

**Report on the Health Status of Slum Inhabitants**  
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**SECTION 1**  
**GENERAL INFORMATION**  
**OF STUDY AREA**

**Abstract**

This survey was aimed at mapping the slums and squatter settlements within the Dhaka metropolitan area, and collecting some information on key characteristics of every slum settlement about their health status and general living condition and other basic human needs. According to a previous survey published by the International Centre for Diarrhoeal Disease Research, Bangladesh, about 75% of the slums were established on private land. The estimated slum population was 718,143 and the total area under slums was 789 acres, resulting in a population density of 910 per acre (or 225,000/sq. km). Nearly one-fourth of the settlements were on government and semi government land. Private slums were smaller than the slums on government and semi-government land. Most slums (81%) had been established since 1971, the year Bangladesh became independent. About 93% of the slum houses were constructed of poor materials (tin, wood, bamboo, or jhupri).

In the Mirpur slum, 76.6 percent, and in Karail, 78.8 percent of young men have heard about HIV. They were then asked questions related to HIV/AIDS. Only 9.9 percent of the young men of Mirpur slum and only 12.3 percent in Karail have comprehensive knowledge of HIV/AIDS (source: Human Development Research Centre). Sixty-four percent of the slums had electricity and 33% had gas. Tube wells or taps were the primary source of drinking water, and most slum dwellers used shared latrines. During the office hours, the entire Karwan Bazaar becomes an area of double and triple parking along the roads. Commuters are often able to use one fourth of each throughfare. During our survey, we selected the slum situated beside Karwan bazaar Dhaka. Our focus was to identify the slum problems close to the train line. After conducting the survey, we realized that individuals in the slum are living an inhuman life. They need to collect each jar of water at taka 5. Whenever crossing the train tracks, they remain tense about their kids. Their diet was also poor. At breakfast, men generally eat a butter bun sometimes with a cup of tea and women consume the remainder of their dinner. Many slum inhabitants are also involved in hemp, alcohol, and many others drug business. "The share of the black money generated in slum area also goes to the police"-A vegetables wholeseller said

**Key words:** Slum, health problems, safe drinking water, data, nutrient,

**1. Introduction**

**1.1 The Background of the study**

The Dhaka metropolitan area consists of 14 Thana. According to the 1991 national census, the total area and population of the 14 Thana is 303 sq:kms and 4.17 million respectively. The Urban Health Extension Project (UHEP) of the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) has been providing family planning and health services through a network of volunteers to the slum residents of 5 of the 14 Thana (Mohammadpur, Lalbagh, Kotwali, Sutrapur, and Demra). Since January 1991, UHEP has been maintaining a comprehensive health and demographic surveillance system, known as the Urban Surveillance System (USS), in a representative sample of the slums in these 5 Thana. The sampling frame for the USS sample was based on a survey and mapping of the slums of Dhaka City conducted on behalf of UHEP by a private organization in 1989. The household registration and baseline surveys in the sampled slums were conducted in 1990. A review carried out in early 1991 revealed that the 1989 slum survey had undercounted the number of slums and in the identified slums, some specific information was erroneous; e.g., population and size characteristics, and new slums may have emerged since that survey.

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Thana: police jurisdiction area

## **1.2 Objectives**

The survey emphasized the extremely poor environmental conditions of the slums, especially in terms of population density and poor housing. We have decided to assess the health status of inhabitants living in a slum area because we know that there are many people who are live in a slum. They are deprived from their basic human needs such as food, health of facilities, education facilities and so on. We have tried to find the actual modes of life.

## **1.3 Definition of Slum**

In previous Survey done by the CUS (1983 and 1988), it was observed that high population density and very small size make it extremely difficult to locate all slums and squatter settlements. The following definition was used to identify slums and Squatters.

### **Slums are settlements/areas of**

- Semi-pucca . flimsy structures (flimsy structure with brick or concrete floors)
- Dilapidated buildings (old building in bad condition)
- Very high gross area density (over 300 persons/acre) and high room
- Crowding (3 or more adults per room)
- Poor sewerage and drainage
- Inadequate water supply
- Irregular or no clearance of garbage
- Little or no paved streets
- Insufficient or absence of street lighting
- Little or no access to gas facility
- The characteristics listed above are common to almost all slum Settlements of the capital. However, for operational purposes, the following three physical characteristics, listed in the order of importance, were used ,to identify the slum settlements:

1. Predominantly poor housing;

2. Very high housing density; and
3. Poor sewerage and drainage facility.

#### 1.4 Definition of a slum household

A slum household is a household located in a slum settlement which fulfills either of the following criteria:

1. The household uses a shared latrine;
2. The household uses shared water sources.

## 2. Materials and methods

The survey involved two major activities:

- (i) Selection of study spot
- (ii) Collection of selected information on individual slums. The actual survey was carried out during 11 October 2016. Two investigators were engaged for the survey.

### 2.1: Location of the study area:



**Figure 2.1: Map of study area**

### **3. Data collection**

We collected data randomly from 50 respondents. Data was collected through a pre-designed and structured questionnaire from study area. Data was collected on 11 November 2016.

### **4. Data analysis**

Collected data was analyzed with the help of SPSS application. Then we got average idea about the health status of slum inhabitants.

### **5. Result and discussion**

Approximately 1000 individuals live at study area (karwan Bazaar). About 85% are illiterate. Most of the individual are hawker, vegetables seller, labor, and waste collector. According to our 75% individual's BMI below normal value ( $18\text{kg/m}^2$ - $25\text{kg/m}^2$ ). About 34% interviewer have no problems as they drink safe water and some also told that they have no problem since they drink of unsafe water. About 14% respondents are suffered from typhoid and 2% and 22% respondents are suffered from cholera and hepatitis respectively remaining 28% respondents are suffered from other water borne disease.

## SECTION 2 A GENERAL PROFILE OF THE SLUMS AND SLUM DWELLERS

### 6. Introduction

We identified 50 families. This section of the report focuses on some important general features of these slum settlements and their inhabitants. The following description is based on data collected from the primary survey of these slums.

### 6.1 Gender of the Respondents

**Table 6.1: Number of respondents in terms of gender**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	29	58.0	58.0	58.0
Female	21	42.0	42.0	100.0
Total	50	100.0	100.0	

From that table we can see that about 58 % ( 29 individual) were male interviewer and rest 42 % (21 individual) were female. They expressed themselves that they are really needy and they want to change their life style and living condition. But they argued that huge data was collected from them but no measures were taken to solve their problems yet. They are deprived from their basic human need such as health facilities, education.

## 6.2 Qualified water consumer

**Table 6.2: Number of safe/unsafe water consumer**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	19	38.0	38.0	38.0
No	31	62.0	62.0	100.0
Total	50	100.0	100.0	

Above tables represent that about 38 % (19 individual) are safe water consumer rest 62% individuals are unsafe water consumer. Many respondents argued that they have to collect drinking water with at 5 taka (each jar) from house (water storage).

## 6.3 Problems due to consume unsafe water

Due to consume unsafe water, Slum inhabitants are suffering from different disease. Via survey method we could identify the frequency of disease to be occurred. Result can be shown with a table

**Table 6.3: Problems for consuming unsafe drinking water**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Typhoid	7	14.0	14.0	14.0
Cholera	1	2.0	2.0	16.0
Hepatitis	11	22.0	22.0	38.0
Others water born diseases	14	28.0	28.0	66.0
No problem	17	34.0	34.0	100.0
Total	50	100.0	100.0	

From the table we can study about various diseases associated with impure water. It is shown that 34% interviewer have no problems as they drink safe water and some also told that they have no problem since they drink of unsafe water. About 14% respondents are suffered from typhoid and 2% and 22% respondents are suffered from cholera and hepatitis respectively remaining 28% respondent are suffered from other water borne disease.

## 6.4 Effects of dust particles:

Dust particles are tiny solid particles scattered or suspended in the air. The particles are organic or inorganic depending on the source of the dust. In organic dust may come from the grinding of

metal or minerals such as rocks and soil such as asbestos, silica, and coal etc. Dust may also contain fungi or microbes or the toxic substances For Example histoplasmosis, psittacosis and fever are diseases that people can get if they breathe inorganic that are infected with certain microorganism. Slum inhabitants told that they have been experiencing a lot of problems due to dust particles emitted from the train after crossing their cottage. As they live just close to rail line so they are the primary victims. They easily inhale these particles. Due to long term consumption they are affected negatively. Some problems associated with this incidence are listed below:

**Table 6.4: Problems associated with dust particles**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Eye irritation	26	52.0	52.0	52.0
Headache	9	18.0	18.0	70.0
Skin disease	1	2.0	2.0	72.0
Others	3	6.0	6.0	78.0
No problem	11	22.0	22.0	100.0
Total	50	100.0	100.0	

It is observed that about 26 (52%) among 50 respondents thought that particles such as smokes, dust emitted from the train causes their eye irritation and about 18% are affected by eye headache 2% are skin diseases and rest 11% has no problem due to dust particles.

## 6.5 General illness

Due to different environmental factors people are generally suffered from various diseases such as fever, heart attack diabetes etc. The frequency of these diseases to be occurred is shown below from according to survey result.

**Tables 6.5: General illness**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Fever	16	32.0	32.0	32.0
Headache	11	22.0	22.0	54.0
High blood pressure	8	16.0	16.0	70.0
Others	15	30.0	30.0	100.0
Total	50	100.0	100.0	

From this table it can be clearly said that. About 30% individuals are frequently suffered from fever and another 22% percent individuals are suffered from headache and others 16% people generally suffer from high blood pressure rest 30% percent suffer from other health diseases. But matter of great regret that they do not take medicine from relevant doctor .We Found huge information talking with them about their life style, food menu etc. It was also observed that people are so addicted and are involved with different unsocial activities such as alcoholism, drug abuse, and interpersonal anxiety etc

## **6.6 Health check up**

We talked to general people about their health condition they told that they generally go to doctor chamber during illness. Whenever we asked a counter question that which hospital you prefer most to go? .They indicated a pharmacy and said that generally they take treatment from that place. How ignorant about their health they are!

**Table 6.6: Quantity of prescription receiver from certified doctor during illness**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	15	30.0	30.0	30.0
No	35	70.0	70.0	100.0
Total	50	100.0	100.0	



Above table shows that about 15(30%) individual among 50 take treatment from the certified doctors rest 70 percent people take medicine from the pharmacy from nearest pharmacy. One interviewer named Osul ali(45) said that they used to take peracitamol when they are suffer from fever and antacid and ranited tablet are frequently taken by the slum dwellers for the precaution of gastric problems.

### 6.7 Necessary check-up during pregnancy.

Pregnancy is the time which one or more offspring develops inside a woman. Parental care improves pregnancy outcome. Parental care may include taking extra folic acid avoiding drugs and alcohol, regular exercise, blood test and regular physical examination etc.

From a given tables we could see the number of women who take necessary check up during pregnancy.

**Table 6.7 Necessary check-up rate during pregnancy**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	14	28.0	28.0	28.0
No	36	72.0	72.0	100.0
Total	50	100.0	100.0	

From that table we can see that about 28 percent women take necessary care during their pregnancy remaining 72% women do not take this type of treatment. They said that they are unable to bear the costs of treatment. As a result many complications of pregnancy can be observed including high blood pressure of pregnancy gestational diabetes, iron deficiency anemia, and severe nausea and vomiting among others.

### 6.8 Noise pollution

Train noise is vehicle noise created by train. Noise may be heard inside the train and outside the train .train noise can be a type of environmental noise when a train is moving there are several distinct sounds such as the locomotive engine noise and the wheels running on the railroad track. The air displacement of a train or sub way car in a tunnel can create different whooshing sound. Trains also employ horns, whistles, bells, and other noise making device for both communication and warning .Let`s take look is there any problems of slum inhabitant due to noise pollution?

**Table 6.8: Problems due to sound pollution**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	37	74.0	74.0	74.0
No	13	26.0	26.0	100.0
Total	50	100.0	100.0	

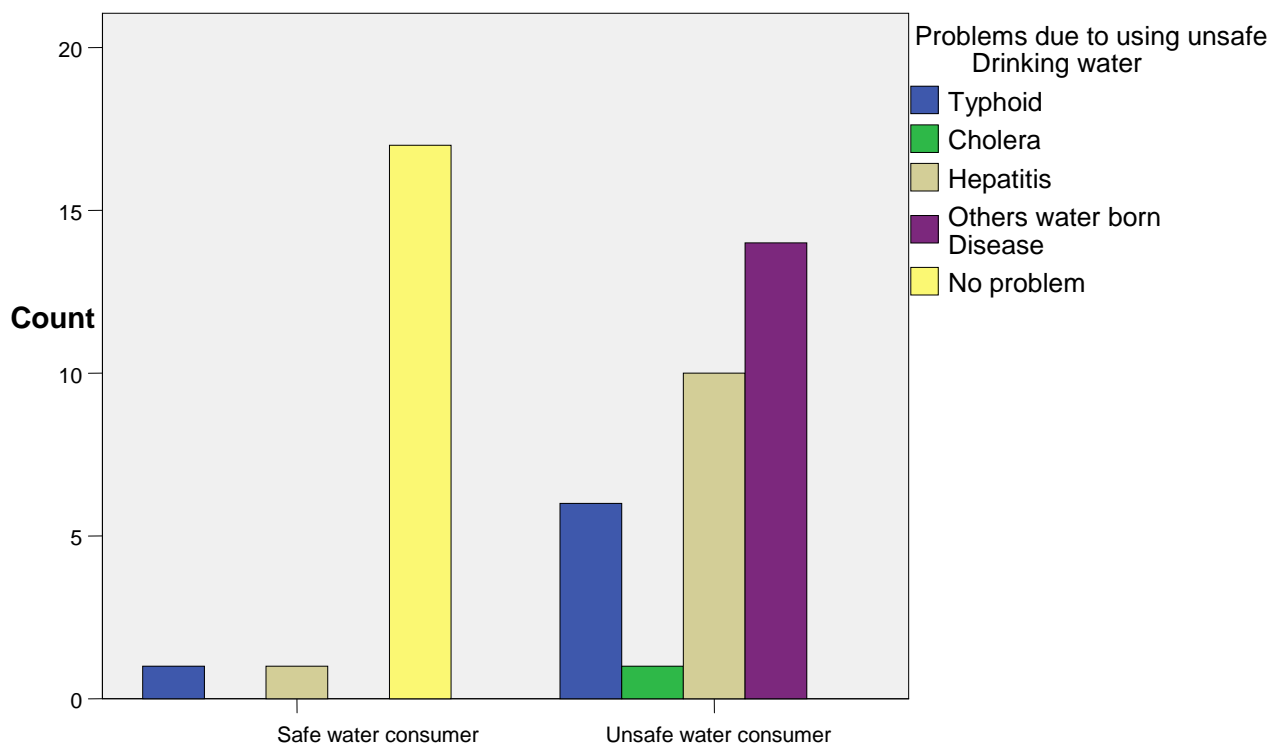
Above figure shows that about 74% people thought that sound create and negative effect to them but rest 26 % people said that they don't feel any problems due to sound pollution that is created from the running train.

## **6.9 Problems associated with drinking water**

We have tried to show the relationship between different waterborne diseases associated with drinking water. We got the result that 19 individuals use safe drinking water while other 31 use unsafe water. People who use safe drinking water do not suffer generally. Just one individual is suffered from typhoid .On the other hand people those who drink unsafe drinking water 31 individuals are suffered from different health disease such as typhoid, cholera, hepatitis etc.

An interviewer told that that they generally collect water from house but they need to pay 5 taka for each jar yet they don't get the safe drinking water.

**Bar Chart**



**Fig 6.9: Different health problems associated with water**

**Table 6.9: Cross tabulation of waterborne problems associated with drinking water**

			Problems due to unsafe drinking water					Total
			Typhoid	Cholera	Hepatitis	Others water born diseases	No problem	
Safe drinking water consumer	Yes		1	0	1	0	17	19
	No		6	1	10	14	0	31
Total			7	1	11	14	17	50

The above graph shows that unsafe drinking water causes different problems such as hepatitis, cholera etc .But among all this problems hepatitis is occurred frequently due to drink unsafe

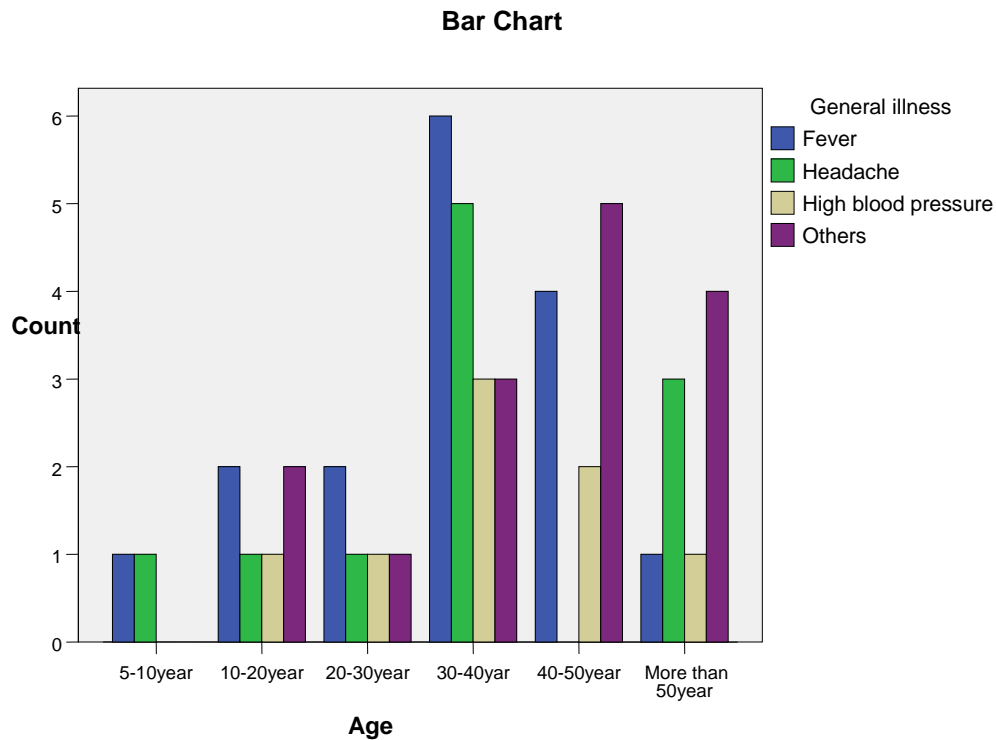
water. So we can surely say that unsafe drinking water is responsible for causing hepatitis as we see that people who drink safe water are not suffer from this type of disease.

## 6.10 General illness associated with age

During our survey we just tried to show the relationship between individual's age and different health problems. Because we know that different ages people are prone to suffer from specific health problems. From our survey the result has come out which are shown below:

**Table 6.10: Cross tabulation of general illness associated with age**

		General illness				Total
		Fever	Headache	High blood pressure	Others	
Age	5-10year	1	1	0	0	2
	10-20year	2	1	1	2	6
	20-30year	2	1	1	1	5
	30-40year	6	5	3	3	17
	40-50year	4	0	2	5	11
	More than 50year	1	3	1	4	9
Total		16	11	8	15	50



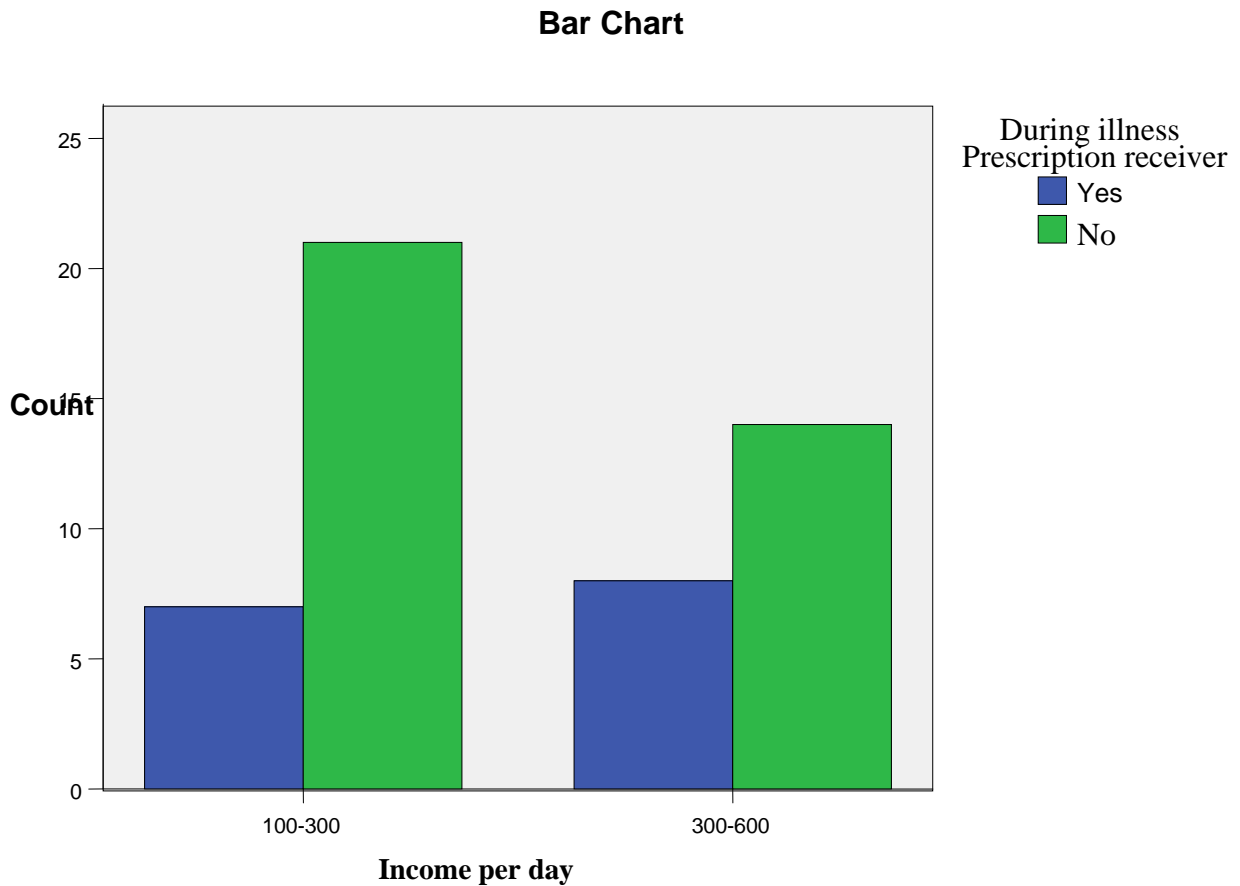
**Fig 6.10: General illness associated with age**

These figure shows that individual whose age ranges from 30-40 years are highly prone to be suffered from fever and high blood pressure. People whose ages are above 50 generally suffer from other health diseases such as asthma, diphtheria, diarrhea, malaria, etc. But a matter of great sorrow is that they don't take any medicine during their illness.

## 6.11 Prescription receiver during illness

**Table 6.11: Prescription receiving tendency based on income**

		During illness prescription receiver		Total
		Yes	No	
Income per day	100-300	7	21	28
	300-600	8	14	22
Total		15	35	50



**Fig 6.11: prescription receiving tendency based on income**

The figure shown above denotes that people whose daily income less than 300 are less interested to receive prescription. The figure shows that about 28 individuals has daily income ranges from 100-300 and 21 individuals do not take prescription from the recognized doctor on the other hand from 14 individual (whose average income 300-600) eight individual are more interested to receive prescription from the certified doctor.

## 7. Recommendation

Considering the situation prevailing in Karwan Bazaar slums, for provision of basic services including services for nutrition of mother and children, and development of children, the recommendations can be given which are as follows:

- ❖ Water should be supplied through government sources at lower price and to be available for more time.
- ❖ Measures should be taken by the government for safe disposal of liquid waste through construction of new drains and cleaning/maintenance of the old ones.

- ❖ Measures should be taken by the government for safe disposal of solid waste through placing dustbins in slum areas and regular evacuation of those through DCC vehicles.
- ❖ Special BCC program should be taken by the government and NGOs to increase awareness of people regarding treatment of drinking water.
- ❖ Pre-school services in slums should be provided by the government as well.
- ❖ More primary schools should be established by the government and NGOs in and around slums.
- ❖ In addition to establishment of some new schools for secondary education, those poor households of slums sending their children for secondary education should be given
- ❖ Some tiffins should be provided to the children coming to schools from slum areas.
- ❖ Special BCC programs should be taken by the government and NGOs to increase awareness of people for sending their children for pre-school, primary and secondary education.
- ❖ More Nagar Shastho Kendra should be established in and around slums for provision of general health, and maternal and neonatal health, especially delivery services at low cost and supply medicine free of cost.
- ❖ As pharmacists are the main service providers in Karwan Baazar slum, the community leaders suggested running the pharmacies by Medical Assistants, so that they can counsel the patients while providing services.
- ❖ Special BCC programs should be taken by the government and NGOs to increase awareness of people for immunization and prevention of diseases, nutrition of mother and children, maternal and neonatal health care, and prevention of AIDS.
- ❖ Government and NGOs should take awareness programs for changing mindset of people to decrease the incidence of domestic violence against women, and corporal punishment of children.
- ❖ Special media effort should be there for slum people who residing in urban areas are leading miserable life worse than that of the rural areas.

## 8. Conclusion

From our observation we could realize that they are passing an inhuman life. One interviewer said that they want to change their life style. They want to shift their living condition to a better place. They requested us to inform their present condition to the relevant authority to take necessary steps. They also argued that many survey was done as we did but necessary steps do not taken yet.

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