

## CHAPTER 6

### RESULTS OF STUDY 2: SATISFACTION ABOUT HEALTH SERVICES

#### 6.1 Result: Satisfaction level in relation to service points.

The perceived satisfaction among the respondents in the different health services was analyzed using structured questionnaire. The parents accompanied with the patient were interviewed through questionnaire at the District hospital. Different indicators(Q1,A1 S1) are used to measure the respondents satisfaction with the existing health care facilities of different service points like Health center, Thana health complex, and District hospital (detailed discussion on chapter 3 on satisfaction part ). The total number of sample size was 100. In 100 sample 80 sample from rural and 20 sample from urban areas. The answer of the question was measured two point scale (0-1). For positive answer value '1' was given and negative answer value '0' was included.

The grading of satisfaction came from the index. The satisfaction index is obtained from the indicator which was used for measuring satisfaction. The mean value of the index centered around 0.5. So, in this studies when the index was below 0.4 it has been designated as low satisfaction level. For the value between 0.4 to 0.6 it has been considered as medium satisfaction level. While for the value above 0.6 the level has been considered as high. However, it should be noted that this classification can affect the results of this study.

To assess the satisfaction towards health center, Thana health complex, and District hospital, out of 80 respondents from rural areas interviewed, 43 respondents stated that they used Health center facilities, 60 respondents used Thana health complex facilities, and 80 respondents used District hospital facilities. 20 respondents from urban areas have no knowledge about rural health care facilities. Therefore, the information on satisfaction of only those users of different facilities was used for further analysis.

Table 6.1 shows only the satisfied rural respondents at different service points, in relation to different variables such as location, drug, laboratory facilities etc. About convenient location the highest satisfaction in health center is 81.40% and the percentage of satisfaction in Health complex is 71.19%. The respondents had lowest level of satisfaction (8.86%) about the convenience of District hospital.

Percentage of satisfaction among rural respondents is high in District hospital i,e about availability of doctor is 100%, doctors attention towards patient is 98.78% and laboratory facilities 92.5%. On the other hand in the Health center and health complex the respondents are less satisfied about the availability of doctor is 39.53% and 58.33% respectively, about doctors attention towards patient is 2.44% and 63.33% respectively. About laboratory facilities in the Thana health complex is 20.37% are satisfied, while the Health center do not have any laboratory facilities. All causes of satisfaction was described in table 6.2 to 6.4.

Table 6.1 Number and percentage of rural respondents who expressed satisfaction in different service point by different parameters.

Questions	Health center (n=80) (a)		Health complex (n=80) (b)		District hospital (n=80) (c)	
	Number	%	Number	%	Number	%
-Convenient of location	35	81.40	42	71.19	7	8.86
-Drug satisfaction	12	27.91	15	25.86	53	66.25
-Adequate lab. facilities	NA	NA	2	3.77	33	41.25
-Lab. Services	NA	NA	11	20.37	74	92.50
-Availability of doctors	17	39.53	35	58.33	80	100.00
-Doctors attention towards patient	1	2.44	38	63.33	79	98.78
-Waiting time to see a doctor	25	58.14	43	71.77	30	37.50
-Diagnosis by the doctors	5	19.35	27	46.56	72	90.00
-Nursing service	NA	NA	12	44.44	53	66.25
-Quality of food	NA	NA	5	18.52	42	52.50
-Diet schedule	NA	NA	6	19.55	54	69.23

Note: NA is not applicable, because Health center provides only out patient facilities.

a) n = 43

b) n = 60

c) n = 80

% comes from the number of respondents who ever used the three types of health care facilities

Table 6.2 shows, positive and negative attitude of rural respondents towards Health center. It has been observed that, as many

Health center. Only 8 respondents give negative expression about that point. Minimum satisfaction of rural respondents towards Health center was doctors attention towards patients,(2.33%), drug quality(27.91%), and availability of doctor.

Table: 6.2 Satisfaction of rural respondents about Health center (n= 43).

Questions	Satisfied		Not satisfied	
	Number	%	Number	%
-Convenient location	35	43.75	8	18.16
-Drug satisfaction	12	27.91	31	72.32
-Availability of doctors	17	39.53	26	60.46
-Attention of doctors	01	02.33	42	97.67
-Waiting time to see a doctor	25	58.19	18	41.86
-Diagnosis by doctor	08	18.60	35	81.39

Regarding high satisfaction about location they mentioned that all the Health center are situated in rural areas. People can go easily to the Health center with in short time, they can walk and it does not incurred any cost for travel when people use Health center.

Regarding dissatisfaction of all parameters they noticed that, the doctors are not staying in the rural areas, they stay in the urban areas, usually attend the hospital late and leave the hospital early. Usually the junior doctors are working in the Health center, they have no specialization in their own field. On the other hand due to the absence of laboratory investigation facilities in the Health center the doctors cannot diagnose the disease accurately. Consequently the people of rural area has less confidence about doctors diagnosis and treatment.

About quality of drugs in the Health center the main reason of dissatisfaction of rural people is that, the people are not convinced to the issue of drugs, because the Health center provides only symptomatic drugs. All the drugs are loose but the people prefer to have drugs in strips which they belief is high quality.

Table 6.3 shows the satisfaction and dissatisfaction of rural respondents towards Thana health complex. The questions related to the indicators of satisfaction used to assess the satisfaction towards Thana health complex are more than Health center (see questionnaire 24.1 to 24.11 in appendix 1, part 3). It has been observed that, the majority of respondents (70%) expressed high satisfaction towards convenient location of the Thana health complex. The large number of

respondents also expressed satisfaction about doctors availability, doctors attention towards patient. On the other hand the minimum satisfaction observed about laboratory facilities (3.33%), quality of drugs 25% and waiting time to see a doctor.

Table: 6.3 Satisfaction of rural respondents about Thana health complex (n=60).

Questions	Satisfied		Not satisfied	
	Number	%	Number	%
-Convenient location	42	70.00	18	30.00
-Quality of drugs	15	25.00	45	75.00
-Adequacy of lab. facilities	2	3.33	58	96.60
-Satisfaction about lab. facilities	11	18.33	49	81.66
-Availability of doctors	35	58.33	25	41.66
-Attention of doctors towards patient	38	63.33	22	36.66
-Waiting time to see a doctor	43	71.66	17	28.33
-Diagnosis by doctors	27	45.00	33	55.00
-Nursing service	12	20.00	48	80.00
-Quality of food	5	8.33	55	91.66
-Diet schedule	6	10.00	54	90.00

Note: % comes from number of respondents who ever used Thana health complexes.

The main reason, regarding satisfaction according to the respondents statement is that most of Thana health complex are very close to there houses. They can walk when they go to the Thana health complex, some mentioned that if they go to the Thana health complex by bus it takes short time because the communication between home to Thana health complex is good. About doctors availability, doctors attention towards patients is that the number of doctors are more in health complex than Health center. Some of doctors are staying with in the Health complex campus consequently people get the doctors when they need.

Regarding dissatisfaction the reason is that, in Thana health complex the laboratory facilities are not adequate. People have to do laboratory investigation from outside when they need. Only the routine investigation are provided in Thana health complex but the report of investigation is questionable because all the laboratory result is written by technicians. Majority of people expressed dissatisfaction about waiting time because most of the doctors are staying in urban areas they come late so people have to wait to see the doctor. Large

number of respondents also expressed dissatisfaction about quality of food and food services. They noticed the food provided by the Thana health complex is not enough for the patients. It was told that food was not given in relation to the diseases. Some of respondents opinion was that food was not well cooked, time schedule was not maintained.

Table: 6.4 Satisfaction of rural respondents about District hospital (n=80).

Questions	Satisfied		Not satisfied	
	Number	%	Number	%
-Convenient location	7	8.75	73	91.25
-Quality of drugs	53	66.25	27	33.75
-Adequacy of lab. facilities	33	41.25	47	58.75
-Satisfaction about lab. facilities	74	92.50	6	7.50
-Availability of doctors	80	100.00	0	0.00
-Attention of doctors towards patient	79	98.75	1	1.25
-Waiting time to see a doctor	30	37.50	50	62.50
-Diagnosis by doctors	72	90.00	8	10.00
-Nursing service	53	66.25	27	33.75
-Quality of food	42	52.50	38	47.50
-Diet schedule	54	69.23	26	32.50

Table 6.4 shows satisfaction and dissatisfaction of rural respondents towards District hospital. It has been observed that rural people have high level of satisfaction about doctors availability, doctors attention towards patient, laboratory facilities, diagnosis by the doctors, quality of drugs etc. On the other hand the rural respondents expressed their high dissatisfaction about the convenient location of the District hospital.

The main causes behind satisfaction is that, doctors wants to stay in the urban areas doctors remains on duty according to the roster. Almost all the doctors stay in the hospital campus, they are available on call. Consequently people get doctors according to their need. About doctors attention towards patient is that, doctors are experienced and have specialization according to their field, so diagnosis by the doctor is more reliable, consequently the rural people has high confidence about the doctors diagnosis. About laboratory facilities in the District hospitals rural people also expressed their satisfaction because all the pathological and radiological reports are written by the experienced pathologist and radiologist respectively. As a result, people consume more laboratory services at the District

hospital. About quality of drugs, they noticed that the drugs provided by the District hospital is good. People get all types of essential drugs according to their need. Most of the drugs are supplied in strips, which has high efficacy.

Regarding dissatisfaction about the convenient location, rural respondents notice the District hospital is far from their house. The communication between home to District hospital is not good. Almost all rural people use more than one transport when they come to the District hospital, it involves more cost and longer time.

Table: 6.5 Satisfaction of urban respondents about District hospital (n=20).

Questions	Satisfied		Not satisfied	
	Number	%	Number	%
-Convenient location	20	100.00	0	0.00
-Quality of drugs	10	50.00	10	50.00
-Adequacy of lab. facilities	5	25.00	15	75.00
-Satisfaction about lab. facilities	17	85.00	3	15.00
-Availability of doctors	20	100.00	0	0.00
-Attention of doctors towards patient	17	85.00	3	15.00
-Waiting time to see a doctor	9	45.00	11	55.00
-Diagnosis by doctors	20	100.00	0	0.00
-Nursing service	15	75.00	5	25.00
-Quality of foods	6	30.00	14	70.00
-Diet schedule	10	50.00	10	50.00

Table 6.5 shows number of satisfied and non-satisfied urban respondents towards District hospital. It has also been observed that 100% urban respondents expressed their satisfaction about convenient location, availability of doctors, diagnosis by the doctors. They also express their high level of satisfaction about laboratory services. 50% of respondents expressed satisfaction about quality of drugs.

Regarding satisfaction they mentioned, all the District hospital are situated in urban area. The communication between home to District hospital is good, due to easy accessibility the urban people come to the District hospital within short time. It also incur minimum cost, because people usually use tri-cycle (cheapest transportation for short distance) when they come to the District hospital. About doctors availability and doctors diagnosis they noticed the doctors in the District hospital are efficient. They work according to the roster most of the doctors stay in the hospital campus. Doctors are available on

call all the times. Majority of the doctors are experienced and have specialization according to their field. So diagnosis by the doctor is reliable. Urban people have full confidence about the doctors diagnosis. The satisfaction level between rural and urban respondents are almost same in relation to different parameters towards District hospital. Chi- square test was done to see the significance between rural vs urban. Table 6.6 shows the result of statistical test between rural vs urban.

Table 6.6 Satisfaction of rural and urban respondents in relation to different parameters at District hospital.

Questions	Rural		Urban		X <sup>2</sup>	P-Value
	Number	%	Number	%		
-Convenient location	7	8.86	20	100.0	67.59	<0.05 *
-Drug satisfaction	53	66.25	10	50.0	1.81	0.178
-Laboratory adequacy	33	41.25	5	20.0	1.79	0.181
-Laboratory service	74	92.50	17	85.0	1.10	0.295
-Availability of doctors	80	100.00	20	100.0	--	--
-Doctor's attention towards patient	79	98.28	17	85.0	7.88	<0.05 *
-Waiting time to see doctor	30	37.50	9	45.0	0.38	0.538
-Diagnosis by doctor	72	90.0	20	100.0	2.17	0.140
-Nursing service	53	66.25	15	75.0	0.56	0.453
-Quality of food	42	52.50	6	30.0	3.25	0.072
-Schedule of food	54	69.23	10	50.0	2.13	0.145

\* Statistically significant

Table 6.6 shows the satisfaction level expressed by the respondents at the District hospital in relation to the set criteria. The proportion of respondents expressed their satisfaction varies with the criteria. This was different between urban X rural also. However when comparisons were made between rural and urban, they differ significantly in their satisfaction level only on two parameters viz convenient location and doctors' attention.

A significantly higher proportion of urban respondents was satisfied with reported to be location of the hospital when compared to

the opinion of the rural respondents attending the hospital.

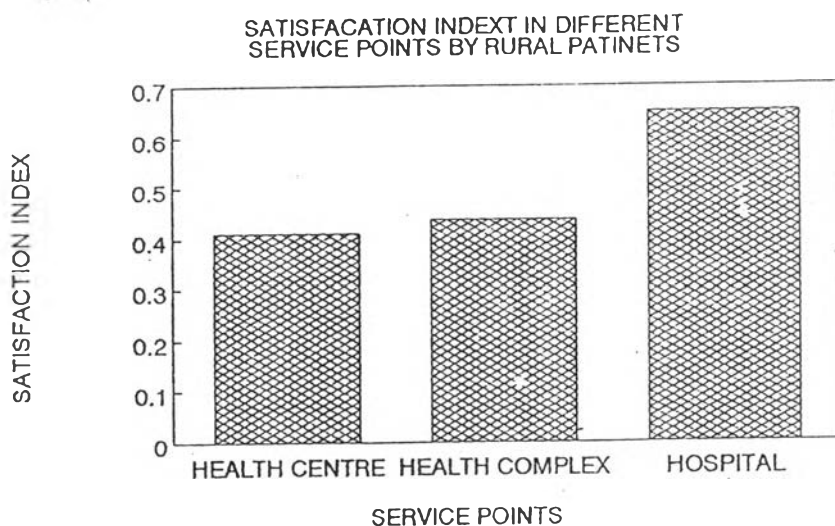
A significantly higher proportion of rural respondents was satisfied with doctors' attention when compared to the opinion of urban respondents attending to the hospital. From the above tables it has been observed that the satisfaction index of rural respondents are higher towards District hospital rather than Health center and Thana health complex. No significant difference in satisfaction index between rural and urban towards District hospital. ( see table 6.7 and 6.8)

Table 6.7 Satisfaction index in receiving health care services by the rural respondents at different service points.

Service point	Range	Mean	Std	SE
Health center (n= 43)	0.0 - 0.80	0.41	0.20	0.20
Health complex (n= 60)	0.0 - 1.00	0.436	0.211	0.026
Dist. hospital (n= 80)	0.27- 1.00	0.65	0.16	0.01

Note: S.E= standard error.

Table 6.7 shows that satisfaction index in receiving health care services by the rural respondents at the different service point. Index of satisfaction showed an increase from Health center to Thana health complex with the highest index of at District hospital. The range of satisfaction index in Health center was from 0 to 0.80, with a mean of 0.41. In Thana health complex it ranged from 0 to 1.0 with a mean of 0.436. Health services at District hospital recorded a mean index of 0.65, ranging from 0.27 to 1.0. The satisfaction index of rural respondents in relation to different service points is shown in Figure 6.1





It was observed that the level of satisfaction index is different from Health center to District hospital, so difference between two means should be tested. The null hypothesis is that there is no difference between satisfaction in Health center, health complex and District hospital.

The mean value did not show any significant difference between Health center and health complex ( $t=1.605$ ,  $p >0.05$ ). Significantly a high level of satisfaction was noticed on the services offered in the District hospital in comparison to services at Thana health complex ( $t=4.478$ ,  $p <0.05$ ) and to services at Health centers.

Table 6.8 Satisfaction index of all respondents at District hospital.

Service point	Range	Mean	Std	SE
Rural (n=80)	0.27-1.0	0.65	0.16	0.01
Urban (n=20)	0.36-1.0	0.68	0.18	0.04

Note: Std= Standard deviation, SE= Standard error.

Table 6.8 shows satisfaction index of rural and urban respondents at District hospital. The range of satisfaction of rural respondent was from 0.27 to 1.00 with a mean of 0.65. Urban respondents expressed satisfaction index of which ranged from 0.36 to 1.00 with a mean of 0.68. However, the mean value of satisfaction didn't differ significantly ( $t=0.83$ ) between rural and urban respondents. Finally cross tabulation was used to see the association between respondents satisfaction in relation to there occupation, education and income (see table 6.9, 6.10, and 6.11 ).

Table 6.9 Respondent's satisfaction score at the District hospital according to their occupation.

Occupation	Urban respondent's satisfaction level			Rural respondent's satisfaction level		
	Low	Moderate	High	Low	Moderate	High
House wife	0	2	3	3	7	14
Farmer	0	0	0	1	4	9
Labor	1	1	6	1	4	24
Business	1	3	2	0	2	1
Govt. service	0	0	1	2	1	4
Others	0	0	0	0	2	1
			$X^2 = 3.19, p = 0.362$	$X^2 = 7.40, P = 0.192$		
df = 5; Tabulated value of $X^2 = 11.0$						

Table 6.9 shows the association between satisfaction level in relation to respondents occupation. The association was tested based on the proportion of people expressing high level of satisfaction. It was observed that laborers were highly satisfied both in urban (75%) and rural (82.7%) population. To test the association a hypothesis was settled. However, no significant association between satisfaction level and occupation of urban respondents ( $X^2$  3.19; p 0.362) as well as rural respondents ( $X^2$  7.40; p 0.192).

Table 6.10 Respondent's satisfaction score on the District hospital services in relation to their education.

Education	Urban respondent's satisfaction level			Rural respondent's satisfaction level		
	Low	Moderate	High	Low	Moderate	High
Illiterate	1	1	3	3	9	28
Primary	1	2	1	3	7	20
Secondary	0	4	5	0	3	5
Graduate	1	1	1	1	1	0
			$X^2 = 1.31, P = 0.762$	$X^2 = 4.23, P = 0.237$		
df = 3; Tabulated value of $X^2 = 7.81$						

Table 6.10 Shows the satisfaction level of rural and urban respondents on hospital services in relation to their education. There

was no association between satisfaction and education. Statistical test was not statistically significant in both urban ( $X^2$  1.31; p 0.726) and rural ( $X^2$  4.23; p 0.237).

Table 6.11 Respondents satisfaction score on the District hospital services in relation to income.

Income range in Taka	Urban respondent's satisfaction level			Rural respondent's satisfaction level		
	Low	Moderate	High	Low	Moderate	High
< 3000	1	1	6	3	12	42
3000-5000	0	1	5	3	5	7
5000->	0	4	2	1	3	4
	$X^2 = 3.88, P = 0.143$			$X^2 = 4.93, P = 0.085$		

df 2 ; Tabulated value of  $X^2$ : 5.99

Table 6.11 shows, that out of 80 rural respondents 71.25% had low income while 18.75% middle and 10% high income. Among the low income group respondents 73.68% expressed a high level of satisfaction, 21.05% expressed moderate and 5.26% low level of satisfaction. It has also been observed that among the high income group 50%, 37.50% and 12.50% had high, moderate and low level of satisfaction respectively.

On the other hand, out of 20 urban respondents, 40% were grouped as low income group, 30% middle and 30% high income group. Among the low income group 75% were expressed high level of satisfaction, while 12.50% expressed moderate and 12.50% low level of satisfaction. Among the high income group 33.33% expressed high level of satisfaction, 66.67% expressed moderate level of satisfaction and none of them were of the opinion that the services were low.

Different groups of respondents based on their monthly income as analyzed for their relationship with satisfaction level. Proportion of people with high satisfaction level was tested against income. The proportion of people who expressed high satisfaction didn't show any association with income groups both in urban areas ( Chi-square = 3.88 p; 0.143) and rural areas ( Chi-square; 4.93 p; 0.085).

However trend analysis showed that the proportion of people with high satisfaction had a significant negative correlation with income group ( Chi-square; 7.74 p; 0.005). This could be due to the choice of high income group in seeking health care services from the private hospital / clinics.

## 6.2 Discussion:

The health of an individual is an important element in the ability of their community to progress. If health is to be improved in

a population, particularly in developing countries health services must be capable of developing effective health care and members of the population must use these services.

Satisfaction which is used to assess the quality and utilization of health care services. Among all respondents in District hospital urban respondents (20 sample) do not use health center or health complex. Satisfaction of the respondents were measured in respect of different facilities available in health center, health complex, and district hospital. The discussion in this section consists of three parts a) Discussion about Health center, b) Discussion about Health complex c) Discussion about District hospital.

#### 6.2.1 Discussion about Health center:

All most all health center are situated in rural areas, mainly in rural remote village areas. Usually rural respondents use Health center services. Total rural sample is 80. It has been observed that only 43 (53.75) people out of 80 used health center. The Health center provides only out patients facilities. Six questions are use to assess the satisfaction of rural respondents towards Health center( 23.1 to 23.6 see appendix 1 part 3). It has been observed that rural people had high level of satisfaction on convenient location (81.40). Dissatisfaction about the quality of drugs (27.91), availability of doctors (39.53), doctors diagnosis (19.91) and doctors attention were at their low level.

Regarding satisfaction about convenient location is that almost all Health center are approachable. They did not have to use any transport to go to the Health center. Usually people go to the Health center on foot, so they do not incur any travel cost.

The reason for dissatisfaction on the location of the Health center were found to be inadequate communication facilities and distance.

The main cause of dissatisfaction about quality of drug is that, the quality is poor as all the drugs are supplied in loose and exposed form making the impression on that they are substandard. Also due to shortage of drugs, people do not get all types of drugs as per prescription. The reason for doctors' absence and doctors' less attention towards patient was that, urban orientation of doctors' they have minimum interest to work in rural areas, making them not to attend the hospital regularly. Consequently the rural people do not get the doctors' at the time of their need.

#### 6.2.2 Discussion about Thana health complex:

Thana health complex are 31 bedded hospital situated in rural areas. It has been observed that 60 respondents use Thana health complex services out of 80. The communication between home to Thana health complex are convenient.

The satisfaction of rural respondents on Thana health complex services was almost the same level as that of Health center. About the location, majority of the people are satisfied as suggesting that it is not so far from their house, people can easily go to the Thana health complex by bus or on foot as a result they can save time and money as well.

About the quality of drugs in Thana health complex only a few people are satisfied. they were reported to get all the drugs as for their need. The quality is also told to be good because it relieved symptoms very quickly. The reasons expressed for the dissatisfaction on the quality of the drugs its inadequacy leading them to buy outside.

Regarding peoples dissatisfaction about doctors' availability in Thana health complex it was found that most of the doctors' reside in the urban areas, so they arrive to the health complex late and return early. The reason behind dissatisfaction of doctors' diagnosis and doctors' attention towards patient is that doctors' do not stay in the Health complex campus. Only the less number of doctors' in relation to the demand could pay less attention. Diagnosis by the doctors' was also not satisfactory as reported in Thana health complex lack of sufficient investigation facilities. Shortage of equipments and reagents made the doctors' to refer the complicated patients to the District hospital.

Among laboratory facilities almost all people expressed dissatisfaction as because laboratory facilities were not adequate in Thana health complexes. So people could not use all laboratory facilities at the Thana health complexes. The other cause was that, there was no experienced doctor to look after the laboratory investigation reports. So reliability of report was questionable.

Regarding nursing facilities in Thana health complexes small number of respondents did not answer this question because they did not admit their patient in the inpatient ward. Rest of the respondents mentioned that the nursing service in Thana health complex was not satisfactory. Because the number of nurses are not enough for inpatient care.

About food quality and service of food in the Thana health complexes people also had a minimum percentage of satisfaction ( 18.52% and 19.55% ) respectively. The reason behind this less satisfaction was that the quantity of food served in the hospital to the patient was insufficient and poor quality. The schedule of servicing food was not maintained.

### **6.2.3 Discussion about District hospital:**

The District hospital are situated in urban areas. Both rural and urban respondents use District hospital. 11 questions are use to assess the satisfaction of both group of respondents towards District hospital services. It has been observed that in District hospital the rural respondents were reported to be highly satisfied than urban

respondents in respect of availability of doctors (100%), doctors attention towards patient (98.78%), doctors diagnosis (90%), and laboratory facilities (92.50%).

Regarding the overall satisfaction of rural population the reason for their satisfaction was that almost all of the doctors were staying in the urban area, generally they stay in the hospital campus. Doctors were available on duty according to the roster and available all the times on call. Adequate number of doctors on different specialization and experience are experienced and have specialization according to their field. So diagnosis by the doctor was more reliable, people developed confidence on the diagnosis.

Laboratory facilities were also indicated to be inadequate. People expressed that they did not get all the investigation services and they had to do many investigations outside. Inspire of this people showed satisfaction about the laboratory facilities. Pathological and radiological reports were written by the experienced pathologist and radiologist respectively which made them to develop faith on the reports. Nursing service was also told to be satisfactory. This could be due to adequate supervision and attention. Food quality and food services in district hospital was also satisfactory.

Regarding dissatisfaction of rural people about location is that District hospital are situated in urban areas, it is far from their house. It takes long time and involving more travel cost to reach hospitals was the reason for the less satisfaction expressed by the rural people.

In District hospital urban people were highly satisfied about the location, availability of doctors and doctors diagnosis (100%) the reason was that all the District hospitals are very near, communication between home to District hospital was satisfactory, and need only short time to reach to the District hospital with out more cost. People used tri-cycles for their travel. Which is the cheapest transportation in Bangladesh.

The opinion of urban people about the doctors availability and doctors diagnosis was similar to rural people. 50% of urban people were satisfied about the quality of drugs. The reason was that they got all drugs of their need. The quality of drugs was also good because it relieved symptoms. 50% of them mentioned that all the times people had to buy medicines out side. The quality of medicine provided by the District hospital was expressed to be of poor quality.

20% respondents were satisfied about laboratories facilities rest( 80% ) noticed that the laboratories facilities were not adequate. Most of the time people had to do investigation outside and that leading to high investigation cost. Generally satisfaction is believed to associated with age, sex, occupation, education and income, but in this study there was no statistical association between occupation, education and income of the respondents.