989	99	85	36	0	10
1990	76	137	50	0	14
1991	16	13	2	0	3
1992	74	36	26	13	16
1993	49	55	27	20	11
1994	54	16	7	7	1
1995	184	69	32	9	18
1996	41	27	31	18	14
1997	9	15	5	4	0
Cumulative Total	1453	773	545	676	270

4.4.3 Nursing

The College of Nursing, situated in Mohakhali, Dhaka, offers a two year degree to nursing diploma holders. Students graduate with a B.Sc. (Nursing) or B. Sc. (Public Health). A new system has been accepted by the Dhaka University and Bangladesh Nursing Council and will be implemented from the beginning of the academic year 1999. Annually, the 38 nursing institutes under the Directorate of Nursing Service offer a four year diploma training programme to those who want to pursue nursing as a career. The location of these institutes and their capacities are presented in **Table 4.4.3.1**. The annual maximum capacity for new students is 1135. However, the actual number admitted between 1992 and 1996 were below this maximum capacity. Between 1992 and 1995, 1075 new students were admitted every year. In 1996, no new student was admitted due to disputes in the Nursing Directorate. However, in 1997, 1,093 new students were admitted.

The total number of graduates during the period 1992-1997 were 6,016 persons indicating that about 10 percent of the students never graduated. The cumulative number of registered nurses, including assistant nurses, from 1992 to 1999, along with other statistics are presented in **Table 4.4.3.2**.

TABLE 4.4.3.1
Nursing Institutes under the Directorate of Nursing Services

Sl. No.	Location of Nursing Training Institute	No. of Seats Sanctioned for New Students Anually	Total Seats in the Institute
8 attached to medical college hospitals			
1.	Dhaka	180	720
2.	Mitford	20	80
3.	Mymensingh	25	100
4.	Chittagong	50	200
5.	Sylhet	50	200
6.	Rajshahi	50	200
7.	Rangpur	50	200
8.	Barisal	50	200
	Sub-total	475	1900
18 attached to New District Hospitals			
1.	Mushiganj	20	80
2.	Natrakona	20	80
3.	Rajbari	20	80
4.	Sherpur	20	80
5.	Brahmanbaria	20	80
6.	Feni	20	80
7.	Cox's Bazar	20	80
8.	Sirajganj	20	80
9.	Moulvibazar	20	80
10.	Chapai Nawabganj	20	80
11.	Joypurhat	20	80
12.	Kurigram	20	80
13.	Thakurgaon	20	80
14.	Chuadanga	20	80
15.	Magura	20	80
16.	Bagerhat	20	80
17.	Satkhira	20	80
18.	Bhola	20	80
	Sub-total	360	1440
12 attached to General Hospitals			
1.	Tangail	25	100
2.	Faridpur	25	100
3.	Comilla	25	100
4.	Noakhali	25	100
5.	Rangamati	25	100
6.	Pabna	25	100
7.	Dinajpur	25	100
8.	Bogra	25	100
9.	Khulna	25	100
10.	Jessore	25	100
11.	Kushtia	25	100
12.	Patuakhali	25	100
	Sub-total	300	1200
	TOTAL	1135	4540

TABLE 4.4.3.2
Nursing Human Resources

Type of information	1992	1993	1994	1995	1996	1997	1998	1999
Total admission	1075	1075	1075	1075	Nil	1093	1055	1090
No. Graduated	808	1195	865	1050	1052	1046	823	N/A
No. Registered	9254	10065	10946	11785	12764	13725	14660	15664
Posts sanctioned by the Government	-	-	7906	8670	8670	8670	9269	11059
Government Posts filled	-	-	-	8392	8308	8308	9069	10811

4.5 Human Resources for Health

The health sector is not only labour intensive, but it requires a large variety of skills to support and manage a wide range of services. This is evidenced by the large number of health professionals engaged in various types of work (Table 4.5.1). As on June 1996 a total of 78,928 staff positions of different categories were sanctioned under revenue head of the Directorate General of Health Services. Of them, 9,209 were Class-I positions, 637 were Class-II, 48,809 were Class-III and 20,273 were Class-IV. A total of 72,333 positions were filled. Of them, 55,705 were male and 16,628 were female. The total number of female employees constituted 21% of those in position (Table 4.5.2). The total number of field personnel was 26,600 which included domiciliary workers and field supervisors: Health Assistants (21,000), Assistant Health Inspectors (4,200), Health Inspectors (1,400) and Sanitary Inspectors (491).

There were 8,749 positions for doctors, 536 for dental surgeons and 2,254 for medical assistants. A total of 6,580 positions were sanctioned for nurses of different categories. For the different categories of technicians, the total number of sanctioned positions was 5,206. The distribution of different categories of medical personnel in five divisions excepting teaching positions is shown in Table 4.5.4. The total number of personnel was 5,995, of which Dhaka Division had 1,639 personnel, closely followed by Rajshahi (1,589) and Chittagong (1,550 including Sylhet). The lowest number of personnel was found in Barisal with only 449 in position followed by Khulna (767). The number of specialists/consultants posted by DGHS in each district is presented in Table 4.5.5.

The total number of administrative support personnel was 8,839. This category includes Head Assistant, Office Assistant, LDA-cum-typist, Accountant, Cashier, Storekeeper, Steno-typist, Stenographer, Driver, etc. More than 27.5% of all personnel could be classified as menial staff, numbering 22,854. This category includes Wardboy, Aya, MLSS, Packer, Loader, Guard, Mali, Sweeper, etc.

TABLE 4.5.1
Human Resources for Health

Category and Number	Number*
Registered doctors as on 20/11/97	26,535
Doctors under health services as on	9,000
Registered nurses as on December 1997**	15,408
Nurses under health services***	4,072
Registered dentists as on 20/11/97	938
Dentists under health services	536
Statisticians	77
Health educationists	117
Medical assistants	2,254
Statisticians (Thana)	460
Dental technicians	484
Sanitary inspectors	490
Radiographer	610
Laboratory technicians	1,414
Pharmacists	2,616
ECG technicians	13
Radiotherapists	34
Physiotherapists	27
Occupational therapists	4
EPI technicians	460
Health inspectors	1,400
Assistant health inspectors	4,200
Health assistants	21,000
Homeopaths	15,000/100F
Ayurvedi doctors (as on 8/3/95)	8,000
Dai/midwife as on 8/3/95	109,825

*Registration of doctors, nurses, dentists and other health professionals is through the various Councils, however, none has a living register and retired or deceased names are not regularly removed.

**In 1998 and 1999, there were 16,311 and 16,900 nurses respectively registered.

***In 1998 and 1999, there were 9,021 and 10,811 nurses employed under health services.

TABLE - 4.5.2
Posts sanctioned and filled by category
and percentage of female in these categories, 1997

Sl. No.	Category of Personnel	No. of Sanctioned Posts	No. in Position	Number and percentage of Female Employees	
1.	Medical Doctor	10044	9497	1622	17.08%
2.	Dental Surgeon	550	320	62	19.38
3.	Other Non-medical Officer:				
	1. Class - I	405	247	5	2.02
	2. Class - II	403	294	9	3.06
4.	Nurse:				
	1. Class - I	44	37	36	97.30
	2. Class - II	238	217	210	96.77
	3. Class - III	6308	6182	5375	86.94
5.	Medical Assistants	2254	2089	69	3.30
6.	Medical Technologist/ Pharmacist	2752	2351	15	0.64
7.	Medical Technologist/ Radiographer	668	441	2	0.45
8.	Medical Technologist/ Dental	475	166	15	9.04
9.	Medical Technologist/ Laboratory	1311	1152	39	3.38
10.	Sanitary Inspector	491	424	0	0
11.	Health Inspector	1400	1200	6	0.5
12.	Assistant Health Inspector	4200	3900	4	0.10
13.	Health Assistant	21000	19524	2600	13.32
14.	Administrative Support Personnel	9719	6200	500	8.06
15.	Mental Staff	22854	20873	4029	19.30
	TOTAL:	84308	74573	14594	19.57%

TABLE 4.5.3
Positions of Medical (Doctors) Personnel (Non-Teaching)
By Division, 1996

Sl. No.	Name of Post	Rajshahi	Khulna	Barisal	Dhaka	Chittagong	Total
1	2	3	4	5	6	7	
1	Director	1	1	1	1	1	5
2	Assistant Director (Adm.)	1	1	0	1	1	4
3	Assistant Director (D.C.)	1	2	1	1	1	6
4	Civil Surgeon	16	10	6	18	15	65
5	Deputy Civil Surgeon	8	3	1	7	6	25
6	Medical Officer	767	341	189	813	716	2826
7	Senior Consultant	32	36	13	40	34	155
8	Junior Consultant	35	28	14	37	31	145
9	R.M.O.	123	63	38	121	128	473
10	Anaesthetist	5	2	2	5	4	18
11	Radiologist	15	2	6	17	14	54
12	Dental Surgeon	122	53	38	122	123	458
13	Pathologist	15	3	6	17	15	56
14	Superintendent	0	2	0	1	1	4
15	Resident Physician	0	1	0	0	0	1
16	Resident Surgeon	0	1	0	0	0	1
17	Assistant Registrar	0	10	0	0	0	10
18	E.M.O.	0	1	0	0	3	4
19	Port Health Officer	0	1	0	1	1	3
20	Assistant Port Health Officer	0	1	0	3	2	6
21	TH&FPO	123	58	38	120	122	461
22	Medicine Specialist	108	49	32	104	110	403
23	Surgical Specialist	108	49	32	104	110	403
24	Gynae Specialist	108	49	32	104	110	403
25	Sub Assistant Surgeon	0	0	0	2	0	2
26	Manager	1	0	0	0	1	2
27	Bacteriologist	0	0	0	0	1	1
	TOTAL:	1589	767	449	1639	1550	5994

TABLE 4.5.3
Positions of Medical (Doctors) Personnel (Non-Teaching)
By Division, 1998

Sl. No.	Name of Post	Rajshahi	Khulna	Barisal	Dhaka	Chittagong	Total
1	2	3	4	5	6	7	
1	Director	1	1	1	1	1	5
2	Assistant Director (Adm.)	1	1	0	1	1	4
3	Assistant Director (D.C.)	1	2	1	1	1	6
4	Civil Surgeon	16	10	6	18	15	65
5	Deputy Civil Surgeon	8	3	1	7	6	25
6	Medical Officer	916	420	238	993	862	3429
7	Senior Consultant	40	33	13	53	52	191
8	Junior Consultant	37	29	15	47	34	162
9	R.M.O.	128	69	41	125	132	495
10	Anaesthetist	11	12	3	12	14	52
11	Radiologist	16	3	6	22	15	62
12	Dental Surgeon	122	53	38	122	123	458
13	Pathologist	16	6	7	22	16	67
14	Superintendent	0	2	0	1	1	4
15	Resident Physician	0	1	0	1	0	2
16	Resident Surgeon	0	1	0	1	0	2
17	Assistant Registrar	17	23	11	23	22	96
18	E.M.O.	58	48	15	62	46	229
19	Port Health Officer	0	1	0	1	1	3
20	Assistant Port Health Officer	0	1	0	3	2	6
21	TH&FPO	124	58	38	120	122	462
22	Medicine Specialist	108	49	32	104	110	403
23	Surgical Specialist	108	49	32	104	110	403
24	Gynae Specialist	108	49	32	104	110	403
25	Sub Assistant Surgeon	0	0	0	2	0	2
26	Manager	1	0	0	0	1	2
27	Bacteriologist	0	0	0	0	1	1
TOTAL:		1837	924	530	1950	1798	7039

Source: DGHS

TABLE 4.5.4
Distribution of Medical Consultants by Specialty by District, 1992

Name of District	No. of Senior Medical Consultants (SC) and Junior Medical Consultants (JC)										Total	Remarks/Other
	Surgery	Medicine	Mid-wifery	Pediatrics	Ophthalmology	ENT	Dermatology	Orthopedic				
Pachagrah	1 SC		1 JC	1 JC							3	
Thakurgaon	1 SC		1 SC	1 JC	1 JC						4	
Dinajpur	1 SC	1 SC	1 JC	1 SC		1 JC					5	
Nilphamari	2 SC	2 SC	2 JC	1 JC							7	Including Saidpur
Lalmonirhat	1 JR	1 SC	1 SC	1 JC							4	
Kurigram	1 SC	1 SC	1 JC	1 JC							4	
Gaibandha	1 SC		1 SC	1 JC		1 JC					4	
Joypurhat	1 SC		1 JC	1 SC							3	
Bogra	1 SC	1 SC	1 JC	1 SC		1 JC					5	
Serajgonj	1 SC		1 SC	1 JC		1 JC					4	
Pabna		1 SC	1 JC	1 SC		1 JC		1 JC			5	
Natore	1 SC	1 JC	1 SC	1 SC							4	
Noagaon	1 SC	1 SC	1 JC	1 SC							4	
C. Nawabgonj	1 JC	1 SC		1 SC							3	
Kushia	1 SC	1 SC	1 JC	1 SC		1 JC					5	
Meherpur	1 SC		1 JC	1 SC							3	
Chuadanga	1 JC		1 SC	1 SC							3	
Jhenaidah	1 JC		1 SC	1 SC							3	
Magura	1 SC	1 SC	1 JC	1 JC							4	
Narail	1 SC	1 JC	1 SC	1 JC							4	
Jessore	1 SC		1 JC	1 SC		1 JC					4	
Satkhira	1 SC	1 SC	1 JC	1 JC							4	
Khulna	1 SC 1 JC	1 SC 2 JC	1 SC 1 JC	1 SC	1 SC 1 JC	1 SC 1 JC	1 SC	2 SC			17	1 SC (Radio.) 1 JC (Anaes.)
Bagerhat		1 JC	1 SC	1 JC							4	
Perojpur	1 SC	1 SC	1 JC	1 JC							4	
Jhalakathi	1 JC		1 SC	1 SC							3	

Name of District	No. of Senior Medical Consultants (SC) and Junior Medical Consultants (JC)										Remarks/ Other
	Surgery	Medicine	Mid-wifery	Pediatrics	Ophthalmology	ENT	Dermatology	Orthopedic	Total		
Barguna	1 SC	1 SC	1 JC	1 JC					4		
Patuakhuli	1 SC		1 JC	1 SC		1 JC			4		
Bhola	1 SC	1 JC	1 SC	1 SC					4		
Barisal	1 JC	1 SC	1 SC				1 JC		4		
Shariatpur	1 SC	1 JC	1 SC	1 JC					4		
Madaripur	1 SC	1 SC	1 JC	1 JC					4		
Gopalganj	1 SC		1 SC	1 JC					3		
Faridpur		1 SC	1 JC	1 SC		1 JC			4	1 SC (Radio.)	
Rajbari	1 SC	1 SC	1 JC	1 SC					4		
Manikgonj			1 SC	1 JC					2	1 SC (Radio.)	
Munshigonj	1 SC		1 JC	1 JC	1 SC				4		
Narayanganj	2 JC 1 SC	2 SC 1 JC	2 SC 1 JC	1 SC	1 SC	1 SC		1 SC 1 JC	15	4 SC (Radio., Path., Anaes., Psych.) + 3 JC	
Narsingdi	1 JC	1 SC							2		
Gazipur	1 SC	2 SC	1 SC 1 JC	1 JC				1 JC	7	Including Tongi	
Tangail			1 JC	1 SC		1 JC		1 SC	4		
Jamalpur	1 JC	1 SC	1 SC	1 SC					5		
Sherpur	1 SC	1 SC	1 JC	1 JC		1 JC			4		
Kishoregonj	1 SC		1 JC	1 SC					3		
Netrokona	1 SC	1 JC	1 SC	1 JC					4		
Sunamgonj	1 SC	1 JC	1 SC	1 SC					4		
Moulvibazar	1 SC		1 SC	1 JC					3		
Hobigonj	1 JC	1 SC	1 SC	1 JC					4		
Brahmanbaria	1 SC	1 JC	1 SC	1 SC					4		
Cornilla	2 SC 1 JC	2 SC 1 JC	1 SC 1 JC	2 SC	1 SC	1 SC 1 JC	1 SC	1 SC	15	4 SC (Radio., Path., Anaes., Psych.) + 3 JC (Path., Anaes., BT.)	

Name of District	No. of Senior Medical Consultants (SC) and Junior Medical Consultants (JC)										Remarks/Other
	Surgery	Medicine	Mid-wifery	Pediatrics	Ophthalmology	ENT	Dermatology	Orthopedic	Total		
Chandpur	1 SC		1 SC	1 JC						3	
Laxmipur	1 JC	1 SC	1 SC	1 JC						4	
Noakhali	1 SC	1 SC	1 JC	1 SC	1 JC	1 JC				6	
Feni		1 SC	1 JC	1 SC				1 SC		4	
Khagrachhari	1 SC	1 SC	1 JC							3	
Rangamati			1 SC	1 JC		1 JC		1 SC		4	
Bandarban			1 JC	1 JC		1 SC	1 SC			4	
Ramgarh	1 SC	1 SC	1 JC							3	
Cox's Bazar	1 SC		1 SC	1 SC	1 JC					4	
TOTAL	57	46	63	55	8	18	7	10	264		11 SC(Radio, Path., Anaes., Psych.) 7 JC (Anaes., Path., Blood Transfusion)

TABLE 4.5.4
Distribution of Medical Consultants by Specialty by District, 1998

Name of District	No. of Senior Medical Consultants (SC) and Junior Medical Consultants (JC)										Total	Remarks/ Other
	Surgery	Medicine	Mid-wifery	Pediatrics	Ophthalmology	ENT	Dermatology	Orthopedic				
Pachagrah	1 SC		1 JC	1 JC				1 SC			4	
Thakurgaon	1 SC		1 SC	1 JC	1 JC	1 JC					5	
Dinajpur	1 SC	1 SC	1 JC	1 SC	1 JC	1 JC	1 SC				8	
Niuphamari	2 SC	2 SC	2 JC	1 JC				1 JC			8	Including Saidpur
Lalmonirhat	1 JC	1 SC	1 SC	1 JC				1 JC			5	
Kurigram	1 SC	1 SC	1 JC	1 JC				1 JC			5	
Gaibandha	1 SC		1 SC	1 JC		1 JC	1 JC	1 JC			6	
Joypurhat	1 SC		1 JC	1 SC				1 JC			4	
Bogra	1 SC	1 SC	1 JC	1 SC		1 JC	1 SC				6	
Serajgonj	1 SC		1 SC	1 JC		1 JC		1 JC			5	
Pabna		1 SC	1 JC	1 SC		1 JC	1 SC	1 JC			7	
Natore	1 SC	1 JC	1 SC	1 SC				1 SC			5	
Noagaon	1 SC	1 SC	1 JC	1 SC				1 JC			5	
C. Nawabgonj	1 JC	1 SC		1 SC				1 JC			4	
Kushtia	1 SC	1 SC	1 JC	1 SC		1 JC		1 JC			6	
Meherpur	1 SC		1 JC	1 SC							3	
Chuadanga	1 JC		1 SC	1 SC							3	
Jhenaidah	1 JC		1 SC	1 SC				1 JC			4	
Magura	1 SC	1 SC	1 JC	1 JC				1 JC			5	
Narail	1 SC	1 JC	1 SC	1 JC				1 JC			5	
Jessore		1 SC	1 JC	1 SC	1 JC	1 JC	1 SC	1 SC	1 JC		9	
Satkhira	1 SC	1 SC	1 JC	1 JC				1 SC			5	
Khulna	1 SC	1 SC	1 SC	1 SC	1 SC	1 SC	1 SC	2 SC			17 + 2	1 SC (Radio.) 1 JC (Anaes.)
	1 JC	2 JC	1 JC			1 JC						

Name of District	No. of Senior Medical Consultants (SC) and Junior Medical Consultants (JC)										Remarks/ Other
	Surgery	Medicine	Mid-wifery	Pediatrics	Ophthalmology	ENT	Dermatology	Orthopedic	Total		
Bagerhat		1 JC	1 SC	1 JC				1 SC, 1 JC	5		
Perojpur	1 SC	1 SC	1 JC	1 JC				1 JC	5		
Jhalakathi	1 JC		1 SC	1 SC				1 JC	4		
Barguna	1 SC	1 SC	1 JC	1 JC				1 JC	5		
Patuakhuli	1 SC		1 JC	1 SC	1 JC			1 JC	5		
Bhola	1 SC	1 JC	1 SC	1 SC				1 JC	5		
Barisal	1 JC	1 SC	1 SC			1 JC			4		
Shariatpur	1 SC	1 JC	1 SC	1 JC				1 JC	5		
Madaripur	1 SC	1 SC	1 JC	1 JC				1 JC	5		
Gopalganj	1 SC		1 SC	1 JC				1 JC	4		
Faridpur	1 JC	1 SC	1 JC	1 SC		1 JC 1 SC	1 SC 1 JC	1 SC 1 JC	10+1		1 SC (Radio.)
Rajbari	1 SC 1 JC	1 SC 1 JC	1 JC	1 SC				1 JC	7		
Manikgonj			1 SC	1 JC		1 JC		1 SC	4		
Munshigonj	1 SC		1 JC	1 JC		1 SC		1 JC	5		
Narayanganj	1 SC 2 JC	2 SC 1 JC	2 SC 1 JC	1 SC	1 SC	1 SC	1 SC	1 SC 1 JC	15 + 4 + 3		4 SC (Radio., Path., Anaes., Psych.) + 3 JC
Narsingdi	1 JC	1 SC	1 SC	1 JC				1 SC	5		
Gazipur	1 SC	2 SC	1 SC 1 JC	1 JC				1 JC	7		Including Tongi
Tangail			1 JC	1 SC	1 JC	1 SC	1 SC	1 SC	6		
Jamalpur	1 JC	1 SC	1 SC	1 SC	1 JC	1 JC			6		
Sherpur	1 SC	1 SC	1 JC	1 JC				1 JC	5		
Kishoregonj	1 SC		1 JC	1 SC					3		
Netrokona	1 SC	1 JC	1 SC	1 JC				1 JC	5		
Sunamgonj	1 SC	1 JC	1 SC	1 SC		1 SC		1 JC	6		
Moulvibazar	1 SC	1 SC	1 SC	1 JC					4		

Name of District	No. of Senior Medical Consultants (SC) and Junior Medical Consultants (JC)										Remarks/ Other
	Surgery	Medicine	Mid-wifery	Pediatrics	Ophthalmology	ENT	Dermatology	Orthopedic	Total		
Hobigonj	1 JC	1 SC	1 SC	1 JC				1 JC	5		
Brahmanbaria	1 SC	1 JC	1 SC	1 SC				1 JC	5		
Comilla	2 SC 1 JC	2 SC 1 JC	1 SC 1 JC	2 SC	1 SC	1 SC 1 JC	1 SC	1 SC	15 + 4 + 3	4 SC (Radio, Path., Anaes., Psych.) + 3 JC (Path., Anaes., Blood Trans.)	
Chandpur	1 SC		1 SC	1 JC				1 JC	4		
Laxmipur	1 JC	1 SC	1 SC	1 JC				1 JC	5		
Noakhali	1 SC	1 SC	1 JC	1 SC	1 JC		1 SC		6 + 1	1 JC (Anaes)	
Feni	1 SC	1 SC	1 JC	1 SC		1 JC		1 SC	6		
Khagrachhari	1 SC	1 SC	1 JC						3		
Rangamati			1 SC	1 JC		1 JC		1 SC	4		
Bandarban			1 JC	1 JC				1 SC 1 JC	5		
Chittangong	1 SC		1 JC			1 SC			3		
Ramgarh	1 SC	1 SC	1 JC						3		
Cox's Bazar	1 SC		1 SC	1 SC	1 JC				4		
TOTAL	60 (SC 44 JC 16)	50 (SC 37 JC 13)	65 (SC 31 JC 34)	57 (SC 29 JC 28)	12 (SC 3 JC 9)	26 (SC 11 JC 15)	14 (SC 11 JC 3)	52 (SC 16 JC 36)	336 (SC 182 JC 154)	11 SC (Radio, Path., Anaes., Psych.) 7 JC (Anaes., Path., Blood Transfusion)	

4.5.1 Teaching Professionals

A total of 524 professionals (Assistant Professor and above) of different categories were sanctioned for 8 medical colleges (Table 4.5.1.1). There were 29 categories of disciplines in each medical college. The total numbers of professors, associate professors and assistant professors were 150, 186 and 188 respectively. The number of professors ranged from 13 in Rangpur Medical College to 31 in Dhaka Medical College. Discipline wise, pathology has the highest number of professors (49), followed by paediatrics (43) and physiology (35). There was only professor in the discipline of radiology. Other disciplines which had relatively few professors were nuclear medicine (2), neurosurgery (4), physical medicine (6), dentistry (7) and nephrology (7).

It is interesting to note that the number of assistant professors and associate professors are about the same (188 and 186 respectively). The ratio of professor to assistant professor is 1:1.25 and of associate professor to assistant professor is almost 1:1. This implies that the promotional opportunity for the teaching professionals in medical colleges is much higher than those in medical service cadre.

TABLE - 4.5.1.1
Medical Teaching Professionals in Medical Colleges, 1996

Name of Discipline	Rangpur	Rajshahi	Barisal	Sir-Sabimullah	Dhaka	Mymensingh	Sylhet	Chittagong	Total	All																	
1*	2	3	1	2	3	1	2	3	1	2	3																
Anatomy	1	1	1	2	1	1	1	1	8	9	26																
Physiology	1	1	2	1	1	2	2	1	9	12	35																
Pharmacology	1	1	1	1	1	1	1	1	8	8	23																
Pathology	1	2	1	2	3	2	1	3	11	11	49																
Community Medicine	0	1	1	2	0	1	1	1	7	10	20																
Med.	1	1	1	1	1	1	1	1	8	7	22																
Jurisprudence																											
Medicine	2	1	2	1	0	2	1	0	19	8	29																
Surgery	2	1	2	2	1	2	1	2	17	10	31																
Midwifery	1	1	1	1	1	1	1	1	12	8	26																
Ophthalmology	1	1	1	1	1	1	1	1	8	1	17																
ENT	0	1	1	1	1	0	1	1	4	8	19																
Pediatrics	1	1	3	2	3	1	2	4	17	15	45																
Radiotherapy	0	1	1	1	2	0	1	0	3	7	14																
Radiology	0	1	1	1	2	0	1	1	5	7	19																
Anaesthesiology	0	1	1	1	1	1	0	1	2	7	15																
Nuclear Medicine	0	0	0	0	1	0	0	0	1	1	2																
Physical Medicine	0	1	1	0	1	0	0	0	2	3	6																
Dermatology	0	1	0	1	0	1	0	0	1	6	9																
Urology	0	0	0	0	1	0	0	0	1	0	1																
Blood Transfusion	0	1	1	1	1	0	1	1	4	7	11																
Cardiology	1	2	1	1	2	1	1	1	7	8	15																
Ped. Surgery	0	0	0	0	1	0	0	1	1	3	7																
Orth. Surgery	0	1	1	1	1	1	1	1	1	8	16																
Neuro Surgery	0	0	0	0	0	0	0	0	1	3	4																
Dentistry	0	1	0	0	0	0	0	0	1	0	7																
Nephrology	0	0	1	1	1	0	0	0	3	4	7																
Microbiology	0	1	0	1	0	0	1	1	2	5	9																
Biochemistry	0	1	0	0	1	1	0	1	1	2	9																
Psychiatrics	0	1	0	1	0	1	0	1	1	0	13																
Total:	13	20	21	15	24	26	18	26	20	19	25	20	31	25	33	15	21	20	15	23	21	24	22	27	150	186	524

*1 = Professor 2 = Associate Professor 3 = Assistant Professor

TABLE 4.5.1.2
Teaching & Research Manpower according to Speciality, 1998

Discipline	Professor						Associate Professor						Assistant Professor						Curator						Lecturer						Medical Officer					
	Sanc		Existing		V		Sanc		Existing		V		Sanc		Existing		V		Sanc		Existing		V		Sanc		Existing		V		Sanc		Existing		V	
	M	F	M	F	T	V	M	F	M	F	T	V	M	F	M	F	T	V	M	F	M	F	T	V	M	F	M	F	T	V	M	F	T	V		
Anatomy	14	5	2	7	7	7	20	9	4	13	7	17	11	4	15	2	14	3	0	3	0	3	11	115	100	8	108	7	9	2	1	3	6			
Biochemistry	10	3	0	3	7	10	5	1	6	4	14	8	2	10	4	0	0	0	0	0	0	0	0	40	31	7	38	2	3	2	1	3	0			
Blood Bank	8	2	1	3	5	16	7	1	8	8	6	5	1	6	0																					
Cardiology	8	3	2	5	3	13	6	1	7	6	17	15	2	17	0																					
Card.Surgery	2	1	0	1	1	1	1	0	1	0	3	2	1	3	0																					
Comm.Med	13	4	2	6	7	16	7	2	9	7	5	3	1	4	1																					
Cl.Path	0			0	0	1	0	1	1	0																										
Dermatology	1	0	1	1	0	7	6	1	7	0	3	2	1	3	0																					
Dentistry	6	2	2	4	2	8	4	1	5	3	25	20	1	21	4																					
ENT	9	2	5	7	2	16	8	4	12	4	23	20	1	21	2																					
Epidemiology	1	1	0	1	0	2	1	0	1	1	4	2	1	3	1																					
Eye	11	10	1	11	0	15	10	2	12	3	8	4	2	6	2																					
Foren.Med	13	2	4	6	7	12	5	4	9	3	12	8	3	11	1																					
Gastroentb.	1	1	0	1	0	2	1	1	2	0	3	2	1	3	0																					
Gynae & Obs	18	10	3	13	5	14	12	1	13	1	10	6	4	10	0																					
Haematology	1	1	0	1	0	1	1	0	1	0	1	1	0	1	0																					
Hepatology	1	1	0	1	0																															
Health.Edu	1	1	0	1	0	1	1	0	1	0	1	1	0	1	0																					
Med.Oncology	1	1	0	1	0																															
Medicine	27	12	4	16	11	18	10	4	14	4	12	4	5	9	3																					
Microbiology	9	6	1	7	2	10	6	1	7	3	17	10	3	13	4																					
Nephrology	1	1	0	1	0	4	3	0	3	1	3	2	1	3	0																					
Neuro.Med	2	2	0	2	0	6	6	0	6	0	8	8	0	8	0																					
Neuro.Surg	4	4	0	4	0	10	10	0	10	0	9	7	0	7	2																					
Nuc.Med	1	1	0	1	0																															
Nutrition	1	1	0	1	0	1	1	0	1	0																										
Orthopaedic	10	7	0	7	3	5	5	0	5	0	14	12	0	12	2																					
Ortho.Surg	4	3	0	3	1	14	10	2	12	2	15	15	0	15	0																					
Paediatric	11	10	0	10	1	25	21	3	24	1	25	15	10	25	0																					
Paed.Surg						0	0	2	0	2	0																									
Paed.Neph	1	1	0	1	0	1	1	0	1	0	1	1	0	1	0																					
Paed.Gastro						0	0	1	1	0	1	1	0	1	0																					
Pathology	15	10	0	10	5	18	12	5	17	1	34	20	12	32	2																					

Discipline	Professor						Associate Professor						Assistant Professor						Curator						Lecturer						Medical Officer					
	Sanc		Existing		V		Sanc		Existing		V		Sanc		Existing		V		Sanc		Existing		V		Sanc		Existing		V		Sanc		Existing		V	
	M	F	M	F	T	V	M	F	T	V	M	F	T	V	M	F	T	V	M	F	T	V	M	F	T	V	M	F	T	V	M	F	T	V		
Pharmacology	9	7	1	8	1	1	14	10	2	12	2	13	10	3	13	0	0	0	0	0	0	0	0	101	75	15	90	11	8	7	1	8	0	0		
Physiology	11	7	3	10	1	1	16	13	2	15	1	20	12	6	18	2	0	0	0	0	0	0	95	76	13	89	6									
Physical Med	4	3	0	3	1	1	4	2	1	3	1	3	2	1	3	0	0	0	0	0	0	0														
Psychiatry	2	2	0	2	0	0	8	4	3	7	1	10	9	0	9	1	0	0	0	0	0	0														
Radiology	7	6	0	6	1	1	15	10	2	12	3	15	10	0	10	5	0	0	0	0	0	0														
Radiotherapy	4	2	0	2	2	2	12	8	0	8	4	6	6	0	6	0	0	0	0	0	0	0														
Sk&VD	4	4	0	4	0	0	6	5	0	5	1	8	7	0	7	1	0	0	0	0	0	0														
Surgery	26	15	0	15	11	18	14	0	14	4	15	15	0	15	0	0	0	0	0	0	0	0														
Urology	2	2	0	2	0	1	1	1	0	1	0	2	2	0	2	0	0	0	0	0	0	0														
Virology	1	1	0	1	0	1	1	1	0	1	0						0	0	0	0	0	0														
Total	275	157	32	189	86	365	240	49	289	76	384	279	66	345	39	14	3	0	3	11	606	460	107	567	39	43	24	11	35	8						

TABLE 4.5.1.3
Professional Human Resources position of new five Medical Colleges, 1998

Discipline	Faridpur					Comilla					Khulna					Bogra					Dinajpur					Total				
	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Anatomy	1	2	1	1	7	12	1	2	1	1	7	12	1	2	1	1	7	12	1	2	1	1	7	12	5	10	5	5	35	60
Physiology	1	1	1	0	4	7	1	1	1	0	4	7	1	1	1	0	4	7	1	1	1	0	4	7	5	5	0	20	35	
Pharmacology	1	1	1	0	3	6	1	1	1	0	3	6	1	1	1	0	3	6	1	1	1	0	3	6	5	5	0	17	36	
Pathology	1	1	1	1	4	8	1	1	1	1	4	8	1	1	1	1	4	8	1	1	1	1	4	8	5	5	5	5	20	40
Community Medicine	1	1	1	0	4	7	1	1	1	0	4	7	1	1	1	0	4	7	1	1	1	0	4	7	5	5	0	20	35	
Med.Juris	1	1	1	0	3	6	1	1	1	0	3	6	1	1	1	0	3	6	1	1	1	0	3	6	5	5	0	15	30	
Medicine	2	1	1	0	4	2	1	0	0	0	3	2	1	0	0	3	2	1	0	0	0	3	10	5	1	0	0	16		
Surgery	2	1	1	0	4	2	1	1	0	0	4	2	1	1	0	0	4	2	1	1	0	0	4	10	5	5	0	0	20	
Midwifery	1	1	0	0	2	1	1	0	0	0	2	1	1	0	0	2	1	1	0	0	0	2	5	5	0	0	5	11		
Ophthalmology	1	1	1	0	3	1	1	0	0	0	2	1	1	0	0	2	1	1	0	0	0	2	5	5	1	0	5	13		
E.N.T	0	1	1	0	2	0	1	1	0	0	2	0	1	1	0	0	2	0	1	1	0	0	2	0	5	5	0	0	10	
Paediatrics	0	1	1	0	2	0	1	1	0	0	1	1	0	0	2	0	1	1	0	0	2	0	5	4	0	0	0	9		
Radiology	0	1	1	0	2	0	1	1	0	0	2	0	1	1	0	0	2	0	1	1	0	0	2	0	5	5	0	0	10	
Anaesthes	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	5	0	0	0	5		
Radiotherapy	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	5	0	0	0	5		
Skin & Ven.Dis	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	5	0	0	0	5		
Blood Transfusion	0	1	1	0	2	0	1	1	0	0	2	0	1	1	0	0	1	0	0	0	1	0	5	2	0	0	0	7		
Ortho. Surgery	0	1	1	0	2	0	1	1	0	0	2	0	1	1	0	0	2	0	1	1	0	0	2	0	5	5	0	0	10	
Dentistry	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	5	0	0	0	5		
Microbiology	0	0	0	3	3	0	0	0	3	3	0	0	0	3	3	0	0	3	3	0	0	0	3	0	0	0	0	15	15	
Biochemistry	0	0	0	3	3	0	0	0	3	3	0	0	0	3	3	0	0	3	3	0	0	0	3	0	0	0	0	15	15	
Total	12	19	15	2	31	79	12	19	12	2	31	76	12	19	12	2	31	76	12	19	12	2	31	76	60	95	63	10	167	392

1= Professor 2= Associate Professor
3= Asst. Prof. 4 = Curator 5 = Lecturer 6 = Total
Teaching Professionals of other institutions are not included in the table.
Source : DGHS, Dhaka

4.5.2 Private Sector Involvement in Health

It is extremely difficult to collect data on the involvement of the private sector in health because many of the doctors and specialists working in private health institutions and medical colleges are on part-time basis. Moreover, many of the same doctors and specialists are enrolled or working in a number of institutions at the same time. So the actual number of doctors or specialists employed in private medical colleges is very difficult to ascertain. According to a survey conducted recently by Dr. Khondaker Abul Kasem (1999), the following private medical colleges/institutions have a total of 1606 doctors:

TABLE 4.5.2.1
No. of Medical Professionals in Private Medical Colleges and Institutions

Sl. No.	Name of Private Medical College	No. of Medical Professionals		
		Male	Female	Total
1	Bangladesh Medical College	100	42	142
2	Zahurul Islam Medical College	111	19	130
3	Community Based Medical College	55	10	65
4	Z.H. Sikder Women's Medical College	53	10	63
5	Jalalabad Ragib Rabeya Medical College	25	10	35
6	Uttara Women's Medical College	43	18	61
7	Dhaka National Medical College	54	17	71
8	Shaheed Mansur Ali Medical College	40	12	52
9	Institute of Applied Health Science	110	10	120
10	North East Medical College	35	20	55
11	Al Sefa Medical College	14	6	20
12	University Dental College	10	5	15
13	Pioneer Dental College	50	13	63
14	City Dental College	32	9	41
	Total	732	201	933
	Other Institutions			
1	BIRDEM (Diabetic Hospital)	251	90	341
2	Shishu Hospital, Dhaka	60	21	81
3	Model Satellite Clinic	2	7	9
4	Red Crescent Hospital (Holy Family)	116	71	187
5	Shishu Hospital, Chittagong	35	20	55
	Total	464	209	673
	Grand Total	1196	410	1606

Source: Kasem, Khondaker Abul, Human Resources Status of the Country, 1999, WHO, Dhaka

TABLE 4.5.2.2
Statistics of Private Medical Practitioners

Specialty	Male	Female	Total
General	5000	400	5400
Paediatrician	500	200	700
ENT (specialist)	10	20	30
Skin and VD Specialist	12	28	40
Ophthalmologist	1600	50	1650
Urologist	100	0	100
Surgeon	200	45	245
Gynaec and Obs	20	130	150
Anaesthesiologist	300	20	320
Radiologist	25	100	125
Ultrasonography Specialist	250	50	300
Pathologist/Microbiologist	60	60	120
Hospital Management	4	0	4
Medicine Specialist	49	50	99
Tropical Medicine Specialist	50	50	100
Nutrition Specialist	4	6	10
Endocrinologist	2	0	2
Nephrologist	3	0	3
Cardiologist	8	2	10
Chest Physician	12	8	20
Orthopaediatric	40	0	40
Physiotherapist	5	0	5
Psychiatrist	8	2	10
Total in Country	8262	1221	9483
Total in Foreign Countries	2400	1000	3400
Grand Total	10662	2221	12883

Source: Bangladesh Private Medical Practitioner's Association (Upto December, 1998)
The Association does not enroll dentists as member.

TABLE 4.5.2.3
Statistics of Registered Dental Practitioners, 1999

Type of information	Male	Female	Total
Government Service	300	100	400
Private Practice	707	339	1346
Total in Country	1007	339	1346
Total in Foreign Countries	80	27	107
Grand Total	1087	366	1453

Source: Bangladesh Dental Society

4.6 Production of Drugs and Vaccines and their Quality Control

There are numerous pharmaceutical companies in Bangladesh producing various kinds of drugs, contraceptives and other blood and biological products. The Government is also involved in drug and vaccine production activity through the Institute of Public Health (IPH). IPH was established in 1953 whose initial responsibility was to produce vaccines against typhoid, cholera, rabies and smallpox. Gradually, IPH extended its services in other areas. At present, it is the only national institute acting as a production, testing and research laboratory. IPH manufactures various intravenous fluids, produces several reagents and supplies different vaccines. Microbiological investigations are carried out in IPH for the diagnosis of communicable diseases. It also serves as the National Quality Control Laboratory for drugs, food and water and acts as the Reference Laboratory for AIDS and Polio. The Institute has the following sections or production units:

1. Microbiological Laboratory
2. Public Health Laboratory
3. Drug Testing Laboratory
4. Biological Laboratory
5. Tetanus and Diphtheria Toxoid Production Laboratory
6. Intravenous Fluid Production Plant and
7. ARV Production Laboratory

The amount of vaccines, fluids, blood products and others produced by type and the number of tests carried out on food, drug and water in 1993-1996 are reported in **Table 4.6.1**. The table indicated that the production level as well as the tests performed had been increasing from 1993 to 1995. This trend was however drastically reversed in 1996. The situation in 1997 improved little. In fact, in 1997, IPH ceased to produce Tetanus Toxoid completely.

TABLE - 4.6.1
Performance of Institute of Public Health, 1993-1996

Sl. No.	Unit	1993	1994	1995	1996	1997
I	DPT Unit: Tetanus Toxoid in 0.5 ml dose	2,822,000	2,606,500	5,539,500	2,643,000	-
II	ARV Unit: Anti-rabies vaccine in ml.	4,378,950	6,038,450	5,123,900	4,234,800	4,312,620
III	Vaccine Unit: TAB Vaccine in ml.	6,000	-	-	-	5,000
IV	I.V. Fluid Unit: I.V. Fluid in bags	1,966,856	1,414,193	1,778,878	1,523,183	1,349,565
	Number of sets	375,780	221,381	302,432	281,300	-
V	PHL Unit: Food sample tested	8,700	9,328	10,476	6,430	5552
	Water sample (Bact.) tested	429	416	711	434	424
	Water sample (chem.) tested	217	256	529	509	237
VI	DTL Unit Drug sample tested	1,343	4,677	1,797	265	3612

Sl. No.	Unit	1993	1994	1995	1996	1997
VII	Microbiological Lab. Unit:					
	Stain production in litre	549	123	11	28	-
	Antigen production in ml.	12,000	2,900	-	-	-
	Polio antigen in ml.	250	-	-	-	-
	Diagnostic in no. of test	6,000	-	-	-	-
	Person trained	35	5	-	-	-

4.6.1 Private Sector Involvement in Drug Production

The drug manufacturing industry in Bangladesh has developed notably and some of the manufacturers are producing very high standard drugs and are exporting their products abroad. However, no facility has been developed in the private sector for manufacturing reagents, blood products, biologicals, etc. The country is entirely dependent on the import of these items for meeting up its domestic requirements. The names of the registered companies manufacturing drugs in Bangladesh, including those that have been suspended or whose licenses have been cancelled are given below:

TABLE 4.6.1.1
List of Pharmaceutical Companies manufacturing drugs

Sl. No.	Name of Company	Location of Factory
01	M/S. ACI Limited	Godnail, Narayanganj
02	M/S. Acme Laboratories Ltd.	Dhamrai, Dhaka
03	M/S. Adco Pharma (Pvt.) Ltd.	BSCIC I/E, Shapura, Rajshahi
04	M/S. Albert Dvid (BD) Limited	115-116, Tejgaon I/A, Dhaka
05	M/S. Alkad Laboratories Ltd.	H.No. 3/B, Plot No. 33, Sec-7, Mirpur, Dhaka
06	M/S. Alkad Laboratories Ltd.	Alamnagar, Rangpur
07	M/S. Alliance Chemicals Ltd.	Dhamrai, Dhaka
08	M/S. Alpha Pharmaceuticals	Savar, Dhaka
09	M/S. Al-amin Laboratories Ltd.	BSCIC I/A, Mymensingh
10	M/S. Aman Laboratories Ltd.	31, Kalabagan, 1st Lane, Dhaka.
11	M/S. Ambee Pharmaceuticals Ltd.	134/1, Tejgaon I/A, Dhaka
12	M/S. Amico Laboratories Ltd.	Tejgaon I/A, Dhaka
13	M/S. Apollo Pharmaceuticals Laboratories Ltd.	Plot No. 10, Sec-7, Mirpur I/A, Dhaka
14	M/S. Aristopharma Limited	Plot no. 21, road no. 11, Shampur, Dhaka
15	M/S. Asiatic Laboratories Ltd.	253, Tongi I/A, Gazipur
16	M/S. Azad Pharmaceuticals Ltd.	128, Eskaton Road, Dhaka
17	M/S. Bangladesh Oxygen Ltd.	185, Tejgaon/FS
18	M/S. Bengal drugs & chemical works Pharm Ltd..	Kandirpar, Comilla
19	M/S. Bengal techno chemical works Ltd.	Dinajpur
20	M/S. Benham Pharmaceuticals Ltd.	10-12, East Nasirabad, Chittagong
21	M/S. Beximco Infusion Ltd.	Tejgaon I/A, Dhaka
22	M/S. Beximco Pharmaceuticals Ltd.	Tongi I/A, Dhaka
23	M/S. Bikalpa Friends Pharmaceuticals Ltd.	287, Moonipur, Sec-2, Mirpur, Dhaka
24	M/S. Bio Pharma Laboratories Ltd.	A-116, Tongi, Gazipur
25	M/S. Blubell Veterinary Products Ltd.	Bipail, Savar, Dhaka
26	M/S. B-pharm Laboratories	625, Bara Moghbazar, Dhaka

Sl. No.	Name of Company	Location of Factory
27	M/S.B.C. Laboratories Ltd.	9/5, Iqbal Road, Mohammadpur, Dhaka
28	M/S.B.S. Industries Ltd.	139/4, Tejgaon IA Dhaka
29	M/S.Cafepharna Laboratories Ltd.	Plot 7, Street 4, Sec-7, Mirpur, Dhaka
30	M/S.Carew & Co.	Dafshana, Chuadanga
31	M/S.Cafica Laboratories Ltd.	150, Alibagh Road, Dhaka
32	M/S.Central Pharmaceutical Ltd.	B.No.7, Road No. 2, Dhanmondi, Dhaka
33	M/S.Chemico Laboratories Ltd.	Ticapara, Rajshahi
34	M/S.Chemist Laboratories Ltd.	College Road, Barisal
35	M/S.Ciba-Geigy (BD) Ltd.	Squib Road, Tongi, Gazipur
36	M/S.Cipla Ltd.	Jahangirabad, Fultola, Bogra
37	M/S.City Chemicals & Pharm. Works	112, Zurain, Dhaka
38	M/S.Colloid Laboratories Ltd.	134/5, Tejgaon, Dhaka
39	M/S.Comilla Laboratories Ltd.	BSCIC I/A, Comilla
40	M/S.Concord Pharmaceuticals Ind.Ltd.	Boragram, Kamrangir Char, Dhaka
41	M/S.Cosmic Chemical Ind. Ltd.	112, Santinagar, Dhaka
42	M/S.Cosmo Pharma Ltd.	Arrapara, Savar, Dhaka
43	M/S.Crystal Pharmaceuticals Ltd.	Chairtha, Comilla
44	M/S.Decent Pharma Lab. Ltd. (Biological)	Jaydebpur, Gazipur
45	M/S.Desh Pharmaceuticals Ltd.	Char Ragunathpur, Keraniganj, Dhaka
46	M/S.Doctors Chemicals Works Ltd.	Fulbari, Bogra
47	M/S.Dokphin Pharmaceuticals Ltd.	82/4, Jatrabari, Dhaka
48	M/S.Drug International Ltd.	Tongi I/A, Dhaka
49	M/S.Drug Land Limited	Palpara, Bogra
50	M/S.Eastern Drug Co. (Pvt.) Ltd.	Dakhin Shakdi Sanir Akhra, Demra, Dhaka
51	M/S.Eastern Pharmaceutical Ltd.	Dhamrai, Dhaka
52	M/S.Edcl, Borga	Thnenthonia, Bogra
53	M/S.Edcl, Dhaka	295-397, Tejgaon I/A, Dhaka
54	M/S.Edruc Ltd.	Pabna
55	M/S.Elixir Ltd.	Hemayetpur, Savar, Dhaka
56	M/S.Eskayef Bangladesh Ltd.	9/C, Northeast, Darus Salam, Mirpur, Dhaka
57	M/S.Ethical Drug Ltd.	Godnail Siddergonj, Narayangong
58	M/S.Everest Chemicals Ind. Ltd.	256, Syed Ahmed Chowdy Road, Chittagong
59	M/S.Fisons (BD) Ltd.	Tongi I/A, Gazipur, Dhaka
60	M/S.Ganoshasthya Pharmaceuticals Ltd.	Nayerhat, Savar, Dhaka
61	M/S.General Pharmaceuticals Ltd.	Kaliakair, Gazipur
62	M/S.Glaxo Bangladesh Ltd.	Fauzderhat I/A, Chittagong
63	Global Capsules Ltd.	Bogra Road, Barishal
64	Globe Laboratories (Pvt.) Ltd.	Mirkadim, Munshiganj
65	M/S.Globe Res. Laboratories Ltd.	Begumgonj I/A, Noakhali
66	M/S.Globex Pharmaceuticals Ltd.	Kamalpur, Fatullah, Narayanganj
67	M/S.Greenland Pharmaceuticals Ltd.	BSCIC I/A, Tongi, Gazipur
68	M/S.G.A. Company Ltd.	109, Tejgaon I/A, Dhaka
69	M/S.Hailmark Laboratories	18, Gopibag, Ist Lane, Dhaka
70	M/S.Health Laboratories	
71	M/S.Hoechst Bangladesh Ltd.	64-65, Agrabad C/A, Chittagong
72	M/S.Hope Pharmaceuticals	Bhairab Bazar, Kishoreganj
73	M/S.Ibn Sina Pharmaceutical Ind. Ltd.	Kaliakair, Gazipur
74	M/S.Institute of Public Health	Mohakhali, Dhaka

Sl. No.	Name of Company	Location of Factory
75	M/S.Jalalabad Pharmaceuticals Ltd.	Kanchpur, Sonargaon, Narayanganj.
76	M/S.Jams Pharmaceuticals Ltd.	Section 7, Mirpur, Dhaka
77	M/S.JanashBa Pharmaceuticals Ltd.	22/A, Katalgonj, Chittagong
78	M/S.Jayson Pharmaceuticals Ltd.	231, Tejgaon I/A, Dhaka
79	M/S.ICI Bangladesh Ltd.	17, Doyagonj, Hatlae, Dhaka
80	M/S.Jess Chemicals & Pharmaceuticals Ltd.	BSCIC I/A, Jessore
81	M/S.Kdh Laboratories Ltd.	134, Shatmoszid Road, Zafrabad, Dhaka
82	M/S.Libra Pharmaceuticals Ltd.	1/7, Sec-2, Mirpur I/A, Dhaka
83	M/S.Links Pharma	31, B.K. Ganguli Lane, Kayettioli, Dhaka
84	M/S.Manners Pharmaceuticals Ltd.	Sanairpur, Narayanganj
85	M/S.Maxdrugs Ltd.	199, Santibag, Dhaka
86	M/S.Medico Pharmaceuticals Ltd.	B.K. Road, Darshana, Pahari, Rangpur
87	M/S.Medicon Laboratories Ltd.	Mirpur, Dhaka
88	M/S.Medimet Pharmaceuticals Ltd.	Alejanda, Barisal
89	M/S.Microbe Laboratories Ltd.	Shibati, Bogra
90	M/S.Millat Pharmaceuticals Ltd.	65-66, Postogola I/A, Dhaka
91	M/S.Mordern Res. Laboratories Ltd.	Jhinaidah
92	M/S.Multi Laboratories Ltd.	Tongi I/A, Gazipur, Dhaka
93	M/S.Natal Chemical Ind.	Norshingdi
94	M/S.National Drug Company Ltd.	25/7, Tajmohal Rd, Mohammadpur, Dhaka
95	M/S.National Laboratories Ltd.	13/1, Avoy Das Lane, Dhaka
96	M/S.Navana Pharmaceuticals Ltd.	Dhaka
97	M/S.Nipa Pharmaceuticals Ltd.	1/5, Rupnagar, Mirpur, Dhaka
98	M/S.North Bengal Pharmaceuticals Ltd.	Naogaon
99	M/S.Oasis Laboratories (Pvt.) Ltd.	Afzal Khan Road, Sherajgaon
100	M/S.Opso Saline Ltd.	Bogra Road, Barishal
101	Opsonin Chemical Industries Ltd.	Bogra Road, Barisal
102	M/S.Organon (Bangladesh) Ltd.	Tongi, Gazipur
103	M/S. Orion Infusion Ltd.	Maikuli, Rupgonj, Narayanganj
104	M/S. Orion Laboratories Ltd.	154, Tejgaon I/A, Dhaka
105	M/S. Pacific Pharmaceuticals Ltd.	Sonargaon, Mogradpara, Narayanganj
106	M/S. Paradise Chemical Industries	Barisal
107	M/S. Peioles Pharmaceuticals Ltd.	105-106, Tongi I/A, Gazipur, Dhaka
108	M/S. Pharmaco International Ltd.	Chandana, Gazipur
109	M/S. Pharmadesh Laboratories Ltd.	239, Tejgaon I/A, Dhaka
110	M/S. Pharmatek Chemical Ltd.	Plot 101, BSCIC I/A, Tongi, Gazipur
111	M/S. Pharmik Laboratories Ltd.	1051/A Nizamuddin Road, Chittagong
112	M/S. Pioneer Pharmaceuticals Ltd.	Tongi, Gazipur
113	M/S. Pip Limited	Pabna (Jubilee Tank)
114	M/S. Popular Chemical Ind. Ltd.	Rajfulbari, Savar, Dhaka
115	M/S. Premier Pharmaceuticals	72, Askar Digi, North, Chittagong
116	M/S. Quality Pharmaceuticals (Pvt.) Ltd.	9, Nujango Bhusan Lane, Kustia
117	M/S. Rahman Chemicals Ltd.	Tarabo, Demra, Narayanganj
118	M/S. Ranata Limited	Sec-11, Mirpur, Dhaka
119	M/S. Reckit & Colman	58-59, Nasirabad I, A, Chittagong
120	M/S. Reliance Laboratories Ltd.	Rajshahi, Kazhata
121	M/S. Reman Drug Laboratories Ltd.	392, New Eskaton, Dhaka
122	M/S. Remedy Pharmaceuticals Ltd.	Konabari, Joydevpur

Sl. No.	Name of Company	Location of Factory
123	M/S. Rephco Laboratories Ltd.	Public School Road, Barisal
124	M/S. Rhone Poulenc Agrovet (BD) Ltd.	Tongi IA, Gazipur
125	M/S. Rhone Poulenc (BD) Ltd.	Tongi IA, Gazipur
126	M/S. Ribak Pharmaceuticals Ltd.	Hemayetpur, Savar, Dhaka
127	M/S. R.D.C.C.S. Rangpur	Alamnagar, Rangpur
128	M/S. Sabbnat Chemical Works	College Road, Bagarhat
129	M/S. Salton Pharmaceuticals Ltd.	
130	M/S. Scientific Drug Industries Ltd.	
131	M/S. Seema Pharmaceuticals Ltd.	Shahid Court, Fulbari, Savar, Dhaka
132	M/S. Sheba Chemicals Industries Ltd.	102, Sukrabad, Mirpur, Dhaka
133	M/S. Sheba Laboratories Ltd.	Bhadra, Kazla, Rajshahi
134	M/S. Skylab Ltd.	BSCIC IE, Comilla
135	M/S. Sodical Chemical Ltd.	D-203, BSCIC I/A, Tongi, Gazipur
136	M/S. Somatec Pharmaceutical Ltd.	28/8, Segun Bagicha, Dhaka
137	M/S. Sonear Laboratories Ltd.	11/2, Topyenbi Circular Road, Dhaka
138	M/S. Squafe Pharmaceuticals Ltd.	Pabna
139	M/S. Square Phar. Ltd. (Chemica Division)	BSCIC I/A, Hemayetpur, Dhaka
140	M/S. Standard Chemical Industries Ltd.	104/B, Tejgaon I/A, Dhaka
141	M/S. Standard Laboratories Ltd.	970, East Nasirabad, Chittagong
142	M/S. Sunypun Pharmaceutical Ltd.	Moraid, Gazipur
143	M/S. Tashmir Laboratories	Chawmahani, Noakhali
144	M/S. Therapeutics (BD) Ltd.	Kalurghat, BSCIC I/A, Chittagong
145	M/S. Tropical Pharmaceuticals Ltd.	House 283, Road 1, Baitul Aman, Adabor, Samoli, Dhaka
146	Union Pharmaceuticals Ltd.	Karnapur, Savar, Dhaka
147	M/S. Unique Pharmaceuticals Ltd.	Karaniganj, Barisur, Dhaka
148	M/S. United Chemicals & Pharm. Ltd.	33/A, FIDC Road, KalurGhat, Chittagong
149	M/S. United Laboratories Ltd.	1029, Askarabad, BT Road Lane, Chittagong
150	M/S. Universal Pharmaceuticals Ltd.	Gopaiapur, Pabna
151	M/S. Weinberg Pharmaceuticals Ltd.	Chandana, Gazipur
152	M/S. Zaco Laboratories Ltd.	Hariharpur, Panchabati, Narayangonj
153	M/S. Zaman Pharmaceuticals Ltd.	Tejgaon I/A, Dhaka
154	M/S. Zenith Laboratories(BD) Ltd.	Feni
155	M/S. Ziska Pharmaceuticals Ltd.	60, Barabag, Porbota, Mirpur, Dhaka
Source: Department of Drug Adfministration		

List of Suspended Pharmaceutical manufacturers in Bangladesh

Sl. No.	Name of Company	Location of Factory
01	M/S Adflame Pharmaceuticals Ltd.	Bhabanpur, Gazipur
02	M/S Agfani Pharmaceuticals Ltd.	138 Tejgaon I/A, Dhaka
03	M/S Albion Laboratories Ltd.	126 CDA Avenue, Muradur, Chittagong
04	M/S Al-zabir Pharmaceuticals Ltd.	Tongi, Gazipur
05	M/S Apcco Limited	1/1 & 1/2, Mirpur I/A, Dhaka
06	M/S Apex Laboratories Ltd.	Bogra Road, Barisal

Sl. No.	Name of Company	Location of Factory
07	M/S APC Pharmaceuticals Ltd.	Fakirhat, Bagerhat
08	M/S Bangladesh Immunity Co. Ltd.	Amghat Road, Tangail
09	Batali Pharma Ltd.	3 Brick Field Road, Chittagong
10	M/S BCI Limited	6/5 Moneshar Road, Dhaka
11	M/S Bigben Pharmaceuticals Ltd.	23 Hatkhola Road, Dhaka
12	M/S Biochem Pharmaceuticals Ltd.	1002 Malibag, Dhaka
13	M/S Bios Pharma Ltd.	Feni
14	M/S City Pharmaceuticals Ltd.	138-189 Bazed Bostami Road, Chittagong
15	M/S Crescent Pharmaceuticals Ltd.	Kadamtola, Gazipur
16	M/S Decent Pharma Lab. Ltd. (Non-biological)	Jaydebpur, Gazipur
17	M/S Doms Pharmaceuticals Industries Ltd.	Chack Shehara, Nowmahai, Mymensing
18	M/S Globe Chemical Industries Ltd.	Dinonath Sen Road, Gandaria, Dhaka
19	M/S Great Bengal CHE. & Pharm. Works Ltd.	Rawjan, Chittagong
20	M/S Green Laboratories Ltd.	Adalatpara, Chandpur
21	M/S Healing Pharmaceuticals	Konabari, Jaydebpur
22	M/S Hudson Pharmaceuticals	Maijdee Court, Noakhali
23	M/S Hugsons Ltd.	BSCIC I/A, Comilla
24	M/S Hydroxide Ltd.	Mowchak, Gazipur
25	M/S Indo-Bangla Pharmaceuticals Ind.	College Road, Barisal
26	M/S Islami Pharmaceutical Industries Ltd.	BSCIC I/A, Sheramoni, Khulna
27	M/S Jalpha Laboratories Ltd.	Sylhet
28	M/S Maxborn Pharmaceuticals	10/1 Magbazar, Dhaka
29	M/S Mig Pharmaceuticals Ltd.	Tail Garden Road, Bogra
30	M/S MiM Pharmaceuticals	Bhair Ab Bazar, Kishorgonj
31	M/S Najat Pharma Ltd.	H. No.8/8 Road No.2, Pallabi, Mirpur, Dhaka
32	M/S National Chemical and Pharm. Works	B.K. Lae, Khulna
33	M/S Panacia Pharmaceuticals Ind. Ltd.	63/G Hazi Afzal Khan Road, Dhaka
34	M/S Pharmacies Ltd.	B-34 BSCIC I/A, Tongi, Gazipur
35	M/S Phoenix Chemical Laboratories Ltd.	Faridpur
36	M/S Polychrome Laboratories Ltd.	Kamrangirchar, Dhaka (Baeagram Garments Bldg.)
37	M/S Pubali Pharmaceuticals Ltd.	62 Old Polton Lane, Azimpur, Dhaka
38	M/S Purbadesh Chemist Ltd.	BSCIC I/A, Comilla
39	M/S Rafimania Chemical Lab. Ltd.	Blsepara Main Road, Failhahi
40	M/S Rexpharmaceuticals	Mojeedpur, Savar, Dhaka
41	M/S Reza Chemical Industries Ltd.	6 Khaje Dewan, 2 nd Lane, Dhaka
42	M/S Sarma Chemical Works	Kandirpar, Comilla
43	M/S Squibb	Tongi I/A, Gazipur (Layoff)
44	M/S Standard Pharmaceuticals Ltd.	44 Palashnagar, Section II, Mirpur, Dhaka
45	M/S Star Pharmaceuticals Ltd.	H No.30, Road No.9/C, Sector 5, Uttara, Dhaka
46	M/S Syntho Laboratories	247-248 Tejgoan I/A, Dhaka
47	M/S United Chemist	213/4 Badda, Dhaka
48	M/S Wee Pharma Ltd.	Hemayetpur, Savar

Source: Department of Drug Administration

List of Cancelled Pharmaceutical Industries in Bangladesh

Sl. No.	Name of Company	Location of Factory
1	M/S Delta Pharma Ltd.	Rangpur
2	M/S East Bengal Chem. & Pharma. Ltd.	Ullan Road, Rampura, Dhaka
3	M/S Eden Chemical Industries Ltd.	53/1-C Senpara, Mirpur, Dhaka
4	Eureka Pharmaceuticals Ltd.	83 Shahid Sayfuddin Khaled Road, Chittagong
5	M/S G.M. Laboratories Ltd.	Gopaldhi, Narayangonj
6	M/S Kaysons Pharmaceuticals (Pvt.) Ltd.	Jaydebpur Bazar, Gazipur
7	M/S Medilb Limited	726 Baitul Aman, Mohammadpur, Dhaka
8	M/S Ureasia Chem and Chem. & Pharm Works. Ltd.	87 Arambag, Dhaka
9	M/S Whd Laboratories Ltd.	U/7 Noorjahan Road, Mohammadpur, Dhaka

Source: Department of Drug Administration

4.7 Health Research

Many NGOs and private companies are actively engaged in health research work in Bangladesh. In addition, different publicly owned institutions are also involved in health research. Examples of these are the Dhaka University, IPGMR, NICVD, National Institute for Cancer Research and Hospital, NIPSOM and BIDS. However, the only designated focal point for health research by the Government is the Bangladesh Medical Research Council (BMRC).

Bangladesh Medical Research Council (BMRC) was established in 1972 by order of the President as an autonomous body under the Ministry of Health and Family Welfare. The objectives, rules and regulations of the Council were formulated by the resolutions of the MOHFW in 1974 and 1976, which also made BMRC the focal point for health research. The objectives of BMRC are to identify problems and issues relating to medical and health sciences and to determine priority areas in research on the basis of health care needs, goals, policies and objectives.

BMRC has a general body with 54 members representing post-graduate medical institutions, medical colleges, universities, learned societies, medical institutions, medical organizations, various divisions and departments of ministries dealing with medical education, services and research. The General Body elects the Executive Committee. A chairperson elected from the members of the General Body heads the Executive Committee.

The Executive Committee of the Council forms the following technical committees for implementation of routine activities of the Council for a period of three years:

1. Scientific Review Committee
2. Ethical Review Committee
3. Editorial Board
4. Committee for Educational Activities
5. Collaborative Research Committee
6. Research Award Committee

BMRC provides grants for suitable research work under regular programmes supported by the World Bank and World Health Organization. For coordination and promotion of research activities there is a Research Cell in each of the old 8 medical colleges (listed in Table 4.5.5). To promote community/field oriented research, recently BMRC has established a Community Health Research Centre (CHRC) in Tangail District. The BMRC publishes a Bulletin thrice a year. In addition, the Council provides library, on-line literature search and internet services to scientists and researchers. Since 1992, a total of 165 research protocols have been approved for funding. Of these, 95 (57%) have been completed.

5. HOSPITAL SERVICES

Hospitals occupy a vital role in the health sector of Bangladesh. It has been estimated that approximately 60 percent of all Government allocations to health is spent on hospital services (HPSP document). Hospital services are provided by the Government from the national to the thana level and in unions, there are sixteen 10-bed rural health centres in unions.

The type and capacity of services provided by hospitals/health complexes at different levels vary substantially. For example, a typical health complex in a thana has only 31 beds with 9 medical doctors, 5 nurses and a host of support staff. It can provide basic indoor and outdoor health and diagnostic services and can perform some minor surgery like clinical contraception, surgical intervention in complicated delivery and management of fractures and others like excision, extraction and minor amputation. For more complicated treatment and surgery, patients have to go to district or higher level tertiary hospitals. It should be mentioned here that until very recently, there was no established referral mechanism.

It is always a policy of the Government to ensure that health services be available to all citizens regardless of location. This policy applies to the hospital services as well. To this end, the Government has been pursuing the strategy of establishing one THC in every thana and one general hospital in every district. All these facilities are capable of providing emergency, in- and out-door services. Below the thana level, with the exception of the above mentioned 16 rural health centres (location of the RHCs are listed in Table 4.2.1), the union sub-centres or UHFWCs can only provide outdoor health services.

Besides the Government, various private enterprises and NGOs also invest in hospital and outdoor patient services at different levels. Names and locations of those tertiary hospitals operated by the Government are listed in Table 4.2.1. The number of public health facilities (hospitals and health centres) that are known to exist at district and lower level are shown in Table 5.1. Details of Bangladesh's private sector involvement in hospital services may be found in a recent study sponsored by WHO, Bangladesh titled "Particulars of Private Health Care and Medical Education Institutions" (Samad Bhuiyan, 1999)

TABLE - 5.1.1
Types of Facilities at Different Levels

Sl. No.	District	District Hospital	Other Hospital		Thana Health Complex/RHC	Union Sub-Centre/Dispensary	Other Out-door facilities
			Public	Private			
Rajshahi Division							
01	Panchagarh	1 (50 beds)	-	-	4	16	-
02	Thakurgaon	1 (50)	-	2	4	13	1
03	Dinajpur	1 (100)	-	9	12	31	2
04	Rangpur	-	2 (670)	15	7	40	2
05	Nilphamari	1 (50)	2 (70)	1	5	21	1
06	Lalmonirhat	1 (50)	-	-	4 (Aditmari)	12	-
06	Kurigram	1 (50)	-	2	8 + 1*	21	1
08	Gaibandha	1 (50)	-	2	6 + 1 (F.chari)	38	1
09	Joypurhat	1 (50)	-	4	4	12	-
10	Bogra	1 (100)	1 (20)	16	10	51	2
11	Serajgonj	1 (100)	-	2	8 + 1	31	1
12	Pabna	1 (100)	2 (420)	5	8	13	2
13	Natore	1 (100)	-	4	5	15	1
14	Naogaon	1 (50)	-	2	4	44	-
15	Nawabgonj	1 (50)	-	3	4	20	1
16	Rajshahi	-	3 (820)	13	9	32	2
Division Total:		14 (950)	10 (2000)	80	108+3	410	17
Khulna Division							
17	Kushtia	1 (100)	-	7	5	25	2
18	Meherpur	1 (50)	-	4	1	9	1
19	Chuadanga	1 (50)	-	9	3	15	1
20	Jinaidah	1 (100)	-	12	5	13	-
21	Magura	1 (50)	-	3	3	9	1
22	Narail	1 (50)	-	2	2	7	-
23	Jessore	1 (100)	1 (20)	14	7	22	2
24	Satkhira	1 (50)	-	3	6	9	-
25	Khulna	1 (150)	3 (370)	29	9	14	2
26	Bagerhat	1 (100)	-	-	8 (Mongla, Chitalmari)	8	1
27	Perojpur	1 (50)	-	-	5	6	1
28	Jhalkathi	1 (50)	-	-	3 + 1	5	-
29	Barguna	1 (50)	-	-	4	8	-
30	Patuakhali	1 (100)	-	1	5	12	1
31	Bhola	1 (50)	-	-	6 + 1 (Monpura)	7	-
32	Barisal	1 (100)	2 (670)	5	9 + 1	32	2
Division Total:		16 (1100)	6 (1060)	89	81 + 3	201	15

Sl. No.	District	District Hospital	Other Hospital		Thana Health Complex/RHC	Union Sub-Centre/Dispensary	Other Out-door facilities
			Public	Private			
Dhaka Division							
33	Shariatpur	1 (50)	-	-	5	18	-
34	Madaripur	1 (50)	-	-	3	13	1
35	Gopalganj	1 (50)	-	-	4 + 1 (T. Para)	22	1
36	Faridpur	1 (100)	2 (270)	-	7 (M.Khali)	22	2
37	Rajbari	1 (50)	-	-	3	26	-
38	Manikgonj	1 (50)	-	2	6	31	-
39	Dhaka	-	13 (3825)	195	6	18	22
40	Munshigonj	1 (50)	-	-	5	26	1
41	Narayangonj	1 (100)	1 (200)	3	4 (Bandar)	13	1
42	Narsingdi	1 (50)	-	3	5 (Belaboo)	19	1
43	Gazipur	1 (50)	1 (50)	-	4	17	-
44	Tangail	1 (100)	-	3	10 (Mirzapur)	59	2
45	Jamalpur	1 (100)	-	3	6	28	1
46	Sherpur	1 (50)	-	2	4	9	-
47	Mymensingh	-	1 (650)	22	11 (Dhubaura)	43	2
48	Kishoregonj	1 (50)	-	-	12	18	1
49	Netrokona	1 (50)	-	-	9	27	1
Division Total:		15 (950)	18 (4995)	233	104 + 1	409	34
Chittagong Division							
50	Sunamgonj	1 (50)	-	-	9 + 1 (D.Bazar, B.Rampur)	22	1
51	Sylhet	1 (100)	4 (656)	16	10 (C.Ganj)	24	2
52	Moulvibazar	1 (50)	1 (50)	2	5	20	1
53	Hobigonj	1 (100)	-	-	7 + 1	18	-
54	Brahmanbaria	1 (100)	1 (20)	8	6	24	1
55	Comilla	1 (100)	1 (250)	9	11 + 1 (B.Para)	48	2
56	Chandpur	1 (50)	-	2	6 (Shahrasti, Haimchar)	20	1
57	Laxmipur	1 (50)	-	1	3	15	-
58	Noakhali	1 (150)	-	7	5 + 1	24	3
59	Feni	1 (50)	1 (20)	4	5 (D.Bhuiyan, Fulgazi)	19	1

Sl. No.	District	District Hospital	Other Hospital		Thana Health Complex/RHC	Union Sub-Centre/Dispensary	Other Out-door facilities
			Public	Private			
60	Khagrachhari	1 (50)	-	-	7	11	-
61	Rangamati	1 (100)	-	2	9 + 1 (Barkol)	11	2
62	Chittagong	1 (100)	3 (920)	29	14 + 2	72	9
63	Bandarban	1 (50)	-	-	6 (Thanchi, Alikadam)	1	-
64	Cox's Bazar	1 (50)	-	1	6	13	1
Division Total:		15 (1150)	11 (1916)	81	109 + 8 (10)	342	24
COUNTRY TOTAL:		60 (4250)	45 (9971)	483	400 + 16 (10)	1362	90

* +1 indicates an RHC. All thana health complexes have 31 beds each.

The existing information processing procedures and practices established by the Health Information Unit allow for the proper collection of some basic information from the government hospitals. There is an obvious assumption that each hospital will take the responsibility of routinely recording, compiling and forwarding the required information to the DG, Directors and/or the higher level supervising agencies.

Over the past 2 years, both the Unified Management Information System (UMIS) and WHO have conducted extensive studies of the current situation with regard to the entire process of hospital information collection. These studies found a number of shortcomings in the current situation which adversely affected the quality of the data. The most serious of which are: a) lack of forms for recording information, b) irregular recording of information, c) late or non-submission of information, d) lack of supervision and monitoring in the data collection process, and e) lack of proper training to record and report information. In general, information submitted was either over or under-reported, depending on the nature of the data. There were also reliability and reproducibility problems. The seriousness of the problems varied directly with the size of the hospitals. Large tertiary hospitals tended to have the largest number of problems. In fact, many of them do not even submit any regular report to UMIS/DGHS. Information coming from District level hospitals and thana health complexes seemed to be submitted more regularly and the quality of the data seemed to be more consistent.

In spite of the many problems in the hospital health information system, the UMIS managed to compile some useful data for the health managers. *Nevertheless, readers/users should exercise caution while interpreting the data provided here.* It is difficult to ascertain the level of under or over reporting in each of the reported areas as the margins of error are unknown. **Table 5.2** provides information on the daily outdoor attendance and bed occupancy rate of the district hospitals and thana health complexes in the country for the years 1994-1997. It may be noted that, with the exception of a few, almost all the facilities submitted reports. Concerning daily outdoor attendance and bed occupancy rate, data relating to these two indicators are generally regularly recorded, although it must be admitted that the forms were not filled in properly. For example, the column on gender of the patient is routinely skipped. Errors

concerning bed occupancy rate due to improper application of the formula for calculating the rate was quite possible. In addition, it has been noted that other reporting problems occurred.

TABLE - 5.1.2

**Registered Private Hospitals/Clinics by Number of Beds and
Medical Human Resources by District**

I. No.	District	No. of Hospitals/ Clinics	Number of Beds	Number of Doctors	Number of Nurses
Rajshahi Division					
01	Panchagarh	-	253	60	107
02	Thakurgaon	2	20	6	12
03	Dinajpur	9	135	28	60
04	Rangpur	15	180	53	116
05	Nilphamari	1	10	3	5
06	Lalmonirhat	-	-	-	-
06	Kurigram	2	18	5	11
08	Gaibandha	2	23	6	11
09	Joypurhat	4	37	11	21
10	Bogra	16	202	50	101
11	Serajgonj	2	16	5	10
12	Pabna	5	54	16	29
13	Natore	4	38	11	22
14	Naogaon	2	20	6	12
15	Nawabgonj	3	30	8	18
16	Rajshahi	13	253	60	107
Division Total:		80	1289	328	642
Khulna Division					
17	Kushtia	7	112	28	55
18	Meherpur	4	35	10	17
19	Chuadanga	9	78	21	39
20	Jinaidah	12	107	30	51
21	Magura	3	28	8	11
22	Narail	2	22	7	12
23	Jessore	14	172	47	91
24	Satkhira	3	29	8	15
25	Khulna	29	333	85	166
26	Bagerhat	-	-	-	-
27	Perojpur	-	-	-	-
28	Jhalkathi	-	-	-	-
29	Barguna	-	-	-	-
30	Patuakhali	1	10	3	6
31	Bhola	-	-	-	-
32	Barisal	5	52	13	26
Division Total:		89	978	260	489

Sl. No.	District	No. of Hospitals/ Clinics	No. of Beds	No. of Cabins	No. of Doctors	No. of Nurses
Dhaka Division						
33	Shariatpur	-	-	-	-	-
34	Madaripur	-	-	-	-	-
35	Gopalganj	-	-	-	-	-
36	Fardpur	-	-	-	-	-
37	Rajbari	-	-	-	-	-
38	Manikgonj	2	20	-	6	12
39	Dhaka	195	4321	753	2036	2029
40	Munshigonj	-	-	-	-	-
41	Narayangonj	3	33	-	8	16
42	Narsingdi	3	32	-	9	17
43	Gazipur	-	-	-	-	-
44	Tangail	3	270	-	56	91
45	Jamalpur	3	32	-	8	16
46	Sherpur	2	20	-	6	11
47	Mymensingh	22	218	-	64	120
48	Kishoregonj	-	-	-	-	-
49	Netrokona	-	-	-	-	-
Division Total:		233	4946	753	193	2312
Sl. No.	District	No. of Hospitals/ Clinics	Number of Beds	Number of Doctors	Number of Nurses	
Chittagong Division						
50	Sunamgonj	-	-	-	-	
51	Sylhet	16	7	57	112	
52	Moulvibazar	2	25	7	11	
53	Hobigonj	-	-	-	-	
54	Brahmanbaria	8	89	22	46	
55	Comilla	9	102	28	55	
56	Chandpur	2	22	6	12	
57	Laxmipur	1	10	3	6	
58	Noakhali	7	70	19	40	
59	Feni	4	36	9	20	
60	Khagrachhari	-	-	-	-	
61	Rangamati	2	164	32	51	
62	Chittagong	29	493	136	259	
63	Bandarban	-	-	-	-	
64	Cox's Bazar	1	15	4	3	
Division Total:		81	1033	323	615	
COUNTRY TOTAL:		483	8246	1104	4058	

TABLE - 5.2

**Average Number of Daily Outpatients and Bed Occupancy Rate of
District Hospitals and Thana Health Complexes, 1994-1997**

Sl. No.	Name of District Hospital/ Thana Health Complex	Daily Outdoor Attendance				Bed Occupancy Rate ¹			
		1994	1995	1996	1997	1994 (%)	1995 (%)	1996 (%)	1997 (%)
	PANCHAGARH	124	109	128	128	77.94	68.47	87.53	79.90
0101	Tetulia	157	100	118	118	55.39	60.25	62.62	63.31
0102	Debiganj	173	139	178	181	67.62	92.71	91.59	95.98
0103	Boda	249	156	150	138	93.04	75.26	77.01	81.63
0104	Atwari	137	112	117	114	93.41	79.53	92.18	90.66
	THAKURGAON	162	185	230	190	106.69	131.11	155.64	171.27
0201	Baliadanga	119	132	106	99	68.01	73.06	73.34	79.05
0202	Ranisankail	129	126	153	143	59.10	53.33	65.50	41.85
0203	Haripur	142	173	143	119	67.97	76.61	71.32	75.81
0204	Pirganj	98	92	125	129	70.65	75.55	76.31	73.86
	DINAJPUR	347	411	378	360	146.52	178.59	136.53	150.45
0301	Bochaganj	79	87	83	72	63.38	64.90	56.51	51.19
0302	Birol	123	163	117	107	79.13	76.72	70.19	62.18
0303	Kaharol	126	104	85	79	57.69	83.63	73.80	63.84
0304	Birganj	114	93	78	61	56.47	58.64	58.53	60.65
0305	Khansama	68	62	61	53	76.04	84.01	79.88	78.48
0306	Chirirbandar	82	92	89	92	80.99	98.39	101.68	74.03
0307	Parbatipur	96	99	98	101	88.94	93.17	88.02	88.22
0308	Fulbari	108	119	126	133	73.65	82.99	74.89	77.05
0309	Nawabganj	199	167	148	129	91.90	90.36	67.80	62.66
0310	Birampur	124	142	125	110	75.06	72.05	75.35	67.77
0311	Hakimpur	113	117	122	95	66.02	62.57	62.51	65.13
0312	Ghoraghat	112	109	110	87	88.03	82.32	61.41	79.54
	RANGPUR								
0401	Pirganj	127	120	110	126	70.83	72.41	67.09	81.79
0402	Mithapukur	191	206	155	139	74.83	87.53	74.57	94.04
0403	Pirgacha	188	147	113	136	81.61	84.86	68.57	93.66
0404	Kownia	160	137	129	219	68.64	68.72	57.25	95.02
0405	Gangachara	119	106	106	124	73.91	81.60	73.33	91.26
0406	Badarganj	136	109	87	99	48.04	90.41	68.99	87.31
0407	Taraganj	62	116	92	71	NF	28.76	60.72	59.66
	NILPHAMARI	111	62	81	86	99.05	89.46	122.43	98.48
0501	Saidpur	210	127	106	128	92.26	68.69	90.96	0
0502	Kishoreganj	128	84	96	80	96.02	98.40	99.43	85.12
0503	Jaldhaka	177	129	143	108	90.70	80.48	84.06	80.50
0504	Domar	160	120	165	126	68.77	63.00	85.55	82.06
0505	Dimla	52	32	65	41	86.44	82.51	100.01	79.20

Sl. No.	Name of District Hospital/ Thana Health Complex	Daily Outdoor Attendance				Bed Occupancy Rate ¹			
		1994	1995	1996	1997	1994 (%)	1995 (%)	1996 (%)	1997 (%)
	LALMONIRHAT	150	88	112	100	107.47	83.68	93.00	86.43
0601	Patgram	137	106	145	137	42.62	40.71	45.91	64.41
0602	Hatibandha	1564	122	123	121	80.01	45.66	39.77	47.27
0603	Kaliganj	184	136	161	147	72.14	65.88	42.33	48.24
0604	Aditmari*	65	63	65	72	NF	NF	NF	0
	KURIGRAM	203	198	180	210	108.84	136.92	121.63	128.22
0701	Rajarhat*	58	67	60	83	0	0	0	45.48
0702	Fulbari	172	158	177	210	17.82	45.30	49.62	64.89
0703	Bhurungamari	182	115	151	148	70.93	82.76	67.32	79.69
0704	Nageswari	182	224	122	137	55.53	85.39	68.77	74.37
0705	Ulipur	102	120	90	79	70.56	86.47	65.95	77.81
0706	Chilmari	80	77	74	100	82.24	98.81	71.98	91.06
0707	Rowmari	122	128	144	147	43.83	56.01	57.02	73.80
0708	Rajibpur*	131	126	117	92	NF	NF	NF	22.32
	GAIBANDHA	162	107	114	76	110.76	97.87	83.09	94.04
0801	Fulchari*	116	82	79	31	0	0	0	0
0802	Shaghata	175	87	81	42	57.66	62.98	55.35	50.61
0803	Sundarganj	149	100	97	51	55.72	62.37	55.28	41.99
0804	Sadullapur	156	95	105	52	83.01	77.37	66.53	41.96
0805	Palashbari	143	110	132	62	90.01	74.08	71.14	45.58
0806	Gobindaganj	132	75	80	58	99.96	106.66	94.61	53.26
	JOYPURHAT	122	154	155	148	107.29	134.23	116.47	154.42
0901	Panchbibi	100	68	52	71	53.17	42.93	51.92	57.49
0902	Kalai	89	144	110	99	66.13	70.61	58.31	58.27
0903	Khetlal	75	100	103	86	0	47.82	36.53	52.27
0904	Akkelpur	140	151	137	106	37.53	62.35	63.72	57.61
	BOGRA	268	274	198	213	146.26	138.68	185.48	200.72
1001	Adamdighi	156	182	188	167	41.13	44.89	49.54	49.59
1002	Dhupchanchia	213	194	196	164	46.89	43.94	42.43	51.90
1003	Kahaloo	145	142	134	115	83.06	96.28	92.43	80.45
1004	Nandigram	92	136	152	140	40.10	50.84	51.77	49.91
1005	Sherpur	179	201	172	143	58.62	71.79	72.14	72.59
1006	Shibganj	71	94	90	90	35.75	47.05	48.97	56.90
1007	Sonatala	386	165	122	97	47.19	45.19	63.12	53.06
1008	Gabtal	154	258	192	159	60.08	45.23	53.19	52.22
1009	Sariakandi	111	133	141	128	47.16	65.72	72.36	68.60
1010	Dhunot	169	118	132	86	55.58	65.85	63.37	62.66
	SERAJGANJ	100	146	115	103	78.88	82.49	67.20	84.80
1101	Kazipur	181	92	116	80	NF	NF	NF	37.22
1102	Raiganj	161	173	117	85	43.45	73.50	50.19	44.18
1103	Tarash	147	157	127	85	28.29	43.10	28.95	46.19
1104	Ullapara	194	86	155	100	97.34	84.62	78.13	62.25

Sl. No.	Name of District Hospital/ Thana Health Complex	Daily Outdoor Attendance				Bed Occupancy Rate ¹			
		1994	1995	1996	1997	1994 (%)	1995 (%)	1996 (%)	1997 (%)
1105	Kamarkanda	252	236	200	147	31.20	41.69	30.13	38.20
1106	Belkuchi	224	200	146	101	88.28	104.54	62.21	61.51
1107	Chowhali	118	124	116	107	24.58	40.71	34.62	39.43
1108	Shahzadpur	274	244	183	136	90.35	77.83	46.03	44.90
	PABNA	315	341	345	303	104.81	116.90	109.12	109.87
1201	Santhia	162	135	129	133	61.69	94.85	92.68	84.55
1202	Bera	166	167	150	146	94.39	97.20	83.61	89.13
1203	Sujanagar	168	175	190	174	59.56	70.75	87.36	78.75
1204	Faridpur	175	175	148	183	84.71	73.60	63.23	57.88
1205	Bhangura	147	227	189	160	NF	26.02	50.61	46.93
1206	Chatmohar	195	149	145	146	69.59	79.98	70.79	86.29
1207	Atghoria	226	226	192	150	76.37	74.68	83.19	77.39
1208	Iswardi	206	206	146	156	67.41	56.41	65.07	77.48
	NATORE	171	210	182	123	63.08	79.27	126.68	71.22
1301	Lalpur	210	147	171	142	79.34	73.45	88.54	84.86
1302	Bagatipara	169	116	123	153	54.13	36.24	45.44	47.57
1303	Baraigram	228	187	198	148	54.21	42.95	65.74	52.64
1304	Gurudashpur	152	161	221	241	77.57	75.33	76.95	54.86
1305	Singra	223	168	215	195	89.77	58.68	87.47	76.88
	NAOGAON	238	210	174	185	123.92	122.26	94.09	130.06
1401	Atrai	141	135	103	92	47.21	33.85	74.87	50.61
1402	Raninagar	177	197	195	164	43.77	57.01	50.46	59.93
1403	Manda	111	96	79	82	68.69	52.70	55.40	60.85
1404	Niamatpur	70	66	73	75	38.3	46.03	55.09	63.00
1405	Mohadevpur	169	173	165	149	40.98	53.10	46.20	47.07
1406	Badalgachi	261	248	150	124	41.63	40.66	37.00	55.67
1407	Dhamairhat	96	112	169	188	23.99	21.56	48.56	53.37
1408	Patnitala	84	101	77	88	35.24	50.16	45.93	57.00
1409	Sapahar	129	127	89	109	45.95	55.02	50.91	69.75
1410	Porsha	156	82	122	130	43.01	36.10	53.73	58.83
	C. NAWABGANJ	167	182	231	181	109.40	107.38	135.88	104.34
1501	Gomastapur	159	145	134	135	45.91	41.82	41.01	45.24
1502	Bholahat	142	140	138	125	52.84	48.24	57.36	68.16
1503	Shibganj	150	124	167	135	75.25	56.61	79.56	68.18
1504	Nachol	167	121	97	90	35.89	35.40	35.62	37.22
	RAJSHAHI								
1601	Godagari	86	114	107	90	69.12	70.96	80.06	78.29
1602	Tanore	91	111	104	95	48.33	44.39	41.02	45.60
1603	Mohanpur	68	93	118	112	46.33	47.90	54.79	63.45
1604	Bagmara	92	89	97	91	44.24	64.02	48.89	51.42
1605	Durgapur	125	124	105	162	67.49	74.47	80.13	69.80
1606	Paba	125	148	163	119	40.91	52.39	39.00	42.52

Sl. No.	Name of District Hospital/ Thana Health Complex	Daily Outdoor Attendance				Bed Occupancy Rate ¹			
		1994	1995	1996	1997	1994 (%)	1995 (%)	1996 (%)	1997 (%)
1607	Puthia	128	170	165	143	67.98	88.52	95.50	87.54
1608	Charghat	118	129	119	144	65.06	78.26	79.38	23.83
1609	Bogha	136	124	122	134	53.84	52.20	72.03	68.87
	KUSHTIA	141	131	140	155	110.59	129.86	144.23	166.57
1701	Daulatpur	94	99	52	65	68.84	81.90	71.17	60.48
1702	Bheramara	81	78	77	57	60.12	34.65	43.60	45.32
1703	Mirpur	151	119	100	78	61.44	51.56	89.73	79.81
1704	Kumarkhali	106	78	50	54	92.36	106.13	75.23	81.08
1705	Khoksha	149	117	71	74	74.33	55.25	56.78	57.99
	MEHERPUR	108	118	117	97	81.85	100.05	93.85	58.3
1801	Gangni	73	124	78	59	74.11	78.31	88.65	91.34
	CHUADANGA	107	120	116	130	105.97	126.94	128.81	134.10
1901	Alamdanga	251	214	206	199	70.17	73.36	84.37	77.76
1902	Damurhuda	114	126	111	125	45.01	50.99	53.69	61.31
1903	Jibanagar	158	137	104	121	37.06	61.38	43.92	55.18
	JHENAIDAH	115	106	130	186	115.13	160.04	98.56	98.74
2001	Mohespur	112	104	96	88	98.19	111.94	63.23	60.43
2002	Kotchandpur	117	128	122	115	87.01	81.87	82.97	76.77
2003	Kaliganj	120	108	111	101	84.15	76.76	58.62	59.46
2004	Harinakunda	124	117	135	111	75.81	91.15	76.31	75.64
2005	Sailkupa	162	156	127	134	97.53	106.99	97.96	90.40
	MAGURA	59	53	73	95	53.99	53.16	148.88	101.56
2101	Sreepur	120	111	88	78	55.08	48.55	43.99	54.69
2102	Salika	84	62	64	50	54.94	47.48	41.07	62.97
2103	Mohammadpur	140	148	67	76	64.04	45.25	46.81	60.45
	NARAIL	105	114	107	90	126.15	123.00	126.38	142.5
2201	Lohagara	274	231	130	91	70.71	53.00	91.37	75.28
2202	Kalia	86	84	77	69	66.77	70.51	73.39	75.95
	JESSORE	151	156	161	182	140.78	130.94	152.17	124.75
2301	Abhoynagar	101	125	128	119	81.54	112.33	111.32	89.22
2302	Bagerpara	106	107	116	87	60.44	66.47	65.56	66.94
2303	Chowgacha	113	102	91	120	25.20	62.47	63.91	72.97
2304	Sarsa	98	71	85	84	92.12	62.32	72.12	65.25
2305	Jhikargacha	101	95	100	92	68.01	89.30	94.22	81.27
2306	Monirampur	61	49	43	32	90.89	101.13	97.56	85.42
2307	Keshabpur	69	57	61	53	99.57	78.23	95.96	88.27
	SATKHIRA	162	190	231	236	111.04	135.85	154.19	146.44
2401	Kalaroa	104	70	80	72	59.28	49.38	64.55	57.15
2402	Debhata	56	54	75	92	34.92	38.15	60.86	73.15

Sl. No.	Name of District Hospital/ Thana Health Complex	Daily Outdoor Attendance				Bed Occupancy Rate			
		1994	1995	1996	1997	1994 (%)	1995 (%)	1996 (%)	1997 (%)
2403	Kaliganj	103	74	96	100	65.40	67.17	84.80	80.41
2404	Shyamnagar	56	45	48	46	62.67	56.25	72.96	85.72
2405	Assasuni	82	61	77	106	48.63	36.51	53.45	49.39
2406	Tala	86	61	74	69	50.79	45.60	76.69	85.67
	KHULNA	218	245	232	361	98.87	83.11	76.59	90.82
2501	Paikgacha	34	37	31	49	32.26	43.69	36.84	50.99
2502	Koyra	102	83	106	106	53.75	36.73	47.49	42.64
2503	Dacope	111	112	80	77	65.08	102.30	96.84	80.89
2504	Batiaghata	79	80	78	77	50.98	59.15	64.00	63.33
2505	Dumuria	113	90	94	104	83.82	76.50	91.38	84.35
2506	Fultala	114	120	111	81	90.84	97.72	83.27	73.50
2507	Digholia	138	152	162	153	44.42	58.34	75.70	50.23
2508	Rupsha	85	105	122	108	36.61	48.42	39.24	46.83
2509	Terakhada	124	137	115	114	82.07	87.23	85.80	85.06
	BAGERHAT	216	179	175	190	120.79	187.29	132.26	95.75
2601	Mollahat	253	201	178	149	80.89	66.78	78.02	76.92
2602	Fakirhat	114	116	126	113	79.73	78.42	82.95	85.36
2603	Chitalmari*	59	53	73	63	NF	NF	NF	NF
2604	Kachua	112	140	121	99	67.97	74.96	74.81	64.62
2605	Morrelganj	165	130	99	93	88.10	88.40	95.95	85.02
2606	Rampal	64	96	78	73	62.14	72.09	81.95	78.72
2607	Mongla*	71	55	46	44	NF	NF	NF	NF
2608	Sarankhola	153	152	126	116	94.37	109.31	106.96	93.16
	PEROJPUR	147	154	154	147	97.01	104.65	107.65	105.03
2701	Mathbaria	113	49	101	102	70.37	36.81	69.14	91.28
2702	Bhandaria	50	44	99	89	47.38	38.61	75.13	71.10
2703	Nazirpur	66	48	86	68	81.79	46.17	92.26	98.62
2704	Swarupkathi	86	75	116	86	45.66	31.82	55.35	60.58
2705	Kowkhali	79	36	66	77	61.54	42.64	81.48	91.90
	JHALKATHI	74	92	110	151	78.26	76.66	88.45	114.88
2801	Nalchithi	77	91	107	132	53.19	61.76	58.13	74.32
2802	Rajapur	61	79	80	83	60.50	76.87	62.07	77.61
2803	Kathalia	41	62	76	95	54.41	57.39	65.72	71.38
	BARGUNA	90	66	87	107	83.03	84.86	106.73	59.88
2901	Betagi	109	60	66	79	73.74	47.16	57.30	81.83
2902	Bamna	97	85	84	71	44.98	58.99	80.11	79.96
2903	Pathargatha	85	62	66	76	64.45	66.67	93.98	92.59
2904	Amtali	200	130	101	87	55.41	65.13	85.67	98.84
	PATUAKHALI	75	82	108	79	83.58	88.23	115.58	121.63
3001	Kalapara	128	82	82	82	98.62	114.69	100.05	101.87
3002	Galachipa	51	106	146	79	84.17	105.55	118.75	90.48

Sl. No.	Name of District Hospital/ Thana Health Complex	Daily Outdoor Attendance				Bed Occupancy Rate			
		1994	1995	1996	1997	1994 (%)	1995 (%)	1996 (%)	1997 (%)
3003	Mirzaganj	78	39	58	82	81.72	64.15	90.82	90.14
3004	Bauphal	103	113	110	136	54.94	94.04	78.91	70.92
3005	Dashmina	64	57	55	43	NF	34.49	32.37	45.34
	BHOLA	168	173	151	121	168.49	121.23	83.96	88.99
3101	Lalmohan	125	125	117	107	86.14	97.78	91.52	89.43
3102	Charfession	255	190	188	173	81.75	108.67	92.11	83.93
3103	Monpura*	79	42	67	47	NF	NF	NF	30.12
3104	Tajumuddin	216	142	113	126	64.71	57.50	48.33	52.97
3105	Borhanuddin	134	116	87	94	61.58	77.75	64.30	72.93
3106	Daulatkhan	137	105	97	78	75.78	54.46	71.23	68.05
	BARISAL	NA	NA	NA	NA	NA	NA	NA	NA
3201	Bakerganj	142	123	109	112	71.58	81.85	82.42	88.48
3202	Bahuganj	78	67	52	67	26.99	33.53	34.65	54.87
3203	Banaripara	102	90	60	65	60.99	75.61	70.89	84.08
3204	Wazirpur	88	70	57	53	70.08	88.61	88.63	82.60
3205	Gournadi	131	99	64	54	66.19	68.95	84.26	53.75
3206	Agailjhara	74	82	92	55	31.29	39.33	58.68	59.62
3207	Muladi	162	123	99	80	78.55	80.46	77.63	84.68
3208	Mehendiganj	178	178	116	109	43.51	48.30	43.00	52.31
3209	Hizla	131	148	130	120	79.88	69.92	71.89	93.14
	SHARIATPUR	124	157	151	109	91.65	93.85	90.93	80.78
3301	Goshairhat	139	135	125	130	39.34	43.61	52.90	54.70
3302	Damuddya	119	121	124	110	54.23	44.81	47.81	44.11
3303	Bhederganj	87	91	58	54	71.78	75.98	80.79	77.99
3304	Naria	87	88	65	63	77.34	92.10	73.18	76.45
3305	Zanzira	162	143	142	94	49.09	51.27	59.74	59.02
	MADARIPUR	171	202	236	204	111.29	151.90	161.92	189.84
3401	Shibchar	80	71	63	60	97.15	86.32	85.91	83.09
3402	Rajoir	152	109	123	118	89.55	102.05	97.91	87.40
3403	Kalkini	155	105	111	85	79.25	48.30	78.30	82.23
	GOPALGANJ	44	50	43	55	84.91	101.33	111.80	127.70
3501	Kotwalipara	79	72	49	43	64.69	58.13	62.75	59.65
3502	Tongipara*	81	112	89	119	NF	NF	NF	NF
3503	Kassiani	69	47	35	46	66.28	55.85	56.67	57.94
3504	Mukshedpur	76	80	79	77	25.81	83.28	84.39	76.99
	FARIDPUR	234	189	149	144	172.92	183.18	188.00	185.15
3601	Bhanga	88	114	108	81	80.42	85.55	86.11	75.77
3602	Sadarpur	84	60	72	53	46.43	43.69	55.42	62.24
3603	Charbhadrason	151	82	61	55	76.80	57.45	56.63	53.12
3604	Nagarkanda	132	105	87	81	86.76	106.21	105.44	76.84
3605	Alfadanga	119	105	114	120	54.83	58.01	60.56	58.55

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		1994	1995	1996	1997	1994 (%)	1995 (%)	1996 (%)	1997 (%)
3606	Boalmari	110	87	85	93	91.09	88.52	101.33	83.51
3607	Modhukhali*	91	54	73	99	NF	NF	NF	51.14
	RAJBARI	91	92	64	57	104.40	135.70	112.31	116.61
3701	Baliakandi	44	38	27	34	66.68	62.05	58.97	57.57
3702	Pangsha	47	32	34	37	81.09	97.38	82.89	75.46
3703	Goalandaghat	76	51	46	46	69.82	71.32	71.08	62.99
	MANIKGANJ	148	138	159	136	141.60	131.45	137.73	118.46
3801	Harirampur	359	95	112	79	NF	66.83	58.34	42.10
3802	Shibalaya	78	56	53	37	72.64	66.36	74.32	66.48
3803	Daulatpur	277	179	147	158	88.97	87.95	74.05	73.90
3804	Ghior	275	123	97	78	55.55	48.53	52.68	47.29
3805	Singair	368	204	157	69	62.65	43.36	54.44	57.60
3806	Saturia	111	84	78	68	70.76	59.73	51.13	59.48
	DHAKA								
3901	Dhamrai	483	309	159	175	78.72	83.62	75.56	89.48
3902	Savar	256	190	153	125	70.64	74.01	67.91	66.76
3903	Keraniganj	265	204	131	76	40.96	37.00	39.81	46.01
3904	Nawahganj	106	120	112	93	26.75	38.21	32.84	47.75
3905	Dohar	89	99	116	95	43.41	44.01	50.29	40.95
	MUNSHIGANJ	129	135	141	95	93.41	84.10	91.95	81.38
4001	Sreenagar	51	43	50	37	48.86	37.45	34.78	36.19
4002	Louhaganj	55	69	82	60	31.66	NF	NF	NF
4003	Serajdikhan	61	88	86	64	41.85	42.68	0	40.49
4004	Tongibari	95	125	130	107	45.77	42.06	55.76	40.20
4005	Gazaria	96	80	80	55	58.70	57.32	44.75	47.74
	NARAYANGANJ	281	295	155	299	78.23	50.67	NF	NF
4101	Bandar*	73	95	95	81	NF	NF	NF	NF
4102	Sonargaon	99	104	94	83	50.67	53.41	55.92	60.83
4103	Araihazar	238	254	319	283	36.19	55.02	60.84	58.52
4104	Rupganj	192	169	178	143	45.82	49.12	55.85	50.07
	NARSINGDI	154	127	129	173	81.24	73.45	69.96	88.45
4201	Palash	95	77	127	127	38.97	51.01	69.43	59.53
4202	Raipur	85	60	58	80	55.19	55.08	55.00	61.22
4203	Betaboo*	99	90	88	114	NF	NF	NF	47.03
4204	Shibpur	82	75	67	63	71.49	59.72	56.73	56.36
4205	Monohardi	76	95	62	64	94.39	91.41	87.66	90.48
	GAZIPUR	182	153	120	139	66.47	82.20	79.36	83.18
4301	Kapasias	312	260	140	171	52.39	61.23	54.22	62.95
4302	Kaliganj	138	109	90	105	75.03	62.08	38.94	57.68
4303	Sreepur	356	229	140	165	61.49	69.70	65.82	67.37

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4304	Kaliakair	347	212	131	136	72.27	85.01	76.90	78.05
	TANGAIL	137	164	166	161	110.26	115.79	132.17	143.32
4401	Mirzapur*	18	0	55	134	NF	NF	NF	NF
4402	Nagarpur	123	100	92	78	49.86	63.76	91.66	91.55
4403	Delduar	123	133	135	116	27.75	58.04	44.27	53.48
4404	Basail	207	177	140	114	47.79	48.56	47.11	58.02
4405	Sakhipur	107	92	79	83	38.42	44.17	53.44	74.39
4406	Khalihati	147	143	174	150	57.16	58.91	92.01	93.19
4407	Bhuapur	161	109	84	95	54.49	70.47	66.83	70.68
4408	Ghatail	224	219	175	169	59.50	81.34	80.65	87.11
4409	Gapalpurr	162	131	100	131	71.02	75.25	70.75	79.89
4410	Modhupur	281	141	102	102	65.79	82.10	86.34	91.11
	JAMALPUR	144	125	101	181	127.08	116.26	99.88	108.87
4501	Sarisabari	138	120	139	139	74.54	90.42	110.84	91.60
4502	Madarganj	144	85	124	115	70.09	64.55	94.49	82.39
4503	Melandha	183	165	230	180	69.97	79.52	83.69	63.74
4504	Islampur	271	242	266	237	46.01	42.80	59.20	58.14
4505	Dewanganj	185	93	92	84	57.22	55.56	49.19	48.66
4506	Bakshiganj	149	159	149	132	33.36	49.27	57.77	56.51
	SHERPUR	131	80	91	166	96.49	91.92	100.15	99.82
4601	Sribardi	162	154	171	136	50.67	53.68	46.05	43.39
4602	Jhenaigati	124	103	104	62	48.64	46.43	41.70	32.80
4603	Nakhla	189	129	140	104	42.70	35.63	39.11	43.37
4604	Nalitabari	82	59	61	61	47.33	42.10	49.68	41.72
	MYMENSINGH								
4701	Haluaaghat	114	163	184	177	93.24	102.24	91.67	94.16
4702	Dhubaura	186	122	116	138	NF	NF	NF	NF
4703	Fulpur	228	192	189	174	59.93	44.50	60.36	73.25
4703	Gouripur	152	115	124	122	88.04	56.98	53.73	52.32
4705	Iswarganj	93	94	112	102	50.23	55.76	64.29	78.56
4706	Mukhtagacha	193	168	194	188	44.20	52.82	68.89	77.90
4707	Fulbaria	140	98	115	121	87.03	74.35	74.54	81.45
4708	Bhaluka	135	106	105	99	86.03	84.05	87.77	89.91
4709	Gaffargaon	188	149	142	139	92.53	102.96	90.28	89.62
4710	Trisal	337	210	172	166	93.61	68.44	64.84	76.62
4711	Nandail	160	134	151	118	70.74	61.23	80.04	92.32
	KISHOREGANJ	118	97	117	134	136.14	158.53	161.96	194.66
4801	Hossainpur	208	116	114	191	53.92	75.54	69.88	66.05
4802	Pakundia	155	135	118	98	65.41	68.86	76.47	78.94
4803	Katiadi	146	107	91	125	68.02	87.05	88.01	96.86
4804	Kulairchar	300	290	184	246	59.17	69.38	68.72	86.33
4805	Bhairab	148	148	165	196	53.98	64.72	55.36	64.97

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4806	Bajitpur	144	123	109	147	42.58	46.04	44.68	51.35
4807	Astagram	76	105	122	113	49.14	53.57	62.23	96.90
4808	Nikhli	52	83	100	100	28.82	40.51	46.08	51.82
4809	Mitamain	124	71	70	62	NF	34.77	35.78	45.29
4810	Karimganj	139	150	142	158	76.97	86.13	86.68	88.40
4811	Tarail	172	136	121	152	73.34	99.01	82.09	88.83
4812	Itna	178	133	73	92	53.46	39.14	37.53	61.78
	NETROKONA	104	87	81	96	125.62	150.40	159.62	140.64
4901	Khaliadhuri	70	73	70	58	NF	31.27	29.12	31.60
4902	Madan	87	66	53	68	74.84	79.89	89.30	69.22
4903	Kendua	100	62	71	70	49.93	59.49	80.56	76.18
4904	Atpara	167	194	170	78	46.65	44.83	49.94	59.07
4905	Mohanganj	179	133	97	81	64.21	73.14	62.32	59.48
4906	Barhatta	176	139	177	128	51.26	47.98	72.68	72.53
4907	Purbadhala	85	68	68	66	39.08	43.23	34.16	44.12
4908	Durgapur	123	100	101	124	45.92	56.76	41.07	43.84
4909	Kamalkanda	187	154	158	143	68.56	71.60	85.75	84.86
	SUNAMGANJ	202	176	206	131	98.67	84.73	104.02	66.25
5001	Dharmapasha	190	113	143	45	28.86	26.81	47.73	41.79
5002	Taherpur	192	115	159	61	63.47	31.33	38.36	41.89
5003	Biswambarpur*	119	60	117	61	NF	NF	NF	NF
5004	Jamalganj	148	77	92	43	42.13	27.76	40.95	48.35
5005	Sulla	79	39	48	27	24.05	24.06	36.48	43.32
5006	Deerai	107	56	76	25	24.45	25.04	54.06	40.29
5007	Jaganathpur	98	69	64	64	21.58	25.64	29.57	53.00
5008	Chhatak	137	73	81	100	31.84	26.98	26.92	52.13
5009	Duarabazar*	136	93	64	63	NF	NF	NF	NF
	SYLHET								
5101	Companiganj	66	69	69	37	NF	NF	NF	NF
5102	Biswanath	59	69	37	49	23.18	25.53	19.13	22.17
5103	Balaganj	56	29	73	45	27.48	23.47	40.23	34.59
5104	Fenchuganj	77	88	100	74	27.46	31.12	39.64	36.82
5105	Golapganj	107	85	125	78	28.41	33.79	40.75	33.15
5106	Gowainghat	64	75	113	60	21.82	29.04	37.23	28.56
5107	Joipypur	45	66	90	67	21.82	38.42	42.17	28.76
5108	Kanaighat	117	80	121	62	32.65	24.63	37.69	23.85
5109	Zakiganj	100	100	121	53	20.49	27.51	34.51	22.65
5110	Beanibazar	77	101	125	73	28.08	36.70	38.33	26.89
	MOULVIBAZAR	189	155	116	63	54.39	97.49	68.14	53.16
5201	Barlekha	152	119	100	83	39.50	37.80	35.48	54.21
5202	Kaulara	167	123	117	118	31.95	33.73	34.45	54.16
5203	Rajanagar	151	80	79	57	36.18	33.36	33.83	52.00
5204	Kamalganj	131	139	126	85	37.52	41.16	34.48	55.05
5205	Sreemangal	190	171	223	181	47.49	37.30	36.97	63.93

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		1994	1995	1996	1997	1994 (%)	1995 (%)	1996 (%)	1997 (%)
	HOBIGANJ	162	199	214	194	87.12	113.96	106.03	109.42
5301	Nabiganj	318	323	272	119	45.30	60.57	67.61	65.82
5302	Azmirganj	125	106	132	126	23.08	36.17	34.47	51.75
5303	Baniachong	89	94	91	75	45.54	56.72	53.73	55.57
5304	Lakhai	222	192	219	139	23.39	31.86	37.06	47.15
5305	Bahubal	114	107	131	135	40.72	57.80	51.19	51.75
5306	Chunarughat	72	81	107	139	45.67	57.02	79.09	88.02
5307	Madhabpur	113	107	181	148	23.56	31.79	47.03	49.58
	BRAHMANBARIA	132	184	206	186	127.61	146.68	187.07	141.03
5401	Nasirnagar	185	170	168	152	38.17	45.39	47.37	42.02
5402	Sarail	274	327	299	214	62.42	77.71	65.81	48.55
5403	Akhaura	134	139	109	93	61.74	69.41	55.24	48.11
5404	Kasba	129	138	131	99	93.79	96.63	89.32	72.57
5405	Nabinagar	168	177	137	85	65.59	71.35	67.41	62.40
5406	Bancharampur	180	161	113	121	40.53	30.19	37.32	39.10
	COMILLA	144	138	137	104	87.19	91.55	96.41	94.44
5501	Homna	172	134	120	110	34.86	43.09	47.01	52.56
5502	Daudkandi	173	136	150	71	97.10	97.03	111.06	91.93
5503	Chandina	63	48	31	25	81.46	84.73	68.17	57.66
5504	Muradnagar	179	162	148	102	59.11	47.98	48.36	52.89
5505	Debidwar	138	146	136	99	78.06	74.96	85.20	87.15
5506	Brahmanpara*	85	95	86	85	NF	NF	NF	30.00
5507	Burichong	133	101	93	73	87.63	113.23	104.82	81.11
5508	Barura	99	88	104	105	85.10	90.61	81.11	77.05
5509	Chouddagram	161	150	134	124	68.01	67.88	61.40	61.66
5510	Nangolkot	74	80	67	88	29.85	49.62	73.40	73.73
5511	Laksham	95	87	118	106	84.12	46.97	41.14	85.32
	CHANDPUR	166	204	207	209	103.99	129.42	114.05	131.91
5601	Saharasthi*	81	70	76	91	NF	NF	NF	50.24
5602	Haziganj	180	97	42	63	94.37	98.05	78.32	92.08
5603	Kachua	176	74	65	66	72.77	82.40	66.20	53.07
5604	Matlab	65	72	58	45	81.71	60.19	60.24	61.71
5605	Haimchar	108	79	52	70	NF	NF	NF	NF
5606	Faridganj	274	130	124	119	71.36	62.27	65.48	77.32
	LAXMIPUR	96	74	41	36	117.66	152.09	54.37	76.17
5701	Raipur	94	70	64	58	62.86	50.01	43.92	50.79
5702	Ramganj	123	139	122	124	70.53	62.90	77.64	78.90
5703	Ramgati	106	90	91	79	53.22	50.16	45.00	42.18
	NOAKHALI	124	131	164	128	54.88	44.25	146.46	161.59
5801	Hatiya	79	62	51	93	32.08	37.15	33.37	82.38
5802	Chatkhil	70	102	116	132	53.58	42.57	53.09	65.27

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5803	Begumganj	183	110	105	85	73.12	76.64	78.10	78.09
5804	Senbag	92	108	84	82	64.12	74.78	68.48	74.11
5805	Companiganj	112	128	133	123	54.77	75.77	68.64	71.14
	FENI	111	127	130	137	113.34	180.27	186.15	229.25
5901	Sonagazi	130	98	91	104	49.38	63.35	59.69	77.53
5902	Daganbhuiyan*	90	41	54	101	NF	NF	NF	67.04
5903	Parsuram	163	135	102	119	74.67	86.27	74.52	89.47
5904	Chhaganaya	87	97	103	91	77.30	68.24	62.80	52.69
	KHAGRACHHARI	50	50	58	64	74.18	62.38	69.48	95.13
6001	Manikchhari	75	101	113	125	30.46	34.17	30.08	42.27
6002	Ramgarh	114	104	111	97	42.16	51.92	57.23	56.18
6003	Matiranga	86	100	79	65	18.90	31.70	25.68	NF
6004	Laxmichhari	25	28	36	34	22.84	34.06	36.39	32.94
6005	Mohalchhari	61	73	73	59	31.06	32.85	51.33	43.76
6006	Panchari	78	82	82	102	60.06	49.32	32.09	54.05
6007	Dighinala	67	77	93	111	26.84	34.54	29.47	50.23
	RANGAMATI	104	66	47	94	82.80	48.59	29.47	57.24
6101	Bagaichhari	78	93	81	66	19.43	33.01	38.89	43.92
6102	Langadu	52	62	41	41	39.37	37.50	36.36	53.32
6103	Naniarchar	68	58	51	40	38.29	33.08	34.05	41.35
6104	Kowkhali	68	95	105	90	26.24	30.93	36.13	40.49
6105	Barkol	22	16	20	23	NF	NF	NF	NF
6106	Jhuraichhari	27	24	23	21	36.56	34.88	34.43	36.81
6107	Belaichhari	36	23	26	20	32.28	30.43	31.13	43.23
6108	Kaptai	128	123	143	96	28.70	40.74	47.75	45.82
6109	Rajesthali	59	42	39	39	25.79	32.55	32.94	36.09
	CHITTAGONG								
6201	Rangunia	71	66	63	92	67.46	62.57	55.02	74.01
6202	Rowzan	88	108	123	129	40.13	46.31	51.56	72.03
6203	Hathazari	151	135	120	112	58.36	38.54	49.32	70.56
6204	Fatikchhari	188	154	179	172	91.65	83.40	65.89	77.30
6205	Mirersarai	185	119	78	66	67.19	82.25	89.12	80.28
6206	Sitakunda	124	117	119	121	42.06	38.59	38.12	44.25
6207	Sandwip	110	86	94	105	38.76	45.66	40.43	44.58
6208	Boalkhali	119	100	89	108	79.53	91.01	73.73	98.79
6209	Potiya	166	161	166	151	41.38	62.60	87.11	80.75
6210	Chandanaish	191	148	135	142	74.94	102.76	85.49	51.90
6211	Anwara	119	95	72	86	43.16	32.72	40.92	58.54
6212	Baskhali	65	51	64	66	58.38	61.95	68.12	66.73
6213	Satkania	105	113	98	95	64.01	45.58	61.66	69.85
6214	Lohagara	152	124	188	161	NF	27.26	60.14	63.10
	BANDARBAN	179	122	95	64	99.82	90.13	77.64	58.43

Sl. No.	Name of District Hospital/ Thana Health Complex	Daily Outdoor Attendance				Bed Occupancy Rate ¹			
		1994	1995	1996	1997	1994 (%)	1995 (%)	1996 (%)	1997 (%)
6301	Rowangchari	37	25	22	20	24.10	35.22	33.66	38.06
6302	Ruma	47	37	39	34	30.26	32.28	33.19	34.64
6303	Thanchi*	10	14	10	04	NF	NF	NF	NF
6304	Alikadam*	116	84	70	69	NF	NF	NF	NF
6305	Nykongchari	90	111	61	37	80.30	114.65	81.47	36.02
6306	Lama	146	136	100	72	63.14	55.10	48.60	46.07
	COX'S BAZAR	267	159	170	211	77.96	55.39	66.60	183.58
6401	Chakaria	141	94	87	137	68.72	53.80	64.71	80.97
6402	Kutubdia	117	93	129	142	39.14	39.41	48.10	56.87
6403	Moheskhali	92	82	117	154	92.77	67.96	100.34	80.59
6404	Ramu	189	209	231	199	35.13	45.96	44.98	83.17
6405	Ukhyia	122	155	231	157	97.97	66.62	68.96	72.51
6406	Teknaf	123	139	170	148	92.55	140.63	119.36	84.75

Note:

* Thana Health Complex not yet functioning.

1 Bed Occupancy Rate = {Total no. of patient days/(No. of beds X No. of days in the period)}X100

- Daily Census: Remaining patients of previous day + admission of the current day

- Patient Days: Monthly/Yearly total of daily census.

It is important to examine recent trends in the utilization of district and thana level government health facilities. The following analysis provides some clue to this issue which recently has become highly controversial due to the inconsistent findings from various surveys. Two indicators were used to analyze the hospital utilization situation in Bangladesh, namely, bed occupancy rate and daily out-patient attendance. Data for these two indicators at district and thana level were fairly complete and they were sent to the Health Information Unit quite regularly.

Table 5.2.1 shows that district hospitals were, in general, over utilized (in-patient). If 100% is used as a cut off point over the four year period 1994-1997, the district hospitals were over-utilized by 52.62%, 56.14%, 60.72% and 55.18% over the years 1994, 1995, 1996 and 1997 respectively. The trend clearly indicates a worsening of the existing situation of over-utilization. On the other hand, if below 80% bed occupancy rate is used as an indication of under-utilization, it can be noted that there was a minor reduction of under-utilized hospitals over the four years. The under-utilization rates for 1994, 1995, 1996 and 1997 were 19.31%, 17.55%, 17.85% and 17.24% respectively.

TABLE - 5.2.1
Bed Occupancy Rate of District Hospitals, 1994-97.

Bed Occupancy level (in percentage)	DISTRICT							
	1994		1995		1996		1997	
	No.	%	No.	%	No.	%	No.	%
Below 50%	0	0	2	3.52	1	1.78	0	0
50.01 - 70.00	5	8.77	5	8.77	6	10.71	6	10.34
70.01 - 80.00	6	10.54	3	5.26	3	5.36	4	6.90
80.01 - 100.00	16	28.07	15	26.31	13	21.43	16	27.58
100.01 - 110.00	10	17.54	4	7.02	6	10.72	6	10.34
110.01 - 130.00	13	22.80	10	17.54	11	17.86	7	12.08
Above 130%	7	12.28	18	31.58	19	32.14	19	32.76
Total No. of District Hospitals	57	100	57	100	59	100	58	100

Table 5.3 gives a different picture of the hospital utilization situation (in-patient) in the thana level. If the same utilization cut-off levels were used, it can be noted that between 1994 and 1997, the under-utilization rates were 80.76%, 78.04%, 76.20% and 78.8% respectively. It can be concluded from the statistics that the situation of THC under-utilization has not changed over the four year period. The number of under-utilized health complexes was unacceptably high. Ironically, both district hospitals and THCs have similar number of medical professionals working there. Many of the very under-utilized THCs come from the Greater Sylhet, Magura and Rangamati and other hill district areas. There is a need to examine why so many THCs in these districts are so under-utilized. Fortunately, the overall trend of THC utilization has been rapidly improving. THCs are better utilized over the years and the number of thanas of extreme under-utilization (below 50%) has been reduced to 0 by 1997. The analysis also shows another adverse trend, i.e., an increasing number of THCs are being utilized beyond their capacity.

TABLE - 5.3
Bed Occupancy Rate of Thana Health Complexes, 1994-96.

Bed Occupancy level (in percentage)	THANA							
	1994		1995		1996		1997	
	No.	%	No.	%	No.	%	No.	%
Below 40%	71	19.24	68	17.99	56	14.71	32	8.38
40.01 - 50.00	60	16.27	68	17.99	54	14.17	64	16.75
50.01 - 60.00	53	14.36	55	14.55	61	16.04	80	20.94
60.01 - 70.00	61	16.53	51	13.49	62	16.31	52	13.62
70.01 - 80.00	53	14.36	53	14.02	57	14.97	73	19.11
80.01 - 100.00	71	19.24	63	16.67	77	20.32	80	20.94
100.01 - 110.00	0	0	14	3.70	9	2.14	1	0.26
Above 110%	0	0	6	1.59	5	1.34	0	0
Total No. of Thana Health Complexes	369	100	378	100	381	100	382	100

With bed occupancy rates over 100% in the majority of district hospitals, it is expected that the number of daily outdoor attendance would also be fairly high. The numbers of beds and specialists in the district hospitals vary from 50 to 200 and from 3 to 15 respectively. Most of the district hospitals have 50 beds

with 4 consultant specialists and 10 medical officers. The optimum number of outpatients a specialist/MO could consult is difficult to judge as the time required varies from case to case; it also depends on the number of in-patients requiring the physician's attention.

Table 5.4 shows that District hospital daily outdoor attendance in 1997 varied from a low of 55 patients in Gopalganj to a high of 361 patients in Khulna. Interestingly, both districts had bed occupancy rate of well over 90%, an indication that in-patient services of these two district hospitals were fully utilized. The table also shows that, from 1994 to 1997, between 15 and 19 percent of the district hospitals had daily outdoor attendance of over 200 patients while between 1.7 and 5.3 percent had daily attendance of below 50 patients. Although population size, disease pattern and hospital capacity vary from district to district, such a huge variation in out-door patient service utilization is unusual.

TABLE - 5.4
Average Number of Daily Outpatients of District Hospitals

Daily Outdoor Attendance	District Hospitals							
	1994		1995		1996		1997	
	No.	%	No.	%	No.	%	No.	%
50 and below	2	3.51	2	3.51	3	5.26	1	1.67
51 - 75	3	5.26	5	8.77	3	5.26	5	8.33
76 - 100	4	7.02	7	12.28	5	8.77	11	18.33
101 - 125	13	22.81	8	14.04	12	21.05	6	10.00
126 - 150	10	17.54	8	14.04	8	14.04	12	20.00
151 - 175	11	19.30	9	15.79	12	21.06	5	8.33
176 - 200	3	5.26	9	15.79	3	5.26	10	16.67
201 - 225	4	7.02	4	7.02	4	7.02	5	8.33
226 - 250	2	3.51	1	1.74	5	8.77	1	1.67
above 250	5	8.77	4	7.02	2	3.51	4	6.67
Total No. of Hospitals	57	100	57	100	57	100	60	100

It is easier to analyze the daily outdoor attendance data at the thana health complexes because the number of medical officers and other support staff is fixed for all THCs. Moreover, almost all of them have 31 beds. Cautions however should be exercised while interpreting the data as the population size of each thana is quite different. Moreover, the actual number of MOs posted in each Thana Health Complex varies tremendously. In general, it is observed that thanas that are located in remote areas tended to have much less out-door and in-door patients. Similar situation occurs when a THC is in close proximity with a district centre where a district hospital is located.

In contrast to the district hospitals which, in general, have very high outdoor service utilization rates, Table 5.5 shows that, in the period under study, much fewer daily outdoor patients visited the THCs. The situation of under-utilization of outdoor services is worsening. In 1994, about 34.75% of all THCs had less than 100 outdoor patients visiting per day. By 1997, the number of THCs having less than 100 outdoor patients had increased to 53.37%. Based on the statistics of Tables 5.3 and 5.5, it can be concluded that THCs are greatly under-utilized. This is particularly so considering the number of medical professionals posted in these institutions.

TABLE - 5.5
Average Number of Daily Outpatients of Thana Health Complexes

Daily Outdoor Attendance	THANA HEALTH COMPLEX							
	1994		1995		1996		1997	
	No.	%	No.	%	No.	%	No.	%
50 and below	14	3.50	26	6.52	24	5.97	37	9.23
51 - 75	47	11.75	56	14.04	61	15.17	73	18.20
76 - 100	78	19.5	88	22.06	91	22.64	104	25.94
101 - 125	75	18.75	90	22.56	100	24.88	78	19.45
126 - 150	56	14.00	66	16.53	61	15.17	65	16.21
151 - 175	51	12.75	32	8.02	30	7.46	26	6.48
176 - 200	38	9.50	14	3.51	23	5.72	12	2.99
201 - 225	11	2.75	12	3.01	5	1.24	3	0.75
226 - 250	5	1.25	8	2.00	3	0.75	3	0.50
above 250	25	6.25	7	1.75	4	1.00	1	0.25
Total No. of THC's	400	100	399	100	402	100	401	100

Table 5.6 presents the statistics on bed occupation rate, hospital death rate and average duration of stay of all types of Government hospitals from 1993 to 1997. These are the three main indicators normally used to monitor service utilization, quality of service and efficiency of services. As a whole, the bed occupancy rate has been rising over the years from 1993's 75.12% to 1997's 85.51% indicating an improvement over the utilization of health facilities. Significant increase in the bed occupancy rate was observed among district and lower level hospitals. It is observed that between 1993 and 1996, there was a significant decline in bed occupancy rates in medical college hospitals, TB hospitals and TB segregation hospitals. A slight decrease in the bed occupancy rate in the country's only Mental Hospital was also noticed. The trend seems to have been reversed in 1997. Overall, the infectious disease hospitals and the Thana Health Complexes were under-utilized.

The overall hospital death rate has declined gradually, from 3.86 in 1993 to 3.43 in 1997. However, four types of hospitals continued to register high death rates, namely, medical college hospitals, TB hospitals, TB segregation hospitals and infectious disease hospitals.

The average length of stay in health institutions has changed very little. However, it can be observed from the data that, in almost every type of facility except medical college hospitals and mental hospitals, patients were staying a longer duration in 1997 than in 1993. In the case of medical college hospitals, there was a sharp drop in the patient's length of stay by almost 30 days over the period 1993-1997 which effectively accounted for the overall decline in length of patient stay in the same time period. Without this drop in the medical college hospitals, it is certainly sure that the overall average number of days spent by a patient would show an increasing trend. Nationally, the average number of days spent by a patient in an institution was around 4.6 days. As expected, hospitals for chronic diseases have the longest duration of patient stay. Mental hospitals for example, retained a patient for an average of more than 95 days in 1997.

Between 1.1 to 1.3 million patients were admitted to the hospitals during 1992-1997. Tables 5.6-5.12 indicated that overall, THCs had the largest number of beds and also had the highest number of admittance. Medical college hospitals (MCH) which had the second largest number of beds also had admitted the second highest number of patients.

Tables 5.6-5.13 also show the number of hospital deaths by the type of facility for the duration 1992-1997. The number of deaths that were recorded in government hospitals ranged from a high of 40,014 cases in 1992 to a low of 33,970 cases in 1996. In 1997, there were 36,190 deaths recorded in hospitals. This means that only between about 3 and 4 percent of the annual deaths in the country in the period under review were recorded by the existing information system, although the percentage has been increasing over time. Most of the unrecorded deaths occurred at home, in private institutions, or simply unregistered in government hospitals. Much work therefore needs to be done to improve the existing vital registration system.

Of all the recorded deaths in hospitals, most occurred in thana health complexes while deaths in leprosy hospitals and mental hospitals were rare events. A better measure of the mortality situation in hospitals is the hospital death rate (HDR) which is the number of deaths per 1,000 patients admitted. Using this rate would allow a comparison of the mortality situations in different types of hospitals.

Tables 5.8-5.13 indicate that TB hospitals and TB segregation hospitals generally had the highest hospital death rates (HDR) in the period 1992-1995 except 1995. In 1995, the medical college hospitals and general hospitals had the highest HDRs. In 1996 and 1997, TB segregation hospitals re-occupied the highest HDR position. Leprosy and mental hospitals had the lowest HDRs in all the years under analysis. On the other hand, TB segregation hospitals, TB hospitals, medical college hospitals and infectious disease hospitals had the highest HDRs during the same period.

TABLE- 5.6
Hospital Bed Occupancy Rate and Hospital Death Rate by type of Hospital, 1993-1996

Type of Hospital	1993				1994				1995				1996				1997				
	Bed Occup. Rate (%)	Hospital Death Rate (%)	Average Length of Stay (Days)	Bed Occup. Rate (%)	Hospital Death Rate (%)	Average Length of Stay (Days)	Bed Occup. Rate (%)	Hospital Death Rate (%)	Average Length of Stay (Days)	Bed Occup. Rate (%)	Hospital Death Rate (%)	Average Length of Stay (Days)	Bed Occup. Rate (%)	Hospital Death Rate (%)	Average Length of Stay (Days)	Bed Occup. Rate (%)	Hospital Death Rate (%)	Average Length of Stay (Days)	Bed Occup. Rate (%)	Hospital Death Rate (%)	Average Length of Stay (Days)
Post Graduate Hospital	94.56	3.83	15.11	108.15	3.83	11.19	114.32	5.91	17.84	105.2	5.70	16.24	97.32	4.05	15.33						
Medical College Hospital	107.73	5.40	9.16	95.90	5.99	8.36	116.02	6.02	8.49	91.41	4.89	6.87	95.60	5.03	7.27						
General Hospital	43.86	3.34	7.91	69.86	5.54	7.18	125.55	5.20	19.46	101.33	2.98	10.53	98.33	3.02	15.35						
Mental Hospital	89.02	0.95	123.43	76.09	0.84	103.43	75.05	0.57	103.37	87.10	0.53	135.43	115.35	2.08	94.77						
T.B. Hospital	84.38	8.53	55.01	89.17	4.09	61.37	67.80	4.29	55.20	73.35	4.01	72.71	78.79	5.03	55.97						
T.B. Segregation Hospital	97.59	4.93	37.24	78.56	6.88	41.22	97.32	4.54	42.58	73.22	6.82	51.04	72.73	6.51	53.78						
Leprosy Hospital	27.70	0.82	54.10	25.14	0.00	39.25	32.07	0.00	38.38	78.53	0.09	34.27	87.34	0.41	65.32						
I.D. Hospital	54.76	5.35	3.27	45.61	3.97	2.38	40.55	4.65	2.54	61.58	6.57	5.01	62.98	4.52	3.86						
150-bed District Hospital	40.52	4.82	2.91	74.37	5.49	4.93	63.93	4.67	3.35	111.53	4.3	6.10	126.21	2.61	5.75						
100-bed District Hospital	109.76	3.51	2.91	113.15	4.72	3.98	113.21	4.09	4.38	119.58	4.22	4.90	107.90	4.11	4.41						
50-bed District Hospital	97.27	3.98	4.00	100.72	4.14	3.61	111.71	3.95	4.07	113.65	3.56	3.98	114.84	3.36	4.00						
Thana Health Complexes	54.30	2.02	3.70	61.66	1.78	4.11	58.87	1.72	3.98	63.03	1.66	3.89	64.13	1.55	3.55						
Total	75.12	3.86	5.19	78.20	3.94	5.11	84.70	3.64	5.23	88.63	2.74	4.90	85.51	3.43	4.58						

TABLE - 5.7
Hospital Statistics (Outdoor Attendance) in Bangladesh, 1992-1997

Type of hospital	1992	1993	1994	1995	1996	1997
Post Graduate Hospital	406422	365271	418410	321183	335721	286079
year to year % change		-10.13	14.27	-23.24	4.53	-14.81
Medical College Hospital	1502687	1330181	1410818	1852275	953250	1418486
% change		-11.48	6.06	31.29	-48.54	48.80
General Hospital	395064	251265	390112	296648	367373	195336
% change		36.40	55.26	-23.96	23.84	-46.83
Mental Hospital	16725	22536	26398	28112	29364	36380
% change		34.74	17.14	6.49	4.45	23.89
Chest disease Hospital	0	0	0	0	0	0
% change		0	0	0	0	0
T.B. Segregation Hospital	0	0	0	0	0	0
% change		0	0	0	0	0
Leprosy Hospital	6878	5639	3429	1210	3522	5008
% change		-18.02	-39.20	-64.71	191.07	42.19
Infectious diseases Hospital	14698	11080	19698	22545	21394	18815
% change		-24.61	77.78	14.45	-5.10	-12.05
150-bed District Hospital	141798	129199	124679	137354	144619	178210
% change		-8.89	-3.50	1.02	5.29	23.23
100-bed District Hospital	1005289	956227	890979	920049	850620	1169029
% change		-4.88	-6.82	3.26	-7.55	34.43
50-bed District Hospital	2403893	2339403	2156232	2057267	2074969	1733318
% change		-2.68	-7.83	-4.59	0.86	-16.46
Thana Health Complex	21687003	23509297	16226064	18526064	15648120	14371228
% change		8.40	-30.98	14.17	-15.53	-8.16
School Health Clinic	159345	151833	158022	148363	89953	76174
% change		-4.71	4.07	-6.11	-39.37	-15.32
Chest disease Clinic	150687	190647	151431	137033	155797	128759
% change		26.51	-20.57	-9.51	13.69	-17.37
USC	14719995	24983691	18597713	17269869	17184431	17004684
% change		69.73	-25.56	-7.14	-0.49	-1.04
Total	1471800310 484	54246359.38	40574025. 12	41717903.42	37859260.15	36621486
% change		27.31	-25.21	2.82	-9.25	-3.27

TABLE - 5.8

Hospital Statistics (Indoor and Outdoor) in Bangladesh, 1992

Type of hospital	No. of hospitals	No. of Beds	No. of beds compiled	No. of patients admitted	No. of patients died	No. of patients discharged	No. of patient days	Bed Occupancy rate (%)	Hospital Death Rate (%)	Average Length of Stay	Outdoor Attendance
Post Graduate Hospital	5	1750	1750	35507	2786	34383	572187	89.58	8.10	15.39	406422
Medical College Hospital	8	5400	3750	201449	9926	168264	1456412	106.40	5.90	8.17	1502687
General Hospital	4	775	275	8466	295	8213	72820	72.55	3.59	8.56	395064
Mental Hospital	1	400	400	1161	1	1043	126108	86.38	0.10	120.79	16725
T.B. Hospital	4	406	406	2039	169	1896	121609	82.06	8.91	58.89	0
T.B. Segregation Hospital	8	160	140	1401	55	1290	48620	95.15	4.26	36.15	0
Leprosy Hospital	3	130	130	5778	10	2690	83685	176.36	0.37	31.00	6878
I.D. Hospital	5	180	180	11150	650	11102	35409	53.89	5.85	3.01	14698
150-bed District Hospital	2	300	300	14148	816	16664	67243	61.41	4.90	3.84	141798
100-bed District Hospital	14	1400	1300	123119	5653	122475	509625	107.40	4.62	3.97	1005289
50-bed District Hospital	42	2100	2100	174357	7568	161072	646862	84.39	4.70	3.83	2403893
Thana Health Complex	400	12400	10943	558626	12085	540138	2053466	51.41	2.24	3.71	21687003
School Health Clinic	25	-	-	-	-	-	-	-	-	-	159345
T.B. Clinic	42	-	-	-	-	-	-	-	-	-	150687
USC	1318	-	-	-	-	-	-	-	-	-	14719995
Total	496*	25401	21647	1137201	40014	1069230	5794046	88.92	4.46	5.22	42610484

*Excluding clinics and USC.

TABLE - 5.9

Hospital Statistics (Indoor and Outdoor) in Bangladesh, 1993

Type of hospital	No. of hospitals	No. of Beds	No. of beds compiled	No. of patients admitted	No. of patients died	No. of patients discharged	No. of patient days	Bed Occupancy rate	Hospital Death Rate	Average Length of Stay	Outdoor Attendance
Post Graduate Hospital	5	1750	1750	40767	1530	39969	604021	94.56	3.83	14.55	365271
Medical College Hospital	8	5400	3750	185985	8689	161042	1474525	107.73	5.40	8.69	1330181
General Hospital	4	775	275	5814	186	5568	44027	43.86	3.34	7.65	251265
Mental Hospital	1	400	400	1228	10	1053	129972	89.02	0.95	122.27	22536
T.B. Hospital	4	406	406	2470	194	2273	125046	84.38	8.53	50.69	0
T.B. Segregation Hospital	8	160	140	1502	66	1339	49870	97.59	4.93	35.49	0
Leprosy Hospital	3	130	50	221	2	243	13146	27.70	0.82	53.66	5639
I.D. Hospital	5	180	160	10914	589	11007	35975	54.76	5.35	3.10	11080
150-bed District Hospital	2	300	300	16114	736	15267	44373	40.52	4.82	2.77	129199
100-bed District Hospital	14	1400	1300	115588	4669	133095	520818	109.76	3.51	3.78	956227
50-bed District Hospital	42	2100	2100	207407	7416	186281	745546	97.27	3.98	3.85	2339403
Thana Health Complex	400	12400	11238	639527	12178	601996	2227310	54.30	2.02	3.63	23509297
School Health Clinic	25	-	-	-	-	-	-	-	-	-	151833
T.B. Clinic	42	-	-	-	-	-	-	-	-	-	190647
USC	1362	-	-	-	-	-	-	-	-	-	24983691
Total	496	25401	21869	1227537	36265	1159133	6014629	75.12	3.96	5.03	54246269

TABLE - 5.10

**Hospital Statistics in Bangladesh, 1994
(Indoor and Outdoor)**

Type of hospital	No. of hospitals	No. of Beds	No. of beds compiled	No. of patients admitted	No. of patients died	No. of patients discharged	No. of patient days	Bed Occupancy rate	Hospital Death Rate	Average Length of Stay	Outdoor Attendance
Post Graduate Hospital	5	1950	1950	42586	2368	61752	690804	108.15	3.83	10.77	418410
Medical College Hospital	8	5400	3750	187236	9643	160912	1312647	95.90	5.99	7.7	1410818
General Hospital	5	825	525	13468	541	9772	70122	69.86	5.54	6.80	390112
Mental Hospital	1	400	400	1023	9	1074	111089	76.09	0.84	102.57	26398
T.B. Hospital	4	406	406	2239	88	2153	132134	89.17	4.09	58.91	0
T.B. Segregation Hospital	8	160	140	1158	67	974	40146	78.56	6.88	38.56	0
Leprosy Hospital	3	130	50	343	0	304	11931	25.14	0.00	39.25	3429
I.D. Hospital	5	180	160	12677	500	12593	29969	45.61	3.97	2.29	19698
150-bed District Hospital	2	300	300	16960	906	16508	81440	74.37	5.49	4.68	124679
100-bed District Hospital	14	1400	1300	123619	6359	134783	536875	113.15	4.72	3.80	890979
50-bed District Hospital	42	2100	2100	218415	8855	213736	771997	100.72	4.14	3.47	2156232
Thana Health Complex	400	12400	11709	649412	11403	641872	2635266	61.66	1.78	4.03	16226064
School Health Clinic	23	-	-	-	-	-	-	-	-	-	158022
T.B. Clinic	44	-	-	-	-	-	-	-	-	-	151431
USC	1362	-	-	-	-	-	-	-	-	-	18597713
Total	497	25651	22790	1269136	40739	1256433	6424420	78.20	3.94	4.95	40573985

TABLE - 5.11

Hospital Statistics in Bangladesh, 1995
(Indoor and Outdoor)

Type of hospital	No. of hospitals	No. of Beds	No. of beds compiled	No. of patients admitted	No. of patients died	No. of patients discharged	No. of patient days	Bed Occupancy rate	Hospital Death Rate	Average Length of Stay	Outdoor Attendance
Post Graduate Hospital	5	1850	1050	27530	1090	27296	298039	52.68	3.99	10.50	321183
Medical College Hospital	8	5400	3850	209927	11564	192095	1630343	116.02	6.02	8.00	1852275
General Hospital	5	825	575	13046	643	12364	240386	36.59	5.20	18.50	296648
Mental Hospital	1	400	400	1200	6	1060	109572	75.05	0.57	102.78	28112
T.B. Hospital	4	406	406	1799	78	1820	100471	67.80	4.29	52.93	0
T.B. Segregation Hospital	8	160	140	1266	53	1168	49733	97.32	4.54	40.73	0
Leprosy Hospital	3	130	20	52	0	61	2341	32.07	0.00	38.38	1210
I.D. Hospital	5	180	160	11194	489	10508	26641	45.62	4.65	2.42	22545
150-bed District Hospital	2	300	300	22074	977	20908	70005	63.93	4.67	3.20	137354
100-bed District Hospital	14	1400	1300	115163	5014	122630	537183	113.21	4.09	4.21	920049
50-bed District Hospital	42	2100	2100	221656	8303	210234	856237	111.71	3.95	3.92	2057267
Thana Health Complex	400	12400	11799	639412	10949	637349	2535266	58.87	1.72	3.91	18526064
School Health Clinic	23	-	-	-	-	-	-	-	-	-	148363
T.B. Clinic	44	-	-	-	-	-	-	-	-	-	137033
USC	1362	-	-	-	-	-	-	-	-	-	17269869
Total	497	25651	22550	1264319	39166	1237493	6456417	79.56	3.64	5.06	41717972

TABLE - 5.12

Hospital Statistics (Indoor and Outdoor) in Bangladesh, 1996

Type of hospital	No. of hospitals	No. of Beds	No. of beds compiled	No. of patients admitted	No. of patients died	No. of patients discharged	No. of patient days	Bed Occupancy rate	Hospital Death Rate	Average Length of Stay	Outdoor Attendance
Post Graduate Hospital	5	1950	1550	29182	1256	29571	505128	105.22	4.24	16.38	335721
Medical College Hospital	11	6300	2700	137763	6415	131185	900878	91.41	4.89	6.54	953250
General Hospital	3	325	275	7729	288	9663	101705	101.33	2.98	10.22	367373
Mental Hospital	1	400	400	873	5	939	127167	87.10	0.53	134.56	29364
T.B. Hospital	4	406	406	1731	60	1495	108697	73.35	4.01	69.90	0
T.B. Segregation Hospital	8	160	140	784	50	733	37415	73.22	6.82	47.78	0
Leprosy Hospital	3	130	50	233	3	1353	14331	78.53	0.09	40.25	3522
I.D. Hospital	5	180	180	8644	530	8072	40459	61.58	6.57	4.70	21394
150-bed District Hospital	2	300	300	20742	861	20020	122123	111.53	4.30	5.84	144619
100-bed District Hospital	21	2100	1900	121046	5453	129098	567429	119.58	4.22	4.21	850620
50-bed District Hospital	36	1800	1800	229102	7599	213518	850422	113.65	3.56	3.84	2074969
Thana Health Complex	378	11811	11687	710137	11450	690328	2688787	63.03	1.66	3.83	15648120
School Health Clinic	23	-	-	-	-	-	-	-	-	-	89953
T.B. Clinic	44	-	-	-	-	-	-	-	-	-	155797
USC	1362	-	-	-	-	-	-	-	-	-	17184431
Total	427	25862	21388	1267966	33970	1237975	6064541	78.98	2.74	4.76	37859133

TABLE - 5.13

Hospital Statistics (Indoor and Outdoor) in Bangladesh, 1997

Type of hospital	No. of hospitals	No. of Beds	No. of beds compiled	No. of patients admitted	No. of patients died	No. of patients discharged	No. of patient days	Bed Occupancy rate	Hospital Death Rate	Average Length of Stay	Outdoor Attendance
Post Graduate Hospital	5	1950	1150	24775	858	23011	357278	57.32	4.05	15.33	286079
Medical College Hospital	11	6300	3100	178221	8687	172679	1256214	95.60	5.03	7.27	1418486
General Hospital	3	325	75	1944	53	1754	26917	98.33	3.02	15.35	195336
Mental Hospital	1	400	400	1112	18	1094	32684	115.35	2.08	94.77	36380
T.B. Hospital	4	406	406	2145	105	2086	116752	78.79	5.03	55.97	0
T.B. Segregation Hospital	8	160	140	811	45	691	37165	72.73	6.51	53.78	0
Leprosy Hospital	3	130	50	268	1	244	15939	87.34	0.41	65.32	5008
I.D. Hospital	5	180	160	10122	386	9190	33459	62.98	4.52	3.86	18815
150-bed District Hospital	2	300	300	25381	627	24052	138195	126.21	2.61	5.75	178210
100-bed District Hospital	21	2100	1900	163250	6980	169730	748298	107.90	4.11	4.41	1169029
50-bed District Hospital	36	1800	1800	198921	6330	188398	754470	114.84	3.36	4.00	1733318
Thana Health Complex	402	12462	11811	740396	12100	778875	2764467	64.13	1.55	3.55	14371228
School Health Clinic	23	-	-	-	-	-	-	-	-	-	76174
T.B. Clinic	44	-	-	-	-	-	-	-	-	-	128739
USC	1362	-	-	-	-	-	-	-	-	-	17004684
Total	501*	26513	21292	1347346	36190	1371804	6281838	85.51	3.43	4.58	36621486

*excluding school health clinics, TB Clinics and USCs.

6. EPIDEMIOLOGICAL INFORMATION

Table 6.1 shows the number of patient visits in the years 1988-1997 to all the Government health facilities in the country according to diagnosis. The statistics was based on data compiled and submitted by the health facilities (including rural health centres) at all levels to the Health Information Unit. As domiciliary health service information is normally not submitted to HIU, field level health data could not be included in these statistics.

Although DGHS has been putting an enormous effort to develop a patient record system for its general hospitals, its adoption is still in the pilot phase. Thus, the information presented here represents only the number (frequency) of patient visits by the type of disease diagnosed in each visit rather than the number of patients suffering from certain types of diseases.

The quality and representation of the data cannot be determined accurately by the Health Information Unit. However, WHO has identified a number of factors that are known to be affecting the data's quality:

1. Completeness of the data

Regular epidemiological information sent from the Government's health facilities at the thana and district level, barring a few exceptions, is in general timely and complete. However, health facilities that are under the management of DGFP do not submit their information to DGHS. They include a large number of FWCs at the union level and MCWCs in a number of district centres. In fact, MIS of DGFP does not even have an Epidemiological Information System (EIS) to monitor the epidemiological situation of the country. It only reports on services that are related to family planning and, to a minor extent, maternal and child health. This issue may perhaps be successfully addressed by the HPSP in the future under a unified reporting and recording system.

Domiciliary health information is collected through the EIS forms which are to be submitted to IEDCR for analysis and consolidation on weekly and monthly basis. Unfortunately this practice is yet to be regularized. Unless the EIS information is copied to HIU for consolidation, compilation of a truly national disease profile is quite impossible.

Hitherto, there is no legal requirement for private health practitioners and NGOs to submit any health information to the Government, despite their pivotal role in the health sector. Almost nothing is known about the health services provided by private health organizations which cater mostly to the middle and upper income population. The probability of a certain degree of class bias in the disease profile therefore cannot be ruled out.

2. Misdiagnosis/miscoding

At the thana and district levels, statisticians and statistical assistants are responsible for coding of diseases and submit the summarized reports to their respective supervisors. It should be emphasized in

this report that Bangladesh has not adopted any version of the International Classification of Diseases (ICD) established by the World Health Organization. Miscoding by untrained personnel at the thana and district health facilities occurs often.

Investigations on the completion of the patient registers by WHO and MIS officials have indicated that the columns relating to patient diagnosis in the register were frequently left unfilled by the responsible medical personnel. Moreover, some of their handwriting is not legible. This problem has led to the incompleteness of data rendering the coding of the diseases of the patients impossible.

3. Non-reporting

While reports on diseases are regularly submitted by most of the thana and district health facilities, large national level health facilities such as the medical college hospitals and specialized hospitals do not follow this same practice. Out of eight medical college hospitals, only 3-4 would submit their reports upon rigorous persuasion. Others simply do not submit any report at all. Although registers were supplied to these national institutions, they were not properly used. For example, a recent visit to the Suhrawardy Hospital (NICVD) by WHO consultants has found that the out-patient register was used to record only the out-patient ticket charges. As a result, the objectives of supplying the register for health service recording were totally lost. The non-submission of disease information by the tertiary health institutions has also led to the report of very few non-communicable diseases and more complicated diseases related to internal organs.

4. Under-reporting on women's health

It is a known fact that proportionally less women seek health services from Government health facilities at thana and district level perhaps due to the relatively few number of female physicians and lack of privacy in these facilities. While analyzing data that are more specifically related to women's health, e.g. Obs. and Gynae complications, cautions should be exercised on the interpretation of the representation of these figures.

Under the planned HPSP, data collection and compilation will be carried out by a number of agencies whose roles in the health information system have yet to be ironed out. Despite the recent establishment of a unified MIS Unit by MOHFW which could resolve some of the past problems related to the separate reporting of performance by both Directorates, most of the issues discussed above remain largely unaddressed. If the current situation continues, these existing problems will persist and perhaps deteriorate further.

6.1 Epidemiological Trends

The static health facility based disease information presented in Table 6.1 provides a glimpse on the epidemiological trend of the country. Over the nine years from 1988 to 1997, the frequency of patient visits to Government health facilities has increased by over 10 million cases. In 1988, about 38

million patients were made to the health facilities while in 1997, the frequency increased to approximately 56.3 million visits. This increase could be attributed to a combination of the following three factors: a) increase in population coverage as a result of more health facilities established in the country, b) improvement in data reporting, and c) increase in facility utilization. The patient visit records clearly indicate that on an average, each citizen of Bangladesh would visit a health facility just under 0.5 times a year. The trend has also indicated that the number of visits to these facilities is increasing.

The ten diseases that caused the highest morbidity in the country remained relatively unchanged over the years. These are: diarrhoeal diseases, skin diseases, intestinal worm infestation, peptic ulcer, acute respiratory infection, anaemia, micro-nutrient deficiency diseases, pyrexia of unknown origin (PUO), eye diseases and injuries.

Two of these ten diagnoses, namely peptic ulcer and PUO were not well defined. Our investigation has indicated that the terminology, "peptic ulcer", was too loosely used. Selected case checking has revealed that this category of disease actually included diseases such as gastritis, dyspepsia, gastric ulcer, duodenal ulcer, pain or discomfort in the stomach region, heart burn, etc. As pathological diagnosis was not done in most of the cases, it was difficult to further reclassify this disease. Over the past two years, with the assistance of WHO, awareness of the problems related to this classification has gained momentum. In 1997, the number of cases reported as "peptic ulcer" has dropped from 2,706,046 cases in 1996 to 923,125 cases in 1997.

PUO is more of a physiological symptom than a disease although there is a code for PUO in the ICD. However, it should be recognized that PUO is an indication of many possible diseases. Unfortunately, the number of PUO cases reported has not declined.

Among the top 10 most common diseases, some changes in the order of importance were found. Diseases that were related to micro-nutrient deficiency and anaemia were increasingly gaining prominence indicating a further deterioration of the malnutrition problem, contradictory to some reports that the situation was improving. In 1988, anaemia and deficiency diseases ranked 6th and 7th respectively as the most common causes of morbidity, but in 1996, anaemia and deficiency diseases ranked 3rd and 7th. In 1988, 2,586,529 and 1,897,805 patient visits were related to anemia and micro-nutrient deficiencies respectively while in 1997, they have increased to 5,589,765 and 3,736,699 patient visits. Malnutrition is indeed a widespread and worsening health problem.

Some other changes in the disease pattern could be detected over the period 1988-1997. Ear diseases, asthma, dental diseases, night blindness and whooping cough occupied the 11th to the 15th places of importance as the most common diseases in 1988. With the successful implementation of the EPI programme in recent years including Vitamin A capsule distribution by MOHFW, the prevalence of night blindness and whooping cough has been significantly reduced. In 1996, obstetric and gynaecological complications and clinical malaria as the 14th and 15th most serious diseases in Bangladesh replacing night blindness and whooping cough. In fact, almost all EPI related diseases like

measles, tetanus and diphtheria are on the wane. While the number and percentage of tuberculosis cases seemed to have gone up, this increase may be a result of better case detection from a wider area and improved case reporting. The TB control programme has been expanding its population coverage since 1992.

Obstetric and gynaecological diseases have been rising in importance over the past one decade, since 1988. However, in 1997, only 123,540 were reported, a drop of almost 500 percent in reported cases over the previous year. Such a decline is highly unlikely and may have been related to erratic data entry or case recording.

The number of reported hypertension cases, although relatively small, has been rising gradually. In 1997, it was currently the 16th most common disease in the country. Attention should also be given to the rising number of poisoning cases which in 1997, has risen to 309,409 as compared with 60,756 cases in 1996.

TABLE-6.1

Disease Profile 1988-1997

Based on Hospital Records at The District Level and Below

Name of Disease	Percentage in parenthesis										
	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Total
Diarrhoeal Diseases	5367004 (14.14)	5241306 (13.38)	7316957 (17.09)	6431480 (15.05)	6940136 (17.12)	6620092 (14.49)	5737634 (12.46)	6292390 (13.41)	6961534 (14.27)	8964706 (15.90)	65873239 (14.74)
Skin Diseases	3057798 (8.06)	2994390 (7.64)	2269168 (5.30)	3003963 (7.03)	4560239 (11.01)	4384870 (9.60)	4096398 (8.90)	6027782 (12.85)	4538544 (9.30)	5903779 (10.47)	40836931 (9.14)
Intestinal Worm Infestation	3704027 (9.76)	4040548 (10.31)	6996573 (16.34)	3973429 (9.30)	4366916 (10.88)	4056888 (8.88)	4655896 (10.11)	5402125 (11.52)	6002780 (12.30)	4161621 (7.38)	47360803 (10.60)
Peptic Ulcer	2953974 (7.78)	3003617 (7.67)	1437304 (3.36)	3179433 (7.44)	3746440 (9.24)	3781878 (8.28)	4183388 (9.09)	3567886 (7.61)	2706046 (5.55)	923125 (1.63)	29483091 (6.60)
Acute Respiratory Infection	2495383 (6.57)	2769644 (7.07)	5385816 (12.58)	3040660 (7.12)	3386953 (8.36)	3261448 (7.14)	3063482 (6.65)	2415196 (5.15)	2648455 (5.43)	3435415 (6.10)	31902452 (7.14)
Anaemia	2586529 (6.81)	2707219 (6.91)	1830840 (4.28)	2879781 (6.74)	3218292 (7.94)	3081226 (6.74)	3672972 (7.99)	3209366 (6.84)	4807565 (9.85)	5589765 (9.92)	33583555 (7.51)
Deficiency Diseases	1897805 (5.00)	2034042 (5.19)	4642272 (10.84)	3576997 (8.37)	2587798 (6.39)	2917728 (6.39)	3039368 (6.60)	2083050 (4.44)	2573550 (5.27)	3736699 (6.63)	29089309 (6.51)
Pyrexia of Unknown Origin	1390178 (3.66)	1598047 (4.08)	829413 (1.94)	2130255 (4.99)	2465254 (6.08)	2036936 (4.46)	2104170 (4.57)	2495613 (5.32)	2085513 (4.27)	2288189 (4.06)	19423568 (4.35)
Eye Diseases	1536519 (4.05)	1384423 (3.53)	871146 (2.03)	1563186 (3.66)	1487562 (3.70)	1381977 (3.02)	1367762 (2.97)	1335698 (2.85)	1636540 (3.35)	2457710 (4.36)	15022523 (3.36)
Injuries	870328 (2.29)	982230 (2.51)	506748 (1.18)	1151662 (2.70)	1340549 (3.34)	1229351 (2.69)	1186588 (2.58)	1363555 (2.91)	1554336 (3.19)	2452967 (4.35)	12638314 (2.83)
Ear Diseases	868237 (2.29)	937158 (2.39)	481921 (1.13)	1052514 (2.46)	1181665 (2.94)	1111117 (2.43)	1012568 (2.20)	1136435 (2.42)	1261561 (2.59)	1846482 (3.28)	10889658 (2.44)
Asthma	495900 (1.31)	474477 (1.21)	210605 (0.49)	538740 (1.26)	695579 (1.73)	673143 (1.47)	668766 (1.43)	693045 (1.48)	994540 (2.04)	1304249 (2.31)	6749044 (1.51)
Dental Diseases	789847 (2.08)	855991 (2.18)	439841 (1.03)	1081043 (2.53)	659620 (1.64)	895283 (1.96)	888524 (1.93)	1016215 (2.17)	1217550 (2.50)	1066206 (1.89)	8910120 (1.99)
Obs. Gynae. Complications	324004 (0.85)	365100 (0.93)	191411 (0.45)	422509 (0.99)	487326 (1.21)	567585 (1.24)	387212 (0.84)	530600 (1.13)	650554 (1.33)	123540 (0.22)	4049841 (0.91)
Clinical Malaria	255575 (0.67)	275400 (0.70)	119359 (0.28)	225788 (0.53)	309687 (0.76)	289737 (0.63)	287714 (0.62)	409034 (0.87)	428035 (0.88)	380787 (0.67)	2981116 (0.67)
Hypertension	128,184 (0.34)	116850 (0.30)	49516 (0.12)	132986 (0.31)	153425 (0.38)	141822 (0.31)	131430 (0.29)	186885 (0.40)	163425 (0.33)	296272 (0.54)	1500795 (0.34)

Name of Disease	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	Total
Night Blindness	451703 (1.19)	323446 (0.83)	114725 (0.27)	187644 (0.44)	114725 (0.25)	1057109 (2.31)	96037 (0.21)	115892 (0.52)	115725 (0.24)	96037 (0.17)	2673043 (0.60)
Whooping Cough	352407 (0.88)	202646 (0.52)	52659 (0.12)	111914 (0.26)	96750 (0.24)	31206 (0.07)	10612 (0.02)	16352 (0.03)	45542 (0.09)	12268 (0.02)	912356 (0.20)
Hepatitis	151895 (0.40)	115801 (0.30)	33141 (0.08)	76997 (0.18)	70109 (0.17)	118822 (0.26)	36660 (0.08)	36295 (0.08)	45347 (0.09)	38241 (0.07)	723308 (0.15)
Diabetes	54254 (0.14)	38685 (0.10)	18404 (0.04)	46180 (0.11)	67183 (0.17)	60667 (0.13)	36292 (0.08)	80243 (0.17)	66334 (0.14)	64111 (0.11)	532353 (0.12)
Poisoning	44086 (0.12)	29418 (0.08)	17584 (0.04)	38135 (0.09)	43536 (0.11)	37734 (0.08)	44338 (0.10)	58876 (0.13)	60756 (0.12)	309409 (0.56)	683872 (0.14)
Filariasis	21610 (0.06)	15244 (0.04)	13832 (0.03)	22462 (0.05)	21316 (0.05)	19505 (0.04)	13896 (0.03)	9722 (0.02)	12776 (0.03)	22543 (0.04)	172906 (0.04)
Tuberculosis	17590 (0.05)	85552 (0.22)	16590 (0.04)	14663 (0.03)	20040 (0.05)	26310 (0.06)	121968 (0.26)	132490 (0.28)	114525 (0.23)	63440 (0.11)	613168 (0.13)
Mental Diseases	29432 (0.08)	22845 (0.06)	12789 (0.03)	20680 (0.05)	17731 (0.04)	15704 (0.03)	24516 (0.05)	66950 (0.14)	76980 (0.16)	33865 (0.06)	321492 (0.07)
Measles	15786 (0.41)	74657 (0.19)	17959 (0.04)	19422 (0.05)	14296 (0.04)	8111 (0.02)	7362 (0.02)	8015 (0.02)	9525 (0.02)	14266 (0.03)	329399 (0.07)
Chicken Pox	16868 (0.04)	11100 (0.03)	13963 (0.03)	6949 (0.02)	15125 (0.04)	8186 (0.01)	6924 (0.01)	44022 (0.09)	51225 (0.10)	4581 (0.01)	178943 (0.04)
Kala-Azar	2880 (0.01)	4999 (0.01)	2361 (0.01)	2947 (0.01)	3116 (0.01)	3600 (0.01)	3240 (0.01)	10176 (0.02)	8196 (0.02)	3457 (0.01)	44972 (0.01)
Tetanus	10896 (0.03)	6087 (0.02)	2019 (0.00)	6314 (0.01)	5974 (0.01)	1711 (0.00)	2557 (0.00)	3333 (0.01)	2529 (0.01)	5634 (0.01)	47054 (0.01)
Diphtheria	5283 (0.01)	2933 (0.01)	524 (0.00)	11083 (0.03)	1655 (0.00)	500 (0.00)	496 (0.00)	1714 (0.00)	1096 (0.00)	4819 (0.01)	30103 (0.01)
Other Discases	7927621 (20.88)	8469812 (21.62)	8929974 (20.85)	7743109 (18.12)	2447416 (20.28)	7869608 (17.22)	9163368 (19.90)	8157813 (17.39)	7955345 (16.30)	10749469 (19.08)	79413535 (17.77)
TOTAL	37943603 (100.00)	39183667 (100.00)	42825414 (100.00)	42692925 (100.00)	40526413 (100.00)	45689854 (100.00)	46052138 (100.00)	46906768 (100.00)	48796429 (100.00)	56353652 (100)	446,970,863 (100.00)

TABLE- 6.2
Disease Profile

Disease Profile by Age Group for the Year 1997

Name of diseases	< 1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Diarrhoeal Diseases	767761	2058995	1884354	4256596	8964706
	22.71	25.11	14.09	13.58	15.93
Clinical Malaria	3736	41446	152148	183457	380787
	0.11	0.51	1.14	0.59	0.68
Int. Worm Infest.	113392	213392	1395870	2438967	4161621
	3.35	2.61	10.44	7.78	7.39
Skin Diseases	502239	1088210	1406796	2996534	5903779
	14.85	13.29	10.52	9.27	10.49
Peptic Ulcer	0	680	85403	837042	923125
	0.00	0.01	0.64	2.67	1.64
Acute Res. Inf.	316845	524002	752284	1842284	3435415
	9.37	6.34	5.63	5.88	6.10
Anaemia	67517	567714	1612024	3342510	5589765
	2.00	6.93	12.06	10.66	9.93
Deficiency Diseases	144961	244961	844018	2502759	3736699
	4.29	2.99	6.31	7.98	6.64
P.U.O	158545	301776	102584	1725284	2288189
	4.69	3.685	0.77	5.50	4.07
Eye Diseases	60722	203898	814085	1379005	2457710
	1.80	2.49	6.09	4.40	4.37
Injuries	40042	171589	420829	1820507	2452967
	1.18	2.10	3.15	5.81	4.36
Ear Diseases	40892	271616	419173	1114801	1846482
	1.21	3.32	3.13	3.56	3.28
Dental Diseases	1929	40882	465882	557513	1066206
	0.06	0.50	3.48	1.78	1.89
Asthma	9707	92070	323741	878731	1304249
	0.29	1.12	2.42	3.80	2.32
Obs. Gynaec Complications	25	34	3663	119818	123540
	0.00	0.00	0.03	0.38	0.22
Night Blindness	1880	16516	30176	47465	96037
	0.06	0.20	0.23	0.15	0.17
Hypertension	0	25	6875	289372	296272
	0.00	0.00	0.05	0.52	0.53
Hepatitis	3061	4644	9974	20562	38241
	0.09	0.06	0.07	0.07	0.07
Whooping Cough	646	3418	2819	5385	12268
	0.02	0.04	0.02	0.02	0.02
Diabetes	50	1718	4400	57943	64111
	0.00	0.02	0.03	0.18	0.11
Poisoning	55	3107	16875	289372	309409
	0.00	0.04	0.13	0.92	0.55
Filariasis	37	986	4683	16837	22543
	0.00	0.01	0.04	0.05	0.04
Mental Diseases	300	2390	1602	29573	33865
	0.01	0.03	0.01	0.09	0.06
Measles	2248	3414	2819	5785	14266
	0.07	0.04	0.02	0.02	0.03
Tuberculosis					
Diphtheria	180	742	1513	2384	4819
	0.01	0.01	0.0	0.01	0.01

Name of diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Chicken pox	208	715	900	2758	4581
	0.01	0.01	0.01	0.01	0.01
Kala-azar	80	173	1040	2164	3457
	0.00	0.00	0.01	0.01	0.01
Tetanus	145	577	1221	3691	5634
	0.00	0.01	0.01	0.01	0.01
Neonatal Tetanus	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00
Polio					
Other Diseases	1143175	2328704	2603243	4674347	10749469
	33.82	28.44	19.47	14.91	19.10
TOTAL	3380378	8185394	13370994	31353446	56290212
	100.00	100.00	100.00	100.00	100.00

TABLE- 6.2
Disease Profile

Disease Profile by Age Group for the Year 1996

Name of Diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Diarrhoeal Diseases	474251	2374791	1554980	2557512	6961534
	25.17	25.44	10.14	11.50	14.27
Clinical Malaria	2984	39446	102148	283437	428035
	0.16	0.42	0.67	1.27	0.88
Int. Worm Infect.	88952	2695230	1460538	1758060	6002780
	4.72	28.88	9.52	7.91	12.30
Skin Diseases	280504	590773	2197888	1469379	4538544
	14.89	6.33	14.33	6.61	9.40
Peptic Ulcer	19	695	48041	2221291	2706046
	0.00	0.01	3.16	9.99	5.55
Acute Res. Inf.	244552	567292	773050	1063561	2648455
	12.98	6.08	5.04	4.78	3.43
Anaemia	35383	330267	2713462	1728453	4807565
	1.88	3.54	17.69	7.77	9.85
Deficiency Diseases	109965	384010	870545	1209030	2573550
	5.84	4.11	5.67	5.44	5.27
P.U.O	12744	297216	843630	931923	2085513
	0.68	3.18	5.50	4.19	4.27
Eye Diseases	46007	279585	513908	797040	1636540
	2.44	3.00	3.35	3.58	3.35
Injuries	18569	169299	434981	931487	1554336
	0.99	1.81	2.84	4.19	3.19
Ear Diseases	35892	217726	289135	718808	1261561
	1.90	2.33	1.88	3.21	2.59
Dental Diseases	1860	67044	571133	577513	1217550
	0.10	0.72	3.72	2.60	2.50
Asthma	6381	59372	190161	738626	994540
	0.34	0.64	1.24	3.12	2.04
Obs. Gynae Complications	0	2569	160048	487937	650554
	0.00	0.03	1.04	2.19	1.33
Night Blindness	580	10719	84014	20412	115725
	0.03	0.11	0.55	0.09	0.24
Hypertension	25	168	8800	154432	163425

Name of diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
	0.00	0.00	0.06	0.69	0.13
Hepatitis	1782	4963	9998	28604	45347
	0.09	0.05	0.07	0.13	0.09
Whooping Cough	554	38188	2409	4391	45542
	0.03	0.41	0.02	0.02	0.09
Diabetes	0	763	2323	63249	66334
	0.00	0.01	0.02	0.28	0.14
Poisoning	63	2732	19788	38173	60756
	0.00	0.03	0.13	0.17	0.12
Filariasis	18	177	2832	9749	12776
	0.00	0.00	0.02	0.04	0.03
Mental Diseases	222	893	5714	70151	76980
	0.01	0.01	0.04	0.32	0.16
Measles	876	1218	5358	1573	9525
	0.05	0.01	0.04	0.01	0.02
Tuberculosis	91	3528	13289	67617	114525
	0.00	0.04	0.09	0.44	0.23
Diphtheria	71	284	237	504	1096
	0.00	0.00	0.00	0.00	0.00
Chicken pox	50	394	22747	28034	51225
	0.00	0.00	0.15	0.13	0.10
Kala-azar	79	278	2317	5531	8196
	0.00	0.00	0.02	0.02	0.02
Tetanus	174	433	765	1184	2529
	0.01	0.00	0.00	0.01	0.01
Neonatal Tetanus					
Polio					
Other Diseases	642666	1302569	2016476	3993634	7955345
	27.68	12.79	13.04	19.06	16.30
TOTAL	2005278	9442622	15357215	21991314	48796429
	100.00	100.00	100.00	100.00	100.00

Disease Profile by Age Group for the Year 1995

Name of Diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Diarrhoeal Diseases	496251	1134249	1791823	2870067	6292390
%	22.63	15.79	14.30	11.48	13.11
Clinical Malaria	10720	41437	117359	239518	409034
	0.49	0.58	0.94	0.96	0.87
Int. Worm Infect.	76224	1643786	1590727	2091388	5402125
	3.48	22.88	12.69	8.37	11.52
Skin Diseases	164364	671300	1121964	4070154	6027782
	7.49	9.34	8.95	16.28	12.85
Peptic Ulcer	0	3625	543331	3020930	3567886
	0.00	0.05	4.34	12.09	7.61
Acute Res. Inf.	210951	671300	829090	703865	2415196
	9.62	9.34	6.62	2.82	5.15
Anaemia	47463	292953	1300510	1568440	3209366
	2.16	4.08	10.38	6.27	6.84
Deficiency Diseases	115723	210703	728623	1028003	2083050
	5.28	2.93	5.81	4.11	4.44
P.U.O	201305	516278	671316	1106714	2495613
	9.18	7.19	5.36	4.43	5.12
Eye Diseases	53448	212240	381087	688923	1356098
	2.44	2.95	3.04	2.76	2.85

Name of Diseases	< 1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Injuries	18249	138231	389000	818075	1363555
	0.83	1.92	3.10	3.27	2.91
Ear Diseases	49723	170947	369747	546018	1136435
	2.27	2.38	2.95	2.18	2.42
Dental Diseases	2915	57158	273233	682909	1016215
	0.13	0.80	2.18	2.73	2.17
Asthma	8829	45962	147910	490344	693045
	0.40	0.64	1.18	1.96	1.48
Obs. Gynae Complications	400	1158	60817	468225	530600
	0.02	0.02	0.49	1.87	1.13
Night Blindness	100	20247	35345	60200	115892
	0.00	0.28	0.28	0.24	0.25
Hypertension	0	100	1542	185243	186885
	0.00	0.00	0.01	0.74	0.40
Hepatitis	5120	2064	9299	19812	36295
	0.23	0.03	0.07	0.08	0.08
Whooping Cough	1220	4732	1933	8467	16352
	0.06	0.07	0.02	0.03	0.03
Diabetes	0	1000	8266	70977	80243
	0.00	0.01	0.07	0.28	0.17
Poisoning	867	5703	12950	38356	57876
	0.04	0.08	0.10	0.15	0.12
Fibrosis	0	1457	1738	6527	9722
	0.00	0.02	0.01	0.03	0.02
Mental Diseases	0	2275	4239	60436	66950
	0.00	0.03	0.03	0.24	0.14
Measles	910	3626	2228	1251	8015
	0.04	0.03	0.02	0.01	0.02
Tuberculosis	0	6771	11338	114381	132490
	0.00	0.09	0.09	0.46	0.28
Diphtheria	23	326	772	593	1714
	0.00	0.00	0.01	0.00	0.00
Chicken pox	22	20737	16748	6515	44022
	0.00	0.29	0.13	0.03	0.09
Kala-az-Zar	0	4	3239	6933	10176
	0.00	0.00	0.03	0.03	0.02
Tetanus	189	969	1226	949	3333
	0.01	0.01	0.01	0.00	0.01
Neonatal Tetanus	10	0	0	0	10
	0.00	0.00	0.00	0.00	0.00
Polio	5	2	1	0	8
	0.00	0.00	0.00	0.00	0.00
Other Diseases	728237	1364061	2103976	1021539	5157813
	33.20	18.15	16.79	4.09	11.00
TOTAL	2193268	7185401	12531366	24996751	46946786
	100.00	100.00	100.00	100.00	100.00

Disease Profile by Age Group for the Year 1994

Name of Diseases	< 1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Diarrhoeal Diseases	465402	1045970	1604160	2623002	5737634
%	19.39	13.93	13.42	10.84	12.46
Clinical Malaria	18956	29858	78564	160336	287714
	0.79	0.40	0.66	0.66	0.62
Int. Worm Infect.	116726	1699018	1182860	1657292	4655896
	4.86	22.68	9.90	6.85	19.11

Name of Diseases	< 1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Skin Diseases	315332	781292	1226296	1773478	4096398
	13.14	10.43	10.26	7.33	8.90
Peptic Ulcer	0	1858	625604	3655926	4283388
	0.00	0.02	5.24	15.11	9.30
Acute Res. Inf.	319470	494546	836002	1413464	3063482
	13.31	6.60	7.00	5.84	6.65
Anaemia	39196	831612	753980	2048264	3672972
	1.63	11.10	6.31	8.46	7.98
Deficiency Diseases	103158	323962	1029216	1583032	3039368
	4.30	4.32	8.61	6.54	6.60
P.U.O	189490	416292	582314	916074	2104170
	7.90	5.56	4.87	3.70	4.57
Eye Diseases	134844	196726	382910	653282	1367762
	5.62	2.63	3.20	2.70	2.97
Injuries	16800	116872	334450	718466	1186588
	0.70	1.56	2.80	2.97	2.58
Ear Diseases	45942	166708	317356	482662	1012668
	1.91	2.23	2.66	1.99	2.20
Dental Diseases	1290	46688	246248	594298	888524
	0.05	0.62	2.06	2.46	1.93
Asthma	7694	36180	129656	485236	658766
	0.32	0.48	1.08	2.01	1.43
Obs. Gynae Complications	0	0	37698	349614	387312
	0.00	0.00	0.32	1.44	0.84
Night Blindness	1880	16516	30176	47465	96037
	0.08	0.22	0.25	0.20	0.21
Hypertension	4	4	3778	127644	131430
	0.00	0.00	0.03	0.53	0.29
Hepatitis	6132	1872	7848	20758	36610
	0.26	0.02	0.07	0.09	0.08
Whooping Cough	1332	3792	1996	3492	10612
	0.06	0.03	0.02	0.01	0.02
Diabetes	0	0	1880	34412	36292
	0.00	0.00	0.02	0.14	0.08
Poisoning	468	3226	9642	31002	44338
	0.02	0.01	0.08	0.13	0.10
Filariasis	0	32	3200	10664	13896
	0.00	0.00	0.03	0.04	0.03
Mental Diseases	410	2420	5864	16822	25516
	0.02	0.03	0.05	0.07	0.06
Measles	1442	2626	2720	574	7362
	0.06	0.04	0.02	0.00	0.02
Tuberculosis	0	128	7402	114438	121968
	0.00	0.00	0.06	0.47	0.26
Diphtheria	6	140	150	200	496
	0.00	0.00	0.00	0.00	0.00
Chicken pox	70	900	2758	3196	6924
	0.00	0.01	0.02	0.01	0.02
Kala-a-Zar	0	4	1382	1854	3240
	0.00	0.00	0.01	0.01	0.01
Tetanus	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00
Other Diseases	613764	1272924	2603243	4673437	9163368
	25.57	16.99	21.78	19.37	19.90
TOTAL	2399968	7491812	11950396	24199965	46042141
	100.00	100.00	100.00	100.00	100.00

Disease Profile by Age Group for the Year 1993

Name of Diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Diarrhoeal Diseases	539406	1182745	1879546	3018395	6620922
%	21.84	17.77	15.07	12.53	14.49
Claical Malaria	13868	31967	80319	163583	289737
	0.56	0.48	0.64	0.68	0.63
Int. Worm Infect.	140744	722227	1331236	1862681	4056888
	5.70	10.85	10.68	7.73	8.88
Skin Diseases	340918	889409	1295338	1859505	4385170
	13.81	13.36	10.39	7.72	9.60
Peptic Ulcer	7164	14446	548420	3211848	3781878
	0.29	0.22	4.40	13.33	8.28
Acute Res. Inf.	270135	567352	898335	1525626	3261448
	10.94	8.52	7.20	6.33	7.14
Anaemia	49859	302446	4007281	1730640	6081226
	1.65	4.54	32.14	7.18	13.31
Deficiency Diseases	117319	703025	924038	1173346	2917728
	4.75	10.56	7.41	4.87	6.19
P.U.O	141399	344035	578299	973203	2036936
	5.71	5.17	4.64	4.04	4.16
Eye Diseases	59796	209515	406486	706180	1381977
	2.42	3.15	3.26	2.93	3.02
Injuries	14223	118035	369263	727830	1229351
	0.58	1.77	2.96	3.02	2.69
Ear Diseases	76989	171169	339486	523473	1111117
	3.12	2.57	2.72	2.17	2.43
Dental Diseases	2579	44716	246806	601182	895283
	0.10	0.67	1.98	2.50	1.96
Astuma	29047	34328	137075	472693	673143
	1.18	0.52	1.10	1.96	1.47
Obs. Gynae Complications	0	0	45659	521926	567585
	0.00	0.00	0.37	2.17	1.24
Night Blindness	1241	23519	140609	891440	1057109
	0.05	0.36	1.13	3.70	2.31
Hypertension	0	0	6532	135290	141822
	0.00	0.00	0.05	0.56	0.31
Hepatitis	2265	17072	19166	80319	118822
	0.09	0.26	0.15	0.33	0.26
Whooping Cough	1196	4998	8254	16758	31206
	0.05	0.08	0.07	0.07	0.07
Diabetes	0	0	2815	57852	60667
	0.00	0.00	0.02	0.24	0.13
Poisoning	211	1296	7329	28898	37734
	0.01	0.02	0.06	0.12	0.08
Filariasis	0	0	3931	15574	19505
	0.00	0.00	0.03	0.06	0.04
Mental Diseases	0	954	1250	13500	15704
	0.00	0.01	0.01	0.06	0.03
Measles	941	3300	2072	1798	8111
	0.04	0.05	0.02	0.01	0.02
Tuberculosis	5750	4226	12108	4226	26310
	0.23	0.06	0.10	0.02	0.06
Diphtheria	67	120	147	166	500
	0.00	0.00	0.00	0.00	0.00
Chicken pox	147	1516	2919	3604	8186
	0.01	0.02	0.02	0.01	0.02

Name of Diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Kala-a-Zar	9	454	1196	1941	3600
	0.00	0.01	0.01	0.01	0.01
Tetanus	179	197	567	768	1711
	0.01	0.00	0.00	0.00	0.00
Other Diseases	662889	1263922	2171888	3770909	7869608
	26.84	18.99	17.42	15.65	17.22
TOTAL	2469341	6656989	12468370	24095154	45689854
	100.00	100.00	100.00	100.00	100.00

Disease Profile by Age Group for the Year 1992

Name of Diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Diarrhoeal Diseases	584866	1315890	2021149	3018231	6940136
%	22.80	18.92	18.27	15.13	17.12
Clinical Malaria	26293	34232	84404	164758	309687
	1.02	0.49	0.76	0.83	0.76
Int. Worm Infecl.	153122	829484	1429950	1954360	4366916
	5.97	11.93	12.93	9.80	10.78
Skin Diseases	372671	895848	1400092	1891718	4560239
	14.53	12.88	12.66	9.48	11.25
Peptic Ulcer	0	7902	584062	3154476	3746440
	0.00	0.11	5.28	15.81	9.24
Acute Res. Inf.	268060	615540	960841	1542512	3386953
	10.45	8.85	8.69	7.73	8.16
Anaemia	51112	338513	920795	1907872	3218292
	1.99	4.87	8.33	9.57	7.94
Deficiency Diseases	124357	445849	790320	1227272	2587798
	4.85	6.41	7.15	6.15	6.39
P.U.O	151569	355479	979103	979103	2465354
	5.91	5.11	8.85	4.91	6.08
Eye Diseases	72121	242316	437069	736116	1487562
	2.81	3.48	3.95	3.69	3.67
Injuries	24768	141515	386786	787480	1340549
	0.97	2.03	3.50	3.95	3.11
Ear Diseases	54929	209896	371095	545745	1181665
	2.14	3.02	3.56	2.74	2.92
Dental Diseases	1003	53269	302674	302674	659620
	0.04	0.77	2.74	1.52	1.63
Asthma	5677	42751	157684	489467	695579
	0.22	0.61	1.43	2.45	1.72
Obs. Gynae Complications	0	0	57802	429524	487326
	0.00	0.00	0.52	2.15	1.20
Night Blindness	1854	27800	42613	42814	115081
	0.07	0.40	0.39	0.21	0.28
Hypertension	0	0	8623	144803	153425
	0.00	0.00	0.08	0.73	0.38
Hepatitis	3166	4711	18330	43988	70169
	0.12	0.07	0.17	0.22	0.17
Whooping Cough	3833	25739	32531	34647	96750
	0.15	0.37	0.29	0.17	0.24
Diabetes	0	0	10540	56643	67183
	0.00	0.00	0.10	0.28	0.17
Poisoning	431	2383	8931	31791	43536
	0.02	0.03	0.08	0.16	0.11
Filariasis	0	0	5854	15462	21316

Name of Diseases	< 1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
	0.00	0.00	0.05	0.08	0.05
Mental Diseases	0	383	2326	15022	17731
	0.00	0.01	0.02	0.08	0.04
Measles	1993	5072	3957	3269	14296
	0.08	0.07	0.04	0.02	0.04
Tuberculosis	0	3267	12624	4149	20040
	0.00	0.05	0.11	0.02	0.05
Diphtheria	88	385	480	782	1655
	0.00	0.01	0.00	0.00	0.00
Chicken pox	348	1993	5228	7556	15125
	0.01	0.03	0.05	0.04	0.04
Kala-a-Zar	67	340	1099	1610	3116
	0.00	0.00	0.01	0.01	0.01
Tetanus	801	1113	1428	2632	5974
	0.03	0.02	0.01	0.01	0.01
Other Diseases	662241	1353326	121677	409816	2547060
	25.81	19.46	1.10	2.05	6.28
TOTAL	2565369	6954996	11059916	19946432	40526713
	100.00	100.00	100.00	100.00	100.00

Disease Profile by Age Group for the Year 1991

Name of Diseases	< 1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Diarrhoeal Diseases	521495	1212873	1899466	2797646	6431480
%	21.70	19.05	15.21	13.03	15.05
Clinical Malaria	9496	26399	62341	127552	225788
	0.40	0.41	0.50	0.59	0.53
Int. Worm Infect.	139529	722448	1284046	1827406	3973429
	5.81	11.35	10.28	8.51	9.30
Skin Diseases	294545	7195	1116598	1585625	3001963
	12.26	0.11	8.94	7.39	7.03
Peptic Ulcer	0	7966	525038	2646439	3179433
	0.00	0.13	4.20	12.33	7.44
Acute Res. Inf.	237215	541703	839184	1422558	3040660
	9.87	8.51	6.72	6.63	7.12
Anaemia	48406	302446	842219	1686710	2879781
	2.01	4.75	6.75	7.86	6.74
Deficiency Diseases	250835	546910	1505813	1273439	3576997
	10.44	8.59	12.06	5.93	8.57
P.U.O	130421	294382	852726	852726	2130255
	5.43	4.62	6.83	3.97	4.99
Eye Diseases	86725	256550	466449	753462	1563186
	3.61	4.03	3.74	3.51	3.66
Injuries	10910	120446	345462	674844	1151662
	0.45	1.89	2.77	3.14	2.70
Ear Diseases	52719	190801	343183	465811	1052514
	2.19	3.00	2.75	2.17	2.46
Dental Diseases	3103	524436	276752	276752	1081043
	0.13	8.24	2.22	1.29	2.53
Asthma	10619	44638	118786	364697	538740
	0.44	0.70	0.95	1.70	1.26
Obs. Gynae Complications	0	0	58931	363578	422509
	0.00	0.00	0.47	1.69	0.99
Night Blindness	1549	26761	79667	79667	187644
	0.06	0.42	0.64	0.37	0.44

Name of Diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Hypertension	0	0	8442	124544	132986
	0.00	0.00	0.07	0.58	0.31
Hepatitis	3976	6910	22183	43928	76997
	0.17	0.11	0.18	0.20	0.18
Whooping Cough	6065	22317	50329	33303	111914
	0.23	0.35	0.40	0.16	0.26
Diabetes	0	0	7250	38930	46180
	0.00	0.00	0.06	0.18	0.11
Poisoning	177	1663	8308	27987	38135
	0.01	0.03	0.07	0.13	0.09
Filaria	0	0	718	21744	22462
	0.00	0.00	0.01	0.10	0.05
Mental Diseases	0	312	4305	16863	20680
	0.00	0.00	0.01	0.07	0.05
Measles	3686	7875	5814	2047	19422
	0.15	0.12	0.05	0.01	0.05
Tuberculosis	0	2191	10281	2191	14663
	0.00	0.03	0.08	0.01	0.03
Diphtheria	90	766	8681	1546	11083
	0.00	0.01	0.07	0.01	0.01
Chicken pox	181	1184	2925	2659	6949
	0.01	0.02	0.02	0.01	0.02
Kala-a-Zar	77	312	1106	1452	2947
	0.00	0.00	0.01	0.01	0.01
Tetanus	960	892	1824	2638	6314
	0.04	0.01	0.01	0.01	0.01
Other Diseases	570471	1494896	1737321	3940421	7743109
	23.71	23.49	13.91	18.35	18.12
TOTAL	2403250	6365272	12486038	21468365	42722925
	100.00	100.00	100.00	100.00	100.00

Disease Profile by Age Group for the Year 1990

Name of Diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Diarrhoeal Diseases	1188423	849778	2010608	3268148	7316957
%	26.34	11.25	16.31	17.73	
Clinical Malaria	3792	13828	34578	67161	119359
	0.08	0.18	0.28	0.30	0.28
Int. Worm Infect.	1096701	2215699	1044435	2639738	6996573
	24.31	29.34	8.47	14.32	16.34
Skin Diseases	120823	431052	768956	949237	2269168
	2.68	5.71	6.23	5.15	5.30
Peptic Ulcer	0	2778	228665	1205861	1437304
	0.00	0.04	1.85	6.54	3.36
Acute Res. Inf.	520593	1138634	1787023	1939566	5385816
	11.54	15.08	14.50	10.52	12.58
Anaemia	20946	140385	616985	1052524	1830840
	0.46	1.86	5.00	5.71	4.28
Deficiency Diseases	853908	1081943	1515813	1190608	4642272
	18.93	14.33	12.30	6.46	10.84
P.U.O	62375	143670	238964	384404	829413
	1.38	1.90	1.94	2.09	1.94
Eye Diseases	40818	119367	304800	406161	871146
	0.90	1.58	2.47	2.20	2.01
Injuries	6695	48493	145042	306518	506748
	0.15	0.64	1.18	1.66	1.18

Name of Diseases	< 1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Ear Diseases	25632	88276	157386	210627	481921
	0.57	1.17	1.28	1.14	1.13
Dental Diseases	18769	23044	127031	270997	439841
	0.42	0.31	1.03	1.47	1.03
Asthma	1231	12503	46765	150106	210605
	0.03	0.17	0.38	0.81	0.49
Obs. Cynae Complications	0	0	30017	161394	191411
	0.00	0.00	0.24	0.88	0.45
Night Blindness	1498	27800	42613	42814	114725
	0.03	0.37	0.35	0.23	0.27
Hypertension	0	0	2945	46571	49516
	0.00	0.00	0.02	0.25	0.12
Hepatitis	237	1525	8682	22697	33141
	0.01	0.02	0.07	0.12	0.08
Whooping Cough	4980	15322	14193	18164	52659
	0.11	0.20	0.12	0.10	0.12
Diabetes	0	0	1549	16855	18404
	0.00	0.00	0.01	0.09	0.04
Poisoning	0	0	4100	13484	17584
	0.00	0.00	0.03	0.07	0.04
Filariasis	0	280	2774	10778	13832
	0.00	0.00	0.02	0.06	0.01
Mental Diseases	0	1801	2864	8124	12789
	0.00	0.02	0.02	0.04	0.03
Measles	3383	8081	4661	1834	17959
	0.07	0.11	0.04	0.01	0.04
Tuberculosis	0	0	8275	8315	16590
	0.00	0.00	0.07	0.05	0.04
Diphtheria	30	135	191	168	524
	0.00	0.00	0.00	0.00	0.00
Chicken pox	68	487	1036	12372	13963
	0.00	0.01	0.01	0.07	0.03
Kalu-a-Zar	174	262	646	1279	2361
	0.00	0.00	0.01	0.01	0.01
Tetanus	451	456	426	686	2019
	0.01	0.01	0.00	0.00	0.00
Other Diseases	540657	1184953	3177006	4027358	8929974
	11.98	15.69	25.77	21.85	20.85
TOTAL	4511884	7550552	12328129	18434849	42825414
	100.00	100.00	100.00	100.00	100.00

Disease Profile by Age Group for the Year 1989

Name of Diseases	< 1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Diarrhoeal Diseases	471374	984025	1480387	2305520	5241306
%	20.28	16.07	13.58	11.63	13.38
Clinical Malaria	9971	33683	80196	151550	275400
	0.43	0.55	0.74	0.76	0.70
Int. Worm Infect.	157463	777436	1302614	1803035	4040548
	6.77	12.70	11.93	9.09	10.51
Skin Diseases	251468	609370	896870	1236682	2994390
	10.82	9.95	8.22	6.24	7.64
Peptic Ulcer	0	8308	488836	2506473	3003617
	0.00	0.14	4.48	12.64	7.67
Acute Res. Inf.	237687	505206	769844	1256910	2769644
	10.22	8.25	7.06	6.34	7.07

Name of Diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Anaemia	47683	292464	772039	1595033	2707219
	2.05	4.78	7.08	8.04	6.91
Deficiency Diseases	109722	376167	616891	931262	2034042
	4.72	6.14	5.66	4.70	5.19
P.U.O	122648	270202	463521	741676	1598947
	5.28	4.41	4.25	5.74	4.08
Eye Diseases	85085	255589	416357	627392	1384423
	3.66	4.17	3.82	3.16	3.53
Injuries	14259	106450	297322	564199	982230
	0.61	1.74	2.73	2.84	2.51
Ear Diseases	52651	183415	298825	402267	937158
	2.26	3.00	2.74	2.03	2.39
Dental Diseases	899	46596	270447	538049	855991
	0.04	0.76	2.48	2.71	2.18
Asthma	3728	32062	110475	328212	474477
	0.16	0.52	1.01	1.65	1.21
Obs. Gynae Complications	0	0	47457	317643	365100
	0.00	0.00	0.44	1.60	0.93
Night Blindness	4664	80836	120159	117787	323446
	0.20	1.32	1.10	0.59	0.83
Hypertension	0	0	7165	109685	116850
	0.00	0.00	0.07	0.55	0.30
Hepatitis	807	10325	34371	70298	115801
	0.03	0.17	0.32	0.35	0.30
Whooping Cough	23333	68878	60472	49963	202646
	1.00	1.12	0.55	0.25	0.52
Diabetes	0	0	3779	34906	38685
	0.00	0.00	0.03	0.18	0.10
Poisoning	337	1679	7312	20090	29418
	0.01	0.03	0.07	0.10	0.08
Filariasis	0	323	3169	11752	15244
	0.00	0.01	0.03	0.06	0.04
Mental Diseases	0	630	4654	17561	22845
	0.00	0.01	0.04	0.09	0.06
Measles	13914	38667	17514	4562	74657
	0.60	0.63	0.16	0.02	0.19
Tuberculosis	0	408	4978	80166	85552
	0.00	0.01	0.05	0.40	0.22
Diphtheria	188	672	751	1322	2933
	0.01	0.01	0.01	0.01	0.01
Chicken pox	308	1990	3879	4923	11100
	0.01	0.03	0.04	0.02	0.03
Kala-a-Zar	0	352	1660	2987	4999
	0.00	0.01	0.02	0.02	0.01
Tetanus	1436	1039	1394	2218	6087
	0.06	0.02	0.01	0.01	0.02
Other Diseases	715251	1435885	2321175	3997501	8469812
	30.77	23.45	21.29	20.16	21.62
TOTAL	2324876	6122657	10904510	19831624	39183667
	100.00	100.00	100.00	100.00	100.00

Disease Profile by Age Group for the Year 1988

Name of Diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Diarrhoeal Diseases	493239	1013412	1544615	2315738	5367004
%	20.07	16.44	14.58	12.35	14.14
Clinical Malaria	7519	35297	77652	135107	255575
	0.31	0.57	0.73	0.72	0.67

Name of Diseases	<1 Yr.	1-4 Yr.	5-15 Yr.	16+ Yr.	Total
Int. Worm Infect.	169813	735678	1213577	1584959	3704027
	6.91	11.94	11.46	8.46	9.76
Skin Diseases	293537	639612	905602	1219047	3057798
	11.94	10.38	8.55	6.50	8.06
Peptic Ulcer	0	15359	522420	2416195	2953974
	0.00	0.25	4.93	12.89	7.78
Acute Res. Inf.	230065	471312	687635	1106371	2495383
	9.36	7.65	6.49	5.90	6.57
Anaemia	56661	365737	740707	1483424	2586529
	2.31	4.96	6.99	7.91	6.81
Deficiency Diseases	128432	369726	565300	834347	1897805
	5.23	6.00	5.34	4.45	5.00
P.U.O	105213	237204	404608	643153	1390178
	4.28	3.85	3.82	3.43	3.66
Eye Diseases	103159	291440	457715	684285	1536519
	4.20	4.73	4.32	3.65	4.05
Injuries	14657	94458	259595	501618	870328
	0.60	1.53	2.45	2.68	2.29
Ear Diseases	54820	179091	279005	355321	868237
	2.23	2.91	2.63	1.90	2.29
Dental Diseases	2366	49882	253728	483871	789847
	0.10	0.81	2.40	2.58	2.08
Asthma	6377	35753	116824	236946	495900
	0.26	0.58	1.10	1.80	1.31
Obs. Gynae Complications	24	2334	46625	275021	324004
	0.00	0.04	0.44	1.47	0.85
Night Blindness	5664	124255	155681	166103	451703
	0.23	2.02	1.47	0.89	1.19
Hypertension	0	0	9170	119014	128184
	0.00	0.00	0.09	0.63	0.34
Hepatitis	2197	13753	42072	93873	151895
	0.09	0.22	0.40	0.50	0.40
Whooping Cough	40220	108570	101385	82232	332407
	1.64	1.76	0.96	0.44	0.88
Diabetes	0	0	6533	47721	54254
	0.00	0.00	0.06	0.25	0.14
Poisoning	502	2841	11867	28876	44086
	0.02	0.05	0.11	0.15	0.12
Filariasis	0	0	5998	15612	21610
	0.00	0.00	0.06	0.08	0.06
Mental Diseases	0	0	5894	23538	29432
	0.00	0.00	0.06	0.13	0.08
Measles	40332	72118	32421	10915	155786
	1.64	1.17	0.31	0.06	0.41
Tuberculosis	0	884	8165	8541	17590
	0.00	0.01	0.08	0.05	0.05
Diphtheria	785	1843	1261	1394	5283
	0.03	0.03	0.01	0.01	0.01
Chicken Pox	915	3445	5777	6731	16868
	0.04	0.06	0.05	0.04	0.04
Kala-A-Zar	22	289	1033	1536	2880
	0.00	0.00	0.01	0.01	0.01
Tetanus	2318	1603	2978	3997	10896
	0.09	0.03	0.03	0.02	0.03
Other Diseases	698519	1357340	2126804	3744858	7927621
	28.43	22.02	20.08	19.98	20.88
Total	2457456	6163236	10592614	18745264	37958570
	100.00	100.00	100.00	100.00	100.00

6.2 Disease Control and Prevention

6.2.1 Expanded Programme on Immunization

The reported coverage of EPI in children under 1 year and TT coverage of women 14-49 years of age are as follows:

Coverage Based on Routine Reports

YEAR	BCG	DPT3	OPV3	Measles	TT2+
1996	100%	97%	97%	96%	90%
1997	100%	98%	97%	97%	94%

Findings based on the Coverage Evaluation Survey indicated the following coverage rates for the above two years. Contrary to the routine reports, the CES showed much lower immunization coverage rates for all the six diseases although the findings indicated that the coverage was increasing. Nevertheless, only 56% of all children under one year of age were fully immunized in 1999.

Coverage Among Children <12 Month Old Based on Ces Results

YEAR	BCG	DPT3	OPV3	Measles	TT2+	Fully immunized
1997	88%	66%	66%	59%	-	51%
1998	91%	68%	68%	62%	72%	54%
1999	99%	82%	82%	70%		56%

For the eradication of Polio in Bangladesh, by the end of 1999, five NIDs were organized and the turnouts were remarkable. The OPV coverage under NID among children under 5 years of age is presented as follows:

National Immunization Day Coverage Based on Routine Reports

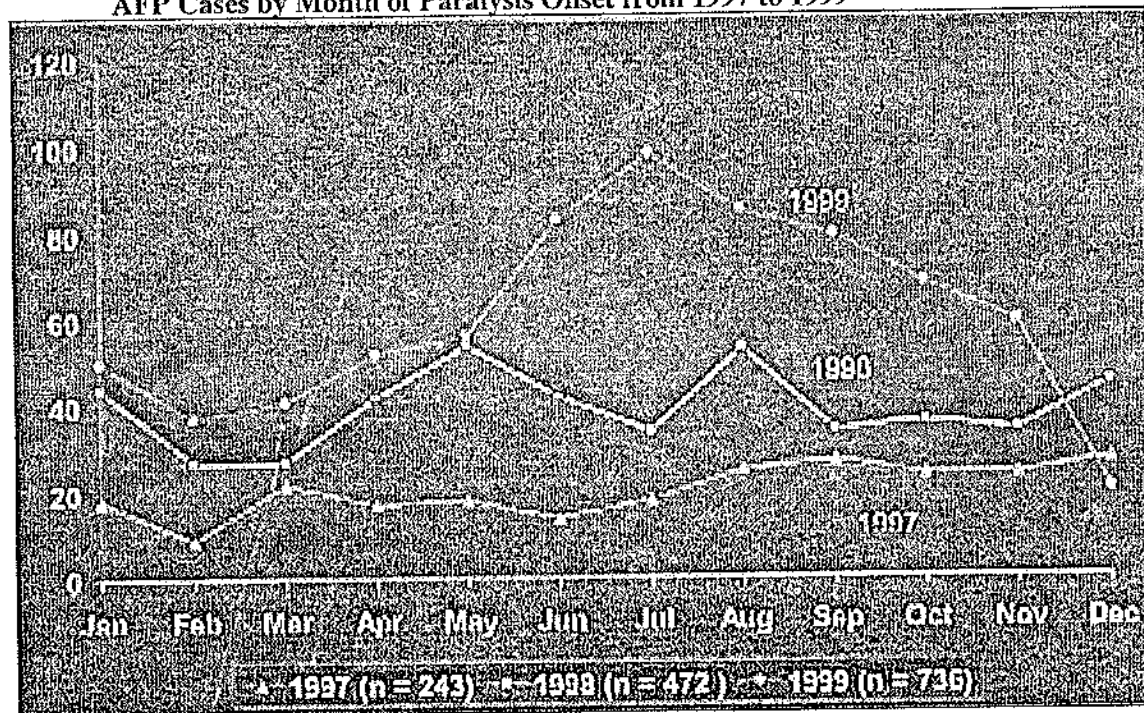
NID	ROUND 1 (%)	ROUND 2 (%)
1 st NID	84	92
2 nd NID	95	97
3 rd NID	98	99.5
4 th NID	99	98
5 th NID	100	100

Findings by the appraisal team on coverages of 3rd-5th NIDs are presented in the following table. It can be gleaned from the table that, at the end of the 5th NID, coverage has still not yet reached 100%.

NID Coverage Based on Findings of Appraisal Team

NID	ROUND 1 (%)	ROUND 2 (%)
3 rd NID	98	99.5
4 th NID	99	98
5 th NID	100	100

AFP Cases by Month of Paralysis Onset from 1997 to 1999



Source: EPI, DGHS, MOHFW, Bangladesh

*1999 data as of 31/12/1999

6.2.2 Integrated Control of Vector Borne Diseases (ICOVED)

6.2.2.1 Kala-Azar Control Programme

Historically, Kala-Azar or Visceral Leishmaniasis (VL) is endemic in Bangladesh. In the sixties and very early seventies DDT spraying under the malaria eradication programme successfully controlled VL transmission in Bangladesh and in the Indian sub-continent. This was a major benefit of the malaria eradication programme. In the late 1970s, Kala-Azar re-appeared in Bangladesh sporadically. Since then Kala-Azar cases have been increasing and from 8 thanas reporting Kala-Azar during the 1981-85 period the number has grown to 62 thanas in 1991 and 88 thanas in 1993. During the last few years, the Kala-Azar situation has assumed epidemic proportion. The disease pattern is extremely focal with most cases reported from rural areas, exhibiting a familial and contiguous household clustering pattern among the lower socio-economic groups. The highest case fatality rate recorded from research on known Kala-Azar patients was 6.4% in Mymensingh district. The prevalence rate in selected villages in the same district was found to be as high as 6% of the total population. The resurgence of Kala-Azar was associated with the lack of spraying which allowed the build-up of sandfly populations.

The Kala-Azar Control Programme is a relatively new component of the overall ICOVED programme. Although Kala-Azar is a notifiable disease in Bangladesh since 1987, reporting as well as diagnostic and curative capabilities of rural health services are still limited. The data available are perhaps an under-estimation of the epidemiological situation. The prevalence estimated in 1995 was

about 40,000 cases nationally. The total population at risk was in excess of 20 million (18%), with at least 27 districts affected (42%) and 88 thanas (19%) reporting Kala-Azar cases in 1993-1994. Males seemed to be more affected by the disease than females. An incidence rate of 1 per 1000 population in the affected areas (estimated in 1995) was considered conservative. In 1996, 5 Direct Agglutination Test (DAT) laboratories were established in 5 districts for sero diagnosis of Kala-Azar purpose. Between 1994 and 1997, a rapidly rising trend has been detected which is alarming. The number of cases in 1994, 1995, 1996 and 1997 were 3,967, 4,213, 6,813 and 8,846 respectively.

6.2.2.2 Malaria Control Programme

In the early 1960s, the then Pakistan Government pursued a programme of eradicating malaria through killing of mosquitoes using DDT spray. Although the programme was unsuccessful in eradicating this time-immemorial disease, it has evolved into a relatively successful and strong programme which kept malaria under control for a long time. In recent years, however, malaria is staging a comeback in Bangladesh. The epidemiological data (Table 6.2.2.2.1) from 1982-1997 show that the number of malaria cases increased over time. A total of 115,660 cases were diagnosed in 1992 which registered more than 100% increase over 1982. The highest number of malaria cases was found in 1994 with 166,563 persons contracting malaria. Since then, the number of positive malaria cases has declined. In 1996, there were 100,864 cases diagnosed country-wide. Until 1989, the majority of the malaria cases were of *P. falciparum* infection. However, the number of *P. Vivax* cases were rising and eventually took over as the dominant malaria infection from 1990 until 1995. The year 1996 marked a reversed trend not only in terms of the number of malaria cases detected but also the re-dominance of *P. falciparum* infection. The malaria control programme has now taken a variety of approaches to deal with malaria and has become a part of PHC. In recent years, insecticide treated bed nets are used in high risk endemic areas to control malaria. In 1996 and 1997, a total of 79,036 and 9,827 bed nets respectively were distributed in 8 endemic districts.

TABLE - 6.2.2.2.1
Trend of Malaria Control Programme in Bangladesh from 1982 to 1997

Year	Population (million)	Blood Slide Exam.	ABER	+ve	API 1000 (%)	SPR (%)	PI Infection	PI (%)	Pv Infection	Pv (%)
1982	90.3	2808765	3.1	46781	0.52	1.67	19059	40.74	27722	59.26
1983	92.2	2516110	2.7	42529	0.46	1.69	17546	41.26	24983	58.74
1984	94.3	2552543	2.7	32977	0.35	1.29	14876	45.11	18101	54.89
1985	96.4	2823028	2.9	31050	0.32	1.10	16211	52.21	14839	47.79
1986	98.0	2685529	2.7	39128	0.40	1.46	21064	53.83	18064	46.17
1987	99.8	2771577	2.8	35848	0.36	1.29	20472	57.11	15376	42.89
1988	101.5	2704563	2.7	33824	0.33	1.25	21565	63.76	12259	36.24
1989	103.8	3152310	3.0	50738	0.49	1.61	35780	70.52	14958	29.48
1990	106.1	2444415	2.3	53875	0.51	2.20	34061	63.22	19814	36.78
1991	109.9	2081137	1.9	63578	0.58	3.05	30282	47.63	33296	52.37
1992	112.1	1919349	1.7	115660	1.02	6.03	51775	44.83	63885	55.17
1993	114.5	1635589	1.4	125402	1.10	7.67	54973	43.84	70429	56.16
1994	116.7	1661701	1.4	166563	1.43	10.00	81015	48.64	85548	51.36
1995	119.0	1461556	1.2	152729	1.28	10.40	75860	49.66	76869	50.34
1996	120.0	1146736	1.0	100864	1.00	8.8	54307	53.84	46557	46.16
1997	125.0	955542	0.90	68541	0.64	7.17	42342	61.78	23,199	38.22

Note: Mid-year population estimate

B/S Exam.

Blood smears examined.

+ve

Microscopically diagnosed malaria positive slides.

Pf. Inf.	Plasmodium falciparum infections (including mixed falciparum and vivax infections)
API	Annual parasite incidence (malaria positive per thousand population under surveillance)
SPR	Slide positively rate (positive per hundred slides examined).
Pf (%)	P.f. proportion (Pf. Infections per hundred malaria positive).
ABER	Annual blood examination rate.

6.2.3 TB and Leprosy Control

6.2.3.1 National TB Programme

The national tuberculosis control and prevention programme was started in 1965. The services were mainly curative and were provided through 44 TB clinics (presently Chest clinics), 8 segregation hospitals and 4 TB hospitals. TB services expanded to 124 Thana Health Complexes during the 1980-86 project "Strengthening TB and Leprosy Control Services" and became integrated with leprosy during 1986-91 under the "Mycobacteria Disease Control Programme". However, it was reported that treatment completion was less than 50% and case detection less than 20% of the estimated cases. The present revised National TB Control Programme (NTP) was launched under the project "Further Development of TB and Leprosy Control Services" and adopts the DOTS strategy. Its field implementation started in November 1993 in four thanas, expanding progressively to the 460 thanas by June 1998. NTP will be also implemented in the metropolitan cities. A national tuberculin survey was performed in 1964-1966 and a tuberculosis prevalence survey in 1987-1988. WHO estimated the Annual Risk of TB Infection (ARTI) in Bangladesh to be of 2.24% in 1997 with a natural decrease of 1% per year. Extrapolating to 1999, the estimated ARTI was 2.20% and the incidence of pulmonary TB smear-positive (infectious) cases was 108 per 100,000 population. With an estimated ratio of 1:1.22 between pulmonary new smear-positive and other forms of TB, the incidence of any form of TB was 241 per 100,000 population. More than 300,000 new cases and 60,000 deaths of TB are estimated to have occurred in 1999 in Bangladesh, which ranks fourth among the TB high-burden countries in the world. TB cases will significantly increase in case of HIV epidemic.

Table 6.2.3.1 shows that, from the inception of registration (November 1993) until September 1999, the cumulative number of reported total TB cases is 313,841 of which 95,690 detected in GOB thanas, 148,964 in TB (Chest) clinics and 69,187 from NGO thanas. With the expansion of NTP at thana level, progressively fewer patients attend the Chest clinics.

TABLE -6.2.3.1
Total TB Cases reported by Unit and Year,
Nov 1993 – Sep 1999

Year	Thana Units by GoB		Chest Clinic		Thana Units by NGOs		Total	
	No.	%	No.	%	No.	%	No.	%
1993	73	100.0	---	---	---	---	73	100.0
1994	2,263	100.0	---	---	---	---	2,263	100.0
1995	9,431	20.6	31,799	69.5	4,556	10.0	45,786	100.0
1996	16,260	23.2	44,891	64.1	8,897	12.7	70,048	100.0
1997	21,449	32.7	28,856	44.0	15,271	23.3	65,576	100.0
1998	25,965	35.9	24,586	34.0	21,720	30.1	72,271	100.0
1999	20,249	35.0	18,832	32.6	18,743	32.4	57,824	100.0
Total	95,690	30.5	76,569	47.5	13,453	22.0	313,841	100.0

Note: last update 16.01.2000

Table 6.2.3.2 shows that, of the reported cases, 55.0% of the total pulmonary cases are smear-positive and 45.0% are smear negative. The ratio of pulmonary new smear-positive cases to pulmonary smear-negative and extra-pulmonary is 1:1.

TABLE - 6.2.3.2
Total TB Cases reported by condition and Year, Nov 1993 – Sep 1999

Year	PTB								ETB New	Total TB	
	PTB positive				PTB negative		Total PTB			No.	Ratio New:Old New
	New	Relap	Total		New		No.	%			
	No.	No.	No.	%	No.	%					
1993	67	0	67	91.8	6	8.2	73	100.0	0	73	1:0.1
1994	1,643	51	1,694	76.7	514	23.3	2,208	100.0	55	2,263	1:0.3
1995	21,396	769	22,165	51.0	21,314	49.0	43,479	100.0	2,307	45,786	1:1.1
1996	32,963	1,229	34,192	51.5	32,229	48.5	66,421	100.0	3,627	70,048	1:1.1
1997	33,784	1,195	34,979	56.7	26,698	43.3	61,677	100.0	3,899	65,576	1:0.9
1998	37,755	1,460	39,215	57.8	28,589	42.2	67,804	100.0	4,470	72,274	1:0.9
1999	29,219	1,238	30,457	56.3	23,622	43.7	54,079	100.0	3,745	57,824	1:0.9
Total	156,827	5,942	162,769	55.0	132,972	45.0	295,741	100.0	18,103	313,844	1:1.0

Note: last update 16.01.2000

Among the new pulmonary TB smear-positive patients reported during 1993-1999 by age group and gender (Table 6.2.3.2), the majority were male patients with an overall male:female ratio of 1:0.4. The male patients are more in the age group of 35-44 years and women in the age group 25-34 years. The gender difference in TB case finding is presently under study.

TABLE - 6.2.3.3
New TB Smear-Positive Cases by Age Group, Gender and Year, Nov 1993 – Sep 1999

Year	0-14 Years		15-24		25-34		35-44		45-54		55-64		65+		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
1994	12	17	117	85	249	120	240	112	214	64	172	31	85	7	1089	436
1995	99	162	1344	832	2726	1234	2626	746	1712	376	1065	203	637	83	10209	3636
1996	194	327	2498	1731	5009	2449	5261	1671	3791	920	2862	484	1722	216	21337	7798
1997	213	360	2952	2143	5572	2857	5380	1816	4238	1099	3107	569	2094	245	23556	9089
1998	254	438	3516	2663	5988	3319	6242	2156	4771	1212	3522	649	2569	324	26862	10761
1999	200	325	2698	2102	4445	2469	4775	1666	3640	1015	2782	550	2129	245	20669	8372
Total	972	1629	13125	9556	23989	12448	24524	8167	18366	4686	13510	2486	9236	1120	103722	40092

Note: last update 16.01.2000

In the period November 1993 – June 1998, among the evaluated new TB pulmonary smear-positive patients, NTP achieved an overall successful treatment rate of 80.1% (75.1% cure and 5.0% treatment completion). The death rate is 5.2%, the failure rate is 1.4%, the defaulter rate is 10.3% and the transferred-out rate is 3.0%. The success rate was 82.3% in 1998, 80.6% in 1997, 78.9% in 1996, 78.5% in 1995, 76.7% in 1994 and 80.6% in 1993. The actual figures are shown in Table 6.2.3.4.

TABLE-6.2.3.4

New TB Smear-Positive Cases Reported by DOTS final Result and Year, Nov 1993 – Jun 1998

Year	Total Evaluat No.	Cured		Treatment Completed		Died		Failures		Defaulted		Transferred Out	
		No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1993	67	52	77.6	2	3.0	8	11.9	3	4.5	20	3.0	0	0.0
1994	1,556	1,124	72.2	70	4.5	93	6.0	32	2.1	179	11.5	58	3.7
1995	10,018	7,303	72.9	565	5.6	527	5.3	167	1.7	1,134	11.3	322	3.2
1996	18,716	13,929	74.4	834	4.5	982	5.2	308	1.6	2,048	10.9	615	3.3
1997	25,664	19,216	74.9	1,468	5.7	1,264	4.9	363	1.4	2,656	10.3	697	2.7
1998	15,825	12,352	78.1	660	4.2	830	5.2	163	1.0	1,390	8.8	430	2.7
Total	71,846	53,976	75.1	3,599	5.0	3,704	5.2	1,036	1.4	7,409	10.3	2,122	3.0

Note: last update 16.01.2000

6.2.3.2 Leprosy Control Programme

Leprosy has been recognized as a major health problem for a long time. In 1992, Bangladesh was estimated to have a leprosy prevalence rate of 13 per 10,000 population, i.e., 136,000 cases, which made Bangladesh the country with the third highest leprosy case-load in the world. The estimated number of leprosy cases was revised to 80,000 in 1996. By the end of 1997, the estimated prevalence of leprosy was 3.5 per 10,000 population with a registered prevalence of 1.17 per 10,000 population. Since 1996, 600 Multi-Drug Therapy (MDT) units were established in the country. Their distribution is shown in Table 6.2.3.2.1.

**TABLE 6.2.3.2.1
Allocation and Implementation of the 600 MDT Facilities**

Category	Number
Thanas	460
District HQ excluding metropolitan areas	60
Municipalities excluding district HQ	43
4 metropolitan areas	37
Total	600 (100.0)

**TABLE - 6.2.3.2.2
Leprosy Case Finding, 1985-1997**

Year	Prevalence	New Case Detection	Prevalence/ Detection Ratio	New Case Detection						Cured with MDT
				Children		Disabled		Multi-Bacillary		
				No.	%	No.	%	No.	%	
1985	52161	4834	10.79	385	7.96	1720	35.58	2149	44.46	35618
1986	43216	4118	10.49	465	11.29	1535	37.28	1993	48.40	
1987	46565	3349	13.49	331	9.88	837	24.99	1672	49.93	
1988	28103	3676	7.64	318	8.65	919	25.00	1103	30.01	
1989	22168	4057	5.46	384	9.47	933	23.00	1239	30.54	
1990	19285	5748	3.36	561	9.76	1322	23.00	1979	34.43	

Year	Prevalence	New Case Detection	Prevalence/ Detection Ratio	New Case Detection						Cured with MDT
				Children		Disabled		Multi-Bacillary		
				No.	%	No.	%	No.	%	
1991	25000	5229	4.78	435	8.32	836	15.99	2144	41.00	
1992	19932	7307	2.73	844	11.55	1170	16.01	2969	40.63	
1993	22334	6943	3.22	809	11.65	1483	21.36	4193	60.39	7428
1994	15110	7983	1.89	1357	17.00	1118	14.00	3062	38.36	8375
1995	12434	8782	1.42	1206	13.73	1209	13.77	3091	38.20	9820
1996	13385	11226	1.19	1779	15.85	1266	11.28	3814	33.85	8822
1997	13,248	11320	1.17	1642	14.50	1328	11.73	4000	35.34	10450
Total		84572		10516	12.43	15676	18.54	33408	39.50	80513

The trend indicates an increase in case detection and a gradual decrease in deformity rate among new cases. The deformity rate among new cases has been declining since 1993. In comparison with 1996, the rate remained almost unchanged in 1997. In 1997, the male/female ratio among new cases was 3:2 and the child rate among new cases was 14.50%.

Since 1994, all registered cases are provided with MDT. Thus the MDT coverage of registered cases is 100% in Bangladesh. The cumulative number of MDT completed cases is as follows:

1993 - 1997	46,254
1985 - 1997	80,513

A cohort analysis of 5,568 Pauci-bacillary (PB) patients registered by 8 NGO units during 1996 showed that 5,339 of the 5,569 patients have satisfactorily completed their treatment (6 doses within maximum 9 months) giving a cure rate of 95.88%.

6.3 Cancer Control Programme

The cancer control programme was started in 1982 as a small non-communicable disease programme. Institutional services and research activities are currently carried out by the National Institute of Cancer Research and Hospital. The hospital is capable of providing operative, pathological and endoscopic examination facilities to cancer patients. The number of cancer patients by sex treated at the Cancer Hospital over the period 1982-1997 is presented in Table 6.3.1. The table indicates that the number of patients seeking treatment in the hospital has been rising. Of those who came for treatment in 1997, an average of 44.1% were found to have cancer. This information indicates that cancer is becoming a more common diseases providing evidence to the suggestion that Bangladesh is entering into an epidemiological transition and is now facing a double disease burden.

Table 6.3.2 shows that the annual number of new cancer patients from 1992 to 1997 has been increasing. The male to female ratios among the new cases in 1992-1997 were 1:0.45 (1992), 1:0.45 (1993), 1:0.52 (1994), 1:0.55 (1995), 1:0.58 (1996), and 1:0.58(1997) respectively. The ratios were quite stable over time and seemed to be consistent with the general intuition that fewer women than men suffer from cancer, due perhaps to the much lower prevalence rate of smoking among women.

TABLE-6.3.1
Distribution of Patients by Sex treated at the Cancer Institute, Dhaka

Year	Total	Number of Patients Came for Treatment by Sex				No. of Cancer Patients by Sex					
		Male	%	Female	%	Male	%	Female	%	Total	% of total
1982	932	673	72.21	259	27.79	348	73.89	123	26.11	471	50.54
1983	1543	1182	76.31	367	23.69	367	74.29	127	25.71	494	32.02
1984	1308	1057	80.81	251	19.19	177	75.32	58	24.68	235	17.97
1985	825	655	79.39	170	20.61	367	79.61	94	20.39	461	55.88
1986	706	532	75.35	174	24.65	195	67.47	94	32.53	289	40.93
1987	887	676	76.21	211	23.79	136	56.67	104	43.33	240	27.06
1988	1556	899	57.78	657	42.22	296	50.25	293	49.75	589	37.85
1989	2953	1888	63.93	1065	26.07	1074	65.41	568	34.59	1642	55.60
1990	7901	5054	63.97	2847	36.03	2303	66.77	1146	33.23	3449	43.65
1991	8529	5253	61.59	3276	38.41	2593	66.59	1301	33.41	3894	45.66
1992	17845	11141	62.43	6704	37.57	7057	68.10	3306	31.90	10363	58.07
1993	9937	6308	63.48	3629	36.52	4460	64.73	2430	35.27	6890	69.34
1994	30910	17880	57.85	13030	42.15	12452	63.91	7031	36.09	19483	63.03
1995	50113	28758	57.39	21355	42.61	11798	59.51	8028	40.49	19826	39.56
1996	57487	31265	54.39	26222	45.61	14902	59.34	10211	40.66	25113	43.68
1997	58209	32131	55.20	26078	44.80	15427	60.10	10242	39.90	25669	44.10
Total	250925	145352	57.93	106295	42.07	73952	61.06	45156	38.94	119108	47.47

TABLE-6.3.2
Total Number of Outdoor Patients, 1992-1997
National Institute of Cancer Research and Hospital

Type of patient	Sex	1992	1993	1994	1995	1996	1997
Total Number of New Patients	Male	2659	4460	3207	3199	3494	3388
	Female	1799	243	2417	2441	2623	2978
	Total	4458	6890	5624	5640	6117	6366
Total Number of Old Patients	Male	8482	1848	14043	13371	11314	32131
	Female	4905	1199	10467	10886	14943	26078
	Total	13387	3047	24510	24257	26257	58209
Number of New Cancer Patients	Male	962	572	1308	1478	1828	1629
	Female	431	258	678	818	1059	1346
	Total	1393	830	1986	2296	2887	3075
Number of Old Cancer Patients	Male	6095	3888	11144	10320	13074	15427
	Female	2875	2172	6383	7210	9152	10242
	Total	8970	6060	17527	17530	22226	25669

6.4 Causes of Death

In 1996, only 17,006 deaths were reported by the district and lower level hospitals. Given a crude death rate of 8.0 per 1000 population in 1997, the total reported cases represented only about 1.7 percent of the estimated 990,000 deaths in the whole country. Questions why there were so few deaths reported to the health authority. This analysis suggests a number of possible factors: a) most of the deaths occurred at home, b) most of the serious cases were referred to tertiary hospitals, and there were therefore fewer deaths occurring in district or lower level health facilities, c) many deaths occurring at district and lower level health facilities were not reported at all, d) of the many deaths that were reported in the secondary and lower hospitals, the causes of many of them were either not reported or could not be determined, and e) most of the tertiary or specialized hospitals did not send their reports to the health information authority. It is most likely that the low reporting was due to a combination of all of the above factors.

Based on the statistics available (i.e., 17,006 cases) with the Health Information Unit, some general interpretations can be made. **Table 6.4.1** gives a breakdown of the deaths by their causes from 1993 to 1997. An attempt was made to use the two digit level ICD-9 to code the diseases which are shown on the first column of Table 6.4.1. The ICD-9 summary table is presented in Section 9 of this bulletin. The table indicated that, in 1997, the top 10 most common causes of death were:

1. Pneumonia
2. Respiratory failure
3. Accidental poisoning by other
4. Diseases of other acute upper respiratory tract
5. Diarrhoea
6. Hypertensive diseases
7. Intra-cerebral and other internal hemorrhage
8. Toxemia of pregnancy
9. Asthma
10. Malaria

Pneumonia has been the number one cause of mortality of the country in all the years between 1993-1997. Other pulmonary diseases including respiratory failure, asthma and diseases of other acute upper respiratory tract were also in the list of the top most common causes of death suggesting that major interventions should be made to prevent such diseases.

Accidental poisoning by other continues to be a very major cause of death in Bangladesh. It is unfortunate that gender disaggregated data were not readily available, we speculated that the majority of the victims of "accidental poisoning by other" were female.

Although diarrhoeal diseases continue to be the most important causes of morbidity, its ferociousness as a killer has been declining in recent years. In 1997, it was ranked as the fifth most

important cause of death. The severe health impact of malaria seemed to be in the decline as well. 2.8% of all deaths in 1997 were caused by malaria which showed a significant decline from the previous year. In 1995, 5.1 percent of all deaths were due to this disease. The information available however did not indicate that malaria, as a disease, has established a declining trend in Bangladesh.

Toxemia of pregnancy has always been a common cause of death in Bangladesh. In 1997, it accounted for 3.4 percent of all deaths. The introduction of the national EOC programme in the next few years should be able to reduce the number of maternal deaths due to causes such as toxemia of pregnancy.

As expected, rapid social and economic changes in the Bangladesh society have given rise to the number and proportion of deaths due to non-communicable diseases. Cardiovascular diseases including intra-cerebral and other internal hemorrhage diseases, hypertensive diseases, acute myocardial infraction and acute but ill defined CVD together accounted for more than 12 percent of all deaths in 1997 making it the number two killer in the country. This conclusion is, of course, based only on the deaths reported to the office of UMIS.

Overall, out of the top 10 causes of death, 6 of them are preventable. They are pneumonia, respiratory failure, diseases of other acute upper respiratory tract, diarrhoea, malaria and toxemia of pregnancy. Many lives could have been saved if these patients had been given timely diagnosis and proper treatment. Non-communicable diseases, particularly cardiovascular diseases, are undoubtedly on the rise and should not be ignored by the health service providers. Based on the mortality and other demographic statistics available with DGHS, it can be concluded that Bangladesh is, epidemiologically and demographically, in transition.

TABLE 6.4.1
District and Lower Level Hospital based Causes of Death Information

ICD-9 Code	Name of Disease	1993	%	1994	%	1995	%	1996	%	1997	%
321	Pneumonia	1934	13.5	2360	14.6	2302	14.2	2885	15.5	2664	15.7
E480	Accidental poisoning by other	539	4.0	657	4.1	1009	6.2	1580	8.5	1474	8.7
467	Respiratory failure	1071	7.0	1100	6.8	544	3.4	1548	8.3	1606	9.4
015	Diarrhoea	895	6.0	1165	7.2	944	5.8	898	4.8	834	4.9
312	Diseases of other acute upper respiratory tract	139	1.0	264	1.6	522	3.2	822	4.4	1006	5.9
460	P.U.O.	895	6.0	1156	7.2	1108	6.8	702	3.8	451	2.6
052	Malaria	527	4.0	677	4.2	827	5.1	708	3.8	484	2.8
260	Hypertensive diseases	579	4.0	478	3.0	473	2.9	708	3.8	608	3.6
291	Intra-cerebral and other internal Hemorrhage	429	3.0	602	3.7	571	3.5	690	3.7	604	3.6
391	Toxemia of pregnancy	535	4.0	633	3.9	453	2.8	679	3.6	586	3.4
E471	Motor vehicle/traffic accident	228	2.0	355	2.2	331	2.0	567	3.0	328	1.9
270	Acute myocardial infarction	363	3.0	429	2.7	667	4.1	512	2.7	400	2.4
323	Asthma	304	2.0	360	2.2	333	2.1	502	2.7	497	2.9
200	Anaemia	358	3.0	411	2.5	436	2.7	441	2.4	361	2.1
341	Ulcer of stomach and duodenum	142	1.0	208	1.3	326	2.0	409	2.2	269	1.6
037	Tetanus	452	3.0	364	2.3	270	1.7	389	2.1	331	2.0
293	Acute but ill defined C.V.D.	220	2.0	253	1.6	251	1.5	355	1.9	474	2.8
036	Meningitis	209	1.0	290	1.8	285	1.8	319	1.7	312	1.9
344	Intestinal Obstruction	262	2.0	312	1.9	274	1.7	260	1.4	209	1.2
500	Open wound of eye, ear and head	194	1.0	193	1.2	217	1.3	261	1.4	243	1.4
192	Other protein calories malnutrition	91	1.0	124	0.8	271	1.7	228	1.2	-	-
045	Encephalitis	0	0.0	166	1.1	221	1.4	226	1.2	222	1.3
453	Birth trauma	0	0.0	0	0.0	142	0.9	205	1.1	116	0.7
011	Typhoid fever	141	1.0	150	0.9	151	1.0	205	1.1	152	0.9
464	Abdominal pain	205	1.0	0	0.0	93	0.6	191	1.0	249	1.5
349	Hepatic coma	214	1.0	200	1.2	186	1.1	189	1.0	104	0.6
046	Hepatitis (Jaundice)	298	2.0	185	1.2	209	1.3	194	1.0	167	1.0
038	Septicemia	0	0.0	0	0.0	129	0.8	168	0.9	263	1.5
52	Burns	96	1.0	117	0.7	92	0.6	164	0.9	-	-

ICD-9 Code	Name of Disease	1993	%	1994	%	1995	%	1996	%	1997	%
491	Other intracranial injuries	0	0.0	0	0.0	118	0.7	109	0.6	86	0.5
046	Obstructed labour	0	0.0	0	0.0	98	0.6	90	0.5	69	0.4
350	Nephritis, Nephrotic Syndrome, and Nephrosis	173	1.2	174	1.1	100	0.6	100	0.5	65	0.4
014	Amoebiasis	0	0.0	0	0.0	82	0.5	98	0.5	56	0.3
012	Shigellosis	132	1.0	0	0.0	85	0.5	82	0.4	57	0.3
17	Malignant neoplasm	0	0.0	0	0.0	46	0.3	69	0.4	-	-
01	Intestinal infections	196	1.0	199	1.2	167	1.0	62	0.3	-	-
324	Bronchiectasis	0	0.0	0	0.0	97	0.6	55	0.3	144	0.9
251	Rheumatic Heart Disease	0	0.0	126	0.8	143	0.9	43	0.2	-	-
343	Hernia of abdominal cavity	0	0.0	0	0.0	109	0.7	0	0.0	-	-
053	Leishmaniasis	0	0.0	0	0.0	66	0.40	0	0.0	-	-
305	Hemorrhoids	0	0.0	0	0.0	61	0.4	0	0.0	-	-
400	Indirect obstetric causes	0	0.0	0	0.0	53	0.3	0	0.0	-	-
095	Malignant neoplasm (liver)	0	0.0	0	0.0	0	0	0	0	44	0.3
320	Confined to Eye and Adnexa	0	0.0	0	0.0	0	0	0	0	140	0.8
-	Other diseases	2469	17.3	2416	15.0	1344	8.3	972	5.2	1331	7.8
	TOTAL	14290	100	16124	100	16206	100	18685	100	17006	100

7. HEALTH SECTOR FINANCING

The revenue and development budgets for the Ministry of Health and Family Welfare for the fiscal years 1971-1997 are presented in **Table 7.1**. The allocations for Health and Family Planning activities as proportions of the total national budgets have increased over the years. In 1975-76, only 1.9% of the total budget was allocated to health and family welfare. By 1996-97 over 5% was allocated for the sector. Yearly comparison of sectoral allocations for the health and population sector has also revealed a rapid increasing trend.

Table 7.2 shows the per capita revenue expenditure on health for the years 1977-78 to 1995-96. It should be noted that there were other resources contributed to various health and population activities which were not accounted for in **Table 7.2**. A large amount of such resources were utilized on health services provided by other Ministries such as Ministry of Home, LGRD, Communication, Industry, etc., NGOs such as Grameen Bank, Proshika, BRAC, ASA, etc., private households, and international and bilateral agencies channelled through international NGOs such as ICDDR,B, CARE, RED CROSS/CRESCENT, etc.

The breakup of revenue expenditure on health by the three major components, Pay and Allowance, Contingencies and Diet, and Medical and Surgical Requisite for the fiscal years 1980-96 are shown in **Table 7.3**. The table shows that the proportion of expenditure on Pay and Allowance was steadily increasing from 48% in 1981 to 68% in 1992. On the other hand, the proportion of expenditure on MSR was declining, from 28% in 1980-81 to 18% in 1996-97.

TABLE 7.1
Budget Allocation For The Period 1971-1999

Figure in million Taka

Financial Year	REVENUE			DEVELOPMENT			TOTAL		
	Health	F.P.	Total	Health	F.P.	Total	Health	F.P.	Total
1971-72	-	-	5.11	-	-	2.38	1.04	-	7.49
1972-73	-	-	13.67	9.80	3.88	13.68	1.66	-	27.35
1973-74	-	-	14.27	18.35	2.03	20.38	2.07	-	34.65
1974-75	-	-	19.36	3.44	8.32	27.82	1.13	-	47.18
1975-76	25.15	0.02	25.17	32.59	20.50	53.09	1.58	20.52	78.26
1976-77	29.36	0.72	30.08	30.96	22.48	53.44	1.82	23.20	83.52
1977-78	41.15	1.21	42.36	42.86	30.72	73.58	2.05	31.93	115.94
1978-79	53.91	2.12	56.03	47.51	46.88	94.39	2.57	49.00	150.42
1979-80	60.62	3.34	63.96	70.07	59.63	129.70	2.47	62.97	193.66
1980-81	67.99	10.06	78.05	65.86	69.69	135.55	2.23	79.75	213.60
1981-82	72.62	11.43	84.05	77.38	84.28	161.66	2.57	150.00	245.71
1982-83	89.34	12.34	101.68	81.15	78.92	160.07	2.22	170.49	261.75
1983-84	100.32	12.88	113.20	82.24	84.95	167.19	2.15	182.56	280.39
1984-85	128.40	16.10	144.50	87.00	119.50	206.50	5.30	215.40	351.00
1985-86	206.50	20.40	226.90	75.80	128.70	204.50	4.99	282.30	431.40
1986-87	218.30	20.60	238.90	101.00	143.90	244.90	5.14	319.30	483.80
1987-88	267.18	21.87	289.05	104.02	175.41	279.43	5.54	371.20	646.26
1988-89	291.29	27.43	318.72	113.31	214.23	327.54	7.02	404.60	799.32
1989-90	336.69	30.06	366.75	135.38	297.19	432.57	8.48	472.07	927.25
1990-91	357.84	29.08	386.92	164.95	295.39	460.34	6.90	522.79	847.26
1991-92	395.76	35.00	430.76	206.24	336.50	542.74	7.60	602.00	973.50
1992-93	508.53	37.73	546.26	229.90	274.28	504.08	5.80	738.33	1030.14
1993-94	564.57	42.70	607.27	305.70	401.49	707.19	7.36	870.27	1314.46
1994-95	639.36	45.90	685.26	373.46	407.00	780.46	7.09	1012.80	1465.72
1995-96	680.79	50.90	731.69	417.20	313.19	730.39	6.99	1097.99	1462.08
1996-97	716.04	50.68	766.72	609.92	391.95	1001.87	8.01	1325.96	1788.59
1997-98									

TABLE 7.2
Revenue Expenditure on Health by GoB
FY 1995-1997

Year	Population (million)	Total Revenue Expenditure		Total Health Revenue Expenditure	
		Total Amount (million Taka)	Per Capita (Taka)	Total Amount (million Taka)	Per Capita (Taka)
1995-96	122.10	-		6821.0	55.86
1994-95	119.90	-		6258.0	52.19
1993-94	117.70	-		5558.5	47.22
1992-93	115.50	-		4726.0	40.91
1991-92	113.30	168,603.1	1521.7	3943.5	34.80
1990-91	109.90	171,232.7	1558.0	3,578.4	32.90
1989-90	108.80	140,110.4	1287.7	3,366.9	31.00
1988-89	107.61	110,994.0	1102.1	2,912.9	27.06
1987-88	106.71	94,359.3	884.5	2,671.8	25.03
1986-87	104.20	85,259.0	818.2	2,183.0	21.00
1985-86	101.70	79,547.0	782.7	2,065.0	20.30
1984-85	99.25	69,683.0	702.9	1,284.2	13.00
1983-84	96.35	26,748.2	277.1	1,003.2	10.41
1982-83	93.65	23,955.4	255.9	893.4	9.53
1981-82	91.30	20,148.1	220.8	726.2	8.00
1980-81	89.25	16,558.4	185.2	679.9	7.61
1979-80	87.43	15,172.2	173.3	606.2	7.00
1978-79	85.31	12,900.2	151.1	539.1	6.31
1977-78	83.25	10,985.6	131.5	411.5	5.00

TABLE - 7.3
Proportionate Revenue Expenditure on Health by GoB

Financial Year	Pay & Allowance	Contingencies & Diet	Medical Surgical Requisite
	%	%	%
1980 - 1981	48	23	28
1981 - 1982	51	23	26
1982 - 1983	54	24	22
1983 - 1984	54	23	24
1984 - 1985	60	19	22
1985 - 1986	65	15	20
1986 - 1987	66	17	17
1987 - 1988	67	16	17
1988 - 1989	65	17	18
1989 - 1990	67	17	15
1990 - 1991	64	16	20
1991 - 1992	67	16	17
1992 - 1993	68	15	17
1993 - 1994	63	20	17
1994 - 1995	61	24	15
1995 - 1996	69	15	16
1996 - 1997	59	10	18

8. HEALTH LEGISLATION

Health legislation in Bangladesh is not a new thing. The earliest legislation in this country can be traced back to the Fatal Accident Act of 1855 passed by the then British Colonial Government. Many acts, bills, ordinances and laws have since been promulgated since then by successive governments with a view to facilitate colonial administration, to protect the population from health risks and to promote public health. Health legislation in Bangladesh can be divided into six groups, namely, (1) vital registration, (2) communicable disease control, (3) food and drugs control, (4) medical education, (5) health practice and (6) environmental health. The following are the major acts and legislation promulgated in Bangladesh:

8.1 Legislations on Health and its Related Subjects

1. Vital Registration and Welfare Legislation

- 1.1 The Births and Deaths Registration Act, 1873
- 1.2 Births, Deaths and Marriages Registration Act, 1886
- 1.3 Fatal Accident Act, 1855
- 1.4 Native Converts, Marriage and Dissolution Act, 1866
- 1.5 Female Infanticide Prevention Act, 1870
- 1.6 Special Marriage Act, 1872
- 1.7 The Bengal Mohamadan Marriage and Divorce Registration Act, 1876
- 1.8 Marriage Validation Act, 1892
- 1.9 The Protection of Mohamadan Pilgrims Act, 1896
- 1.10 The Bengal Children Act, 1922
- 1.11 The Bengal Brostal School Act, 1928
- 1.12 Child Marriage Restraint Act, 1922
- 1.13 The Bengal Places of Public Amusement Act, 1933
- 1.14 The Bengal Workman Protection Act, 1944
- 1.15 Employment of Children Act, 1938 (Amended by Act, L-iii of 1974)
- 1.16 The Bengal Maternity Benefit Act, 1939
- 1.17 War Injuries Act, 1934
- 1.18 The Bengal Orphanage and Widow's Homes Act, 1944
- 1.19 The Bengal Maternity Benefit (Tea Estate) Act, 1950
- 1.20 Census ordinance, 1959
- 1.21 The Children Act, 1974
- 1.22 The Bangladesh Abandoned Children (Special Provision), 1972
- 1.23 The Bengal Vagrancy Act, 1943

2. Communicable Diseases Control

- 2.1 The Bengal Prevention of Inoculation Act, 1865
- 2.2 The Vaccination Act, 1880
- 2.3 The Lepers Act, 1898
- 2.4 Epidemic Diseases Act, 1897
- 2.5 The Bengal Diseases of Animals Act, 1944
- 2.6 Malaria Eradication Board Ordinance, 1961
- 2.7 Prevention of Malaria (Special Provision) Ordinance, 1978

3. Food and Drugs Control

- 3.1 The Opium Act, 1857, 1878
- 3.2 The Opium Smoking Act, 1932
- 3.3 Poisons Act, 1919,1990
- 3.4 Dangerous Drugs Act, 1930
- 3.5 The Assam Opium (Amendment) Act, 1933
- 3.6 The Drugs Act, 1940
- 3.7 The East Pakistan Food (Special Court) Act, 1956
- 3.8 Drugs and Medicines (Indemnity) Act, 1957
- 3.9 Opium and Dangerous Drugs Act, 1957
- 3.10 Pharmacy Act, 1957 (Amended 1974)
- 3.11 The East Pakistan Animal Slaughter (Registration) and Meat Control Act, 1957
- 3.12 The East Pakistan Pure Food Ordinance, 1959
- 3.13 The East Pakistan Government Fisheries (Protection) Ordinance, 1959
- 3.14 The East Pakistan Fisheries Development Corporation Ordinance, 1964
- 3.15 The Drugs (Control) Ordinance, 1982
- 3.16 The Drugs (Control) (Amendment) Ordinance, 1982
- 3.17 The Drugs (Control) (Amendment) Ordinance, 1984
- 3.18 The Drugs (Supplementary Provisions) Ordinance, 1986
- 3.19 The Drugs Control Act, 1990
- 3.20 Power Alcohol Ordinance, 1959
- 3.21 The Live-stock Importation Act, 1898
- 3.22 The Bengal Food Adulteration Act, 1919
- 3.23 Cantonments Pure Food Act, 1966
- 3.24 The Bangladesh Hotels and Restaurants Ordinance, 1982
- 3.25 The Juvenile Smoking Act, 1919
- 3.26 Tobacco Products Marketing Control Act, 1988

4. Health Education and Health Practice

- 4.1 Lunacy Act, 1912
- 4.2 The Bengal Nurses Act, 1934
- 4.3 Nursing Council Act, 1952
- 4.4 The Chittagong Hill Tracts (Nursing) Regulation, 1956
- 4.5 Unani, Ayurvedic and Homeopathic Practitioners Act, 1956 (Amended in 1968)
- 4.6 The Medical Degrees Act, 1916 (Amended in 1976)
- 4.7 Medical Qualification (Information) Ordinance, 1960
- 4.8 Eye Surgery (Restrictions) Ordinance, 1960
- 4.9 Medical College (Governing Bodies) Ordinance, 1961
- 4.10 The Bengal Dentists Act, 1939
- 4.11 The Medical and Dental Council Act, 1980
- 4.12 Medical Council Ordinance, 1962
- 4.13 The Medical Council Act, 1973
- 4.14 Allopathic System (Prevention of Illicit Use) Ordinance, 1962
- 4.15 Medical Services of Pakistan (Repeal) Act, 1963

- 4.16 Medical Diplomas (Repeal) Act, 1966
- 4.17 Pakistan College of Physicians and Surgeons Ordinance, 1962
- 4.18 The Bangladesh College of Physicians and Surgeons Order, 1972 (Amendment in 1974 And Renamed in 1976)
- 4.19 The Bangladesh Homeopathic Practitioners Ordinance, 1983
- 4.20 The Bangladesh Unani and Ayurvedic Practitioners Ordinance, 1983
- 4.21 The Pharmacy Ordinance, 1976
- 4.22 International Centre for Diarrhoeal Disease Research, Bangladesh, Ordinance, 1978
- 4.23 Blind Relief Act (Donating Eye), 1975
- 4.24 Pakistan Red Cross Society Act, 1965

5. Environment

- 5.1 The Irrigation Act, 1876
- 5.2 The Public Parks Act, 1904 (Amended by Act L-iii of 1974)
- 5.3 The Smoke Nuisances Act, 1905
- 5.4 The Agriculture and Sanitary Improvement Act, 1920
- 5.5 The Mines Act, 1923
- 5.6 The Bengal Water Hyacinth Act, 1936
- 5.7 The Bengal Tanks Improvement Act, 1939
- 5.8 The East Bengal Embankment and Drainage Act, 1952
- 5.9 The Town Improvement Act, 1953
- 5.10 The East Bengal Prohibition of Smoking in Show Houses Act, 1952
- 5.11 The East Pakistan Hats and Bazaars (Establishment and Acquisition) Ordinance, 1959
- 5.12 Factory Act, 1965
- 5.13 Pakistan Atomic Energy Commission Ordinance, 1965
- 5.14 The East Pakistan Water Supply and Sewerage Authority Ordinance, 1963 (Amended in 1966)
- 5.15 Water Supply and Sewerage Authority (Amended) Ordinance, 1969
- 5.16 The Water and Sewerage Authority Act, 1996
- 5.17 Water Pollution Control Ordinance, 1970 (Amended in 1974)
- 5.18 The Environmental Pollution Control Ordinance, 1977
- 5.19 Pourashava Ordinance, 1977 (Amended in 1983)
- 5.20 Local Government Ordinance, 1977
- 5.21 State Owned Manufacturing Industries Workers Act, 1974
- 5.22 The Abandoned Buildings (Supplementary Provisions) Ordinance, 1985 (L-iv of 1985)
- 5.23 The Water Resources Planning Act, 1992
- 5.24 The Bangladesh Environment Conservation Act, 1995
- 5.25 The Nuclear Safety and Radiation Control Act, 1993

6. Public Health

- 6.1 The Sarais Act, 1867
- 6.2 The Bengal Local Self Government Act, 1885
- 6.3 The Bengal Self Government, 1957
- 6.4 The Local Government Ordinance, 1976 (As amended up to 28th February, 1983)
- 6.5 The Public Health (Emergency Provisions) Ordinance, 1944
- 6.6 The Breast Milk Substitute (Regulation of Marketing) Ordinance, 1984

- 6.7 The Breast Milk Substitutes (Regulation of Marketing) (Amendment) Act, 1990
- 6.8 The Iodine Deficiency Diseases Prevention Act, 1989

7. Protection of Children and Women

- 7.1 The Panel code of 1860
- 7.2 The Police Act of 1861
- 7.3 The Suppression of Immoral Traffic Act, 1933
- 7.4 The Children (Pledging of Labour) Act, 1933
- 7.5 The Child Marriage Restraint Act, 1929
- 7.6 The Children Act, 1974
- 7.7 The Repression against Women and Children (Special Provisions) Act, 1995
- 7.8 The Anti-terrorism Ordinance, 1992
- 7.9 The Cruelty to Women (Deterrent Punishment) Ordinance, 1993 (repealed)
- 7.10 The Vagrancy Act, 1943*

Source: 1. Bangladesh Health Profile, 1977
2. Occupational health, DGHS
3. Health Acts and Legislations, Vol.1., DGHS, 1992
4. Legislation on Health and Its Related Subjects, Vol. I-II, DGHS, 1997

- Under this act, law enforcement agencies are permitted to detain "vagrants". Street children often fall under the definition of "vagrant". To some, this act does not "protect" children at all.

9. INTERNATIONAL CLASSIFICATION OF DISEASES

The Ninth edition of WHO International Classification of diseases (ICD) is the accepted coding document for Bangladesh. Although the tenth edition of ICD is available for reporting the morbidity it has yet to be adopted by DGHS. The ICD-9 has three basic classifications for each disease. A total of 56 disease categories are identified. Most of the disease categories are then classified in a number of sub-groups. Finally most of the sub-groups are further detailed in more precise categories. In addition other conditions such as accident, poisoning, adverse effects of drugs, suicide, homicide etc. are also included in the list.

An organized health system is expected to document and report its morbidity as per the ICD as much as possible in order to ensure effective analysis and international comparison. The DGHS lags behind in adopting the ICD-9. It is therefore important that special efforts be undertaken by concerned institution and hospitals to document and report diseases and others conditions as per ICD. An abridged version of ICD 9th revision is attached as **Table 9.1**.

TABLE 9.1
ICD - 9 Basic Tabulation List

ICD Code	Disease	Detailed list of Codes
01.	Intestinal Infectious Disease 010. Cholera 011. Typhoid Fever 012. Shigellosis 013. Food Poisoning 014. Amoebiasis 015. Intestinal Infections due to other specified organism 016. Ill-defined intestinal infections	001 - 009 001 002.0 004 003,005 006 007,008 009
02.	Tuberculosis 020. Pulmonary Tuberculosis 021. Other Respiratory Tuberculosis 022. Tuberculosis of meninges and central nervous system 023. Tuberculosis of intestines, peritoneum and mesenteric glands 024. Tuberculosis of bones and joints 025. Tuberculosis of genitourinary system	010 - 018 011 010,012 013 014 015 016
03.	Other Bacterial Diseases 030. Plague 031. Brucellosis 032. Leprosy 033. Diphtheria 034. Whooping cough 035. Streptococcal sore throat, scarlatina and erysipelas 036. Meningococcal Infection 037. Tetanus 038. Septicaemia	020 - 041 020 023 030 032 033 034,035 036 037 038
04.	Viral Diseases 040. Acute Poliomyelitis 041. Smallpox 042. Measles 043. Rubella 044. Yellow Fever 045. Arthropod-borne Encephalitis 046. Viral Hepatitis	045 - 079 045 050 055 056 060 062-064 070

ICD Code	Disease	Detailed list of Codes
	047. Rabies 048. Trachoma	071 076
05.	Rickettsiosis and Other Arthropod- Borne Diseases 050. Louse-Borne Typhus 051. Other Rickettsiosis 052. Malaria 053. Leishmaniasis 054. Trypanosomiasis	080 - 088 080 081-083 084 085 086
06.	Venereal Diseases 060. Syphilis 061. Gonococcal Infections	090 - 099 090-097 098
07.	Other Infections and Parasitic Diseases and late effects of Infections and Parasitic Diseases 070. Non- Syphilitic Spirochaetal Diseases 071. Mycosis 072. Schistosomiasis 073. Echinococcosis 074. Filarial Infection and Dracontiasis 075. Ancylostomiasis and Necatoriasis 076. Other Helminthiasis 077. Late effects of Tuberculosis 078. Late effects of Acute Poliomyelitis	100 - 139 100-104 110-118 120 122 125 126 121,123,124 127-127 137 138
08.	Malignant Neoplasm of digestive organs and Peritoneum 090. Malignant Neoplasm of Oesophagus 091. Malignant Neoplasm of Stomach 092. Malignant Neoplasm of Small Intestine, including Duodenum 093. Malignant Neoplasm of Colon 094. Malignant Neoplasm of Rectum, Rectosigmoid Junction and Anus 095. Malignant Neoplasm of Liver, specified as primary 096. Malignant Neoplasm of Pancreas	150 - 159 150 151 152 153 154 155.0 157
10.	Malignant Neoplasm of Respiratory and Intrathoracic Organs 100. Malignant Neoplasm of Larynx 101. Malignant Neoplasm of Trachea, Bronchus and Lung	160 - 165 161 162
11.	Malignant Neoplasm of Bone, Connective Tissue, Skin and Breast 110. Malignant Neoplasm of Bone and Articular Cartilage 111. Malignant Melanoma of Skin 112. Other Malignant Neoplasm of Skin 113. Malignant Neoplasm of Female Breast	170 - 175 170 172 173 174

ICD Code	Disease	Detailed list of Codes
12.	Malignant Neoplasm of Genitourinary Organs 120. Malignant Neoplasm of Cervix Uteri 121. Malignant Neoplasm of Placenta 122. Malignant Neoplasm of Uterus, other and unspecified 123. Malignant Neoplasm of Ovary and Other Uterine Adnexa 124. Malignant Neoplasm of Prostate 125. Malignant Neoplasm of Testis 126. Malignant Neoplasm of Bladder	179 - 189 180 181 179,182 183 185 186 188
13.	Malignant Neoplasm of other and unspecified sites 130. Malignant Neoplasm of Brain	190 -199 191
14.	Malignant Neoplasm of Lymphatic and Haemopoietic 140. Hodgkin's Disease 141. Leukaemia	200- 208 201 204-208
15.	Benign Neoplasm 150. Benign Neoplasm of Skin 151. Benign Neoplasm of Breast 152. Benign Neoplasm of Uterus 153. Benign Neoplasm of Ovary 154. Benign Neoplasm of Kidney and Other Urinary Organs 155. Benign Neoplasm of Nervous System 156. Benign Neoplasm of Thyroid	210 - 229 216 217 218, 219 220 223 225 226
16.	Carcinoma in situ	230 - 234
17.	Other and unspecified Neoplasm	235 - 239
18.	Endocrine and Metabolic Diseases, Immunity Disorders 180. Disorders of Thyroid Gland 181. Diabetes Mellitus 182. Hyperlipoproteinaemia 183. Obesity of Non-Endocrine Origin	240-259 270-279 240-246 250 272.0-272.4 278.0
19.	Nutritional Deficiencies 190. Kwashiorkor 191. Nutritional Marasmus 192. Other Protein-Calorie Malnutrition 193. Avitaminosis	260 - 269 260 261 262-263 264-269
20.	Diseases of Blood and blood forming organs 200. Anaemia's	280 -289 280 -285
21.	Mental Disorders 210. Senile and Presenile Organic Psychotic Conditions 211. Schizophrenic Psychoses	290 - 319 290 295

ICD Code	Disease	Detailed list of Codes
	212. Affective Psychoses 213. Other Psychoses 214. Neurotic and Personality Disorders 215. Alcohol Dependence Syndrome 216. Drug dependence 217. Physiological Malfunction arising from Mental Factors 218. Mental Retardation	296 291-294, 297-299 300-301 303 304 306 317-319
22.	Diseases of the Nervous system 220. Meningitis 221. Parkinson's Disease 222. Other Degenerative and Hereditary Disorders of the Central Nervous System 223. Multiple Sclerosis 224. Infantile Cerebral Palsy and Other Paralytic Syndromes 225. Epilepsy	320 - 359 320-322 332 330,331 333-336 340 343,344 345
23.	Disorders of the eye and adnexa 230. Glaucoma 231. Cataract 232. Blindness and Low Vision 233. Conjunctivitis 234. Disorders of Lacrimal System 235. Strabismus and Other Disorders of Binocular Eye Movements	360-379 365 366 369 372.0-372.3 375 378
24.	Diseases of the Ear and Mastoid Process 240. Otitis Media and Mastoiditis 241. Deafness	380-389 381-383 389
25.	Rheumatic Fever and Rheumatic Heart Disease 250. Acute Rheumatic Fever 251. Chronic Rheumatic Heart Disease	390 - 398 390-392 393-398
26.	Hypertensive Disease 260. Hypertensive Heart Diseases	401-405 402,404
27.	Ischaemic Heart Disease 270. Acute Myocardial Infraction	410-414 410
28.	Diseases of Pulmonary Circulation and Other Forms of Heart Disease 280. Pulmonary Embolism 281. Cardiac Dysrhythmias	415-429 415.1 427
29.	Cerebrovascular Disease 290. Subarachnoid Haemorrhage	430-438 430

ICD Code	Disease	Detailed list of Codes
	291. Intracerebral and Other Intracranial Haemorrhage 292. Cerebral Infraction 293. Acute but Ill-defined Cerebrovascular Disease 294. Cerebral Atherosclerosis	431,432 433,434 436 437.0
30.	Other Diseases of the Circulatory System 300. Atherosclerosis 301. Arterial Embolism and Thrombosis 302. Other Diseases of Arteries, Arterioles and Capillaries 303. Phlebitis, Thrombophlebits, Venous Embolism and Thrombosis 304. Varicose Veins of Lower Extremities 305. Haemorrhoids	440-459 440 444 441-443 446-448 451-453 454 455
31.	Diseases of the Upper Respiratory 310. Acute Tonsillitis 311. Acute Laryngitis and Tracheitis 312. Other Acute Upper Respiratory infections 313. Deflected Nasal Septum and Nasal Polyps 314. Chronic Pharyngitis, Nasopyrnyngitis and Sinusitis 315. Chronic Diseases of Tonsils and Adenoids	460-465, 470-478 463 464 460-462, 465 470-471 472-473 474
32.	Other Diseases of the Respiratory System 320. Acute Bronchitis and Bronchiolitis 321. Pneumonia 322. Influenza 323. Bronchiectasis, Chronic and Unspecified, Emphysema and Asthma 324. Bronchiectasis 325. Other Chronic Obstructive Pulmonary Disease 326. Pneumoconiosis and Other Lung Disease due to External Agents 327. Pleurisy	466,480-519 466 480-486 487 490-493 494 495,496 500-508 511
33.	Diseases of Oral Cavity, Salivary Glands and Jaws 330. Diseases of Teeth and Supporting Structures 331. Diseases of the Jaws	520-529 520-525 526
34.	Diseases of Other Parts of the Digestive System 340. Disease of Oesophagus 341. Ulcer of Stomach and Duodenum 342. Appendicitis 343. Hernia of Abdominal Cavity 344. Intestinal Obstruction without Mention of Hernia 345. Diverticula of Intestine 346. Other Functional Digestive Disorders 347. Chronic Liver Disease and Cirrhosis	530-579 530 531-533 540-543 550-533 560 562 564 571

ICD Code	Disease	Detailed list of Codes
	348. Cholelithiasis and Cholecystitis	574-575.1
35.	Diseases of Urinary System 350. Nephritis, Nephritic Syndrome and Nephrosis 351. Infections of Kidney 352. Urinary Calculus 353. Cystitis	580-599 580-589 590 592,594 595
36.	Diseases of Male Genital Organs 360. Hyperplasia of Prostate 361. Hydrocele 362. Redundant Prepuce and Phimosis 363. Infertility, male	600-608 600 603 605 606
37.	Diseases of Female Genital Organs 370. Diseases of Breast 371. Salpingitis and Oophoritis 372. Inflammatory Diseases of Pelvic Cellular Tissue and Peritoneum 373. Inflammatory Diseases of Uterus, Vagina and Vulva 374. Uterovaginal Disorders 375. Menstrual Disorders 376. Infertility, Female	610-629 610,611 614.0-614.2 614.3-614.9 615,616 618 626.0-626.5 628
38.	Abortion 380. Spontaneous Abortion 381. Legally Induced Abortion 382. Illegally Induced Abortion	630-639 634 635 636
39.	Direct Obstetric Causes 390. Haemorrhage of Pregnancy and Childbirth 391. Toxaemia of Pregnancy 392. Infections of Genitourinary Tract in Pregnancy 393. Obstructed Labour 394. Complications of the Puerperium	640-646, 651-676 640-641 666 - 642.4-642.9 - 643 646.6 660 670-676
40.	Indirect Obstetric Causes	647,648
41.	Normal Delivery	650
42.	Diseases of Skin and Subcutaneous Tissue 420. Infections of Skin and Subcutaneous Tissue	680-709 680-686
43.	Diseases of the Musculoskeletal System and Connective Tissue 430. Rheumatoid Arthritis, except Spine 431. Other Arthropathies 432. Other Disorders of Joints 433. Ankylosing Spondylitis 434. Other Dorsopathies 435. Rheumatism, excluding the back 436. Osteomyelitis, Periostitis and other infections	710-739 714 710-713 715-716 717-719 720.0 720.1-724 725-729

ICD Code	Disease	Detailed list of Codes
	involving bone 437. Acquired Deformities of Limbs	730-734-736
44.	Congenital Anomalies 440. Spina Bifida and Hydrocephalus 441. Other Deformities of Central Nervous System 442. Congenital Anomalies of Heart and Circulatory System 443. Cleft Palate and Cleft Lip 444. Other Deformities of Digestive System 445. Undescended Testicle 446. Congenital Dislocation of Hip 447. Other Congenital Anomalies of Musculoskeletal System	740-759 741,742.3 742.0-742.2,742.4-742.9 745-747 749 750,751 752.5 754.3 754.0-754.2 754.4-756
45.	Certain Conditions Originating in the Perinatal Period 450. Maternal Conditions Affecting Foetus or New-born 451. Obstetric Complications Affecting Foetus or New-born 452. Slow Foetal Growth, Foetal Malnutrition and Immaturity 453. Birth Trauma 454. Hypoxia, Birth Asphyxia and Other Respiratory Conditions 455. Haemolytic Disease of Foetus or New-born	760-779 760 761-763 764,765 767 768-770 773
46.	Signs, Symptoms and Ill-defined Conditions 460. Pyrexia of Unknown Origin 461. Symptoms Involving Heart 462. Renal Colic 463. Retention of Urine 464. Abdominal Pain 465. Senility Without Mention of Psychosis 466. Sudden Infant Death Syndrome 467. Respiratory Failure	780-799 780.6 785.0-785.3 788.0 788.2 789.0 797 798.0 799.1
47.	Fractures 470. Fracture of Skull and Face 471. Fracture of Neck and Trunk 472. Fracture of Humerus, Radius and Ulna 473. Fracture of Neck of Femur 474. Fracture of Other Parts of Femur 475. Fracture of Tibia, Fibula and Ankle 475. Other Fractures of Limbs	800-829 800-804 805-809 812,813 820 821 823,824 810-811,814-819 822,825,829
48.	Dislocations, Sprains and Strains	830-848

ICD Code	Disease	Detailed list of Codes
49.	Intracranial and Internal Injuries, including Nerves 490. Concussion 491. Other Intracranial Injuries	850-869, 950-957 850 851-854, 950-951
50.	Open wounds and Injury to Blood Vessels 500. Open Wound of Eye, Ear and Head 501. Open Wound of Upper Limb 502. Open Wound of Lower Limb	870-904 870-873 880-887 890-897
51.	Effects of Foreign Body Entering through Orifice	930-939
52.	Burns 520. Burn confined to Eye and Adnexa 521. Burn of Wrist and Hand	940-949 940 944
53.	Poisonings and Toxic Effects 530. Medicinal Agents	960-989 960-979
54.	Complications of Medical and Surgical Care	996-999
55.	Other injuries, Early Complications of Trauma	910-929 958-959 990-995
56.	Late Effects of Injuries, of Poisonings of Toxic Effects and of Other External Causes	905-909
E47.	Transport Accidents E470. Railway Accidents E471. Motor Vehicle Traffic Accidents E472. Other Road Vehicle Accidents E473. Water Transport Accidents E474. Air and Space Transport Accidents	E800-E848 E800-E807 E810-E819 E826-E829 E830-E838 E840-E845
E48.	Accidental Poisoning E480. Accidental Poisoning by Drugs, Medicaments and Biologicals E481. Accidental Poisoning by Other Solid and Liquid substances E482. Accidental Poisoning by Gases and Vapours	E850-E869 E850-E858 E860-E866 E867-E869
E49.	Misadventures during Medical Care, Abnormal Reactions Late Complications	E870-E879
E50.	Accidental falls	E890-E899
E51.	Accidents caused by Fire and Flames	E890-E899
E52.	Other Accidents, including Late Effects E520. Accidents due to Natural and Environmental Factors E521. Accidental Drowning and Submersion E522. Foreign Body Accidentally Entering Orifice	E900-E929 E900-E909 E910 E914,E915

ICD Code	Disease	Detailed list of Codes
	E523. Accidents Caused by Machinery, and by Cutting and Piercing Instruments E524. Accidents caused by Firearm missile	E919,E920 E922
E53.	Drugs, Medicaments Causing Adverse Effects in Therapeutic use	E930-E949
E54.	Suicide and Self-inflicted Injury	E950-E959
E55.	Homicide and Injury Purposely Inflicted by Other Persons	E960-E969
E56.	Other Violence	E970-E999
	E560. Injury Undetermined Whether Accidentally or Purposely Inflicted	E980-E989
	E561. Injury Resulting from Operation of War	E990-E999
VOX	Other Reasons for Contact with Health Services	V01-V82
	V01. Supervision of Pregnancy and Puerperium	V22-V24
	V02. Healthy Liveborn Infants	
	V03. Persons Encountering Health Services for Specific Procedures and Aftercare	V30-V39
	V04. Persons Encountering Health Services for Psychosocial Reasons	V60-V59
	V05. Examinations and Investigations of Individuals and Populations	V70-V82

9.1 ICD-10 Proposed List for Hospitals at District Level and Below

The Tenth Revision of the International Statistical Classification of Diseases and Related Health Problems is the latest version of the disease classification efforts. The work on the 10th Revision of the ICD was started in September 1983. "In the updated classification, conditions have been grouped in a way that was felt to most suitable for general epidemiological purposes and the evaluation of health care" (ICD-10,1992, p.1). With the finalization and publication of the 10th Revision of ICD in 1992, many countries have now adopted the changes. In Bangladesh, efforts to introduce ICD-10 is also underway. Under the assistance of WHO, a number of Government officials have already been trained in ICD-10. In-country training of ICD-10 is expected to start from February, 2000. A proposed list of the selected disease codes for hospitals at district level and below is presented in **Table 9.2**.

Table 9.2 ICD-10 Selected Disease Codes for Hospitals at District Level and Below

Sl. No	Name of the Diseases	Code No.	Sl. No	Name of the Diseases	Code No.
1	Abdominal and pelvic pain	R10	41	Concussion	S06.0
2	Abortion complicated by RTI	O04.5	42	Conductive hearing loss	H90.2
3	Abortion on medical reason	O04.6	43	Congestive heart failure	I50.0
4	Abscess of Bartholin's gland	N75.1	44	Conjunctivitis	H10.9
5	Abscess of liver	K75.0	45	Constipation	K59.0
6	Acne	L70.9	46	Functional diarrhoea	K51.1
7	Acute abdomen	R10.0	47	Contusion of eyelid	S00.1
8	Acute pain	R52.0	48	Contusion of knee	S80.0
9	Acute respiratory infection	J06.9	49	Convulsions	R56
10	Alcohol intoxication	F10.0	50	Arthrosis of hip	M16.9
11	Allergic contact dermatitis	L23.9	51	Crohn's disease	K50.9
12	Amenorrhoea	N91.2	52	Crushing injury of head	S07.9
13	Amoebiasis	A06.9	53	Cu. abscess, furuncle and carbuncle	L02.9
14	Amoebic dysentery (acute)	A06.0	54	Burn of unspecified degree of trunk	T21.0
15	Anaemia	D64.9	55	Burn of wrist and hand	T23.0
16	Anal fissure	K60.2	56	Burns of multiple regions	T29.0
17	Anaphylactic shock	T78.2	57	Bursopathy	M71.9
18	Angina pectoris	I20.9	58	Cachexia	R64
19	Anorexia	R63.0	59	Calculus of bladder	N21.0
20	Antepartum haemorrhage	O46.9	60	Calculus of kidney	N20.0
21	Anuria and Oliguria	R34	61	Cancer brain	C71.9
22	Anxiety disorder	F41.9	62	Cancer breast	C50.9
23	Appendicitis (acute)	K35.9	63	Cancer bronchus or lung	C34.9
24	Appendicitis with peritonitis	K35.0	64	Cancer cervix uteri	C53.9
25	Arthritis	M13.9	65	Cancer colon	C18.9
26	Arthrosis	M19.9	66	Cancer eye	C69.9
27	Ascariasis	B77.9	67	Cancer Intestinal tract	C26.0
28	Ascites	R18	68	Cancer larynx	C32.9
29	Asphexia neonatorum	P22.0	69	Cancer lip	C00
30	Asphyxia	R09.0	70	Cancer liver	C22.9
31	Asthma	J45.9	71	Cancer lymph node	C77.9
32	Astigmatism	H52.2	72	Cancer nasal cavity	C30.0
33	Bacterial pneumonia	J15.9	73	Cancer of anus	C21.0
34	Beriberi	E51.1	74	Cancer of biliary tract	C24.9
35	Bipolar affective disorder	F31.9	75	Cancer of pancreas	C25.9
36	Birth asphyxia	P21.9	76	Cancer of skin	C44.9
37	Birth injury	P15.9	77	cancer of stomach	C16.9
38	Bradycardia	R00.1	78	Cancer of tongue	C02.3
39	Bronchitis <15(acute)	J20.9	79	Cancer of oesophagus	C15.9
40	Bronchitis >15(acute)	J40	80	Cancer rectum	C21.8

Sl. No	Name of the Diseases	Code No.	Sl. No	Name of the Diseases	Code No.
81	Bronchiectasis	J47	121	Cancer urinary bladder	C67.9
82	Bronchopneumonia	J18.0	122	Candidal stomatitis	B37.0
83	Brucellosis	A23.9	123	Candidiasis	B37.9
84	Burn of head and neck	T20.0	124	Car occupant injured in traffic accident	V49.9
85	Burn of hip and lower limb	T24.0	125	Cardiac arrhythmia	I49.9
86	Cardiomegaly	I51.7	126	Dislocation of acromioclavicular joint	S43.1
87	Cataract	H26.9	127	Disorder of refraction	H52.7
88	Cellulitis	L03.9	128	Disorders of accommodation	H52.5
89	Cerebral infarction	I63.9	129	Disorders of lacrimal system	H06.0*
90	Cerebrovascular disease	I67.9	130	Disorientation	R41.0
91	Cervicalgia	M54.2	131	Disseminated zoster	B02.7
92	Chest pain	R07.4	132	Diverticular disease of intestine	K57.9
93	Chest pain on breathing	R07.1	133	Dog bite	T14.1
94	Cholecystitis	K81.9	134	Dorsalgia	M54.9
95	Cholelithiasis	K80.1	135	Drowning and nonfatal submersion	T75.1
96	Chronic nephritic syndrome	N03.9	136	Duodenal Ulcer	K26
97	Colle's fracture	S52.7	137	Dysmenorrhoea	N94.6
98	Colour vision deficiencies	H53.5	138	Hepatic failure	K72.9
99	Coma	R40.2	139	Hepatitis A	B15.9
100	Complete uterovaginal prolapse	N81.3	140	Hepatitis B	B16.9
101	Dyspepsia	K30	141	Hepatomegaly	R16.0
102	Dyspnoea	R06.0	142	Hepatomegaly with splenomegaly	R16.2
103	Dysuria	R30.0	143	Herpes viral infection	B00.9
104	Effects of electric current	T75.4	144	HIV disease resulting in other conditions	B23.8
105	Effects of lightning	T75.0	145	HIV infection syndrome	B23.0
106	Emphysema	J43.9	146	Hodgkin's disease	C81.9
107	Endometriosis	N80.9	147	Haemorrhoids	I84.9
108	Enlarged lymph nodes	R59.9	148	Hookworm disease	B76.9
109	Epilepsy	G40.9	149	Hyperaesthesia	R20.3
110	Epistaxis	R04.0	150	Hypermetropia	H52.0
111	Extravasation of urine	R39.0	151	Hypertensive heart disease	I11.0
112	Cystitis	N30.9	152	Hypotension	I95.9
113	Delirium	F05.9	153	Hypothermia of newborn	P80.9
114	Delivery by caesarean section	O82.9	154	Hypovolaemic shock	R57.1
115	Delusional disorder	F22.0	155	Infections of the RT in pregnancy	O23.5
116	Dengue	A90	156	Inflammatory disease of prostate	N41.9
117	Dengue Hemorrhagic Fever	A91	157	Inflammatory disease of uterus	N71.9
118	Dental caries	K02.9	158	Influenza/ common cold	J11.1
119	Depressive episode	F32.9	159	Inguinal hernia	K40
120	Dermatitis	L30.9	160	Injury in collision with motorvehicles	V19.4

Sl. No.	Name of the Diseases	Code No.	Sl. No.	Name of the Diseases	Code No.
161	Diabetes mellitus (unspecified)	E14	201	Injury of eye and orbit	S05.9
162	Diabetic arthropathy	M14.2*	202	Injury of intra-abdominal organs	S36.7
163	Diabetic retinopathy	H36.0*	203	Febrile convulsions	R56.0
164	Diaphragmatic hernia	K44	204	Feeding difficulties and mismanagement	R63.3
165	Diarrhoea & gastroenteritis	A09	205	Female genital tract fistula	N82.9
166	Diffuse cystic mastopathy	N60.1	206	Primary sterility	N97.9
167	Diffuse non-Hodgkin's lymphoma	C83.9	207	Female pelvic inflammatory disease	N73.9
168	Diphtheria	A36.9	208	Fever of unknown origin	R50
169	Enterocolitis	A09	209	Filariasis	B74.9
170	Disease of pancreas	K86.9	210	Food poisoning	A05.9
171	Gingivitis	K05.1	211	Foreign body in oesophagus	T18.1
172	Foreign body in nose	T17.9	212	Multiple # of cla.scapula and humerus	S42.7
173	Foreign body in ear	T16	213	Multiple fractures of femur	S72.7
174	Fracture of clavicle	S42.0	214	Multiple fractures of forearm	S52.7
175	Fracture of femur	S72.9	215	Insulin-dependent diabetes mellitus	E10.0
176	Fracture of foot	S92.9	216	Intestinal parasitism	B82.9
177	Fracture of lower end of humerus	S42.4	217	Intracranial injury	S06.9
178	Fracture of lower leg	S82.9	218	Intrapartum haemorrhage	O67.0
179	Fracture of neck	S12.9	219	Irregular menstruation	N92.6
180	Fracture of neck of femur	S72.0	220	Irritable bowel syndrome withdiarrhoea	K58.0
181	Fracture of rib	S22.3	221	Juvenile arthritis	M08.9
182	# of shafts of both ulna and radius	S52.4	222	Kaposi's sarcoma	C46.9
183	Fracture of skull and facial bones	S02.9	223	Keloid scar	L91.0
184	Fracture of upper end of radius	S52.1	224	Labyrinthitis	H83.0
185	Fracture of upper end of ulna	S52.0	225	Laryngitis(acute)	J04.0
186	Fractures involving head with neck	T02.0	226	Leishmaniasis	B55.9
187	Gas gangrene	A48.0	227	Leprosy	A30.9
188	Gastric ulcer	K25	228	Lesion of sciatic nerve	G57.0
189	Gastritis	K29.7	229	Liver disease	K76.9
190	Gastroduodenitis	K29.9	230	Localized swelling, mass or lump	R22.9
191	Gastrointestinal haemorrhage	K92.2	231	Lordosis	M40.5
192	G/oeso. reflux disease with oesophagitis	K21.0	232	Lymphangitis	I89.1
193	Gestational oedema	O12.0	233	Lymphoid leukaemia	C91.9
194	Giardiasis (lambliasis)	A07.1	234	Malaria (pf) severe & complicated	B50.0
195	Gingivitis	K05.0	235	Malaria(pf) uncomplicated	B50.9
196	Glaucoma	H40.9	236	Malaria(pv)	B51.9
197	Gonococcal infection	A54.9	237	Maltreatment syndrome	T74.9
198	Haematemesis	K92.0	238	Manic episode	F30.9
199	Haemoptysis	R04.2	239	Mastodynia	N64.4
200	Haemorrhage in early pregnancy	O20.9	240	Mastoiditis	H70.9

Sl. No	Name of the Diseases	Code No.	Sl. No	Name of the Diseases	Code No.
241	Hallucinations	R44.3	281	Open wound of abdomen	S31.8
242	Headache	R51	282	Open wound of scalp	S01.0
243	Heart failure	I50.9	283	Open wound of trunk	T09.1
244	Measles	B05.9	284	Optic atrophy	H47.2
245	Measles with complications	B05.8	285	Orchitis, epididymitis	N45.9
246	Mediastinum	C38.3	286	Osteomyelitis	M86.9
247	Melaena	K92.1	287	Osteoporosis	M81.9
248	Meningitis	G03.9	288	Otalgia	H92.0
249	Meningococcal meningitis	A39.0+	289	Other intrapartum haemorrhage	O67.8
250	Menopausal syndrome	N95.1	290	Other visual disturbances	H53.8
251	Mesothelioma	C45.9	291	Otitis externa, noninfective	H60.5
252	Migraine	G43.9	292	Otitis media	H66.9
253	Miliary tuberculosis	A19.9	293	Otorrhagia	H92.2
254	Motorcycle rider injured in accidents	V29.8	294	Otorrhoea	H92.1
255	Multiple delivery	O84.9	295	Otosclerosis	H80.9
256	Multiple fractures	T02.9	296	Pain	R52.9
257	Multiple fractures of cervical spine	S12.7	297	Pain in joint	M25.5
258	Painful micturition	R30.9	298	Open wound of head	S01.9
259	Palpitations	R00.2	299	Open wound of knee	S81.0
260	Papilloedema	H47.1	300	Open wound of lower leg	S81.9
261	Papilloedema	H47.1	301	Puerperal mental disorder	F53.9
262	Paraplegia	G82.2	302	Pulmonary Oedema(acute)	J81
263	Paratyphoid fever,	A01.4	303	Pulmonary tuberculosis	A16.0
264	Passenger injured in motor vehicles	V19.5	304	P.TB confirmed by sputm microscopy	A15.0
265	Pedal cyclist injured in traffic accident	V19.9	305	Pulpitis	K04.0
266	Pedestrian injured in traffic accident	V09.3	306	Rabies	A82.9
267	Pediculosis	B85.2	307	Recurrent oral aphthae	K12.0
268	Pelvic and perineal pain	R10.2	308	Relapsing fever	A68.9
269	Pemphigus	L10.9	309	Renal failure(acute)	N17.9
270	Peptic ulcer	K27	310	Renal failure(chronic)	N18.9
2871	Perforation of tympanic membrane	H72.0	311	Respiratory failure	J96.9
272	Periodontosis	K05.4	312	Respiratory failure(chronic)	J96.1
273	Multiple # of lumbar spine and pelvis	S32.7	313	Restlessness and agitation	R45.1
274	Multiple fractures of metacarpal bones	S62.4	314	Retained placenta	O73.0
275	Multiple fractures of ribs	S22.4	315	Retention of Urine	R33
276	Multiple injuries of ankle and foot	S99.7	316	Retinal detachment	H33.0
277	Multiple injuries (intrathoracic organs)	S27.7	317	Retinal haemorrhage	H35.6
278	Multiple injuries of lower leg	S89.7	318	Retrograde amnesia	R41.2
279	Multiple injuries of shoulder	S49.7	319	Rheumatic heart disease	I09.9
280	Multiple myeloma	C90.0	320	Rheumatism	M79.0

Sl. No.	Name of the Diseases	Code No.	Sl. No.	Name of the Diseases	Code No.
321	Multiple open wounds	T01.9	365	Salmonella enteritis	A02.0
322	Multiple superficial injuries	T00.9	366	Salmonella infection	A02.9
323	Mumps	B26.9	367	Salpingitis and oophoritis	N70.9
324	Mumps with other complications	B26.8	368	Schizophrenia	F20.9
325	Myalgia	M79.1	369	Sciatica	M54.3
326	Myocardial infarction(acute)	I21.9	370	Peritonitis	K65.9
327	Myopia	H52.1	371	Phlebitis and thrombophlebitis	I80.9
328	Nausea and vomiting	R11	372	Phthiriasis	B85.3
329	Neglect or abandonment	T74.0	373	Physical abuse	T74.1
330	Nephritic syndrome(acute)	N00.9	374	Pleurisy	R09.1
331	Nephrotic syndrome	N04.9	375	Pneumonia	J18.9
332	Neuralgia and neuritis	M79.2	376	Pneumothorax	J93.9
333	Neurotic disorder	F48.9	377	Poliomyelitis(acute)	A80.9
334	Night blindness	H53.6	378	Polyarthrosis	M15.9
335	Nonorganic insomnia	F51.0	379	Polydipsia	R63.1
336	Normal delivery	O80.9	380	Polymyositis	M33.2
337	Obstetric trauma	O71.9	381	Polyneuropathy	G62.9
338	Obstructed labour	O66.9	382	Polyp of female genital tract	N84.9
339	Obstructive laryngitis[croup]	J05.0	383	Polyphagia	R63.2
340	Oedema	R60.9	384	Pre-eclampsia	O14.9
341	Oesophageal varices with bleeding	I85.0	385	Presbiopia	H52.4
342	Open wound of forearm	S51.9	386	Pruritus	L29.9
343	Psoriasis	L40.9	387	Sinusitis(chronic)	J32.9
344	Psychological abuse	T74.3	388	Snake bite	T63.0
345	Tic disorder	F95.9	389	Splenomegaly	R16.1
346	Tinea barbae and tinea capitis	B35.0	390	Spondylolysis	M43.0
347	Tinea corporis	B35.4	391	Spontaneous abortion	O03.9
348	Tonsillitis(acute)	J03	392	State of emotional shock and stress	R45.7
349	Toxoplasmosis	B58.9	393	Streptococcal septicaemia	A40.9
350	Tracheitis(acute)	J04.1	394	Stupor	R40.1
351	Transient cerebral ischaemic attack	G45.9	395	Superficial injury of ankle and foot	S90.9
352	Traumatic amputation finger	S68.1	396	Superficial injury of head	S00.9
353	Traumatic amputation of fingers	S68.2	397	Superficial injury of scalp	S00.0
354	Traumatic amputation of foot	S98.4	398	Superficial injury of trunk	T09.0
355	Traumatic amputation of hip and thigh	S78.9	399	Superficial mycosis	B36.9
356	Traumatic amputation of lower leg	S88.9	400	Suppurative otitis media	H66.0
357	Traumatic cerebral oedema	S06.1	401	Syncope and collapse	R55
358	Traumatic pneumothorax	S27.0	402	Syphilis	A53.9
359	Traumatic shock	T79.4	403	Tachycardia	R00.0
360	Trigeminal neuralgia	G50.0	404	Taeniasis	B68.9
361	TB of intestine & peritoneum	A18.3	405	Tetraplegia	G82.5
362	Tumor bone and articular cartilage	D16.9	406	Threatened abortion	O20.0
363	Tumor bronchus and lung	D14.3	407	Thyrototoxicosis with diffuse goitre	E05.0
364	Tumor colon	D12.6	408	Pneumoconiosis	J64

Sl. No.	Name of the Diseases	Code No.	Sl. No.	Name of the Diseases	Code No.
	Tumor nasopharynx	D10.6	452	Stomatitis- aphthus	K12.0
409	Tumor of hepatobilliary tract	D01.5	453	Oral thrush	B37.0
410	Tumor of tongue	D10.1	454	Cleft palate	Q35.9
411	Tumor phgarynx	D10.9	455	Cleft lip	Q36.9
412	Typhoid fever	A01.1	456	Abcess of lung	I99.8*
413	Typhus fever	A75.9	457	Abcess of breast	N61
414	Ulcerative colitis	K51.9	458	Bells palsy	G51.0
415	Umbilical hernia	K42	459	Undescended testicle	Q53.9
416	Urinary calculus	N20.9	460	Encephalitis	Q04.9
417	Urticaria	L50.9	461	Hypothyroidism	E03.9
418	Varicella without complication	B01.9	462	Obstructive jaundice	
419	Varicose veins of lower extremity	O22.0	463	Tetanus	A35
420	Venous complication in pregnancy	O22.9	464	Neonatal tetanus	A33
421	Vertigo of central origin	H81.4	465	Placenta praevia	O44.1
422	Vesicovaginal fistula	N82.0	466	Poisoning with dutura	T62.2
423	Viral conjunctivitis	B30.9	467	Poisoning with organophophorus	T60.0
424	Viral hepatitis(chronic)	B18.9	468	Poisoning with kerosine	T53.0
425	Viral pneumonia	J12.9	469	Poisoning with sedative	T42.7
426	Scoliosis	M41.9	470	Poisoning with corrosive(acid)	T54.2
427	Senile degeneration of brain	G31.1	471	Ascariasis	B77.9
428	Septicaemia	A41.9	472	Impetigo	L01.1
429	Sexual abuse	T74.2	473	Kwashiorkor	E40
430	Shigellosis	A03.9	474	Marasmus	E41
431	Shock	R57.9	475	Thalassemia	D56.9
432	Sinusitis(acute)	J01.9	476	Congenital heart disease	Q24.9
433	Aphthous Ulcer	K12.0			
434	Leucorrhoea	N89.8			
435	Burning feet syndrome	E53.9			
436	Fibroid uterus	D25.9			
437	Pleural effusion	J90			
438	Hydrocele	N43.3			
439	Rectovaginal fistula	N82.3			
440	Vertigo	R42			
441	Neonatal jaundice	P59.9			
442	Epispodiasis	Q64.0			
443	Hypospodiasis	Q54.9			
444	Ovarian cyst	N83.2			
445	Hydrocephalus	G91.9			
446	Hydatidiform mole	Q01.9			
447	Imperforated anus	Q42.3			
448	Menorrhagia	N99.0			
449	Burgers disease	E78.3			
450	Leukemia (acute)	C95.0			
451	Goitre (multinodular)	E01.1			

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