

on drugs, 19 per cent on transport, 4 per cent on different tests/investigations, 3 per cent on admission and another 1 per cent on food. Similarly, an inpatient spent about 70 per cent on drugs, 14 per cent on transport, 8 per cent on food/accommodation and 5 per cent on laboratory tests/investigations. However, the proportion of total cost spent on medicine was similar for both in-and-out patients (70% vs. 72%).

Both official and unofficial payments for registration/entry fee were recorded. Though admission/entry at the government health facilities are supposed to be free of cost, it has been observed that sometimes patients have to make extra payments for registration/ticket or entry at the health facilities. It may be mentioned that the official fees for entry/ticket at the district hospitals vary from Tk. 5 to Tk. 10, while facilities at the upazila level and below generally do not charge any fees from patients for registration/admission. Only in one of the sample UHCs (i.e. Nalciti UHC in Jhalakati district) a nominal fee of Tk 2 is charged as admission/entry fee.

The findings from Table 4.2 suggest that for outdoor patients the amount paid as “unofficial fee” for admission/registration is more or less the same for both male and female patients. However, in case of indoor patients at the UHC, there are significant variations in the amount of unofficial entry/registration fee between male and female users. On the average, a male inpatient spent Tk 6.47 as unofficial entry fee at the UHC, as against Tk 21.70 spent by a female inpatient. The findings imply that females seeking admission for indoor facilities at the UHC have to make unofficial payments at a much higher rate compared to their male counterparts.

The average amount spent by an inpatient in a district hospital was almost three times more than the amount spent by an inpatient at a UHC (Tk. 1991 vs. Tk. 669). Similarly, the average amount spent (Tk 91) by an outpatient visiting a district hospital was more than twice the amount spent by an outpatient in a UHC, almost 8 times higher than the amount spent in a HFWC and 20 times more than the average amount spent in a CC.

Treatment Cost by Gender

There were some variations in the amount of cost incurred by male and female patients (Table 4.2). The average cost incurred by a female inpatient was about 15 per cent higher than that of a male inpatient (Tk. 1679 vs. Tk. 1462). However, in case of outpatients, the average amount spent by males was about 30 per cent higher than the average amount spent by female patients. (Tk. 51.41 vs. Tk. 39.68). There was also some variation in the amount of cost incurred by patients (both in-and-out) by type of facility. For outpatients, costs of treatment were higher for males (than females) at the DH, UHC and CC, while at the HFWC cost incurred by females was higher than that of males. The average amount spent by an outpatient at the UHC was 30 per cent higher for males than females (Tk 41 vs. Tk 31). By contrast, the average amount spent by an outpatient at the HFWC was 26 per cent higher for females than males (Tk 12 vs. Tk 10). However, in case of inpatients the average amount spent by females was higher than that of males for both at the DH and UHC. The average inpatient cost for females at the district hospital was 18 per cent higher than that of males, while at the UHC the amount spent by female inpatients was 9 per cent higher than that of males.

Differentials in Treatment cost by Socio-economic Characteristics

Economic status of the household is an important factor in affecting health-seeking behaviour. Because even though services are supposed to be free at the government facilities, there are other costs involved. A patient willing to visit a health facility has to spend on transport, food and accommodation. Again, because of non-availability or inadequate supply of medicine, both in-and-outpatients are required to purchase medicine from outside the facility.

As is expected, patients from the poorer households can afford to spend much less compared to their counterparts from richer household. It is evident from Table 4.3 that the average cost incurred by an inpatient from the poorest household (monthly income up to Tk 1000) was less than half (Tk 1158 vs. Tk 2399) of that spent by an inpatient from the richest household (monthly income Tk 10,000⁺). Similarly, the average cost of

treatment for an outpatient from the poorest household was no more than 30 per cent of the amount that was spent by an outpatient from the richest household (Tk 23.50 vs. Tk 80.43). The findings indicate that the cost of treatment increases monotonically with the increase in the household income. Similarly, cost of drug also shows an upward rise with the increase in household income.

It is observed from Table 4.3 that the amount spent on medicine by patients from poorer households is much lower compared to their counterparts from richer households. For outpatient visit, the cost incurred for medicine was lowest (Tk 18) for the poorest group and highest (Tk 63) for the richest group. Similarly, for inpatient facilities the amount spent on medicine by users from the poorest group was less than 50 per cent of the amount that was spent by users from the richest group (Tk 823 vs. Tk 1706). The findings imply that patients from the poorer households cannot afford to buy the required medicine for diseases that are relatively expensive to treat. This happens because even though patients normally do not have to pay any consultation fee for receiving treatment from government health facilities, most of the time they have to spend on medicines and diagnostic tests.

Variation in average treatment cost by socio-demographic characteristics of the users is presented in Table 4.4. Differentials in average cost of treatment by age of patients can be seen from the table. It appears that per user treatment cost increases with the age of the patient- with few exceptions. For outpatients the lowest average treatment cost (Tk 23.46) was found for patients in the age group 10-14 years, while the highest treatment cost (Tk 108.82) was found for users in the oldest age group (65+ years). Again, for inpatients the lowest treatment cost (Tk 553) was found for children under one year, while the highest cost (Tk 2145) was incurred for patients in the age group 10-14 years, and the second highest expenditure was incurred for patients in the oldest age group (65+ years).

The findings from Table 4.4 show that the cost of treatment generally rises with the increase in the educational level of household head and size of household land. This trend of increasing treatment cost with increased socio-economic condition of the household is found for both in-and-out patients (with few exceptions in case of outpatients from the landless households). The results are in the expected direction.

From the foregoing analysis it is clear that there is a positive association between household income, education of head, size of landholding and the amount spent for treatment of ailments. It reflects that better income has a compound positive impact on people's health status. Among upper income groups, higher socio-economic status leads to better exposure and opportunities which ultimately lead to better understanding of health and allied issues, and also the upper strata can afford to spend more when they fall sick. One may argue that landholding categories and education of heads which are considered a proxy for economic prosperity, in itself does present a sufficient explanation in determining treatment status during sickness.

Treatment Received before Visiting a Health Facility

The impact of ill-health on well-being and financial outcomes depends not only on whether people are sick, but also on whether they obtain appropriate preventive or curative care. Timely preventive care can ameliorate adverse health outcomes and financial consequences in the future. Effective treatment for sick persons can reduce the length of time they are ill and the income losses associated with morbidity and premature mortality.

The findings from Table 4.5 show that about half of the inpatients had previously received some kind of treatment before being hospitalized. The proportion ranged from 47.7 per cent for inpatients of DH to 55.9 per cent for inpatients of UHC. About a fifth of the inpatients received self-medication or purchased medicine from pharmacy, while only about 12 per cent (15% for DH and 6% for UHC) of the inpatients were treated by qualified physicians.

For patients attending outpatient services the situation was even worse, where about three-quarters of the patients did not receive any care from any source before coming to the facility (Table 4.5). About 13 per cent of the outpatients were treated under self-medication or purchased drugs from the pharmacy, 6 per cent were treated by unqualified allopath, while only 3 per cent received treatment from a qualified doctor. However, there

were some variations in the type of treatment received before coming to the facility by type of facility visited. The general pattern which emerges shows that a higher proportion of patients visiting a lower level facility received no treatment (including self-medication), compared to patients who visited facilities at the upazila level and above.

Again, about half of the outpatients and a third of the inpatients sought care during their current sickness after several days of becoming sick (Appendix Table A4.1). By contrast, only 30 per cent of the outpatients and 56 per cent of the inpatients visited a health facility immediately after becoming sick. This implies that there is a general apathy and lack of awareness regarding health care among the majority of the users who visited a health facility. This is also because of the fact that a large majority of the facility users belong to the poorer socio-economic strata with low levels of income and literacy, coupled with poor nutrition and high rates of morbidity. People belonging to this group have a tendency to ignore illness and only in case of severe sickness they take it seriously and go to service providers for receiving treatment.

It needs to be mentioned here that though health services at the government facilities are supposed to be free of cost, there are other costs associated with visits to a health facility. Apart from the direct monetary cost, the distance of the health facility and the need to be accompanied by one or several persons (relatives) mean that there are costs arising from wages not earned or from work not done. Low income households are more susceptible to the economic shocks associated with serious disease, given their high dependence on labour income, and their having low levels of savings so that there is a real risk of indebtedness in times of ill health.

The main factor is the culture of deprivation. When people are deprived for long time and can do little to change the vicious cycle of poverty, ill health and malnutrition, they will surely become fatalistic, if only as defense mechanism. To overcome this fatalistic attitude, efforts must be made to improve their social and economic status by ensuring employment opportunities round the year and by providing health education to raise their health awareness.

Sources of Financing Treatment Cost

The present survey also examined the sources used for financing treatment cost. The bulk of the treatments are financed either from regular income or from household savings (Table 4.6), the rest is financed by borrowing from friends and moneylenders. However, there are some differences in the sources of financing between inpatients and outpatients.

The data suggest that resources at the household level available for medical care are limited. Because of poverty for majority of the population, an overwhelming proportion of household income is spent on food, leaving very little scope for spending on health care. The findings show that for outpatient care (Table 4.6), about 58 per cent of the patients utilized past savings to meet the cost, while 38 per cent utilized cash revenue/income. But for inpatient care about a fifth of the users spent from past savings, 47 per cent spent from regular income, 44 per cent through borrowing from friends, 7 per cent by borrowing from moneylenders and about 7 per cent from distress sale or mortgage of property/asset. However, for the poorest group a larger share of inpatient treatment cost is met from borrowing or distress sale/mortgage of property (Table 4.7). In case of inpatients from the poorest income group (up to Tk 2000 per month), about 40 per cent of the households utilized past savings/income to meet the treatment cost, while about 50 per cent had to either borrow from friends/money lenders or through distress sale/mortgage of property. By contrast, for the higher income groups (Tk 5001+), more than four-fifths of the households utilized past savings/income to finance treatment cost. The main reason for this differential is the fact that the income level of the richer group (monthly income more than Tk 5000) is much higher resulting in higher savings potential, whereas due to very low income base of the poorer group (monthly income not exceeding Tk 2000), most of their income is spent on buying daily necessities of life (mostly food items). This implies that in case of sickness requiring treatment, they are forced to borrow to meet the emergency. Tables 4.6 and 4.7 make it amply clear as to how the households are able to spend money with the help of different sources of finances.

Impact of Treatment Cost on Household Consumption

Expenditure incurred for health care has some adverse impact on household consumption. The data in Appendix Tables A4.2 and A4.3 speak about the kind of inconvenience households face in meeting their outpatient and inpatient needs. Findings show that expenditure on health resulted in withholding of other subsistence resources. Treatment costs have had adverse effect on other household consumption items for 70 per cent of inpatients and 12 per cent of outpatients. Among the inpatients who were adversely affected because of hospitalization, food consumption was reduced or there was inadequate food in 68 per cent of the households; expenditure had to be curtailed on other essential household items for another 64 per cent cases because of treatment cost, while 13 per cent households had to face problems in financing their children's education. It may be pointed out that as already mentioned, a vast majority of the respondents belong to households who fall below the poverty line and food expenditure alone accounts for a very large proportion of household budget for these households. Thus, illness requiring treatment and hospitalization has significant adverse implications for the economic well-being of affected households and individuals, particularly for poor households.

One way by which this occurs is in the form of out-of-pocket health expenditures for diseases that are relatively expensive to treat or require hospitalization. Another way in which illness can influence the economic well-being of affected households arises from incomes foregone on account of the morbidity of affected members, or taking time off from work to care for the sick. A single episode of hospitalization can account for 30 to 50 per cent of annual per capita income, with the proportion being even higher for poorer groups (Table 4.8). This can lead to tremendous financial burden on poor households and indebtedness, sometimes resulting in liquidation of their assets/property. This would certainly indicate that episodes of illness affect the economic position of the households rather badly.

Disease Burden on the Poor

It is apparent from Table 4.8 that the average monthly household income of facility users was Tk. 3762. However, there were wide variations in monthly household income

between the richest and the poorest households. The average monthly income of the richest households was 22 times higher than that of the poorest group (Tk. 16,733 Vs. Tk. 746). It is also clear from the table that family size is positively related with household income. The average size of family is found to be 5.4 for all users taken together. However, family size ranges from 3.97 for the poorest households to 7.73 for the richest households.

On the whole, 8.8 per cent of monthly household income was spent on illness treatment. But the poorest households had to spend about 38 per cent of household income to meet the treatment cost of illness episodes, which is a heavy burden by any reckoning. On the other hand, the richest households spent only 3.4 per cent of household income for treatment of illness episode. Again, the poorest households spent much less in absolute sense for treatment purposes compared to the richest households (Tk 283 vs. Tk 572). This is primarily because of the fact that due to very low income of the poorest group, most of their income is spent on purchasing food and other daily necessities of life leaving very little scope for spending on health care. The findings clearly indicate that members from the poorer households have less access to resources available for health care and that they undergo a lot of economic pressure to finance their treatment cost/medical needs. Thus, for low-income households there is a real risk of indebtedness in times of illness requiring treatment.

The situation becomes really precarious for patients who need hospitalization. In the case of inpatient treatment in a government facility, especially if surgical intervention is required, the households have to incur a huge amount as out-of-pocket expenditures on medicines, diagnostic tests and other related items. To meet the hospitalization expenses many households have to borrow money and even liquidate their assets.

Any hospitalization in the household involves huge expenditure, both medical and non-medical expenses and this can very badly affect the household budget. This brings us to the question of providing financial protection to the poor households against such contingencies. Insurance schemes to cover the poor and/or low-income households who are mostly in the informal or unorganised sector can be devised. Also, even if the

government hospitals want to levy user charges, people below a certain income level should be exempt from paying such charges and this could be achieved through proper targeting.

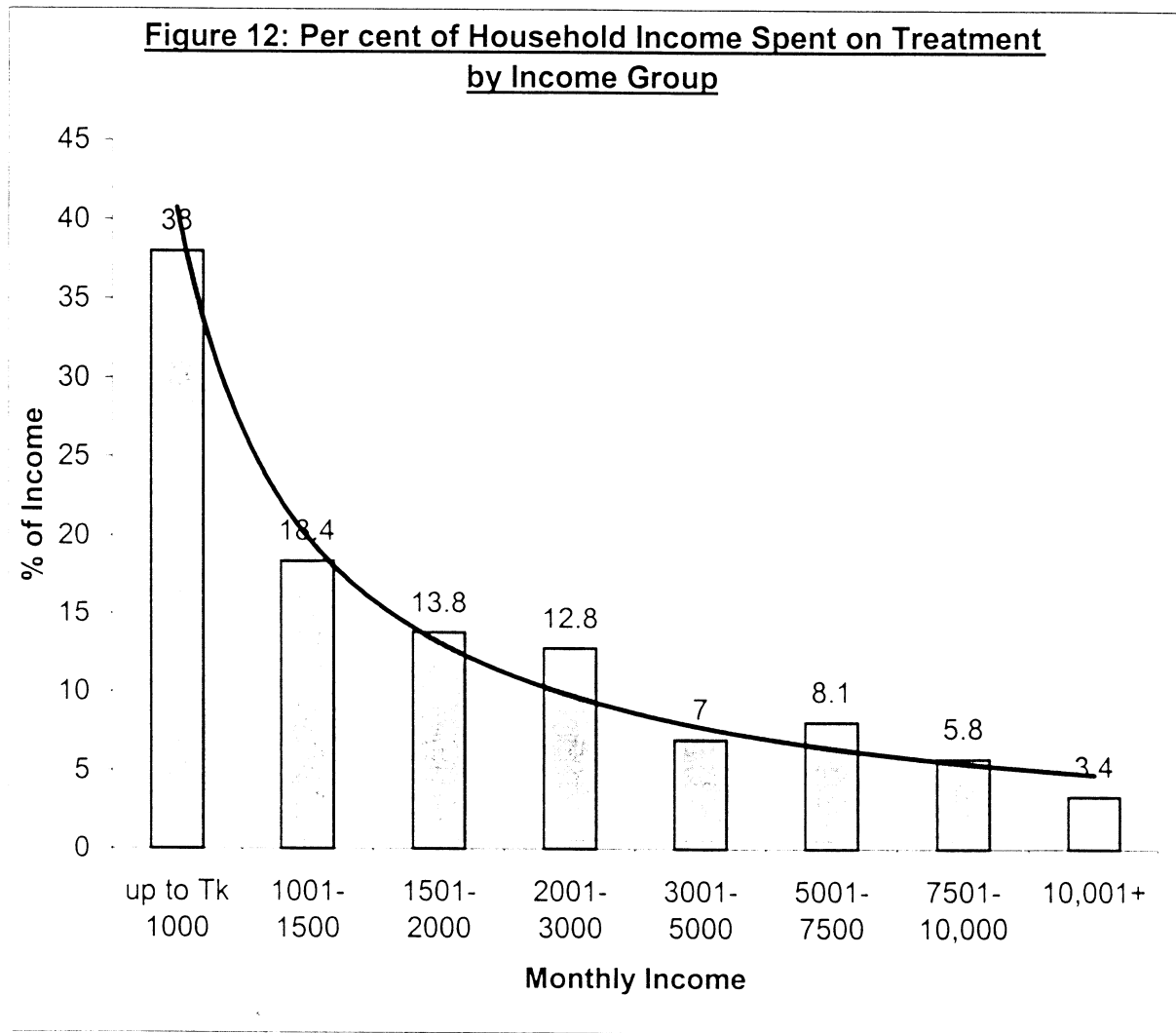


Table 4.1: Average Cost of Treatment (in Taka) by Facility Type and by Patient category

A: Outpatients										
Facility Type	Total Users	Cost Components								
		Ticket/Entry		Consultation	Medicine	tests	Transport	Food/ Accommodation	Others	Total
		Official	Unofficial							
DH	1211	4.05	0.48	0.41	59.89	4.36	19.83	1.39	0.33	90.54
UHC	2568	0.18	0.33	0.09	27.65	1.19	5.64	0.27	0.03	35.38
UHFWC	687	0.00	0.43	0.06	8.81	0.00	1.84	0.02	0.00	11.13
CC	200	0.00	0.00	0.00	3.45	0.00	0.74	0.05	0.00	4.24
Overall	4666	1.15	0.37	0.16	32.20	1.79	8.50	0.51	0.10	44.78
B: Inpatients										
DH	732	8.03	3.39	1.19	1396.24	107.00	280.98	169.31	24.67	1999.33
UHC	354	0.57	13.44	0.37	474.90	20.20	93.93	53.44	12.51	669.85
Overall	1086	5.60	7.05	0.92	1095.91	78.70	220.00	131.54	20.70	1569.43

Table 4.2: Cost of Treatment (in taka) by Gender of Users: Inpatient and Outpatient

Inpatient									
a) Male users									
Type of facility	Cost components								
	Ticket/Entry		Consul tation	Medicine	tests	Transp ort	Food/A ccomm odation	Other s	Total
	Official	Unofficia l							
DH	7.65	4.67	0.24	1291.39	87.09	278.01	172.19	12.80	1854.05
UHC	0.61	6.47	0.26	438.45	24.71	107.98	62.34	5.20	646.02
All	5.38	5.25	0.24	1015.70	66.93	223.05	136.68	8.68	1461.91
b) Female users									
DH	8.50	3.09	2.35	1523.95	131.26	284.60	165.81	39.12	2158.68
UHC	0.51	21.70	0.49	518.10	14.84	77.28	42.88	27.28	703.08
All	5.87	9.21	1.74	1192.76	92.93	216.34	125.33	35.23	1679.12
Outpatient									
a) Male users									
Type of facility	Cost components								
	Ticket/Entry		Consul tation	Medicine	tests	Trans port	Food/Acco mmmodation	Others	Total
	Official	Unoffici al							
DH	4.03	0.41	0.36	60.90	6.29	17.35	1.73	00	91.07
UHC	0.24	0.35	0.04	33.20	0.77	5.83	0.34	0.08	40.85
UHFWC	00	0.43	0.08	7.06	00	1.98	0.02	00	9.57
CC	00	00	00	8.57	00	0.45	00	00	9.02
All	1.35	0.37	0.14	37.78	2.32	8.70	0.71	0.04	51.41
b) Female users									
DH	4.07	0.56	0.47	58.86	2.38	21.93	1.05	0.67	90.01
UHC	0.13	0.32	0.12	23.31	1.53	5.49	0.21	00	31.11
UHFWC	00	0.43	0.05	9.79	00	1.76	0.02	00	12.04
CC	00	00	00	1.79	00	0.83	0.07	00	2.68
All	1.00	0.37	0.18	27.90	1.38	8.34	0.36	0.15	39.68

Table 4.3: Average Treatment Cost (in taka) by Household Income: Inpatient and Outpatient

Inpatient										
Monthly Income (Tk)	Total Users	Cost Components								
		Ticket/Entry		Consultation	Medicine	Tests	Transport	Food/Accommodation	Others	Total
		Official	Unofficial							
up to - 1000	105	5.19	4.95	-	823.19	47.14	163.68	113.24	0.76	1158.96
1001-1500	148	6.44	4.45	.34	905.76	47.74	181.67	58.15	36.31	1240.57
1501-2000	143	5.56	4.45	-	856.74	60.31	220.21	91.91	27.50	1266.73
2001-3000	236	5.37	6.99	2.92	1146.38	61.49	217.53	148.17	14.64	1603.59
3001-5000	235	5.31	13.01	.63	987.90	72.66	176.06	119.78	9.60	1384.99
5001-7500	123	5.83	4.92	.88	1509.19	148.37	289.63	211.58	49.67	2220.74
75001-10,000	43	5.85	8.39	-	1590.81	155.12	406.37	241.28	14.65	2422.03
10,000+	53	5.77	3.19	.10	1706.09	157.17	331.25	182.96	12.23	2398.79
Overall	1086	5.60	7.05	.92	1095.91	78.70	220.00	131.54	20.70	1560.43
Outpatient										
Monthly Income (Tk)	Total Users	Cost Components								
		Ticket/Entry		Consultation	Medicine	Tests	Transport	Food/Accommodation	Others	Total
		Official	Unofficial							
up to - 1000	354	0.73	.00	0.10	17.64	0.92	4.11	0.00	0.00	23.57
1001-1500	639	1.73	0.40	0.07	14.09	0.28	6.20	0.03	0.06	21.99
1501-2000	642	0.90	0.21	0.06	21.94	2.67	6.09	0.29	0.07	32.22
2001-3000	1030	1.04	0.19	0.10	30.43	1.12	7.79	0.67	0.00	41.13
3001-5000	1104	1.34	0.30	0.24	33.65	2.35	8.93	0.57	0.00	47.13
5001-7500	487	1.84	0.45	0.33	42.55	0.25	13.02	1.56	0.31	60.33
75001-10,000	214	1.47	1.50	0.42	90.46	9.90	16.19	0.32	1.17	121.44
10,000+	196	1.48	1.38	0.10	63.04	0.74	13.48	0.20	0.00	80.40
All	4666	1.15	0.37	0.16	32.20	1.79	8.50	0.51	0.10	44.79

Table 4.4: Average Cost of Treatment (in taka) by Socio-demographic Characteristics of the Users

Characteristics	Outpatients			Inpatients		
	Total Cost	Medicine Cost	Medicine as % of Total Cost	Total Cost	Medicine Cost	Medicine as % of Total Cost
Landholding Size (acres)						
00	57.47	50.32	87.6	1051.22	799.00	76.0
.01-.04	22.43	12.75	56.8	1406.54	1003.54	71.4
.05-.49	31.24	21.02	67.3	1524.62	1082.12	71.0
.50-1.49	58.95	44.60	75.7	1582.49	1105.83	69.9
1.50-2.49	48.35	34.56	71.5	1729.47	1217.53	70.4
2.50-4.99	81.71	64.00	78.32	1543.59	1060.24	68.7
5.00+	148.95	96.62	65.1	2605.75	1693.77	65.0
Education of Head (years of schooling)						
00	31.17	22.07	70.8	1181.67	848.04	71.8
Can read and write	42.71	31.18	73.0	1421.26	959.60	67.5
1-5	36.34	26.45	72.8	1702.73	1186.46	69.7
6-9	62.06	44.04	71.0	1949.23	1383.66	71.0
10-12	76.56	59.28	77.4	1981.25	1382.05	69.8
13-16	78.42	43.55	55.5	2899.61	1964.80	67.8
Age of users (years)						
<1	27.42	16.95	61.8	553.26	354.20	64.0
1-4	40.46	28.39	70.1	752.94	531.56	70.6
5-9	39.24	26.41	67.3	1269.69	787.47	62.0
10-14	23.46	14.58	62.1	2144.61	1438.86	67.1
15-19	50.67	37.05	73.1	1844.40	1259.27	68.3
20-49	46.16	32.03	69.4	1704.62	1237.93	72.6
50-64	52.35	42.38	81.0	1508.55	1061.19	70.4
65+	108.82	97.93	90.0	1861.25	1186.87	63.8
All	44.78	32.20	71.9	1560.43	1095.91	70.2

**Table 4.5: Type of Treatment Received before Coming to the Health Facility:
Outpatient and Inpatient**

Outpatient										
Type of Treatment Received	DH		UHC		UFFWC		CC		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
No Treatment	760	62.8	1994	77.6	565	82.2	177	88.5	3496	74.9
Self medication/ purchase of medicine from pharmacy	216	17.8	298	11.6	71	10.3	11	5.5	596	12.8
Unqualified allopath	114	9.9	139	3.4	25	3.6	8	4.0	286	6.1
Homeopath/ kabiraj	34	2.8	61	2.4	11	1.6	2	1.0	108	2.3
Spiritual healer	4	0.3	4	0.2	3	0.4	-	-	11	0.2
MBBS Doctor (Private)	75	6.2	57	2.2	11	1.6	2	1.0	145	3.1
Private Clinic	2	-	6	0.1	-	-	-	-	8	0.2
Others	6	0.5	9	0.4	1	0.1	-	-	16	0.3
All	1211	100	2568	100	687	100	200	100	4666	100
Inpatient										
Type of Treatment Received	DH		UHC		UFFWC		CC		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
No Treatment	349	47.7	198	55.9					549	50.4
Self medication/ purchase of medicine from pharmacy	143	19.5	82	23.2					225	20.7
Unqualified allopath	80	10.9	32	9.0					112	10.3
Homeopath/ kabiraj	19	2.6	12	3.4					31	2.9
Spiritual healer	2	0.3	2	0.6					4	0.4
MBBS Doctor (Private)	109	14.9	21	5.9					130	12.0
Private Clinic	11	1.5	2	0.6					13	1.2
Others	19	2.6	5	1.4					24	2.2
All	732	100	354	100					1086	100

Table 4.6: Sources of Financing Health Expenditure: Inpatients and Outpatients

Sources	Outpatients		Inpatients		Total
	No.	%	No.	%	
Savings	2690	57.7	211	19.4	2901
Income	1757	37.7	507	46.7	2264
Mortgage of Asset/Property	24	0.5	22	2.0	46
Sale of Asset/Property	09	0.2	38	3.5	47
Borrowing from friends	193	4.1	477	43.9	670
Borrowing from money lenders	21	0.5	78	7.2	99
Others	63	1.4	70	6.5	133

Table 4.7: Sources of Financing Health Expenditure by Household Income:
Inpatient and Outpatient

a) Inpatients							
Monthly Income (Tk)	Sources of Finance (%)						
	No of Cases	Savings/ Income	Mortgage of Property	Sale of assets	Borrowing from friends	Borrowing from money lender	Others
up to 1000	105	40.9	1.0	2.9	41.0	5.7	8.6
1001-1500	148	37.2	4.7	3.4	38.5	6.8	9.5
1501-2000	143	51.8	2.1	2.1	35.7	4.2	4.2
2001-3000	236	55.9	1.7	3.0	29.7	4.2	5.5
3001-5000	235	70.2	0.9	2.1	20.0	4.3	2.6
5001-7500	123	74.0	0.0	3.3	17.1	3.3	2.4
7501-10,000	43	79.1	0.0	4.7	14.0	0.0	2.3
10001+	53	94.3	0.0	0.0	3.8	1.9	0.0
All	1086	59.3	1.6	2.7	27.3	4.3	4.8
b) Outpatients							
Monthly Income (Tk)	Sources of Finance (%)						
	No of Cases	Savings/ Income	Mortgage of Property	Sale of assets	Borrowing from friends	Borrowing from money lender	Others
up to 1000	354	87.9	0.6	0.6	7.3	0.8	2.8
1001-1500	639	91.0	0.9	0.0	6.6	0.8	0.8
1501-2000	642	93.2	0.2	0.2	4.7	0.6	1.2
2001-3000	1030	94.7	0.2	0.1	3	0.4	1.6
3001-5000	1104	95.5	0.5	0.4	2.3	0.3	1.2
5001-7500	487	98.0	0.4	0.0	1.4	0.0	0.2
7501-10,000	214	97.2	0.5	0.5	1.4	0.0	0.5
10001+	196	96.9	2.0	0.0	0.0	0.0	1.0
All	4666	94.2	0.5	0.2	3.5	0.4	1.2

Table 4.8: Per cent of Household Income Spent on this Episode of Illness by Income Groups

Household Income Group	Mean Household Income (Tk)	Mean Household Size	Mean Treatment Cost	Per cent of Income Spent on Health Care
up to Tk 1000	746	3.97	283.46	38.0
1001-1500	1359	4.65	250.46	18.4
1501-2000	1854	4.89	256.51	13.8
2001-3000	2616	5.11	333.88	12.8
3001-5000	6978	4.73	280.33	7.0
5001-7500	6098	6.43	496.61	8.1
7501-10,000	8741	6.81	506.70	5.8
10,001+	16733	7.73	571.54	3.4
All	3762	5.40	330.69	8.8

Chapter 5

Quality of Health Care and Satisfaction of Users

Introduction

A well-functioning health infrastructure and delivery of quality health services are essential for improving the health status of the people. Perceived quality of services is an important aspect of utilization of services from the public health facilities. The choice of a particular health service provider depends to a large extent on the quality of services and satisfaction derived by the clients from the services received. Apart from doctors/service providers' apathy towards patients, there are factors such as inadequate supply of drugs and other medical supplies, attitudes of supporting staff, non-availability of physicians and long waiting time while at the center are some of the predominant reasons for low utilization and clients' dissatisfaction.

The provision of quality health care services leads to a more effective health care delivery system. While quality of care is critical for clients' satisfaction, it is difficult to define and measure. Hence, the health care delivery system is needed to be examined at various levels from different perspectives, including addressing the attitudes and behaviour of service providers. Access to quality services with the presence of essential drugs is expected to lead to better utilization of public health services.

In this study, quality of care is judged on the basis of information on ten different aspects of quality of services, ranging from attitudes of doctors/service providers, availability of drugs to overall quality of treatment. However, quality of treatment is deemed to be the ultimate objective of the provision of all other services. In the present facility level survey, a total of 5752 patients were interviewed consisting of 4666 outdoor patients and 1086 indoor patients from 60 government health facilities. Clients' ranking of various aspects of quality of services were recorded using a five-way categorical scheme (e.g. from excellent to bad).

Reasons for Choice of the Facility

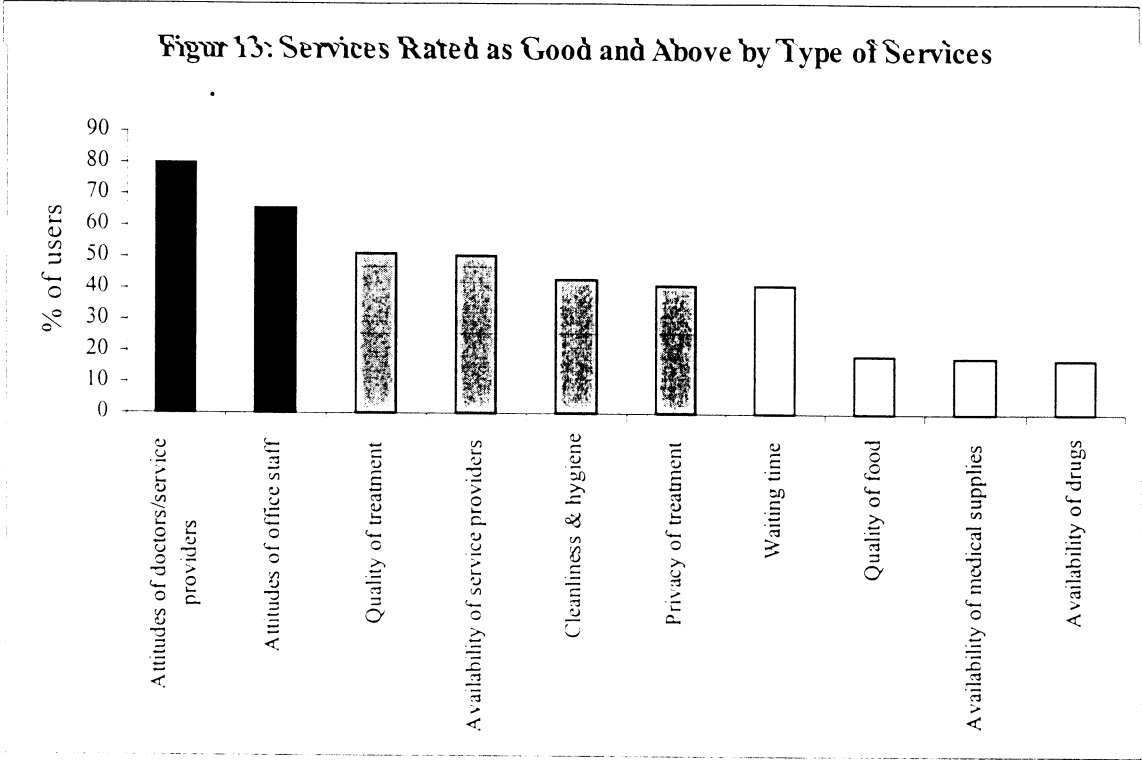
Initially a question was asked regarding the reason for choice of the facility. More than half of the clients preferred the facility because of its free/ low cost of treatment, followed by a significant proportion (27%) preferring for quality treatment and another sizeable amount (20%) for vicinity to home (Table 5.1). This reflects the composition of patients majority of whom came from poor, landless households who are in need of free/ low cost of treatment. Besides, quality of treatment ranks prominently as a reason for choice of the facility.

With regards to indoor and outdoor patients, there is significant variation in their reasons for choice of the facility. Among indoor patients, quality of treatment is as important as free /low cost of treatment. Among outdoor patients, quality of treatment is of much lesser importance in comparison with free/low cost of treatment.

Quality Ratings of Services by Service Users

Information on quality of public health services was gathered from the service users of different public health facilities. The overall quality of health services of a facility depends on a variety of aspects, such as attitudes of doctors /health providers towards patients and attitudes of supporting staff such as nurses, office staff. Besides, cleanliness and hygienic conditions of the facility are important considerations of clients' satisfaction. In most facilities, privacy of treatment and waiting time for treatment are affected due to overcrowding of patients during peak hours especially in DHs and UHCs. In addition, adequate supply of drugs and medical supplies and quality of inmate food are important aspects of clients' satisfaction of public health services. Therefore, in order to capture all the aspects of clients' satisfaction, opinions of service users were recorded on ten different important aspects of quality of services, ranging from attitudes of doctors /service providers to quality of treatment. Information from the facilities as well as our survey work during February-April reveals that the clients' visits to the facilities had been relatively lower during the winter season due to seasonal variation in the incidence of diseases, particularly diarrhoeal diseases. Lower visits of the clients resulting in less

attendance and crowding in the facilities is expected to affect their opinions about the quality of services.



Those who had used government health services were asked their opinions of the quality of services they received on the day of visit. Their responses suggest that a small proportion of the clients rated the attitudes of doctors / service providers as excellent, while a three-quarter rated the service as good, another 17 percent rated it as average and the rest 3 percent as poor/bad (Table 5.2). Attitudes of doctors/service providers as a critical service seems to have received the highest rating in terms of quality among all other services. This implies that the service users have actually received good quality service from doctors /service providers of health facilities. The opinions about attitude of office staff including nurses, technicians and supporting staff show that two-thirds rated the quality of service as good and above, while a significant proportion (29%) rated the service as average and the rest 5 percent as poor/bad. The findings suggest that though a large proportion of the service users are satisfied with the services of the paramedics and supporting staff, about a third are dissatisfied with their services. However, there may be an inherent bias in these responses. While talking to the clients it surfaced that most of

the clients, who were poor and illiterate, felt that unless they appreciated the services of the health providers including doctors and office staff, the quality of their future treatment in the facilities would be jeopardised. This may partly explain the high rating received by the service providers although it is well known that the patients received very little consultation time and physical examination from them. Ratings for the services, availability of service providers and quality of treatment, appear to be of similar levels, around half of the service users rated them as good and above which indicates that the remaining half of the users are dissatisfied with these services.

The opinions of the service users about cleanliness and hygiene, privacy of treatment and waiting time for treatment are of similar nature, around two-fifths rated them as good and above indicating that the larger proportion of the users are hardly satisfied with these services. Ratings for the rest three services, viz., quality of inmate food, availability of drugs and availability of medical supplies are the lowest in the opinions of the service users, less than 20 per cent rated them as good and above. This means that indoor patients of both DHs and UHCs are highly dissatisfied with the quality of food provided to them. The service users also expressed dissatisfaction about the supply of drugs and medical supplies from the health facilities. A study shows that 63 per cent of the indoor clients were satisfied with the services of doctors at UHCs (Sharifa Begum et, al, 1997). Another study reports that in the opinions of the service users about half (53%) rated the overall service they received from government health services as “good” (CIET, Canada).

Table 5.3 showing the actual amount of services received may clarify some of the reasons for patients’ dissatisfaction. It shows that 33 per cent of the clients received physical examination and 57 per cent received some advice from doctors /service providers. That a major portion of the clients did not receive any physical examination rather received only some advice is a reflection of the attitudes of doctors / service providers. Besides, 8 per cent of the service users received bandages /plasters for injuries and major or minor operations.

With regard to the services of the supporting staff such as nurses, medical technicians, it is found that only 7 per cent of the clients received pathological tests and x-rays and

another 3 per cent received immunization. A large proportion of the clients received drugs (82%) from the facilities, however, most of them received only partial drugs, and occasionally inappropriate drugs those are usually available from the facilities.

Ratings of Services and Type of Facilities

Ratings of the services received from DHs show that above three-quarter of the clients rated the service of “attitudes of doctors /service providers” as good or excellent and it also received the highest rating among all other services (Table 5.4). This indicates that most of the clients are satisfied with the services of the doctors /service providers at the DHs. The next good rating is received by the service “attitudes of office staff”, and less than two-thirds of the service users rated their service as good or above. Around half of the users rated the services “availability of service providers” and “quality of treatment” as good and above. Around 40 per cent of the service users of DHs rated the services, “cleanliness and hygiene”, “privacy of treatment” and “waiting time” as good or excellent which indicates that the majority of the clients are dissatisfied with the quality of these services. It is apparent that the standard of cleanliness and hygiene is very low in DHs, but privacy of treatment and waiting time for treatment in these facilities are largely affected by overcrowding of patients compared to the limited facilities available. Though around a quarter of the clients are satisfied about the availability of medical supplies, only a minor proportion (14%) of the indoor patients are satisfied about the quality of inmate food and a lesser proportion (13%) are satisfied about the supply of drugs.

A similar but slightly different picture emerges for the UHCs (Table 5.5). Attitudes of doctors /service providers and of office staff rank high in the rating of quality of services by the clients. The next good ratings are received for services like availability of service providers and quality of treatment since about half of the clients rated these services as good and above. The cleanliness and hygiene, privacy of treatment and waiting time for treatment are ranked lower than the former services. Like the situation of district hospitals, quality of food, availability of drugs and medical supplies are also rated lowest and the patients seem to be highly dissatisfied with these services at the UHCs.

However, qualitative differences in service delivery are noticed between DHs and UHCs. With regard to delivery of services, UHCs have been found to deliver better quality services compared to DHs in almost all kinds of services except the supply of medical supplies. The services rendered by HFWCs are of better quality than the services of UHCs except such aspects of services like waiting time for treatment and availability of medical supplies (Table 5.6). CCs rank lowest in the provision of quality services in respect of availability of service providers, supply of drugs and quality of treatment among others (Table 5.7). A comparative picture of the quality of services using scores for quality ranking of services delivered from various facilities and by patient category is discussed below.

Variation of Ratings Using Scores and Sex of Patients

In order to understand the variation of service ratings by sex and other socio-economic characteristics, a simple index of rating is used. A rating of 1 to 5 is assigned for bad to excellent rating in interval scale that provides an index of quality for a service. Here a value of above 2 and up to 3 is considered average rating and above 3 and up to 4 will be indicative of good rating. The index values of average rating of most of the services are found to be good, but less than excellent (Table 5.8).

The opinions of the service users about the quality of services offered by the public health facilities do not vary widely between males and females. Males rated slightly favourably the attitudes of doctors/service providers, while the females to some extent rated favourably about the cleanliness and hygienic conditions of public health facilities. With respect to both qualities of inmate food and waiting time for treatment, males rated them slightly higher than the females. On the other hand, with regards to the supply of drugs and of medical supplies, ratings of these services were higher for females than males. Lastly, males rated the overall quality of treatment higher than the females. Thus the findings demonstrate that females are probably relatively more satisfied with respect to such services as cleanliness and hygiene, supply of drugs and of medical supplies, while males are likely to receive better services with regard to doctors/service providers, quality of inmate food, waiting time for treatment and more importantly quality of treatment.

Variation of Ratings Using Scores and Patient's Category

Indoor and outdoor patients are observed to have significant differentials in ratings of services (Table 5.9). The ratings for most of the services excepting a few are higher for the outdoors than the indoor patients, which are expected. The outdoor patients assigned greater ratings for the services ranging from behaviour of doctors and office staff, cleanliness and hygiene, privacy of treatment, availability of drugs to quality of treatment. The findings suggest that the outdoor patients received much less physical examination, but similar amount of medical advice and lesser proportion of bandages /plasters and surgical operations compared to indoor patients. But a higher proportion of them received drugs from the facilities. Outdoor patients visit the centers for relatively less complicated and occasionally trivial diseases, stay in the compound for limited amount of time, have limited interaction with service providers and thus they are expected to hold better opinions about the services in general. However, the indoor patients visiting the health centres mostly with chronic and complicated diseases, rated less favourably the quality of most of the services excepting a few. They are found to be equally satisfied like outdoor patients with respect to waiting time, availability of service providers and supply of medical supplies. Finally, the indoor patients are probably less satisfied on many aspects of the services than the outdoor patients.

Variation of Ratings Using Scores and Types of Facilities

Ratings of quality of services among different types of facilities reveal that UHCs show slightly higher rating than other facilities for the service of attitudes of doctors/service providers (Table 5.10). In this respect, CCs have the lowest ranking. This in fact manifests that the service users get better services from UHC doctors / service providers, compared to other facilities. For the service of attitudes of office staff, CCs rank highest while DHs get the lowest ranking. CCs have only a health assistant and family welfare assistant to run the programme who are well acquainted with the local people. So it is natural that the clients would receive favourable treatment from them. In respect of cleanliness and hygiene DHs were rated the least, followed by UHCs and CCs were rated the highest. It is obvious that due to inefficient management practices, maintenance of

cleanliness and hygienic conditions are appalling in DHs. A similar but slightly better situation prevails in UHCs. The ratings for the privacy of treatment are almost similar in all the facilities except DHs showing slightly lower rating. Quality of food for indoor patients is rated slightly better for the UHCs than the DHs.

UHCs and HFWCs are rated slightly better for waiting time for treatment than the DHs and CCs. It was found earlier that the average waiting time in DHs, UHCs, HFWCs, and CCs were 25,17,13 and 7 minutes respectively. However, though waiting time is higher at the UHCs than at the HFWCs and CCs, they show higher rating than these facilities. This indicates a contrast between perception about and actual waiting time. In both HFWCs and CCs clients have to wait longer for treatment due to the irregular supply of drugs. In addition, CCs have not yet become fully operational because of lack of office staff and medicine supply, and remain closed for most of the time except on immunization days. For similar reasons, CCs seem to have the lowest rating for availability of service providers. The rating for availability of drugs is also the lowest for the CCs, followed by DHs. As a result, the patients are likely to be relatively more dissatisfied with regard to the supply of drugs from both DHs and CCs. District Hospitals were slightly favourably rated for the supply of medical supplies, while HFWCs were rated the lowest. In the overall rating of the quality of treatment, UHCs and HFWCs fared better than the DHs and the CCs were ranked the lowest. Thus it appears that the clients are probably better satisfied about the quality of treatment at the UHCs and HFWCs compared to that of DHs and CCs.

A comparison of the quality of services available from different facilities reveals that service users are likely to be more satisfied with the services of the UHCs than the DHs, except for the “availability of medical supplies”. The situation at the DHs is worse because of the lack of quality services in many respects which may be mainly attributed to overcrowding of clients compared to limited resources available. HFWCs were favorably rated for availability of drugs and quality of treatment. The reason lies in the fact that patients generally do not visit the HFWCs when drug is not available. This information is circulated in the locality beforehand. Service users are mostly satisfied with the CCs with regard to attitudes of office staff, cleanliness and hygiene and privacy

of treatment. Not surprisingly, CCs are cleaner and hygienic because their structures are recently established and they are also less crowded. Finally, it appeared that in the overall ratings of all the services, UHCs and HFWCs were favourably rated in most of the services including quality of treatment compared to either DHs or CCs.

Two Most Important Services

The service users were asked in their opinions about, which were the two most important services, in order of merit, from the list of ten essential services. A large proportion (39%) of the clients viewed that the attitude of doctors / service providers was the most important service demanded by them (Appendix Table A5.1). Another 21 per cent suggested that the most important service required by them was the availability of drugs. This was followed by a significant proportion (17%) suggesting the availability of service providers. Indoor patients were slightly more likely to choose attitudes of doctors /service providers as the most important service than the outdoor patients, while the reverse was true with regard to availability of drugs.

With regard to the choice of second most important service, a greater proportion of the clients (34%) opined that the availability of drugs was the second most important service (Appendix Table A5.2). The next choice of second most important service was the quality of treatment, suggested by 27 per cent of the clients. Outdoor patients assigned more importance to the supply of drugs than the indoor patients and the reverse was observed in case of quality of treatment.

Socio-economic Status and Rating of Services

It has been observed earlier that the perception of the service users regarding two most important services in order of merit were attitudes of doctors /service providers and supply of drugs. Surprisingly, quality of treatment received third preference in their choice of most important services. However, the preference for attitude of doctors /service providers which implies quality treatment from qualified doctors / service providers is itself indicative of their choice for quality or competent care. In the following

analysis, relationship between socio-economic status and the two most important services along with the quality of treatment are examined.

Landholding Status

The relationship between the rating of attitudes of doctors /service providers and household landholding status shows a positive relationship (Appendix Table A5.3). This means that clients from the higher landholding status are, in fact, more satisfied about the attitudes of doctors /service providers than those from the lower landholding status. Consequently, it may be inferred that the people from higher landholding status probably receive better services from the doctors/service providers. On the contrary, the relationship between the rating of availability of drugs and landholding status shows that it slightly increases with the increase in landholding status, but declines for the highest landholding group. This indicates that the clients from lower and middle landholding status are slightly better-off in terms of getting the essential supply of drugs from the public health facilities. The index of quality of treatment also shows an upward trend with the increase in landholding status which implies that the clients from higher landholding status actually receives better quality of treatment, and hence more satisfied with their treatment. Thus it appears that the affluent and people with higher landholding status receive both better services from the doctors /service providers as well as better quality of care from the public health services. On the other hand, those with lower landholding status are to some extent are slightly more satisfied regarding the supply of medicine.

Type of Dwelling

Another indicator used for ascertaining socio-economic status is type of dwelling of household. The rating for the service attitudes of doctors /service providers shows a rise with the improved dwelling structure of households (Appendix Table A5.4). Attitudes of doctors /service providers are much more congenial for service users whose habitats are *pucca* houses compared to those who live in *kucha*/straw houses. This indicates to the provision of better health services by the service providers to those living in better

housing conditions, and as a result they are also more satisfied with the services of doctors /service providers.

With regard to availability of drugs, those who live in poor housing conditions including those who live in tin roof /tin wall structures are slightly better-off, and are probably more satisfied with the drugs they receive from health facilities compared to those living in better housing conditions. Quality of treatment has been found to improve with the improvement of housing conditions implying that those who reside in better housing conditions are more satisfied with the quality of treatment they receive.

In summary, the following observations can be made. Both landholding status and type of dwelling are important indicators of poverty and socio-economic status. With the help of both the indicators, it may be inferred that those service users from higher landholding status and also those living in better housing conditions receive better services from doctors /service providers, as well as better quality of treatment. The land poor and those living in poor housing conditions are slightly favoured particularly with regard to their having supply of medicine from the public health facilities. However, it may be mentioned that the differentials in the quality of services received by various socio-economic groups are very small.

Visits to the Facility

There is no significant variation in the number of visits to the health centres by landholding status (Appendix Table A5.5). Half of the clients visited the centres once during the last six months, and a quarter visited twice and the rest visited the centre three or more times. Land poor households are found to have visited the centres slightly more frequently than the land rich households. When asked whether the clients would visit the centre again in the future in case of necessity, the overwhelming majority (98%) replied in the affirmative (Appendix Table A5.6). Future visits to the centre do not vary significantly by landholding status.

Despite clients' dissatisfaction on many counts of service delivery system, half of the service users visited the facility once during the last six months, and a quarter visited the

facility twice. An overwhelming majority also expressed their desire to visit the facilities again in future. This attests to the fact that their choice of public health facilities hinges on among others, the three main considerations, as discussed earlier, viz. low /free cost of treatment, quality of treatment and location or proximity to the household.

In summary, the foregoing analysis reveals that the service users are likely to be relatively more satisfied with the services of doctors/service providers as well of the office staff. They are probably moderately satisfied with the availability of service providers and quality of treatment. The clients, however, seem to be dissatisfied with such aspects of services as cleanliness and hygiene, privacy of treatment and waiting time for treatment. They are probably highly dissatisfied with the quantity of supply of drugs and medical supplies and quality of inmate food.

There are no wide variations in the levels of satisfaction derived from the selected public health services between males and females. Indoor patients are relatively more dissatisfied than the outdoor patients. Clients are more satisfied with the quality of most of the services provided by UHCs than that of the DHs. Findings suggest that the service users with higher landholding status and living in better housing conditions are likely to receive better services from doctor/service providers, as well as better quality of treatment. The land poor and those living in poor housing conditions are probably slightly better-off with regard to availability of drugs from the public health facilities.

Table 5.1: Reasons for Choice of Facility by Patient Category

Reasons for Choice	Category of Patients		Total
	Outpatient	Inpatient	
Vicinity to house	22.6	6.7	19.6 (1128)
Low transportation cost	0.9	0.6	0.8 (48)
Free / low cost of treatment	53.2	44.8	51.6 (2968)
Quality treatment	22.7	44.9	26.9 (1547)
Friend / relative works in the Center	0.2	0.6	0.3 (17)
Others	0.4	2.3	0.8 (44)
All	100.0 (4666)	100.0 (1086)	100.0 (5752)

Table 5.2: Quality Ratings of Services

Type of Services	Rating of Services					Total
	Excellent	Good	Average	Poor	Bad	
Attitudes of doctors/service providers	6.0	74.2	16.9	2.7	0.1	5752
Attitudes of office staff	2.5	63.3	29.1	4.5	0.5	5606
Cleanliness & hygiene	2.1	41.3	48.3	6.9	1.4	5699
Privacy of treatment	2.6	38.9	52.6	5.7	0.2	4440
Quality of food	-	18.9	46.8	30.5	3.9	1018
Waiting time	0.6	40.4	46.7	11.7	0.6	5595
Availability of service providers	0.7	49.8	39.0	9.9	0.7	5637
Availability of drugs	0.4	17.4	44.2	30.2	7.7	5673
Availability of medical supplies	0.3	17.7	50.9	23.3	7.8	2713
Quality of treatment	1.5	49.5	43.4	4.9	0.7	5588

Table 5.3: Services Received from the Facilities by Patient Category

Services Received	Patient Category				Total	
	Outpatient		Inpatient			
	%	No.	%	No.	%	No.
Physical Examination	29.6	1380	45.5	494	32.6	1874
Some advice	56.6	2640	56.3	611	56.5	3251
Provide contraceptives	3.1	144	0.1	1	2.5	145
Ligation / Vasectomy	0.0	1	-	-	0.0	1
M.R.	0.0	2	0.2	2	0.1	4
Medicine	83.8	3911	74.2	806	82.0	4717
Blood test	1.1	49	13.0	141	3.3	190
X-ray	0.7	32	13.0	141	3.0	173
Urine / Stool test	0.3	15	4.4	48	1.1	63
Immunization	3.0	139	2.0	22	2.8	161
Injury requiring Bandage / Plaster	0.8	37	8.5	92	2.2	129
Major Operation	0.1	3*	4.7	51	0.9	54
Minor Operation	0.0	2	26.2	284	5.0	286
Nothing	0.4	18	-	-	0.3	18
Others	2.0	95	2.2	24	2.1	119
All	-	4666	-	1086	-	5752

* Patients who received services as inpatients, but later visited as outpatients for further checkup/advice.

Table 5.4: Ratings of Services by Type of Facilities: District Hospital

Type of Services	Rating of Services					Total
	Excellent	Good	Average	Poor	Bad	
Attitudes of doctors/service providers	6.2	70.7	19.5	3.3	0.3	1943
Attitudes of office staff	2.2	58.4	32.5	5.9	1.1	1938
Cleanliness & hygiene	2.0	35.0	50.3	10.0	2.7	1923
Privacy of treatment	2.4	37.5	52.6	7.1	0.4	1499
Quality of food	-	14.2	48.0	33.2	4.7	748
Waiting time	0.7	35.8	46.1	16.0	1.4	1903
Availability of service providers	0.8	49.6	36.6	11.9	1.2	1903
Availability of drugs	0.1	13.3	39.6	35.9	11.2	1928
Availability of medical supplies	0.4	23.8	44.8	21.5	9.4	1184
Quality of treatment	1.0	47.1	43.5	6.9	1.5	1899

Table 5.5: Ratings of Services by Type of Facilities: Upazila Health Complex

Type of Services	Rating of Services					Total
	Excellent	Good	Average	Poor	Bad	
Attitudes of doctors/service providers	6.7	75.6	15.1	2.5	0.1	2922
Attitudes of office staff	3.3	64.5	27.8	4.2	0.2	2918
Cleanliness & hygiene	2.4	41.6	49.6	5.5	0.9	2896
Privacy of treatment	3.1	38.6	53.2	5.0	0.1	2249
Quality of food	-	32.1	48.5	18.3	1.1	443
Waiting time	0.7	43.8	46.5	9.0	0.1	2832
Availability of service providers	0.7	50.6	40.6	8.0	0.2	2860
Availability of drugs	0.8	19.0	47.8	27.7	4.7	2872
Availability of medical supplies	0.3	14.4	55.9	22.9	6.5	1194
Quality of treatment	2.2	50.5	43.7	3.2	0.4	2824

Table 5.6: Ratings of Services by Type of Facilities: Union Health and Family Welfare Centre

Type of Services	Rating of Services					Total
	Excellent	Good	Average	Poor	Bad	
Attitudes of doctors/service providers	2.9	79.8	15.4	1.9	-	687
Attitudes of office staff	0.3	70.8	26.4	2.4	-	617
Cleanliness & hygiene	0.1	54.5	40.8	4.6	-	681
Privacy of treatment	0.8	43.2	51.4	4.6	-	523
Waiting time	0.2	42.1	48.6	9.1	-	662
Availability of service providers	0.3	52.9	36.5	9.9	0.4	677
Availability of drugs	0.1	24.1	46.2	24.1	5.5	676
Availability of medical supplies	-	7.4	52.0	34.2	6.3	269
Quality of treatment	0.1	56.4	38.4	5.1	-	670

Table 5.7: Ratings of Services by Type of Facilities: Community Clinic

Services	Rating of Services					Total
	Excellent	Good	Average	Poor	Bad	
Attitudes of doctors/service providers	5.5	69.0	23.0	2.5	-	200
Attitudes of office staff	1.5	75.2	21.8	1.5	-	133
Cleanliness & hygiene	6.0	52.8	35.2	5.5	0.5	199
Privacy of treatment	2.4	43.2	48.5	5.9	-	169
Waiting time	1.5	30.3	49.5	18.2	0.5	198
Availability of service providers	-	30.5	47.2	18.8	3.6	197
Availability of drugs	-	12.2	30.5	32.5	24.9	197
Availability of medical supplies	-	9.1	62.1	19.7	9.1	66
Quality of treatment	1.5	34.9	54.9	8.7	-	195

Table 5.8: Quality Ratings of Services Using Scores by Sex

Type of Services	Male	Female	Total
Attitudes of doctors/ service provider	3.85	3.82	3.83 (5745)
Attitudes of office staff	3.63	3.63	3.63 (5580)
Cleanliness & hygiene	3.33	3.38	3.36 (5621)
Privacy of treatment	3.38	3.38	3.38 (4431)
Quality of food	2.84	2.76	2.81 (1018)
Waiting time	3.30	3.28	3.29 (5564)
Availability of service provider	3.39	3.40	3.40 (5600)
Availability of drugs	2.71	2.74	2.72 (5237)
Availability of medical supplies	2.73	2.84	2.79 (2501)
Quality of treatment	3.49	3.44	3.46 (5549)

Table 5.9: Quality Ratings of Services Using Scores by Patient Category

Type of Services	Patient Category		Total
	Outpatient	Inpatient	
Attitudes of doctors/ service provider	3.85	3.77	3.83 (5745)
Attitudes of office staff	3.66	3.51	3.63 (5580)
Cleanliness & hygiene	3.42	3.12	3.36 (5621)
Privacy of treatment	3.40	3.31	3.38 (4431)
Quality of food	-	2.81	2.81 (1018)
Waiting time	3.29	3.29	3.29 (5564)
Availability of service provider	3.40	3.39	3.40 (5600)
Availability of drugs	2.80	2.42	2.73 (5237)
Availability of medical supplies	2.79	2.80	2.79 (2501)
Quality of treatment	3.48	3.38	3.46 (5549)

Table: 5.10: Ratings of Services Using Scores by Type of Facility

Type of Services	Type of Facility				Total
	District Hospital	Upazila Health Complex	Union Health & Family Welfare Centre	Community Clinic	
Attitudes of doctors/ service provider	3.79	3.86	3.83	3.78	3.83 (5745)
Attitudes of office staff	3.54	3.66	3.69	3.77	3.63 (5580)
Cleanliness & hygiene	3.24	3.39	3.50	3.58	3.36 (5621)
Privacy of treatment	3.34	3.39	3.40	3.42	3.38 (4431)
Quality of food	2.67	3.07	-	-	2.81 (1018)
Waiting time	3.18	3.36	3.33	3.14	3.29 (5564)
Availability of service provider	3.37	3.44	3.43	3.05	3.40 (5600)
Availability of drugs	2.55	2.83	2.89	2.39	1.87 (5237)
Availability of medical supplies	2.84	2.79	2.61	2.71	2.79 (2501)
Quality of treatment	3.39	3.51	3.52	3.29	3.46 (5549)

Chapter 6

Public Health Spending and the Poor

Introduction

Improving the health of individuals, particularly those belonging to socially and economically disadvantaged groups, is a key objective of the Bangladesh government, and a major consequence of the Constitution that repeatedly directs the state to this end. Moreover, the Bangladesh government has, at various points in time, embraced the objective of promoting the health of the poor and the disadvantaged in its policy statements and actions. One example being the signing of the Alma Ata Declaration of 1978, emphasizing 'Health for All', the other being the new national health policy adopted by the government during 1998.

The concern for health improvements, especially among the poor and the disadvantaged, whether espoused in government policies or elsewhere, stems from several considerations. One is the increasing recognition that improvements in health translate into substantial gains in economic performance and overall well-being of society. Second, good health may be considered an end in itself, irrespective of any contribution it can potentially make to enhance economic growth. Third, poor health has significant adverse implications for the economic well-being of affected households and individuals, particularly for poor households. One way by which this occurs is in the form of out-of-pocket health expenditures for diseases that are relatively expensive to treat. Another way in which adverse health can influence the economic well-being of affected households arises from incomes foregone on account of the morbidity (or mortality) of affected members, or taking time off from work to care for the sick. Krishnan (1996) points out that a single episode of hospitalization can account for between 20 and 60 per cent of annual per capita income, with the proportion being even higher for poorer groups. This can lead to tremendous financial burden on poor households and indebtedness, sometimes resulting in liquidation of their assets.

Benefit Incidence Analysis

Benefit Incidence Analysis (BIA) is one analytical tool that allows measurement of the access to or opportunities provided by government resources in order to determine who benefits from public spending. The main purpose of BIA is to see how the benefits from government spending on health are distributed across various income groups. The analysis will help to evaluate the extent to which public expenditures on health benefit poorer groups in Bangladesh.

There are at least two ways of assessing the redistributive effect of public health spending in the short term. The first consists of evaluating the distribution of spending (i.e., how much of the total public expenditure is received by each income quintile). The second consists of determining what proportion of each quintile's income is represented by public spending on health. The impact of government expenditure on health can be analyzed from both the perspectives. However, in the present analysis the former methodology has been used.

To measure the direct benefits of public health spending by income groups, two types of data are needed: (i) information on use of facilities by income quintiles, and (ii) per capita public spending data by components of ESP category. Total spending per group can be obtained by allocating the expenditure on each ESP component according to the number of visits by each quintile group.

The operation of medical facilities is financed primarily through the Health and Population Sector Program (HPSP) of the MOHFW. Within the combined development and revenue budget of HPSP, the Essential Services Package (ESP) claims the largest proportion- more than 60 per cent of the total. All services delivered at the upazila level and below as well as some other services delivered at the district level are considered part of the ESP. The Benefit Incidence Analysis has been carried out separately for (i) facilities at the upazila level and below, and (ii) district hospitals.

Per patient ESP cost by component, as obtained by Ferdousi (HEU, 2001), has been used for the benefit incidence analysis. In the case of ESP components, the breakdowns of per patient cost by components are: **family planning**: Tk 24.40; **maternal care**: Tk 93.41, **other reproductive health**: Tk 51.48, **child health**: Tk 45.89, **communicable disease control**: Tk 111.99, and **limited curative care**: Tk 68.02.

This data on per patient cost by ESP component in conjunction with utilization episodes, estimated from the present survey, has been used to infer per visit cost. To determine access to subsidies/government spending, together with information on service utilization and per-unit subsidy, households have been divided into five groups- or quintiles (each with equal numbers of individuals)-based on their per capita monthly income in the overall, country wide distribution according to the HIES, 2000. Results are summarised by expressing subsidies received by a quintile group in terms of their percentage share in the total subsidy. A distribution is considered pro-poor, if the poor receive a larger share of the (health) subsidy than their share in the total population (Van de Walle and Ned, 1995).

The results as presented in Tables 6.1 through 6.5 suggest that a higher share of public expenditure on health accrues to the poorer strata of the population. As per the current pattern of utilization of public health facilities, the highest benefit is received by the poorest income quintile (having 37.1 per cent of total transfers), while the share of the poorest two quintiles is 54.3 per cent of total transfers. Households located at the top income quintile receive the lowest benefits (10.7%) compared to other quintiles. These findings are consistent with those of Tahmina Begum (HEU, 2001) which also reported that the poorest two quintiles receive more than 50 per cent of the total benefits from public health spending.

The results also suggest that of all categories of ESP spending, allocations to 'Curative Care' and 'Child Health' reduce inequality the most, with the poorest 20 per cent of the population having considerably more access to the subsidy than the rest of the population. Distribution of these outlays is found to be strongly pro-poor, in large part because poor households tend to have more children. In addition, because of endemic poverty coupled

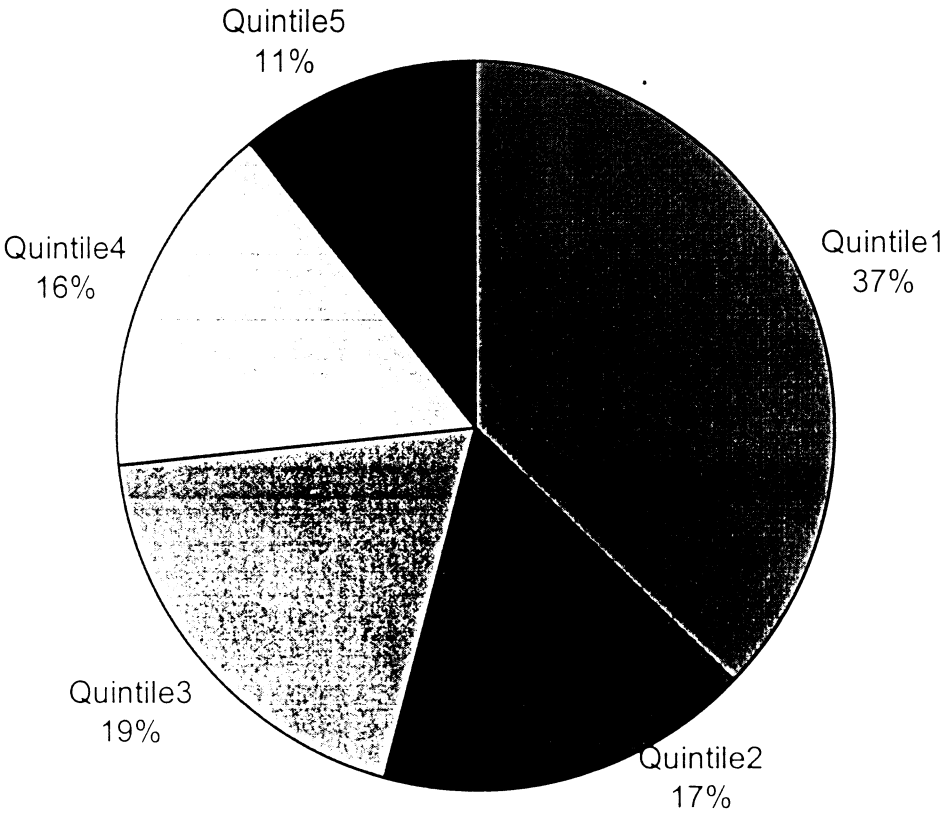
with poor living condition and unhygienic practices, members from poorer households are especially disadvantaged with respect to morbidity and mortality.

The emerging pattern is generally pro-poor- which implies that the share of the poor in the total stream of benefits from public health spending is much more than their share in the total population. This holds true for both upazila level (and below) facilities and facilities at the district level. However, the share of the poorest two quintiles is 48 per cent in case of district hospital, while their share in the total population is 40 per cent. On the other hand, for facilities at the upazila level and below the share of public health expenditures accruing to the bottom two quintiles is 54 per cent (while their share in the overall population is 40%). Overall, for all facilities taken together, the bottom 40 per cent of the population receive 52 per cent of total transfers (Table 6.5).

Such a distribution of public health expenditures reduces inequality and adds proportionately more to the welfare of the poor. Thus, in Bangladesh health expenditures taken as a whole are progressive and reduce inequality. What account for these distributional patterns? The amount of subsidy accruing to a subgroup or distribution of government health subsidies across income groups depends on the number of potential users and the rate of use among those users. The number of potential users is largely determined by the demographic composition and overall health status of a particular group. Propensity to fall ill, propensity to seek curative care or preventive care, and propensity to choose government- provided or government financed services as opposed to other providers, are all important factors influencing the distribution. In addition, the number of potential users might be different across groups. For example, immunization is demanded by children, and this demographic group is (likely to be) over-represented among the poor.

The survey findings show that the benefits derived from public spending on health is highest for the poorest quintile (**Figure 13**) which declines almost secularly for the richer quintiles(except for the third quintile). A critical assumption here is that the quality of services during the process of seeking care is similar between patients from different income groups. But this may not always be the case.

Figure 14: Distribution of ESP Spending by Income Quintile



Per Capita Spending by Gender

Total ESP spending by income group and sex has also been estimated by allocating expenditure on each ESP component (obtained from the PER, 2001/02) according to the number of visits by males and females in each of the income groups (obtained from the present survey). The operation of health facilities is financed primarily through the HPSP of the MOHFW. Allocations are made both from the revenue and development budgets. During the financial year 2001/02, a total of Tk 2396,88,69,000 was allocated under the HPSP (both revenue and development expenditure). During the same period, a total of Tk 13,884 million could be directly attributed to (services provided under) ESP.

This expenditure data in conjunction with utilization episodes (by gender) obtained from the present survey has been used to estimate per capita spending by sex and by quintile group. Total spending per group has been estimated by allocating the expenditure on each ESP component according to the number of visits by each income quintile. To estimate per capita expenditure on males and females, spending has been decomposed by sex.

The findings from Table 6.6 show that per capita spending on females is 3.2 times as high as that of males (Tk 174 vs. Tk 54). This arises mainly because of the fact that almost all family planning services, including 22.8 per cent spending on maternal care, are obtained by women (though both men and women benefit from this), and this tends to skew the benefit distribution. It is useful to see how ESP benefits compare between males and females in the absence of RH services. Accordingly, total spending on females has been estimated both with and without **reproductive health** services. If RH services are excluded from the analysis, then it is found that the gap between male-female per capita spending is reduced and per capita spending on males becomes 11 per cent higher than that of females (Tk 54 vs. Tk 48). This holds true for all income quintiles.

It is evident from Table 6.6 that the per capita spending is highest for the poorest quintile and lowest for the richest quintile. Per capita spending decreases with an increase in the economic condition, it is only the third quintile that receives a higher share than the second quintile. This is true for both men and women. The patterns of expenditure

incidence presented in Table 6.6 are consistent with the results obtained from the earlier BIA studies (HEU, 2001).

Thus, the government overall health expenditures are pro-poor in the sense that these expenditures are more equitably distributed compared to the distribution of household income. In other words, public health spending helps to reduce the overall inequality in the economy. These results suggest that:

- The poorer segment of the population receives a larger share of the subsidies; they enjoy higher subsidy per capita.
- The amount of subsidy is highest for the poorest quintile and declines monotonically for richer quintiles (except the third quintile).

Conclusion

The benefit incidence analysis has shown that public expenditures on health play a reasonably good redistributive role and contribute proportionately more to the welfare of the poor than to that of the non-poor. Moreover, there is evidence that health sector programs and expenditures favour women and have a significant impact on desired outcomes.

The above results derived under the static benefit incidence analysis as applied to ESP allocations are based on the assumption that unit costs for obtaining public health services are the same for the various income levels. This is hardly satisfactory, given the often high transaction costs involved in getting access to public health care, costs which are likely to be higher for the poor than the non-poor. Besides, one should also take into account the quality differential in the services provided by public health bodies to different socio-economic status groups, including the difference between poor and non-poor groups. The latter may be measured in-terms of adequate attention given to patients, differential access to inpatient and outpatient facility, access to medical tests, etc. Thus, the results relating to benefits to different income groups from public health spending needs to be interpreted by taking these transaction costs and quality factors into consideration.

Table 6.1: Spending at Upazila Level Facility and Below on ESP by Income Quintile: All Patients

Disease Category	% of Spending on Group				
	Q1	Q2	Q3	Q4	Q5
Family Planning	21.4	19.2	22.0	26.9	10.4
Maternal Health	22.6	11.3	32.1	18.9	15.1
Other Reproductive	21.3	23.4	17.0	19.1	19.1
Child Health	37.3	18.5	18.5	15.1	10.5
Communicable Disease Control	37.2	14.0	20.9	17.4	10.5
Limited Curative Care	38.3	17.2	18.3	15.8	10.5
All	37.1	17.2	18.9	16.1	10.7

Table 6.2: Spending at Upazila Level Facility and Below on ESP by Income Quintile: Male and Female Patients

Male Patients					
Disease Category	% of Spending on Group				
	Q1	Q2	Q3	Q4	Q5
Family Planning	25.0	0.0	75.0	0.0	0.0
Maternal Health	0.0	0.0	0.0	100.0	0.0
Other Reproductive	25.0	0.0	37.5	12.5	25.0
Child Health	37.5	19.6	17.7	13.9	11.3
Communicable Disease Control	41.5	17.1	17.1	19.5	4.9
Limited Curative Care	35.2	16.8	18.2	18.0	11.8
All Males	35.9	17.3	18.2	17.2	11.4
Female Patients					
Disease Category	% of Spending on Group				
	Q1	Q2	Q3	Q4	Q5
Family Planning	21.3	19.7	20.8	27.5	10.7
Maternal Health	23.1	11.5	32.7	17.3	15.4
Other Reproductive	20.5	28.2	12.8	20.5	17.9
Child Health	37.1	17.2	19.6	16.6	9.5
Communicable Disease Control	33.3	11.1	24.4	15.6	15.6
Limited Curative Care	40.8	17.5	18.4	14.0	9.4
All Females	38.0	17.2	19.5	15.2	10.2

Table 6.3: Spending at District Hospital on ESP by Income Quintile: All Patients

Disease Category	% of Spending on Group				
	Q1	Q2	Q3	Q4	Q5
Family Planning	66.7	0.0	33.3	0.0	0.0
Maternal Health	35.4	8.5	12.2	14.6	29.3
Other Reproductive	43.2	8.1	10.8	16.2	21.6
Child Health	31.5	15.6	18.2	21.0	13.7
Communicable Disease Control	29.5	21.3	14.7	14.7	19.7
Limited Curative Care	32.9	15.7	18.8	6.1	16.0
All	32.9	15.4	17.7	16.9	17.1

Table 6.4: Spending at District Hospital on ESP by Income Quintile: Male and Female Patients

Male Patients

Disease Category	% of Spending on Group				
	Q1	Q2	Q3	Q4	Q5
Family Planning	100.0	0.0	0.0	0.0	0.0
Maternal Health	0.0	0.0	0.0	0.0	0.0
Other Reproductive	28.6	28.6	14.3	28.6	0.0
Child Health	30.9	15.5	18.0	20.6	14.9
Communicable Disease Control	32.4	18.9	13.5	13.5	21.6
Limited Curative Care	31.1	17.8	19.1	15.5	16.5
All males	31.2	17.5	18.4	16.4	16.5

Female Patients

Disease Category	% of Spending on Group				
	Q1	Q2	Q3	Q4	Q5
Family Planning	50.0	0.0	50.0	0.0	0.0
Maternal Health	35.0	8.7	12.5	13.7	30.0
Other Reproductive	46.9	3.1	9.4	15.6	25.0
Child Health	32.5	15.8	18.3	21.7	11.7
Communicable Disease Control	25.0	25.0	16.7	16.7	16.7
Limited Curative Care	35.2	13.1	18.3	18.1	15.4
All females	34.6	13.0	16.9	17.6	17.7

**Table 6.5: Spending on ESP by Income Quintile at District Level Facility and below:
All Patients**

Disease Category	% of Spending on Group				
	Q1	Q2	Q3	Q4	Q5
Family Planning	22.2	18.9	22.2	26.5	10.3
Maternal Health	30.4	9.6	20.0	16.3	23.7
Other Reproductive	30.9	16.8	14.3	17.9	20.2
Child Health	35.6	17.8	18.4	16.8	11.4
Communicable Disease Control	34.0	17.0	18.4	16.3	14.3
Limited Curative Care	36.6	16.7	18.5	16.0	12.2
All	35.7	16.6	18.5	16.4	12.8

Table 6.6: Spending per capita by income group and sex, 2001-2002 (Taka)

	Male		Female		Female (without RH)	
	Per Capita	%	Per Capita	%	Per Capita	%
Quintile1 (poorest)	98.31	36.49	230.12	26.44	91.78	37.93
Quintile2	47.98	17.81	145.71	16.74	40.74	16.84
Quintile3	53.14	19.72	206.99	23.78	47.58	19.66
Quintile4	40.29	14.95	181.87	20.89	37.96	15.69
Quintile5 (richest)	29.71	11.03	105.73	12.15	23.91	9.88
Bangladesh	53.90	100.00	174.03	100.00	48.40	100.00

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Chapter-2 Tables

Table: A2.1: Utilization of Services by Socio-economic Characteristics and by Gender: Outpatients and Inpatients

Characteristics	Percent Distribution by Gender						All (No.)
	Outpatient			Inpatient			
	Male (%)	Female (%)	Both (No.)	Male (%)	Female (%)	Both (No.)	
Age group (years)							
<1	55.9	44.1	247	61.7	38.3	60	307
1-4	57.6	42.4	698	58.6	41.4	70	768
5-9	55.4	44.6	361	51.0	49.0	49	410
10-14	57.7	42.3	338	56.9	43.1	51	389
15-19	48.3	51.7	418	43.8	56.3	80	498
20-49	28.4	71.6	2001	48.3	51.7	497	2498
50-65	49.8	50.2	482	67.0	33.0	218	700
65+	71.1	28.9	121	67.2	32.8	61	182
Education of Head (years of schooling)							
00	41.6	58.4	1881	57.3	42.7	450	2331
Can read/write	6.7	93.3	567	57.0	43.0	135	702
1-5	44.3	55.7	867	55.7	44.3	192	1059
6-9	43.5	56.5	627	52.9	47.1	155	782
10-12	46.9	53.1	572	46.0	54.0	113	685
13-16	53.9	46.1	152	43.9	56.1	41	193
Landholding size (acres)							
00	37.7	62.3	342	49.3	50.7	69	411
0.01-0.04	34.5	65.5	618	53.0	47.0	149	767
0.05-0.49	40.8	59.2	2071	51.4	48.6	475	2546
0.50-1.49	49.6	50.4	905	61.6	38.4	190	1095
1.50-2.49	52.6	47.4	329	60.0	40.0	80	409
2.50-4.99	54.6	45.4	271	55.7	44.3	70	341
5.00+	56.2	43.8	130	62.3	37.7	53	183
Occupation of Head							
Farming	55.8	44.2	701	65.9	34.1	229	930
Agricultural labour	39.0	61.0	528	63.4	36.6	161	689
Non-agricultural labour	39.6	60.4	1452	48.9	51.1	266	1718
Petty trading/Business	41.4	58.6	788	49.4	50.6	180	968
Big business	39.0	61.0	205	45.2	54.8	31	236
Service	45.6	54.4	772	45.2	54.8	146	918
Housewife	34.5	65.5	29	12.5	87.5	8	37
Cottage industry	39.1	60.9	23	75.0	25.0	8	31
Unemployed	51.2	48.8	43	58.3	41.7	12	55
Retired	54.4	45.6	68	75.0	25.0	28	96
Others	40.4	59.6	57	41.2	58.8	17	74
All	43.5	56.5	4666	54.7	45.3	1086	5752

Table A2.1 Contd.

Characteristics	Percent Distribution by Gender						All (No.)
	Outpatient			Inpatient			
	Male (%)	Female (%)	Both (No.)	Male (%)	Female (%)	Both (No.)	
Monthly Income(Tk)							
up to 1000	30.8	69.2	354	37.1	62.9	105	459
1001-1500	38.3	61.7	639	41.2	58.8	148	787
1501-2000	40.5	59.5	642	63.6	36.4	143	785
2001-3000	45.1	54.9	1030	57.2	42.8	236	1266
3001-5000	46.0	54.0	1104	59.6	40.4	235	1339
5001-7500	51.3	48.7	487	57.7	42.3	123	610
7501-10000	46.3	53.7	214	58.1	41.9	43	257
10001+	48.5	51.5	196	60.4	39.6	53	249
All	43.5	56.5	4666	54.7	45.3	1086	5752

Chapter-3 Tables

Table: A3.1: Average Distance (in kms) Travelled by Landholding Size and Facility Type

Type of Facility	Landholding Size (in acres)					Total
	< .50	.50- 1.49	1.50 - 2.49	2.50 – 4.99	5+	
District Hospital	7.0	9.4	9.2	9.4	13.4	8.0 (1943)
Upazila Health Complex	3.0	3.5	3.5	3.5	3.8	3.2 (2922)
Union Health & Family Welfare Centre	1.8	1.7	1.7	2.0	1.9	1.8 (687)
Community Clinic	0.9	1.1	0.7	0.9	0.8	0.9 (200)
All	4.1 (3724)	5.1 (1095)	5.1 (409)	5.4 (341)	7.6 (183)	4.5 (5752)

Table: A3.2: Average Distance(in kms) Travelled by Income Quintiles and Type of Facility

Type of Facility	Quintile Groups					Total
	Q1	Q2	Q3	Q4	Q5	
District Hospital	8.8	7.8	7.7	7.5	7.5	8.0 (1943)
Upazila Health Complex	3.2	3.2	3.3	3.0	3.0	3.2 (2922)
Union Health & Family Welfare Centre	1.6	1.9	1.9	1.6	2.1	1.8 (687)
Community Clinic	0.9	1.0	0.9	1.0	0.6	0.9 (200)
All	4.7 (2050)	4.3 (950)	4.5 (1054)	4.3 (951)	4.9 (747)	4.5 (5752)

Table A3.3: Average Waiting Time (in minutes) by Landholding Size and Type of Facility

Type of Facility	Landholding Size (in acres)					Total
	<.50	.50-1.49	1.50-2.49	2.50-4.99	5+	
District Hospital	25.3	24.0	20.9	22.0	30.8	24.8 (1943)
Upazila Health Complex	16.3	16.2	16.4	18.0	21.9	16.6 (2922)
Union Health & Family Welfare Centre	13.9	10.1	14.0	12.0	9.7	13.0 (687)
Community Clinic	6.2	7.6	9.3	4.7	5.0	6.7 (200)
All	18.7 (3724)	17.7 (1095)	17.3 (409)	18.3 (341)	24.6 (183)	18.6 (5752)

Table A3.4: Average Waiting Time (in minutes) by Income Quintiles and Type of Facility

Type of Facility	Income Quintiles					Total
	Q1	Q2	Q3	Q4	Q5	
District Hospital	25.4	23.6	24.6	25.3	24.1	24.8 (1943)
Upazila Health Complex	16.0	19.2	17.3	15.5	14.9	16.6 (2922)
Union Health & Family Welfare Centre	10.9	12.6	14.4	15.9	12.6	13.0 (687)
Community Clinic	5.5	8.8	6.5	6.2	7.1	6.7 (200)
All	18.0 (2050)	19.2 (950)	19.0 (1054)	18.6 (951)	18.5 (747)	18.6 (5752)

Chapter-4 Tables

Table A4.1: Whether Visited the Health Facility on the Same Day of Illness

When was the visit	Type of Facility								Total
	District Hospital		UHC		UHFWC		CC		
	No.	%	No.	%	No.	%	No.	%	
A. Outpatients									
On the same day of illness	324	26.8	784	30.5	236	34.4	67	33.5	1411
After one day	79	6.5	190	7.4	64	9.3	9	4.5	342
After two days	142	11.7	257	10.0	68	9.9	5	2.5	472
After several days	641	52.9	1261	49.1	264	38.4	41	20.5	2207
After a long time	25	2.1	76	2.9	55	8.0	78	39.0	234
All	1211		2568		687		200		4666
B. Inpatients									
On the same day of illness	391	53.4	214	60.5	-	-	-	-	605
After one day	54	7.4	12	3.4	-	-	-	-	66
After two days	41	5.6	11	3.1	-	-	-	-	52
After several days	237	32.4	112	31.6	-	-	-	-	349
After a long time	9	1.2	5	1.4	-	-	-	-	14
All	732	-	354	-	-	-	-	-	1086

Table A4.2: Whether Any Problems Faced by Households Due to Health Expenditure: by Income Groups

Monthly Income (Tk)	Outpatients			Inpatients		
	All Cases	Cases having problem		All Cases	Cases having problem	
		No.	%		No.	%
up to 1000	354	51	14.40	105	81	77.14
1001-1500	639	92	14.40	148	116	78.37
1501-2000	642	92	14.33	143	119	83.21
2001-3000	1030	137	13.30	236	186	78.21
3001-5000	1104	136	12.31	235	152	64.68
5001-7500	487	33	6.78	123	72	58.53
7501-10,000	214	18	8.41	43	19	44.18
10001+	196	7	3.57	53	15	28.30
All	4666	566	12.13	1086	760	69.98

Table A4.3: Type of Problems Faced Due to Health Expenditure

Type of Problem	Outpatients		Inpatients	
	No.	%	No.	%
Insufficient food for the family	272	48.06	516	67.89
Children's education affected	29	5.12	98	12.89
Essential purchases affected	311	54.95	488	64.21
Others	15	2.65	24	3.16
All	566	-	760	-

Chapter-5 Tables

Table A5.1: First Most Important Service by Patient's Category

Type of Services	Category of Patients		Total (%)
	Outpatient	Inpatient	
Attitudes of doctors/ service provider	38.8	41.1	39.3 (2254)
Attitudes of office staff	4.4	5.7	4.7 (268)
Cleanliness & hygiene	4.8	4.4	4.7 (271)
privacy of treatment	1.0	1.7	1.1 (65)
Quality of food	-	4.9	1.0 (55)
Waiting time	4.6	2.3	4.2 (239)
Availability of service provider	17.3	14.5	16.8 (963)
Availability of drugs	21.7	17.1	20.8 (1197)
Availability of medical supplies	0.5	2.2	0.8 (45)
Quality of treatment	6.8	6.1	6.7 (385)
N	4657	1085	5742

Table A5.2: Second Most Important Service by Patient's Category

Quality of Services	Category of Patients		Total (%)
	Outpatient	Inpatient	
Attitudes of doctors/ service provider	3.7	3.8	3.8 (215)
Attitudes of office staff	7.1	6.2	6.9 (397)
Cleanliness & hygiene	2.3	2.5	2.3 (133)
privacy of treatment	1.6	1.3	1.6 (89)
Quality of food	-	6.8	1.4 (81)
Waiting time	4.0	2.9	3.8 (216)
Availability of service provider	17.9	13.0	17.0 (972)
Availability of drugs	35.4	29.3	34.2 (1962)
Availability of medical supplies	1.6	6.7	2.6 (147)
Quality of treatment	26.3	27.6	26.5 (1521)
N	4652	1081	5733

Table A5.3: Ratings of Services by Land Holding Status

Quality of Services	Landholding Size (in acres)					Total
	< .50	.50-1.49	1.50-2.49	2.50-4.99	5+	
Attitudes of doctors / service provider	3.81	3.86	3.90	3.89	3.92	3.83 (5752)
Availability of drugs	2.73	2.75	2.70	2.74	2.57	2.73 (5673)
Quality of treatment	3.45	3.45	3.53	3.45	3.61	3.46 (5588)

Table A5.4: Ratings of Services by Type of Dwelling

Quality of Services	Type of Dwelling					Total
	Kucha/ Straw	Tin roof & Kucha clay wall	Tin roof & Tin wall	Tin roof & Pucca wall	Pucca house	
Attitudes of doctors / service provider	3.77	3.82	3.88	3.84	3.94	3.83 (5752)
Availability of drugs	2.74	2.69	2.82	2.62	2.64	2.73 (5673)
Quality of treatment	3.42	3.45	3.51	3.44	3.54	3.46 (5588)

Table A5.5: Visits during the Last Six Months by Landholding Status

Landholding Size (acres)	Number of Visits					Total
	No visit	One time	Two times	Three times	4+ times	
<.50	0.9	49.3	25.0	11.3	13.4	(3724)
.50-1.49	0.8	49.1	25.4	12.1	12.5	(1095)
1.50-2.49	1.2	51.8	26.9	8.3	11.7	(409)
2.50-4.99	0.3	50.1	25.5	12.0	12.0	(341)
500+	1.1	55.7	21.9	6.6	14.8	(183)
All	0.9 (52)	49.7 (2860)	25.2 (1447)	11.2 (642)	13.1 (751)	100.0 (5752)

Table A5.6: Future Visit by Landholding Status

Landholding size (acres)	Future visit		Total
	Yes	No	
< .50	98.3	1.7	1178
.50-1.49	98.5	1.5	3641
1.50-2.49	98.3	1.7	409
2.50-4.99	98.8	1.2	341
500+	96.2	3.8	183
All	98.4 (5659)	1.6 (93)	100.0 (5752)

- 5.7 What services did you receive from the health provider/facility?
(please give tick mark, more than one answer is possible)

01=Physical examination, 02=Some advice, 03=Provide contraceptives (reversible methods), 04=Ligation/vasectomy, 05=M.R., 06=Medicine, 07=Blood test, 08=X-ray, 09=Urine/stool test, 10=Immunisation, 11=Injury requiring bandage/plaster, 12=Major Operation, 13= Minor Operation, 14=Hospitalisation, 15=Nothing, 99=Other (Specify) _____

- 5.8 How long was the consultation time? Minutes

- 5.9 What further treatment did the health provider say you needed?
(Please put tick mark, more than one answer is possible)

1=Antibiotic medicine, 2=Other medicine, 3=Further diagnostic test, 4=Hospitalisation
5=Operation, 6=Referred to another physician, 7=Nothing,
9=Other (Specify) _____

- 5.10 How many workdays have been lost because of this illness? Days

- 5.11 Were you kept over night at this facility for treatment?
1=Yes, 2=No (Go to Q.6.1)

- 5.12 How many nights have you stayed at this facility? Nights

- 5.13 In what kind of bed have you stayed?
1=Ward, 2=Cabin, 3=Other (Specify) _____

6. Cost of Treatment

- 6.1 Now please state how much you spent in the health centre for your treatment both as official fees and unofficial expenses

Sl. No.	Items	Official fees	Unofficial expenses
1	Admission fee		
2	Consultation fee		
3	Medicine		
4	Blood/urine/stool test		
5	X-ray		
6	ECG		
7	Bed charge		
8	Food		
9	Others (Specify) _____		

- 6.2 The patient incurred unofficial expenses during treatment
1=Yes, 2=No (Go to Q. 6.4)

- 6.3 If you had not made this payment what do you think would have happened?
1=No treatment, 2=Slow treatment, 3=Bad quality treatment, 4=Bad quality drugs,
5=No drugs provided, 6=Other (specify) _____

6.4 Did you have to incur any expenses outside this facility on such items as drugs, pathological tests, food etc. for your treatment? 1=Yes, 2=No, (Go to Q. 6.6)

6.5 How much did you spend? Tk.

Sl. No.	Items	Expenses (Tk.)
1	Medicine	
2	Bandage	
3	Syringe	
4	Blood	
5	Blood/urine/stool test	
6	X-ray/ECG	
7	Food/Hotel expenses	
8	Transportation	
9	Other (Specify)	

6.6 From which sources have you met your medical expenses? (please give tick mark)

1=savings, 2=Income, 3=Mortgage of land/property, 4=Sale of land/property, 5=Loan from friends/relatives, 6=Loan with interest, 9=Other (specify) _____

6.7 Did it have any adverse impact upon your family expenditure? (please give tick mark)

1=Insufficient food, 2=children's education hampered, 3=Essential purchases curtailed, 4=No problem faced, 9=Other (specify) _____

6.8 Were you assisted or accompanied by any other person whilst seeking care for this episode? ☐ 1=Yes, 2=No

6.9 What costs or losses were incurred because of this?

Transportation Tk.

Food Accommodation Tk.

Workdays lost Days

7. Reasons for Choice of the Facility and Quality of Services

7.1 What are the reasons for your choosing this facility?

1=Vicinity to house, 2=Low transportation cost, 3=Free/low cost of treatment 4=Quality treatment, 5=Friend relative works in the centre, 9=Other (specify) _____

7.2 Now would you please tell me about your level of satisfaction derived from the following aspects of the facility

Sl. No.	Facility aspects/Indicators	Quality				
		Excellent	Good*	Average	Poor	Bad
1	Attitudes of doctor/service provider					
2	Attitudes of office staff					
3	Cleanliness and hygiene					
4	Privacy of treatment					
5	Quality of food					
6	Waiting time					
7	Availability of service provider					
8	Availability of drugs					
9	Availability of medical supplies					
10	Quality of treatment					

7.3 Please mention, which of the above two quality aspects are most important to you?

1st

2nd

7.4 How many times did you visit this facility during last six months?

Times

7.5 In case of your necessity will you visit this facility again in the future?

1=Yes, 2=No

Indoor Service

Four of the sampled six district hospitals are each functional with 50 beds (i.e. Moulavibazar, Netrokona, Laxmipur and Jhalakati). Of the remaining two, Bogra district hospital is a 250 bedded facility, while Magura district hospital is a 100 bedded facility. All the sampled Upazila health complexes are provided with 31-beds in each.

5) The bed utilization rate of the in-patients was about 148 per cent in the district hospitals on the average, varying from 116 to 158 per cent.

6) Two-thirds (67%) of the bed-nights were utilized in the Upazila health complexes on the average, with a wide difference ranging from 42 to 97 per cent. One-third of the bed-nights remained unused in the UHCs (Table 1)

Available Facilities

7) The district hospitals had, on the average, 32-oxygen cylinders (O.C) about 6 sucker machines, 3 ambo machines, 2 microscopes and 2 x-ray machine in functional status. At least one functional ambulance was available in each of the six district hospitals. The number of functional Oxygen Cylinders varied from 12 in the 50 bedded Jhalakati hospital to 85 in the 250 bedded Bogra hospital.

8) All the UHCs had 3 Oxygen Cylinders and 1.5 sucker machine in functioning condition, on the average. Two-thirds of the UHCs had one functional ambulance, while one-third had the ambulance out of order. Half of the UHCs had functional X-ray machine (Table-2)

Emergency Service

9) All the district hospitals had emergency room with availability of bandage and stitching materials. Supply of medicine, oxygen and necessary equipment were available in all but one hospital. Saline and emergency doctors were available in 3 out of 6 district hospitals.

10) All of the sampled UHCs had emergency room with availability of bandage and stitching materials. Medicine and necessary equipment were available in over two-thirds of the UHCs, oxygen in over half, while saline and designated doctor for emergency in less than half of the UHCs (Table 3).

Radiology Unit, Surgery Unit and Blood Transfusion Unit

11) All the district hospitals had radiology unit, Surgery unit and Blood transfusion unit in working condition.

12) Out of 18 UHCs, 15 had radiology unit. Operation theatres were functional in 16 UHCs. The blood transfusion unit was non-existent in the UHCs (Table 4).

20) Out of six district hospitals only one had all the programmes (i.e. six in number by type) on BCC in functional status.

21) Nearly all the UHCs had half of the six types of programmes on BCC in functional status. The three programmes are Family Planning Education, Clinic Counseling and Health Education respectively (Table 8).

Overall Management

22) Out of 6 district hospitals, 5 DHs reported inadequate supply of medicine. Two-thirds had “average” type of functional beds, while one-half had toilets in good condition.

23) Nearly all the UHCs had reported insufficient supply of medicine. Less than half of the UHCs (7) had functional beds in good condition while over half of the UHCs (11) had average condition of beds. In general, toilets were found to be in bad condition in the UHCs (Table 9).

Table 1: Average Number of Patients Attending Facilities by Type

Type of Facility	Total number of functional beds	Daily turnout of outpatients*	Daily turnout of inpatients*	Bed-Utilization rate(%)
(1)District Hospital				
Laximpur DH	50	125	70	140
Netrakona D.H.	50	110	58	116
Bogra D.H	250	612	385	154
Moulvibazar D.H	50	249	75	150
Jhalokathi D.H	50	183	66	132
Magura D.H	100	241	158	158
All	550	1520(253.3)	812	147.6
(2)Upazila health complexes (18)	558	2901(161.7)	374	67.1
(3)Union Health and Family Welfare Centre (18)		771(42.8)		
(4)Community Clinic (14)		209 (14.9)		

Note: * Figures show the total number of patients (in-and-out), attending the facility on the day preceding the survey/interview. Figures in parentheses indicate the average number of outpatients visiting the facilities by type.

Table 2: District hospital and Upazila Health Complex by Availability of Logistics and Support Facilities

Type of Facility	District hospital		Upazila Health Complex	
	Total	Average	Total	Average
Oxygen Cylinder:				
Total Number	192	32	68	3.77
Functional	191	31.8	58	3.22
Non -Functional	1		10	.55
Sucker Machine:				
Total Number	48	8	38	2.33
Functional	34	5.6	25	1.47
Non -Functional	14	2.3	13	.76
Ambo:				
Total Number	18	3	13	1
Functional	17	2.8	12	.92
Non -Functional	1		01	.07
Ambulance:				
Total Number	10	1.6	17	1
Functional	08	1.3	12	.7
Non -Functional	02		05	.30
Microscope:				
Total Number	20	3.3	50	2.77
Functional	14	2.3	31	1.7
Non -Functional	06	1.0	19	1.05
X- Ray Machine:				
Total Number	19	3.7	14	1
Functional	12	2.0	09	.64
Non -Functional	7	1.6	05	.35
Dental X- Ray:				
Total Number	1			
Functional	1			
Non -Functional	0			

Table 3: Availability of Emergency Room and Specific Medical Facilities by Type of Facility

Type of Facility	Emergency room	Oxygen	Saline	Medicine	Necessary Equipment	Bandage and Stitching	Designated Doctor for Emergency
District Hospital	6	5	3	5	5	6	3
Upazila Health Complex	18	10	8	13	14	18	8
Union Health and Family Welfare Centre		1	---	4	6	4	---
Community Clinic		----	----	1	----	2	----

Table 4: District Hospital and Upazila Health Complex having Radiology Unit, Surgery Unit and Blood Transfusion Unit

Type of Unit	District Hospital (6)	Upazila Health Complexes (18)
Radiology unit	6	15
Technicians	6	13
Equipment	6	14
Surgery Unit	6	17
Functional	6	16
Non- Functional		1
Blood Transfusion Unit	6	0

Table 5: District Hospital and Upazila Health Complexes by Existence of Pathology Unit and Availability of Pathological Test by Type

Facility Type	Pathological test by type						
	Pathol ogy Unit	Blood test Normal	Blood test Specifi c	Urine test Normal	Urine test Cultur e	Stool test Routin e	Others
District Hospital (6)	6	6	5	6	2	6	3
Upazila Health Complexes (18)	18	18	2	17	1	17	9

Table 6: Supply of Essential Medicine by Type of Facility

Supply of Medicine	Facility by Type			
	District Hospital	Upazila Health Complex	Union Health and Family Welfare Centre	Community Clinic
Antibiotic (Pieces)	3,71,990 (61,998.3)	401654 (22314.1)	47,880 (3420)	6173
b) Antihistamine (Pieces)	295900 (49,316.6)	463550 (27267.7)	39,367 (2812)	7077
c) Anti-helmenthic (Pieces)	348500 (58,083.3)	116606 (8969.7)	10,238 (682.5)	88
d) Paracetamol (Pieces)	3,10,800 (51,800)	359875 (23991.7)	39,392 (2813.7)	9736
e) ORS Saline (Packet)	1,35,650 (22,608.3)	226732 (13337.2)	13,547 (1505.2)	494
f) Vitamin A Capsule(Pieces)	5,000 (833.3)	156750 (17416.7)	20,000	290
g) Iron tablet (Pieces)	4,15,250 (69,208.3)	505978 (28109.9)	1,54,058 9628.6	1852
h) T.T Injection (Nos.)	10,000 (1,666.6)	3180 (244.6)	145	04
i) Oxeytocine (Nos.)	10500 (1750)	950	Nil	Nil
j) Argometrine (Nos)	250 (41.6)	200	742 (82.4)	Nil
k) Intravenous Saline (Bags)	6450 (1075)	1564 (111.7)	0 Nil	Nil

Note: Figures in Parentheses indicate the average number by type of facility

Table 7: Availability of Manpower by Type of Facility

Community clinic	Type of health personnel	Facility by Type					
		District Hospital (6)		Upazila Health Complex (18)		Union Health and Family Welfare Centre (18)	
		Sanction ed Post	Post filled	Sanctio ned Post	Post filled	Sanctio ned Post	Post filled
173	8.1) Medical Specialist	5	3	18	6		
177	8.2) Surgical Specialist	5	2	18	12		
188	8.3) Consultant	49	31	12(a)	3		
186	8.4) Dental Surgeon	6	5	18	2		
194	8.5) Resident Medical Officer (R.M.O)	6	6	18	11		
200	8.6) Medical Officer (M.C.H)	--	--	25(b)	16		
252	8.7) Medical Officer (D.C)	--	--	11©	6		
4	8.8) Medical Officer (M.O)	32	23	29(d)	15	4	3
Nil	8.9) Anesthetist	8	4	18	5		
Nil	8.10) Medical Assistant/SACMO*	--	--	36	32	17	14
Nil	8.11) Lab – Technician (Pathologist)	7	7	25(e)	24		
Nil	8.12) Lab – Technician (Radiologist)	8	8	18	15		
Nil	8.13) Nurse	243	201	172(f)	151		
	8.14) F.W.V.	--	--	67	64	23	21

Table 7: Availability of Manpower by Type of Facility

Type of health personnel	Facility by Type							
	District Hospital (6)		Upazila Health Complex (18)		Union Health and Family Welfare Centre (18)		Community Clinic(14)	
	Sanctioned Post	Post filled	Sanctioned Post	Post filled	Sanctioned Post	Post filled	Sanctioned Post	Post filled
8.1) Medical Specialist	5	3	18	6				
8.2) Surgical Specialist	5	2	18	12				
8.3) Consultant	49	31	12(a)	3				
8.4) Dental Surgeon	6	5	18	2				
8.5) Resident Medical Officer (R.M.O)	6	6	18	11				
8.6) Medical Officer (M.C.H)	--	--	25(b)	16				
8.7) Medical Officer (D.C)	--	--	11©	6				
8.8) Medical Officer (M.O)	32	23	29(d)	15	4	3		
8.9) Anesthetist	8	4	18	5				
8.10) Medical Assistant/SACMO*	--	--	36	32	17	14		
8.11) Lab – Technician (Pathologist)	7	7	25(e)	24				
8.12) Lab – Technician (Radiologist)	8	8	18	15				
8.13) Nurse	243	201	172(f)	151				
8.14) F.W.V.	--	--	67	64	23	21	15	14

Table 7 Contd.

Type of health personnel	Facility by Type							
	District Hospital (6)		Upazila Health Complex (18)		Union Health and Family Welfare Centre (18)		Community Clinic(14)	
	Sanctioned Post	Post filled	Sanctioned Post	Post filled	Sanctioned Post	Post filled	Sanctioned Post	Post filled
Pharmacist					5	5		
Health Assistant							11	10

Note: *SACMO is posted at the Union Health and Family Welfare Centres only.

- a) Six UHCs reported having no sanctioned post of consultant.
- b) Eleven UHCs reported sanctioned post of one M.O and the remaining seven UHCs reported two M.O.
- c) Seven UHCs reported having no sanctioned post of M.O.
- d) 8 UHCs reported sanctioned post of one M.O and of the remaining 3UHCs reported two M.O and one UHC three M.O. respectively.
- e) Eleven UHCs reported the sanctioned post of one lab Technician and the remaining seven UHCs reported more than one technician.
- f) 13 UHCs reported having sanctioned post of nurse varying from 9 to 11 (i.e 7 UHCs with 9 nurses, 6 having 10 nurses and 4 having 11 nurses) and one UHC reported having sanctioned post of 5 nurses.

Table 8: Regular Supply of Family Planning Materials and Type of BCC Programme by Facility Type

Supply of family planning materials/ Type of BCC Programme		Facility Type			
		District Hospital (6)	Upazila Health Complex (18)	Union Health and family welfare Centre (18)	Community Clinic (14)
Supply of family planning materials regularly	Yes	2	14	18	11
	No	4	4	0	03
Motivation at the house hold level		2	15	13	09
Group discussion Programme		3	13	10	07
Clinic Counseling		2	17	17	14
Social Movement		2	05	03	04
Health Education		6	17	18	12
Family Planning Education		4	18	18	13

Table 9: Information on Selected Aspects by Facility Type

Indicators		Facility by Type			
		District Hospital (6)	Upazila Health Complex (18)	Union Health and family welfare Centre (18)	Community Clinic (14)
Medicine Supply	Adequate	1	1	2	----
	Inadequate	5	17	7	----
	No			9	----
Bed Condition	Good	2	7	----	----
	Average	4	11	----	----
	Not Good			----	----
Condition of Toilet	Good	3	4	8	9
	Average	3	11	10	5
	Not Good		3		
Purdah	Yes	5	9	11	9
	No	1	9	7	5