

(The study is conducted by the 14th batch participants of Gender and Governance Training Program of Democracywatch)

Health Problems of Women Living in Slums: A Situation Analysis of Three Selected Slums in Dhaka City

Democracywatch

15 Eskaton Garden Road, Dhaka-1000

Published by: Democracywatch 15 Eskaton Garden Road Ramna Dhaka-1000

First Edition 2014

Copy Right:

Democracywatch

Printed by: Democracywatch 15 Eskaton Garden Road Ramna Dhaka-1000

Preface

Democracywatch, a trust and a registered NGO was established in 1995 with the aim of strengthening Democracy in Bangladesh. We ventured out to achieve this through creating awareness of democratic process, values, human rights and good governance and thereby foster democratic culture. These are to be implemented through education, training of youth especially women, concluding research, increase capacity of democratic institutions and advocacy. Democracywatch trained around 25000 youths sofar in "Life skills" and "Lifestyle" course on basic skills for developing as a confident, aware and competent human being ready to contribute as leaders towards ushering in a better society.

Democracywatch developed a special gender and governance training to add its leadership program. Awareness of gender issues is one of the main themes of training the youths of tomorrow. So an innovative training program called Gender and Governance Training Program (GGTP) and later named as Gender and Governance Sensitization Program (GGSP) was introduced in 2005 funded by CIDA. After two terms of funding by CIDA the Royal Danish Embassy, the Program for Asian Project (PAP) gave us the necessary support. Young public university graduates both male and female came forward to undertake this innovative and purposeful training program. Our rich pool of resource persons includes renowned academics and researchers on gender, politics, sociology and law. These immensely enriched trainings attracted well attributed women and men. The training period was only four months. It was highly regarded as it incorporated some additional components which are not readily found in other short courses i.e. research on gender issues and internship with reputable development and economic organizations. Both of these gave the participants of the course practical knowledge and hand on experience. This inculcated in many of the participants being well placed in renowned international and national NGOs and also engaged in big corporate. We feel elated that the course has been successful in creating female and male leaders in our society within such a short time.

We are proud to present the research reports that each batch has produced. These researchers are rather empirical with small sample size, as it had to be finished within the course period on a shoestring budget. These studies need to have a sympathetic view by its readers. Nevertheless topics selected often created a lot of interest among the stakeholders and academics when they were presented by the students at our seminars. Hope this study is useful to some in their own work and in giving an insight on women's plight in our society.

To end I thank Mrs. Taherunnesa Abdullah, Magsaysay Award Winner, Prof. Salahuddin M. Aminuzzaman, Prof. A.S.M Atiqullah of Dhaka of Dhaka University, Mr. Saiful Islam our Monitoring and Evaluation Team Leader and thegender unit for helping the students in completing the reports of these researchers. The students would have been at a loss without their all out support.

I congratulate and thank all the participants for their hard work and willingness to learn about importance of gender in all spheres of the society and contribute in achieving it.

Last but not the least my deepest gratitude to our donors Norad, CIDA, PAP and Royal Danish Embassy for their support.

Taleya Rehman Founder Executive Director Democracywatch

ACKNOWLEDGEMENT

Democracywatch set up Gender Resource Center in 2005 with a view to collect data and evidences of specific problems related to women in our society. The students of Gender and Governance course which looks at contribution of gender for establishing good governance in Bangladesh. But without extensive data on women and their situation in society it is difficult to envisage the course of action to be taken for Good Governance.

The Gender Resource Center (GRC) of Democracywatch conducted the survey titled – "Health Problems of Women Living in Slums: A Situation Analysis of Three Selected Slums in Dhaka City". In doing this survey guidance and support were received from many people, without which this survey would not have been possible. Thanks to Mrs. Tahrunnesa Abdullah for her precious advice and guidance. Democracywatch gratefully acknowledges contribution of Prof. A. S. M. Atiqur Rahman, Institute of Social Welfare and Research, University of Dhaka for his excellent teaching on the theoretical aspects of social survey that made the researchers comfortable in undertaking this field of survey. Special thanks to Ms. Mansura Akhter, Ms. Anupama Anam, Ms. Syeda Nazneen Jahan Ms. Dipannita Kundu and Mr. Anando Mostofa of Gender Resource Center for their continuous guidance and suggestions in every stage of the survey. Thanks to the participants of the 14th batch of the "Gender and Governance Sensitization Program" of Democracywatch who conducted the field investigation as part of their training program. Democracywatch gratefully acknowledges the contribution of all the respondents for their time and sharing their valuable knowledge and experience on the study subject.

Taleya Rehman
Executive Director
Democracywatch
June-September 2010

TABLE OF CONTENTS

Acknowledgement	iv
Executive Summary	vi
CHAPTER: ONE	1
Chapter: Two	8
Chapter: Three	29
Chapter: Four	50
Chapter: Five	72
References:	73
Annex- I	74

EXECUTIVE SUMMARY

The scale of urban poverty is greatly under estimated — its nature misunderstood and the best means for reducing it is rarely acted upon. In this survey we are looking at aspects of poverty which affects women and children adversely which is health. The urban slum dwellers living in tropical countries, their health condition is threatened by a variety of tropical diseases. Health equity can only be achieved by "leveling up" living conditions for the poor, and by reducing differential exposure and vulnerabilities among different groups in society. It is clear that female slum dwellers have extremely limited opportunities for a decent lifestyle: They lack the foundation for healthy and fulfilling lives, and at the same time carry immense responsibilities for maintaining their homes and families.

Cultural norms dictate that women in urban slums tend to spend more time in the home caring for their families and their households. Factors in the home such as poor sanitation, leaking roofs, flooding and fire risks increase inhabitants' vulnerability to the disease. Because women spend more time in the home, they are therefore more susceptible to the adverse health outcomes associated with inadequate housing conditions.

Meanwhile, cultural hierarchies or social status often significantly disadvantage women. In urban populations of Bangladesh, healthcare is provided according to an individual's status in a household. Due to women and girls' lower societal position, less money is spent on them for medical treatment.

This study was undertaken to understand present health status of women living in selected slums of Dhaka City; health services provided in slums for women, treatment for various health problems and discuss various remedies regarding these problems influenced by a large number of factors apart from knowledge and awareness. Seventy five married women from Mirpur Bauniya-Bandh slum, Mohammadpur Bashbari slum and Karwan Bazar slum were purposively selected as the study population. Face to face interview techniques of data collection were applied using semi-structured interview schedule.

A. General Information:

Respondents of Bashbari and Bauniya-Bandh were comparatively young in age ranging from 15 to 29 years and 20 to 34 years. In Karwan Bazar slum, age of respondents mostly varied from 30 to 44years. The respondents of all the slums were mostly married. In slum areas generally it is difficult for single women to live without the guardianship of men. Most of them belonged to nuclear family. Joint family generally consisted of nuclear family with one or two dependent members such as mother, mother in law, brother living with them. The number of their family members of two third of the respondents (66%) of Bashbari was in the range of 1 to 4 (they were nuclear family with father mother and children.), whereas in

Karwan Bazar two third respondents had considerably large families consisting 5-9 and above members. In Babuniya-badh, 39% had small families (1-4 members), 34% had 5-6 members and 26% had large families (7-9+). A large portion of the respondents were illiterate among whom some could only write their names. Respondents who completed primary level education were 32% in Bauniya-Bandh, 20% in Bashbari and 12% in Karwan Bazar. A large portion of the respondents living in these slums for a long time; one third of the respondents were residing in these slums for ten to twelve years. Only a few of them moved in these slums recently. Some of them reported that they were born in the slum.

A substantial number of respondents (women) of the study areas were working women who supplemented family income; 70% in Bashbari Slum worked as domestic workers, cook, tea stall owner, and day laborer, in Karwan Bazar 67% working women who sold rice with curry (to the slum dwellers, to the people involved in different types of work in Karwan bazaar), domestic workers, vegetable seller, water business (11% selling water to the fish market and to the large wholesale bazaar area), rice cake seller, tea-betel leaf seller, business of buying and selling discarded goods, selling baskets and garment workers, and in Bauniya-Bandh 40% respondents worked as domestic workers, garment workers, labor, midwife, and as helpers at the Chinese restaurants.

Monthly income of the family varied from taka 2000 to 12000 and above. Monthly income of more than half (56%) of the family in both Bashbari and Karwan Bazar and 26% family of Bauniya-Bandh slums was within the range between taka 4000 to taka 6000. i.e. Tk. 200/-(\$3) and below per family daily. With a family of four members these families were much below MDG goal of \$1 a day.

The majority of the respondents who were involved in various occupations were contributing substantial amount to their family income. Monthly income of 42% respondents in both Bashbari and Bauniya-band and 18% respondent of Karwan Bazar engaged in various income earning activities range from Tk.1000 to Tk.2000. However, 36% respondents of Bashbari earned an income varying from Tk.2000 to Tk.4000 and 67% respondents of Karwan Bazar earned an income ranging from Tk.3000 to Tk.4000.

B. Housing Condition:

In all three slums majority (73%, 88%, and 90 %) of the respondents lived in one room with their whole family. Housing facilities of Karwan Bazaar slum was in deplorable condition. These houses were built on the platform over a ditch. In most cases (72, 89, 94 %) these houses have one entrance. Majority (44, 89, and 93 %) of the rooms have no window. The roofs of the houses mostly made of corrugated tin and in some cases hard board covered with plastic, bamboo or tin and cane. The floor of the rooms is made of bamboo, pieces of

wooden planks and is some cases mud floor. Only positive thing is most of respondents said that they have electricity facilities in the slums.

Most of the respondents lived in the slum in great difficulty in one or two rooms, so their desire for a separate kitchen is beyond their imagination. A large number of them used open space adjacent to house for cooking purpose. Some of them used common kitchen for cooking. The respondents used firewood, gas and rice husk for cooking.

C. Nutrition:

Food Consumption Pattern:

A balanced diet is the combination of food like carbohydrate, protein, fat, vitamin and mineral, which are essential for every human being. But as the economic condition of the slum dwellers is generally poor and sometimes they live from hand to mouth, most of them cannot even think of having balanced diet. Diets of nearly half of the families in Bashbari consist of carbohydrate that is only rice and another 55% mostly eat rice and vegetables. In Karwan Bazar diets of 89% of the families consist of rice with vegetables and only a few can afford fish. In Bauniya-Bandh along with rice and vegetables half of the respondents can afford to have fish. (The slum dwellers catch fish from a water body close to the slum) Most of the families have fish, meat, eggs and milk on weekly, monthly or occasionally and several of them can never afford to have these foods. A substantial amount of family income is spent on food item. In Karwan Bazar slum percentage of family income spent on food item ranged from 33% to 50%, in Bouniya Band it varied from 33% to 100% and in Bashbari it ranged from 50% to 100%.

D. Water-Sanitation & Hygiene:

The respondents from all three slums reported that they used tap water for the purpose of drinking, bathing, toileting, cooking and household needs. However, the platform of the tap or tube well is generally not clean; the slab is always slippery and covered with moss. Most of the respondents reported that they did not boil water for drinking as they cannot afford because of high fuel cost.

The slum dwellers mostly use common latrines. In Bashbari there is too little space to set a toilet and they used hanging latrines and respondents of Karwan Bazar reported that there were seven sanitary latrines side by side in one side of the slum.

Majority of the respondents reported that they used soap to wash their hands after defecation. Most of them also washed before eating and all of them after eating. They washed their hands only with water both before and after eating. Most of the respondents brush their teeth with tooth powder, coal or ash. Most of them regularly wear rubber sandals.

Since Bauniya-Bandh Slum has the service of scavenger's van and most of the respondents there dump garbage into scavenger's van. The respondents of other two slums mostly drop the garbage into the ditch below the platform of the house which definitely creates an unhygienic environment.

E General health information:

The diseases mentioned by all three slum dwellers were headache, fever, cough and cold, intestinal diseases such as diarrhea, dysentery, worm (intestinal parasite), gastric/ulcer, skin diseases including eczema, toothache, high or low blood pressure, jaundice, diabetes and anemia. Other health problems mentioned are gynecological problem, asthma, work related health hazard, tuberculosis, gout, etc. A major portion of slum women suffered from gastric/ulcer. As the slum people live from hand to mouth, these women sometimes cannot even eat three times a day. For irregularity in eating, for eating excessive spicy food and stale food, respondents suffered from gastric/ ulcer problem.

Due to financial constraints, most of them do not go for medical help. Only some time when they cannot get relief with home remedy they go to the doctors. A number of respondents mentioned that they go for traditional medicine such as Kabiraji. However, the slum dwellers were conscious of modern medicines. Most of them go for allopathic treatment when they avail services of herbal medical doctors, NGO clinics and government hospitals. Only a few can afford services of private hospitals. There were also health visitors who visited the slums to provide health care services. The respondent mentioned that as their monthly income was not enough to run the family so it is hard for the family to spend money for health care. In spite of limited income the families spend around Tk. 500/- per month on medical expenses.

F. Reproductive health information:

The respondents in general have limited number of children, mostly one to four. Most of them go to health centers during pregnancy or avail services of health visitors for pre-natal care and also receive necessary vaccination.

The respondents informed that they were aware of Family Planning method and they practiced different FP methods for controlling child birth and were conscious of the positive effect of the FP methods. In most cases wives were users of FP methods. Several respondents who adopted some Family Planning methods faced some physical problems, such as feeling dizziness, irregular period, excessive bleeding, headache, aching arm, legs and stomach, loss of weight, low vision, obesity, back pain, weakness etc. Majority of them did not take any measure due to side effect of adopting Family Planning method; some respondents mentioned that they stopped using the method temporarily and took medicine and others use alternative methods.

G. Recommendations from the respondents to improve the quality of health service of slum area:

The respondents recommended following steps to improve the quality of health service of their area:

- Hospital and more health care centers should be established in the locality.
- Environment of health care center should be more healthy and hygienic.
- Medicine should be provided free of cost
- Door to door health services should be provided in the slum areas by government and non govrnment organization.
- Quality of health services should be improved.
- Doctors and health service providers' behavior needed to be more cordial.
- · Reducing price of medicine so that slum people could afford it.
- Quality of sanitation facilities to be improved.
- Distribution of iron tablet, and vitamin tablets by the Government in the locality was needed.
- Government and non-government organization should work in increasing awareness on different health issues.
- MCH doctors and health workers should take proper care of the pregnant women and new born babies and spread adequate knowledge and information to the respondents.
- Female doctors are needed to be appointed in the maternal child health centers.
- There should be regular spray to control mosquito and proper garbage cleaning facility by City Corporation.

CHAPTER: ONE

1.1 INTRODUCTION:

Since the beginning of civilization human being started to live in large numbers in close proximity to each other which were called cities. Those city dwellers like now needed water, food and other essential provisions for leading safe and secure life. They face more health challenges now due to pressure and density of population. This is more so in the urban slums which is our subject of study. As most of the urban slum dwellers live in tropical countries, their health is also threatened by a variety of tropical diseases influenced by social and environmental determinants. Health equity can only be achieved by "leveling up" living conditions for the poor, and by reducing differential exposure and vulnerabilities among different groups in society.

It is clear that female slum dwellers have extremely limited opportunities for a decent lifestyle: they lack the foundation for healthy and fulfilling lives, and at the same time carry immense responsibilities for maintaining their homes and families. Global poverty is, in itself, a severe issue, and slum dwellers are undoubtedly particularly vulnerable to adverse social and medical outcomes. Currently, when women's issues are central, it is worth being aware of how far the struggle has to go – particularly in the developing world.

This study will help us to understand health status of women living in slums of Dhaka City; health services provided in slums for women, treatment seeking behavior for various health problems and discuss various remedies regarding these problems influenced by a large number of factors apart from knowledge and awareness.

1.2 LITERATURE REVIEW:

UN-Habitat defines slum conditions as a living environment with non-durable structures, insecure tenure, lack of water, lack of sanitation, and overcrowding. One billion people (32 percent of the global urban population) live in urban slums. The UN predicts that, failing a major intervention, this total is set to double in a little over 30 years. Women, children, and widows are the most vulnerable groups among the urban poor. Women are also particularly vulnerable to gender violence during slum clearances and other forms of social upheaval.

Slums have been defined by Mr Salahuddin and Ms Ishrat (1992), as a densely populated temporary residential house built lawfully or unlawfully having no water supply, sanitation facilities or electricity supply. Most of these are one-roomed dwellings and extremely over-crowded. The World Bank, in a survey report that was conducted in collaboration with the Housing and Settlement Directorate, Government of Bangladesh (GoB) and Centre for Urban Studies, defined a slum as a residential area where more than three hundred people

live in one acre (0.405 hectors) of land. An average of more than three adults live in a single room. 46 per cent of these houses are one-roomed and the average size is 120 square feet. Ventilation, drinking water, electricity and sewerage facilities are absent in these houses. (Source: 'Dhakar Paribesh', Gias Siddique, page- 47)

Cultural norms dictate that women in urban slums tend to spend more time in the home caring for their families and their households. Factors in the home such as poor sanitation, leaking roofs and increased flooding and fire risks increase inhabitants' vulnerability to the spread of disease. Because they spend more time in the home, women are therefore more susceptible to the adverse health outcomes associated with inadequate housing conditions.

Meanwhile, cultural hierarchies or social status often significantly disadvantage women. In urban populations of Bangladesh, healthcare is provided according to an individual's status in a household. Due to women and girls' lower societal position, less money is spent on them for medical treatment. The impact of this has been demonstrated to a devastating effect in the various Bangladeshi cholera epidemics. Women are not taken to hospital until the disease is far advanced. Due to this factor fatalities among females have been seen to be three times higher than males.

In Bangladesh with urban population growth, the number of slums and the people who dwell in them are rapidly increasing. An estimated 3.4 million people live in some 5000 slums of its capital city, Dhaka. Dhaka is now experiencing a period of enormous population growth and migrations from villages that live in the slums are mainly responsible for this high growth rate. At least 50 % of the urban population of Dhaka will be living in slums. (Barkat et al.), 1996 Bangladesh's high rate of growth of slums and population living in slums has serious economic, social, and public health consequences. Although the government has a structured health and family planning service delivery system for the rural poor, it does not have any comparable infrastructure for the urban poor. Non-governmental organizations (NGOs) are the primary service providers for the urban poor population. However, some studies report that "NGO services are often selective, less than optimum, and their coverage is incomplete". Gross health inequity exists in cities, especially in Dhaka city which is overburdened with over 14 million people including 4 million slum dwellers. These people are struggling to access basic health services like safe water and sanitation. Global climate change has further highlighted the importance of health equity because the poor dwellers from both rural and urban areas have been projected to be the most vulnerable to the health hazards of global warming. Climate change will exacerbate the already prevailing poverty and inequity. Slum populations, which are increasing at an alarming rate in Bangladesh mainly due to rural-urban migration, are often neglected and characterized by poverty, poor housing, overcrowding, poor environment, and high prevalence of communicable diseases. Unfortunately, studies comparisons between women living in slums and those not living in slums are very limited in Bangladesh.

The Ministry of Health and Family Welfare itself admits that the health indicators for the urban poor are worse than those of the rural poor due to the unavailability of urban primary health care (PHC) and poor living conditions¹. This is because the healthcare services in the city are generally meant for those who can afford it. Moreover, the sanitary system, hygiene habits and awareness of communicable or non-communicable diseases are very low among the slum dwellers. When availed, the poor population more often fails to use health services effectively for lack of knowledge and education. Their earnings are so low that they can only spend a negligible amount for it.

A study conducted by Mookherji, S. And Bishai, D., titled "The Demand for Health Care Among Urban Slum Residents in Dhaka, Bangladesh"; Paper presented at the annual meeting of the Economics of Population Health: Inaugural Conference of the American Society of Health Economists, TBA, Madison in 2006. The study concludes that urban health systems in Bangladesh must work to improve access to care by the poor. Among other things, they should address the curative care needs of adult income-earners as well as those of women and children, and investigate occupation-based health care targeting for urban slum residents. Evidence from this study also indicates that the urban poor view health care as an investment in future productivity; as such, urban health policy should view pre-paid financing schemes as a feasible strategy for protecting the urban poor from the financial burden of illness.

Another study on "Socio-economic factors explain differences in public health-related variables among women in Bangladesh: A cross-sectional study", conducted by Md Mobarak H Khan and Alexander Kraemer, Published in 23 July 2008. The result of this study indicated that a significantly higher percent of women living in slums came from country side, had a poorer status by household characteristics, had less access to mass media, and had less education than women not living in slums.

A report published on the daily news paper The Daily Star entitled "SLUMS IN DHAKA CITY: Life of Misery" by Md. Rubel. From this report it is also clear that female slum dwellers have extremely limited opportunities for a decent lifestyle: they lack a foundation for healthy and fulfilling lives, and at the same time carry immense responsibilities.

Another study conducted by Divisions of Infectious Disease and Epidemiology, School of Public Health, University of California, Berkeley, California, USA on "Slum health: Diseases of neglected populations", Published in 7 March 2007. This study found that continued neglect of ever-expanding urban slum populations in the world could inevitably lead to greater expenditure and diversion of health care resources to the management of end-stage complications of diseases that are preventable. A new approach to health assessment and characterization of social-cluster determinants of health in urban slums is urgently needed.

From the findings of these studies, it is clear that the condition of health problems among women living in slums is severe.

1.3 OBJECTIVES OF THE STUDY:

The general objective of the study is to know about the present heath status of women living in sums of Dhaka City.

More specifically the objectives of the study are to:

- 1. Identify overall health problems of women living in slums of Dhaka City.
- 2. Find out the causes behind these health problems of women.
- 3. Determine the influence of socio economic background of the women living in slums on their health.
- 4. Identify health awareness of women living in slums of Dhaka City.
- Assess/ evaluate the health care services available for women in selected slums.
- 6. Find out the way to improve health situation for women living in slum.

1.4 Rationale of the study:

With the increase of people living in Dhaka city, the impact of urban living on human health is now a growing concern. The rapid growth of slum populations in Bangladesh is an increasing challenge for local health authorities and deserves intensive investigations. Slums have often been conceptualized as areas of concentrated poverty, which comprise a social cluster that engenders a distinct set of health problems. So, it is the utmost importance to ensure health services for these growing numbers of city dwellers, especially the poor. This neglected population of slum has become a major reservoir for a wide spectrum of health conditions that the formal health sector must deal with.

People residing in slums face many problems like improper sanitation, unhygienic environmental conditions, social, economic, health, educational and cultural problems and many more. The basic problems inherent in slums are health hazards. Lack of basic amenities like safe drinking water, proper housing, drainage, and sheet disposal services; make slum population vulnerable to infections.

Poor sanitary conditions and poor quality of water lead to illnesses like diarrhoea and other water borne diseases, affecting the life expectancy of slum dwellers. In dense, overcrowded urban conditions it is often difficult for people to find space to build latrines. Many have to defecate in the open or share whatever limited facilities are available which tend to offer no privacy, safety or hygiene.

Human waste and refuse deposited in stagnant pools spread disease and contaminates water sources. This problem is made worse during the rainy season when rubbish and excrement are washed into cramped living areas. In these conditions it is virtually impossible to remain healthy and clean. Diseases spread rapidly among the crowded conditions and the little money that slum dwellers earn often has to be spent on medicines.

The physical environment also causes problems. There is a serious shortage of knowledge about basic hygienic condition, such as garbage collection, and as a result surrounding areas become polluted with garbage. Drains are not covered or kept clear, and so stagnant water collects, forming a breeding ground for mosquitoes and increasing the danger of malaria and dengue fever. Lack of sufficient or sanitary toilet facilities heighten the risk of diseases such as diarrhoea, dysentery, typhoid or cholera that are spread through contaminated food and water. The cramped conditions of the slums, number of people per home and close proximity to others enables disease to spread rapidly, whether by air, water, food or from person to person.

Slum conditions pose many dangers to the inhabitants' health. Lack of education means that people are unaware of the health problems caused by unhealthy conditions, and do not know how to prevent the spread of disease. Poverty means that food is often scarce or lacking in nutrients and a high proportion of women are malnourished. Very few women receive vaccinations and so diseases which have been almost eradicated elsewhere can become fatal to them. When health problem becomes apparent, people are often reluctant to seek medical help due to the costs involved. They can be misled by the advice offered by local "quacks" - people who pose as doctors but have no medical training. Their incorrect diagnoses and unsuitable medication pose more damage than the patients' illnesses themselves.

The slum women are marginalized due to the difficulty of accessing healthcare services and information. They do not have access to public health services and private health care service is very expensive.

1.5 Definition of the terms used:

Slum:

A slum is a densely populated urban area which is characterized by a generally low standard of living.

The slums have been defined as a run-down area of a city characterized by substandard housing and squalor a densely populated temporary residential house built lawfully or unlawfully having no water supply, sanitation facilities or electricity supply. Most of these are one-roomed dwellings and extremely over-crowded defined by the *United Nations agency UN-HABITAT*. The World Bank, in a survey report that was conducted in collaboration with the Housing and Settlement Directorate, Government of Bangladesh and Centre for Urban Studies, defined a slum as a residential area where more than three hundred people live in one acre (0.405 hectors) of land. An average of more than three adults lives in a single room. 46 percent of these houses are one-roomed and the average size is 120 square feet. Ventilation, drinking water, electricity and sewerage facilities are absent in these houses.

Slums can be divided into three groups

- 1. Unauthorized occupation of government or semi-government lands
- 2. Living in thatched houses made of papers, polythene, tin etc, built on unauthorized vacant land near railway lines or on the footpath or by side of the main roads.
- 3. Living in unauthorised private lands.

Again in a study by the Centre for Urban Studies et al. 2006, slums were defined as residential areas characterized by the following conditions:

- 1. Predominantly poor housing
- 2. Very high population density and room crowding
- 3. Very poor environmental services, particularly water and sanitation facilities
- 4. Very low socioeconomic status for the majority of residents
- 5. Lack of security of tenure

At present 1.5 million people live in slums within two or two and half miles radius of the city. The living conditions of these slums are inhuman. There are no water supplies for drinking, bathing or cooking. Most of the dwellers have to spend daily Tk.10-15 on average for buying water, which is unaffordable for many. Apart from this, there are few sanitation facilities. In the majority of slums, up to 20 - 100 families use one toilet and only on payment. The slum dwellers are also deprived of primary health care facilities. There is no medical centre for them. The child death rate is unusually high, more than 15 per cent. Most of the children suffer from malnutrition.

1.6 Methodology

1.6.1 Sample size and Sampling Technique: Among the slums of Dhaka City as

representative sample Mirpur Bauniya-Bandh slum, Mohammadpur Bashbari slum and Karwan Bazar slum were selected as the study area purposively for their extensive size and

mass identity in Dhaka City.

1.6.2 Study Population: The study Population consisted of the slum dwellers of Dhaka city.

78 married women from each slum were selected as sample as per their availability to

collect data.

1.6.3 Data collection technique: The study was conducted on urban slum women to know

about their knowledge regarding health issues, existing services and to identify necessary steps to ensure women's good health. Face to face interview techniques of data collection

were applied using semi-structured interview schedule.

1.6.4 Data Processing:

To analyze the data, collected information was classified in the light of objectives set forth for

the study. The classified data was coded, tabulated and percent calculated for the same. The results were presented and discussed along with tables and graphs in numbers and

percentages.

1.6.5 Period of study: June-September, 2010

1.6.6 Limitations of the study:

As resources and manpower allocated for the proposed survey was very limited, the

data collection was limited only within 234 respondents of slum dwellers of Dhaka city.

Some respondents were reluctant to answer the question regarding their health issues.

7

CHAPTER: TWO

DATA ANALYSIS AND FINDINGS:

Karwan Bazar Slum

A. General Information:

Table 2.1: Age of the Respondents

SI	Age Range	Frequency	Percentage
			%
1	15-19	01	1
2	20-24	07	10
3	25-29	05	7
4	30-34	17	25
5	35-39	17	25
6	40-44	10	15
7	45-49	06	9
8	50-54	04	8
	Total	67	100

Analysis:

Table 2.1 shows that respondents were mostly (65%) within the age group of 30 to 44 years.

Table 2.2: Marital Status

SI	Marital Status	Frequency	Percentage %
1	Married	54	81
2	Widow	06	9
3	Separated	01	1
4	Deserted	06	9
	Total	67	100

Table 2.2 shows that majorities (81%) of the respondents were married and only nine percent were widows. This study came across with a few respondents (9%) who had been deserted by their husbands and separated (1%). This is interesting in the sense that normally in lower income group divorce or deserting is common phenomena everywhere in Bangladesh. In this context very negligible number of persons in these groups gives a different trend in this slum. Since it is difficult for single women to stay all by her self in a slum, only 13 out of 67 were found in these slums.

Table 2.3: Types of family

SI	Types of family	Frequency	Percentage
			%
1	Nuclear	55	82
2	Joint	12	18
	Total	67	100

Analysis:

Table 2.3 shows that majority (82%) of the respondents belongs from nuclear family and the rest of the participants were from joint family. These joint families include one or two members such as their uncle or mother-in-law or father-in-law or friends living with them,

Table 2.4: Number of family member

SI	Number of family member	Frequency	Percentage
			%
1	1-2	05	8
2	3-4	21	31
3	5-6	23	34
4	7-8	15	22
5	9 and above	03	5
	Total	67	100

Table 2.4 shows that around two third respondents have considerably large families consisting 5-9 and above members, 39% respondents have small family having 1 to 4 members.

Table 2.5: Educational Qualification

SI	Educational Qualification	Frequency	Percentage
			%
1	Illiterate	39	58
2	Can write name	18	27
3	Primary	08	12
4	Lower secondary	02	3
	Total	67	100

Analysis:

This study found that among the respondents 85% are illiterate among whom 27% can only write their name. Among rest of the respondents 12% have completed primary level of education and three percent have completed lower secondary level. In comparison to national adult female literacy rate (49.8%) the literacy rate of this slum is very low.

Table 2.6: Duration of living in this slum

SI	Duration of living in this slum (In year)	Frequency	Percentage
			%
1	Below 1 year	07	11
2	1-3	12	18
3	4-6	16	24
4	7-9	10	15
5	10-12	05	7
6	12 and above	17	25
	Total	67	100

One fourth of the respondents were living in these slums for as long as twelve years and above. Another 22% was residing in this slum for 7 to 12 years and 24% were residents of this slum for 4 to 6 years. Only seven respondents have lived there below 1 year.

Table 2.7: Occupation of the respondents

SI	Occupation	Frequency	Percentage
			%
1	Food business	11	16
2	House wife/Home maker	22	33
3	Water Business	07	11
4	Vegetable seller	08	12
5	Domestic worker	10	15
6	Others	09	13
	Total	67	100

Analysis:

Table 2.7 shows that one third of the respondents (33%) are home maker. As Karwan bazaar slum is adjustment to Karwan bazaar market so women involved in jobs related to such kind of work which is available in the market places. Among those who are working 16% of them are involved in food business. These women sell cooked rice with curry to the slum dwellers, to the people involved in different types of work in Karwan bazaar. These are followed by domestic work (15%), vegetable selling (12%), water business (11% selling water to the fish market and to the broad kacha bazaar area) and the other (13%) options include the occupation rice cake seller, tea-betel leaf seller, Vangari business, basket seller and garment workers.

Table 2.8: Monthly Income (approximate) of the family

SI	Monthly income of the family (In taka)	Frequency	Percentage %
1	2001-4000	05	9
2	4001-6000	32	56
3	6001-8000	04	7
4	8001-10000	06	10
5	10001-12000	05	9
6	12000 and above	05	9
7	No information (N/A)	10	
	Total	67	100

Analysis:

It is a joint effort of all the family members in their struggle for existence. These family members' earnings play an important role in running day to day life of the slum dwellers. Monthly income of the family varied from taka 2001 to 12000 and above. Monthly income of more than half (56%) of the family was within the range between taka 4001 to taka 6000, Nine percent family earned between 2001 to 4000 taka, following that seven percent earned

between taka 6001 to 8000 and ten percent have income range between taka 8001 to 10000. These income ranges reflect the poor earning condition of the family. Only 18% of the family earned from taka 10001 to above.

Table 2.9: Monthly Income (approximate) of the respondent

SI	Monthly income of the respondent (In taka)	Frequency	Percentage
			%
1	1001-2000	07	15
2	2001-3000	08	18
3	3001-4000	16	36
4	4001 and above	14	31
5	Not Applicable	22	
	Total	67	100

Analysis:

Monthly income of the respondent varied from taka 1001 to 4000 and above. Monthly income of more than two third (67%) of the respondent was within the range between taka 3001 to taka 4000 and above, 18% respondents had income range from taka 1001 to taka 2000 and 15% are in the income group of taka up to 1000. This shows that majority of the respondents who are involved in various occupations are contributing substantial amount of his family income.

B. Housing Condition:

Table 2.10: Description of the

S	Number	Frequenc	Percentag	SI		Number of	Frequ	enc	Percentag
ı	of room	у	е			window	у		е
			%						%
1	One	60	90	1		One	04		6
2	Two	06	9	2		Two	01		1
3	Three	01	1	3		No window	62		93
	Total	67	100			Total	67	,	100
S	Number	Frequenc	y Percenta	ag	SI	Electricit	Frequen	С	Percentage
ı	of door	-	е			у	y		%
			%						
1	One	63	94		1	Yes	62		93
2	Two	04	6		2	No	05		7
	Total	67	100			Total	67		100
S	Roof of	Frequenc	y Percenta	ag		Types of	Frequen	c	Percentage
I	the room	•	e			floor	y y		%
1	I.	1	I					l l	

			%			
1	Tin and	2	3	Grubby	17	26
	Cane					
2	Tin	38	59	Brick built	05	8
3	Hard	24	38	Wooden	42	66
	board					
	covered					
	with					
	plastic					
4	No	3		No	03	
	informatio			informatio		
	n			n		
	Total	67	100	Total	67	100
	i Otai	07	100	Total	07	100

Housing facilities of Karwan Bazar slum is in deplorable condition. These houses are built on the platform over a ditch. In Karwan bazaar slum 90% families live in one room houses. Only 10% families have two to three rooms each.

Most rooms of the slum have only one door (94%). While 93% respondent mentioned that there was no window in their small room which is unhealthy for the people living in those rooms.

While talking about roof 59% respondents said that the roof of their room was made of tin, following that 38% mentioned that the roof was made of hard board covered with plastic. Only three percent respondent said that their roofs of the rooms was made of tin and cane.

According to 92% respondents floor of the rooms were made of coarse wooden planks and grubby. Only 8% of the floors are built with brick.

Only positive things was that among the slum dwellers 93% said that they have electricity facilities in the slums but seven percent replied negatively.

Table 2.11: Place for cooking

SI	Place of cooking		Frequency	Percentage %
1	Open place along with the house		59	88
2	In room		03	5
3	Others		05	7
		Total	67	100

As the Karwan bazaar slum is a densely populated area and the living condition of the slum dwellers is very poor. They have to live in the slum in great difficulty in one or two rooms, so the desire for a separate kitchen is beyond their imagination. More than three fourth (88%) respondents said that they used open place along with their house for cooking purposes. Five percent (5%) of them cooked inside their room. Only seven percent used some other place for cooking.

Table 2.12: fuel for cooking

SI	fuel for cooking	Frequency	Percentage %
1	Firewood	38	57
2	Husk	16	24
3	Wood	10	15
4	Gas	2	3
5	Kerosene	1	1
	Total	67	100

Analysis:

Table 2.12 reveals that more than half (57%) of the respondents use firewood for cooking, 24% use husk and 15% use wood in this purpose. Only 3% respondent use gas which is cylinder gas and 1% use kerosene for cooking.

C. Nutrition:

Table 2.13: Food Chart

SI	Food Chart	Da	ily	Wee	ekly	Mor	thly	Special Occasion		Never		No info
		N	%	N	%	N	%	N	%	N	%	
1	Rice	67	100									
2	Vegetables	58	89	07	11							02
3	Fish	39	59	26	39	01	2					01
4	Meat			39	58	14	21	12	18	02	3	
5	Milk	04	5	27	40	05	8	05	8	26	39	
6	Egg	14	21	44	66	02	ფ	02	3	05	7	
7	Bread	80	12	18	27	04	6	01	2	35	53	01
8	Others	-	1	ı	-	1	ı	-	ı	-	-	-

A balanced diet is combination of food like carbohydrate, protein, fat, vitamin and mineral, which is essential for every human being. But as the living condition of the slum dwellers is very poor and sometimes they live from hand to mouth; they cannot even think of having a balanced diet. The study found that, all the respondent eat rice daily, following that 89% eat vegetable daily and 11% eat vegetable in weekly basis. Among the respondents 59% eat fish daily, 39% eat fish weekly and only 2% eat monthly. In response to another protein item meat more than half (58%) respondent said they used to have meat on weekly basis, while monthly 21%, on special occasion and 3% mentioned that they never eat meat even for a single day as because of their poor financial condition. In response to having milk the responses were daily (5%), weekly (40%), monthly (8%), on special occasion (8%) and more than one third (39%) of the respondent never have milk. The table reveals that 21% of the respondents eat egg daily, while two third of them eat egg on weekly basis. The other responses are monthly (3%), on special occasion (3%) and never (7%). In response to having bread more than half (53%) of the respondent said that they never ate bread as meal. The other responses are daily (12%), weekly (27%), monthly (6%) and on special occasion (2%). These shows that daily diet of 11% respondent is only rice and diet of 89% of the families consist of rice with vegetables and 59% can afford to have fish. However, they can afford other food items such as meat, egg, milk occasionally: weekly, monthly or on special occasions and several of them can never afford to have these foods.

Table 2.14: Monthly Expenditure (Approximate) for food

SI	Monthly Expenditure for food (In taka)	Frequency	Percentage
			%
1	1001-2000	7	11
2	2001-3000	16	25
3	3001-4000	6	9
4	4001 and above	35	55
5	No information	3	
	Total	67	100

Analysis:

Table 2.14 shows that, more than half of the respondents (55%) expend more than 4000 taka monthly for food, one fourth of the respondents expend within the range of taka 2001 to 3000 for in this purpose, 11% expend 10001 to 2000 taka and only 9% the respondents expend 3001 to 4000 taka for food purpose.

Table 2.15: Source of Food

SI	Source of Food	Frequency	Percentage
			%
1	Cook herself	64	95
4	Others	03	5
	Total	67	100

Table 2.15 reveals most of the respondents (95%) cook herself and only 5% respondents collect their food from other sources.

D. Water-Sanitation & Hygiene:

Inadequate access to safe water and sanitation leads millions of our people to various health problems. Water and vector born diseases like diarrhoea, dysentery, typhoid, worm infestation and polio, malaria, hepatitis A and E are too common in the country. WHO states that one tenth of the global disease burden is preventable by improving water supply, sanitation, hygiene and management of water resource. Prompt action is required to ensure that these are implemented properly and sustained especially to protect our children.

Picture of sanitation is worse in slums and rural Bangladesh is worse where there are ignorance, poverty, too little space to set a toilet, traditional practice of open defecation, the use of hanging latrines, and lack of knowledge about hand washing which pose a serious threat to health.

Source of Water:

All the people of Karwan Bazar slum mentioned that they use tap water supplied by Dhaka municipality for the purpose of drinking, bathing, toileting, cooking and household needs. The condition of the place of water supply is not clean; in the bathroom there is a small slab which stands in an open place and widely used for the purpose of bathing and daily household work and this place is visible from the road. Both men and women use it. The condition of bathroom is very unhygienic. The slab is always slippery and covered with moss. This place is also used for the purpose of cooking and washing things. So the place is always full of refuses vegetables and other garbage.

Table 2.16: Practices of boiling drinking water

SI	Response	Frequency	Percentage
			%
1	Yes	03	4
2	No	64	96
	Total	67	100

The slum dwellers preserve drinking water from supply water in pitchers (*Patil*) or any kind of pots. Table 2.16 indicates most of the respondents (96%) answered negatively in case of boiling drinking water; they do not boil water for drinking. Only 4% respondents boil water to drink.

The respondents who do not boil water they said that, as fuel for cooking is expensive so they think that boiling water for drinking is extravagance to them. They also are not aware of the importance of pure drinking water.

Table 2.17: Practice of washing hand before and after eating

SI	Response	before eating			after eating		
		N	%		N	%	
1	Yes	51	76		67	100	
2	No	16	24		04	06	
	Total	67	100		67	100	

Analysis:

This table indicates that more than three fourth (76%) respondents replied positively about washing their hands before eating and all the respondents washed their hands after eating. On the other hand, nearly one fourth (24%) of the respondents did not wash their hand before eating.

Table 2.18: If "yes" then material use to wash hand

SI	Response	Before			After		
		N	%		N	%	
1	Soap	24	47		11	17	
2	Only water	25	49		52	83	
3	Ash	2	4		-	-	
4	No information	-	-		-	-	
	Total	51	100		63	100	

Analysis:

This table reveals that, 47% respondents use soap to wash hands before eating and only 17% use soap after eating. Almost half of the respondents (49%) use only water to wash before eating and most of the respondents (83%) wash their hands by using only water. Only 4% respondents wash their hands by using ash before eating.

Table 2.19: Types of latrine

SI	Types of latrine	Frequency	Percentage
			%
1	Hygienic	66	99
2	Non-hygienic	01	1
	Total	67	100

As there is always high density of population in the slum areas and for being poor, living condition of the slum dweller is generally unhealthy. For a large number of slum dwellers there is limited number of latrine. In Karwan Bazaar slum there are seven sanitary latrines side by side in one side of the slum. Table 16 shows that 99% of the respondent said that latrines of this slum are hygienic, only one percent mentioned as unhygienic.

Table 2.20: Materials to wash hand after urinate/ defecating

SI	Name of materials	Frequency	Percentage
			%
1	Soap	39	57
2	Ash	25	36
3	Do not wash hand	05	7
	Total	69	100

^{*}Multiple Responses

Analysis:

Table 2.20 shows that more than half of the respondents (57%) mentioned that they use soap to wash hand after urinating/ defecation. Ash is used by 36% of the respondents. Only seven percent said that they do not wash hand after urinating/ defecation.

Table 2.21: Methods of cleaning latrine

SI	Process of cleaning latrine	Frequency	Percentage
			%
1	with water	22	33
2	hire cleaner	28	42
3	with bleaching powder	11	16
4	No system for cleaning	06	9
	Total	67	100

Analysis:

Table 2.21 shows that nearly half (50%) of the respondents of this slum mentioned that they hire cleaner to clean the toilets. The people of this slum appoint a person once week who clean the toilet with harpic (toilet cleaner) and water. Following that 33% of the respondents said that they wash their latrine only with water whenever they use it. 16% respondents clean sometime with bleaching powder and nine percent mentioned that there was no system to clean the latrines.

Table 2.22: Practices about using Sandal

SI	Responses	Frequency	Percentage
			%
1	Yes	60	90
2	No	07	10
	Total	67	100

Table 2.22 shows that in most 90% cases the interviewed families responded positively to have practices about using sandal.

Table 2.23: Brushing Materials

SI	Name of Materials	Frequency	Percentage (%)
1	Coal	23	34
2	Tooth powder	26	39
3	Ash	08	12
4	Tooth paste	08	12
5	Others	02	3
	Total	67	100

Analysis:

Table 2.23 shows that 39% of the respondents mentioned that they use tooth powder to brush teeth, following that 34% of them use charcoal. 12% respondents use ash to clean their teeth. It is an interesting finding that only 12% slum dwellers use toothpaste as brushing materials. The rest three percent said that they use brushing materials according to availability.

Table 2.24: Place for dumping garbage

SI	Place for garbage	Frequency	Percentage
			%
1	Ditch	37	56
2	Beside the rail line	03	4
3	Throw into the mail train	07	11
4	In a specific place on the road	02	3
5	Drain	09	13
6	Dustbin	09	13
	Total	67	100

Analysis:

Table 2.24 shows that more than half (56%) of the respondents dumped garbage into ditches on which the slums are built. An interesting finding was that 11% respondents throw their garbage into the mail train as it passes through the slum; it is because the Karwan bazaar slum is situated beside a rail line. Rest of the respondents mentioned that they dump garbage in drain (13%), dustbin (13%), beside the rail line (4%) and only 3% respondent dumped garbage in a specific place on the road side.

E. Health Related Information:

i) General health information:

Table 2.25: Common Diseases suffered by the respondents

SI	Name of the diseases	F	Causes of Diseases	Types of treatment
1	Fever, Cough and cold	56	Season ChangeDrenched in RainWork pressure	Bring medicine from pharmacy Take medicine from prescribed doctor of the nearest hospital
2	Headache	35	Excessive tensionExcessive heatSleeping problemWork pressure	 Take medicine Use ointment (like vix, nix) Take rest Medicated band-aid Do not take medicine
3	Toothache	35	Brush irregularlyDental carriagePyorrhea	 Take medicine occasionally Extract tooth Mouthwash with boiled salted water Do not take medicine
4	Skin Disease	14	 Excessive heat For carrying pitcher full of water continuously in one side Lack of awareness about cleanliness 	 Take medicine Use lime(CHUN) Do not take medicine
5	Gastric/ Ulcer	34	 Irregularity in taking food For taking excessive spicy food 	Take medicine irregularly
6	A Maggot/ Worm (An intestinal parasite)	10	Lack of awareness about transmission of worm through skin while walking bare foot.	Take homeopathyTake Allopathic medicineDo not take medicine
7	Blood Pressure	10	For excessive tension	Take medicine
8	Diarrhoea	10	For eating stale food	 Take orsaline Take rice with scum Take medicine from prescribed doctor of the nearest hospital
9	Jaundice	08	 Irregularity in taking food Excessive work load Take unhygienic food Lack of fresh drinking water They do not know 	 Take medicine Kabiraji treatment Sometimes they do not receive treatment
10	Gout	04		Take medicineJhar phookHaat jhara dei
11	Dysentery	03	Take unhygienic food	Take medicine

			•	Lack of fresh drinking water		
12	Diabetes	01	•	For taking sweets	•	No ability to take treatment
13	Anemia	01			•	Take rest
14	Tuberculosis	01				

The respondents reported that generally they suffer from Intestinal infections such as Diarrhea, Dysentery, and Intestinal parasite. Other diseases mentioned are Headache, Fever, Cough and cold, Gastric/ Ulcer, Blood Pressure Jaundice, Diabetes, Anemia, Skin Disease, Toothache etc. The table shows that in some cases they have some idea about the causes of the diseases, but in most cases they are not aware of real causes of diseases. Most of the respondents reported that they go for modern medical assistance. Some of them also use traditional medicine such as such as Kabiraji, homeopathy etc.

The most common diseases mentioned by the slum dwellers from which they suffered from are headache, skin diseases, A Maggot/ Worm (An intestinal parasite), Fever, Cough and cold, Gastric/ Ulcer, Blood Pressure, Toothache, Diarrhoea, Jaundice, Diabetes, Dysentery, Anemia, Tuberculosis and Gout.

In most cases the slum dwellers lack knowledge about disease and symptoms of disease. In case of diseases like Fever, Cough and cold, Gastric/ Ulcer, Blood Pressure, Diabetes, Diarrhoea and Dysentery the respondents can specify the exact causes. Such as they know that season change, drenching in rain etc are the causes of fever, as well as gastric/ulcer is the cause of irregularity in taking food. Regardless of the initial water quality, widespread unhygienic practices during water collection and storage, poor hand washing and limited access to sanitation facilities mean that in slum areas, spread of diarrhoea-causing germs by taking stale and unhygienic food is very common. Although diarrhoea is easily treated by rehydration methods, people do not always have the knowledge to deal with it in this way. In case of diarrhea, dysentery the respondents know that these are caused for taking unhygienic food, but they do not know exactly that these disease are the result of viral or bacterial infection. The respondents are not that much aware of having treatment. The study found that either the respondents take medicine from prescribed doctor of nearest hospital, NGO clinic or from the nearest pharmacy. In case of headache some respondents said that they do not take medicine, respondents suffered from gastric take medicine irregularly and in case of diabetes respondents said that they have no ability to take treatment.

The study found that in case of some diseases the slum women do not even know about the causes. They thought that skin diseases such as eczema are a normal skin condition due to excessive heat.

They mentioned another disease toothache, which is the cause of dental decay, pyorrhea and brushing irregularly. But they do not know that dental decay and pyorrhea itself is a disease and toothache is caused for that. Sometimes they use their general knowledge to cure from the disease. Such as: they use mouthwash with boiled salted water to get relief from toothache. Otherwise they take medicine. So, it can be said that they are not much acquainted with knowledge about diseases, their causes and its prevention.

In case of some severe diseases like tuberculosis, anemia, the slum women don't even know the cause and their proper treatment.

Open sewers are just one of the unsanitary aspects of slum conditions, and these cause serious problems by contaminating water. In addition to dysentery, cholera and other preventable diseases, the water contains parasites such as hookworm, whipworm and roundworm that infect the slum dwellers and children in particular. The slum dwellers know about maggot/worm, but they thought that this is only because of not using sandal. But they do not know the actual cause. They take homeopathy or allopathic medicine as prevention. Some of them do not even take medicine.

Table 2.26: Knowledge about Health care Center

SI	Responses	Frequency	Percentage %
1	Yes	14	21
2	No	45	68
3	Don't Know	07	11
4	No information	01	-
	Total	67	100

Analysis:

Table 2.26 shows the dwellers of this slum is not that much conscious about the existence of health care center. More than two third (68%) of the respondents said that there were no health care center in their area. On the contrary nearly one fourth (21%) of them said there was health care center in the locality, and only 11% had no idea about the existence of health center.

Table 2.27: Types of health care center

SI	Types of health Center	Frequency	Percentage %
1	Government hospital	01	7
2	Private hospital	04	29
3	NGO Clinic	08	57
4	Others	01	7
	Total	14	100

Analysis:

Table 2.27 reveals that, more than half of the respondents (57%) mentioned about existence of NGO clinic from where they receive treatment. more than one fourth (29%) mentioned about private hospital, and only 7% of the respondents said that they receive treatment from

government hospitals. The rest of the respondent (7%) said that health workers come at home to give advice. As such they do not go to any health centre for health services.

Table 2.28: Response about receiving treatment for sickness

SI	Response	Frequency	Percentage
	_		%
1	Always	15	23
2	Sometimes	49	74
3	Never	02	3
4	No information	01	
	Total	67	100

Analysis:

Table 2.28 shows that, near about three fourth of the respondents (74%) sometimes receive treatment for sickness, near about one fourth of them (23%) always receive treatment for sickness, and only 3% of the respondents never receive treatment when get sick.

Table 2.29: Types of treatment

SI	Types of treatment	Frequency	Percentage %
1	Allopathic	63	95
2	Homeopathic	06	9
3	Kabiraji	08	12
4	Others	06	9
5	No information	01	
	Total	84	

^{*}Multiple Responses

Analysis:

The study found that most of the slum dwellers (95%) receive allopathic treatment, which signifies that they are not ignorant of modern treatment service. Kabiraji (herbal medicine) treatment has been received by 12% of the respondent, homeopathic treatment (9%) and others (9%).

Table 2.30: Response about taking medicine

SI	Responses	Frequency	Percentage %
1	Yes	61	94
2	No	01	2
3	Consult doctor but do not take medicine	03	6
4	No information	02	100
	Total	67	

Analysis: Table 2.30 reveals that most of the respondent (94%) response positively in response to take medicine. Only two percent said that they do not take medicine while getting sick and six percent said that they used to take treatment but do not take medicine.

Table 2.31: Monthly Expenditure (Approximate) for treatment

SI	Monthly Expenditure(approximate) for	Frequency	Percentage
	treatment (In Taka)		%
1	Up to 500 taka	36	55
2	501-800	03	5
3	801-1100	11	17
4	1101-1400	05	8
5	1401 and above	11	17
6	No information	01	
	Total	67	

The respondent of Karwan bazaar slum mentioned that as their monthly income is not enough to run the family so that it is hard for the family to expend money for her own health care. In spite of that more than half (55%) of the respondent said that they expend up to 500 taka monthly for the purpose of treatment. 17% of the respondent expend taka 1401/- and above for treatment, 17% expend taka 801 to 1100/-, 8% expend taka 1101/-1400 and 5% expend taka 501-800 for the purpose of treatment.

Table 2.32: Response about getting any health service from Government/non-Government health service provider

SI	Responses	Frequency	Percentage %
1	Yes	22	33
2	No	45	67
	Total	67	100

Analysis:

Table 2.32 shows that more than two third of the respondent (67%) said that they do not get any health care services from Government/ non Government health service provider.

Table 2.33: Response about satisfaction of existing health service

SI	Responses	Frequency	Percentage
			%
1	Yes	16	24
2	No	51	76
	Total	67	100

Analysis:

More than three fourth (76%) of the respondents mentioned that they are not satisfied with the existing health service. Rest of the respondents (24%) replied positively.

ii) Reproductive health information:

Table 2.34: Number of Children

SI	Number of children	Frequency	Percentage %
1	No children	5	7
2	1-2	21	31
3	3-4	27	40
4	5-6	12	18
5	7 and above	2	4
	Total	67	100

Analysis:

Table 2.34 reveals that more than one third of the respondents (40%) have 3-4 children. Following that 31% have 1-2 children. The rest responses were like 5-6 children (18%), 7 and above (4%) and no children (7%).

Table 2.35: Response about taking health care in pregnancy period

SI	Responses	Frequency	Percentage %
1	Yes	34	53
2	No	30	47
3	No information	03	
	Total	67	100

Analysis:

More than half (53%) of the respondent replied positively in case of taking health care service during pregnancy period. 47% of the respondent did not take health care service during pregnancy period.

Table 2.36: If yes, mostly visited place for health care service

SI	Place of health service	Frequency	Percentage %
1	Government Hospital	18	53
2	Health worker	03	9
3	Surjer Hashi Clinic	08	23
4	NGO Clinic	05	15
	Total	34	100

Analysis:

The respondents who had taken health care services during pregnancy period among them more than half (53%) went to government hospital for pregnancy related issues. Nearly one fourth (23%) respondent mentioned about "Surjer Hashi" Clinic. Other responses are NGO

clinic (15%) and from health worker (9%) who visited door to door of the slum area for providing health care service.

Table 2.37: Reason behind not going to the health care center

SI	Reasons	Frequency	Percentage %
1	Financial Problem	04	14
2	No need of taking treatment	11	38
3	Treatment facilities at home	02	7
4	Nobody taken her to hospital	03	10
5	Not known	09	31
6	No information	01	
	Total	30	100

Analysis:

The respondents who did not go to health care center during pregnancy period they were asked the reason behind not going. The study found that more than one third (38%) of the respondents said that they think there is no need to take treatment during pregnancy period as they did not face any complication. 31% respondent did not know about health care service provided during pregnancy period. Because of financial problem 14% respondent did not get health care center during pregnancy. Treatment facilities provided at home by the health visitors as mentioned by 7% of the respondent. 10% respondent said that nobody in her family took her to the Hospital, so that she did not get health care service during Pregnancy.

Table 2.38: Response about taking vaccine during pregnancy period

SI	Responses	Frequency	Percentage %
1	Yes	39	65
2	No	22	35
3	No information	06	
	Total	67	100

Analysis:

Table 2.38 reveals that nearly two third (65%) of the respondents said that they took vaccine during pregnancy period, and 35% of the respondents did not take vaccination.

Table 2.39: Place of taking vaccine

SI	Place of taking vaccine	Frequency	Percentage %
1	Government Hospital	18	46
2	NGO clinic	10	26
3	Others	11	28
	Total	39	100

Analysis: Table 2.39 shows that respondents who had taken vaccine during pregnancy period nearly half of them (46%) took it from Government hospital, 26% from NGO clinic and from other places 28%. These other places are mentioned by the slum dwellers as, on every

holiday doctors and nurses from Government hospitals visited the slum areas and arranged campaign program. By these campaigns they make the slum dwellers aware of various diseases, its prevention procedure, provide free vaccine, free medicine etc.

Table 2.40: Information on Family Planning Practices and Methods used

SI	FP	N	%			Name	N	9	%
	Practices								
1	Yes	36	54	Methods	1	Injectables	14	(1)	39
				used for FP	2	Pill	21	5	8
					3	Others	01	;	3
						Total	36	10	00
2	No	31	46			Reasons		Ν	%
					1	want childre	n	02	8
					2	Do not know		13	52
				Reasons for	თ	want of boy o	hild	01	4
				not	4	Husband do r	not want	01	4
				receiving FP	5	Fear of being	sick	01	4
					6	Follow safe pe	eriod	05	20
					7	Respondent of	do not like	02	8
					8	Not applicable	Э	06	
	Total	67	100				Total	31	100

Analysis:

In practice family planning method the number of users was found to be more than half (54%). The interviewed respondents informed that they are aware of Family Planning method and they practiced different FP methods for controlling child birth. The respondents who practice family planning methods were conscious of the positive effect of the FP methods. In most cases wives are the major clients of FP methods. Among these group of respondents more than half (59%) took pill for birth control pills, more than one third (39%) took injections.

Nearly half of the respondents (46%) who did not practice any family planning method they mentioned different reasons. Among these group of respondents more than half (52%) said that they did not know about FP method, 20% mentioned that they followed safe period so that they had no need to receive FP method. The other reasons were for want of children (12%), respondent did not like to use FP materials (8%), husband did not want (4%) and fear of being sick (4%). It was also found from the study that husbands generally used condoms and did not prefer any other methods for FP.

Table 2.41: Physical problems faced for receiving family planning methods

SI	Responses	Frequency	Percentage %
1	Yes	08	14
2	No	50	86
3	No information	09	
	Total	67	100

Table 2.41 shows that most of the respondents (86%) did not face any physical problem for receiving family planning method. Only 14% mentioned that they face some problem for receiving FP method; such as headache, pain in hand, leg, bellyache, fever, loss of weight, low vision problem etc. The respondents said that they took medicine from prescribed doctor of the nearest family planning clinic.

RECOMMENDATION BY THE RESPONDENTS OF KARWAN BAZAAR SLUM:

Following steps that should be taken to improve the quality of health service of this area:

- Hospital to be established in the locality.
- Medicine should be provided at free of cost
- Health service should be provided by the Government door to door and also by the non Government organizations.
- Quality of health service needed to be improved.
- Doctors and health service provider's behavior needed to be more cordial.
- The price of medicine should be reduced.
- More health care centers should be set up in the locality.
- Quality of sanitation facilities needed to be improved.

CHAPTER: THREE

DATA ANALYSIS AND FINDINGS

Mohammadpur Bashbari Slum

A. General Information:

Table 3.1: Age of the Respondents

SI	Age Range	Frequency	Percentage
			%
1	15-19	15	20
2	20-24	15	20
3	25-29	18	24
4	30-34	5	7
5	35-39	10	13
6	40-44	5	7
7	45-49	7	9
8	50-54	-	
	Total	75	100

Analysis:

Table 3.1 shows that maximum number of respondents (64%) concentrates within the age group of 15 to 29 years.

Table 3.2: Marital Status

SI	Marital Status	Frequency	Percentage %
1	Married	58	78
2	Widow	04	5
3	Separated	09	12
4	Deserted	04	5
	Total	75	100

Analysis:

Table 3.2 shows that majority (78%) of the respondents are married, whereas only five percent are widow. This study came across with a few respondents (5%) who had been deserted by their husbands and separated (12%). In general it is difficult for women without protection of male members in the family to live in the slums.

Table 3.3: Types of family

SI	Types of family	Frequency	Percentage
			%
1	Nuclear	50	67
2	Joint	25	33
	Total	75	100

Table 3.3 shows that more than one third (67%) of the respondents belonged to nuclear family and the rest one third (33%) were from joint family. (nuclear family with one or two dependent members such as mother, mother in law, brother living with them).

Table 3.4: Number of family members

SI	Number of family member	Frequency	Percentage
			%
1	1-2	14	18
2	3-4	36	48
3	5-6	18	24
4	7-8	05	7
5	9 and above	02	3
	Total	75	100

Analysis:

Table 3.4 shows that two third of the respondents (66%) said that the number of their family members was in the range of 1 to 4 (mostly they are nuclear family with father mother and children as indicated in table 3). One third (34%) of the respondents have family members 5 to above.

Table 3.5: Educational Qualification

SI	Educational Qualification	Frequency	Percentage %
1	Illiterate	30	40
2	Can write name	25	33
3	Primary	15	20
4	Lower secondary	05	7
	Total	75	100

Analysis:

Of the total respondents though 40% are illiterate, 33% of the respondents can only sign their names which can also be considered as illiterate. 20% of the respondents could complete primary level of education and 7% had education up to lower secondary level. This shows that adult female literacy rate in this slum is much below national average i.e. 49.8%

Table 3.6: Duration of living in this slum

SI	Duration of living in this slum (In year)	Frequency	Percentage
			%
1	Below 1 year	04	5
2	1-3	19	26
3	4-6	07	9
4	7-9	06	8
5	10-12	09	12
6	12 and above	18	24
7	From birth	12	16
	Total	75	100

Twelve respondents reported that they were born in this slum and lived there. A little below one third (31%) of the respondents living in this slum for three years and below including four of them living for one year and below. Another 36% respondents were residing in this slum for ten to twelve years and above. In fact a large portion of the respondents lived in this slum for a long time.

Table 3.7: Occupation of the respondents

SI	Occupation	Frequency	Percentage
			%
1	House wife/Home maker	23	30
2	Domestic worker	36	48
3	Cook	05	7
4	Owner of Tea shop	03	4
5	Day Laborer	02	3
6	Others	06	8
	Total	75	100

Analysis:

Table 3.7 shows that 70% of the respondents are working women who supplement family income. Among them 69% are domestic workers. Other occupations include cook, tea shop owner, and day laborer. Nearly one third (30%) of the total respondents were home makers. The other groups include the occupation as service holder (Ansar), tutor, worker in parlor, sweeper, garment worker, seamstress etc.

Table 3.8: Working hour of working women

SI	Working hour	Frequency	Percentage %
1	2-4	11	21
2	5-7	22	42
3	8-10	10	19
4	11 and above	09	18
	Total	52	100

Among the respondents who worked, 42% spend 5-7 hours and another 37% spend 8-11 and above hours in their work. In addition they also spend time for household work and take care of their family.

Table 3.9: Monthly Income (Approximate) of the family

SI	Monthly income of the family (In taka)	Frequency	Percentage
			%
1	Up to 2000	03	4
2	2001-4000	21	28
3	4001-6000	21	28
4	6001-8000	13	17
5	8001-10000	10	14
6	10001-12000	04	5
7	12000 and above	03	4
	Total	75	100

Analysis:

It is a joint effort of all the family members in their struggle for existence. These family members' earnings play an important role in meeting basic needs of the family members. Monthly income of the family varies from taka 2000 to 12000 and above. Monthly income of more than half (56%) of the families is within the range between taka 2001 to taka 6000, 17% family earn between 6001 to 10,000 taka, following that 14% earn between taka 8001 to 10000 and ten percent have income range between taka 8001 to 10000. These income ranges reflect the poor earning condition of the family. Only 9% of the family earned from taka 10,001 to above.

Table 3.10: Monthly Income (Approximate) of the respondent

SI	Monthly income of the respondent (In taka)	Frequency	Percentage %
1	Up to 1000	07	13
2	1001-2000	22	42
3	2001-3000	12	23
4	3001-4000	07	13
5	4001 and above	04	8
6	Not Applicable	23	-
	Total	75	

Monthly income of the respondents varies from taka 1000 to taka 4001 and above. Monthly income of 42% of the respondents is within the range between taka 1001 to taka 2000, 36% respondents have income range from taka 2001 to taka 4000 and 8% are in the income group of taka 40001 and above. This shows that working women contribute substantially in family income.

B. Housing Condition:

Table 3.11: Description of the house hold

SI	Number of	Frequency	Percentage	SI	Number of	Frequency	Percentage
	room	. ,	%		window	•	%
1	One	66	88	1	One	03	4
2	Two	8	11	2	Two	05	7
3	Three	1	1	3	No window	67	89
	Total	75	100		Tota	ıl 75	100
SI	Number of	Frequency	Percentage	SI	Electricity	Frequency	Percentage
	door		%				%
1	One	67	89	1	Yes	57	76
2	Two	80	11	2	No	18	24
	Total	75	100	3	Total	75	100
SI	Roof of the	Frequency	Percentage	SI	Types of	Frequency	Percentage
	room		%		floor		%
1	Tin and	-	-	1	Grubby	_	
	Cane						
2	Tin	75	100	2	Bamboo	59	79
3	Hard board	-	-	3	Wooden	16	21
	covered				Total	75	100
	with plastic					_	
	Total	75	100				

In Mohammadpur Bashbari slum 88% family found who possessed only one room for their whole family. Only 12% families have two to three rooms each.

Each room of the slum had only one door (89%) and two doors (11%). While 89% respondent mentioned that there was no window in their small rooms which is unhealthy for the people living in those rooms. Only seven percent said they had two windows in their room and 4% had only one window.

While talking about material used for roof of the house all of the respondents said that the roof of their room is made of tin.

According to 79% respondents of this slum the floor of rooms were made of bamboo, and the rest 21% said that floors were made of planks of wood.

Among the slum dwellers 76% said that they had electricity facilities in the slum but 24% replied negatively.

Table 3.12: Place for cooking

SI	Place of cooking	Frequency	Percentage
			%
1	Open place along with the house	21	28
2	In room	52	69
3	Others*	02	3
	Total	75	100

Analysis:

As the living condition of Bashbari slum dwellers are very shabby, they have to live in the slum in great difficulty in one or two rooms, so the desire for a separate kitchen is beyond their imagination. More than two third (69%) of the respondents said that they cooked food in their rooms. More than one fourth (28%) respondents used open space adjacent to their house for cooking purposes. Three percent (3%) of them used some other place (used ovens at neighbor's house, landlord's house) for cooking.

Table 3.13: fuel for cooking

SI	fuel for cooking	Frequency	Percentage
			%
1	Firewood	71	95
2	Garbage paper	04	5
	Total	75	100

Table 3.13 reveals that most (95%) of the respondents use firewood for cooking. The slum dwellers buy these fire woods from the nearest shop along with the slum. Only 5% respondents use garbage paper for cooking.

C. Nutrition:

Table 3.14: Food Chart

SI	Food Chart	Da	ily	We	ekly	Mor	thly	Special Occasion		Never		No info
		N	%	N	%	N	%	N	%	N	%	
1	Rice	75	100	-		-		-		-		-
2	Vegetables	41	55	34	45	-		-		-		-
3	Fish	11	15	51	69	02	3	01	1	09	12	01
4	Meat	-		23	33	23	33	07	10	17	24	05
5	Milk	07	10	11	16	14	21	01	1	35	51	07
6	Egg	06	8	34	47	12	17	02	3	18	25	03
7	Bread	20	31	11	17	07	11	-		26	41	11
8	Others		-	-	-	-	-	-	-	-	-	-

Analysis:

A balanced diet is the combination of food like carbohydrate, fat, vitamin and mineral, which are essential for every human being. But as the slum dwellers are very poor and sometimes they live from hand to mouth, they cannot even think of having balanced diet. The study found that, all the respondents ate rice daily, following that more than half (55%) ate vegetable daily and 45% ate vegetable on weekly basis. Among the respondents 15% eat fish daily, 69% eat fish weekly, 3% eat monthly, 1% eat on special occasion and 12% never eat fish. In response to another protein item meat, one third (33%) of the respondent said they have meat on weekly basis, while 33% monthly and 10% on special occasion. 24% mentioned that they never eat meat even for a single day as because of their poor financial condition. In response to having milk the responses were daily (10%), weekly (16%), monthly (21%), on special occasion (1%) and more than half (51%) of the respondent never have milk. The table reveals that 8% of the respondents eat egg daily, while more than one third (47%) of them eat egg on weekly basis. The other responses are, monthly (17%), on special occasion (3%) and never (25%). In response to having bread 41% of the respondent said that they never eat bread as meal. The other responses are daily (31%), weekly (17%), monthly (11%). This shows that diet of most of the families consists of carbohydrate that is

only rice (45%) and another 55% mostly eat rice and vegetables and some (15%) have fish. Most of the families have fish, meat, eggs and milk on weekly, monthly or occasionally and several of them can never afford to have these foods.

Table 3.15: Monthly Expenditure (Approximate) for food

SI	Monthly Expenditure for food (In taka)	Frequency	Percentage %
	,		/0
1	Up to 1000	04	5
2	1001-2000	20	27
3	2001-3000	25	34
4	3001-4000	06	8
5	4001 and above	19	26
6	No information	01	
	Total	75	100

Analysis:

Table 3.15 shows that, two third of the respondents (66%) spend within the range of taka below1000 to 3000 monthly for food, one fourth of the respondents (26%) spend 4001 taka and above in this purpose, 8% spend 3001 to 4000 taka. If we relate it with the income of the families i.e. monthly income of 60% of the families is within the range between below taka 2000 to taka 6000, a large portion of family income is spent on food items.

Table 3.16: Source of Food

SI	Source of Food	Frequency	Percentage %
1	Cook herself	55	79
2	Bring from hotel	10	14
3	Food bring from others house	05	7
4	No information	05	
	Total	75	

Analysis:

Table 3.16 reveals that three fourth of the respondents (79%) cook herself, 14% bring food from hotel and only 7% respondents bring their food from others houses (These respondents either are domestic worker and bring food from their employers house or they share their meal with their mother).

D. Water-Sanitation & Hygiene:

Inadequate access to safe water and sanitation leads millions of our people to various health problems. Water and vector born diseases like diarrhoea, dysentery, typhoid, worm infestation and polio, malaria, hepatitis A and E are too common in the country. WHO states that one tenth of the global disease burden is preventable by improving water supply, sanitation, hygiene and management of water resources. Prompt action is required to ensure that these are implemented properly and sustained especially to protect our children.

Picture of sanitation is worse in slums and rural Bangladesh is worse where there are ignorance, poverty, too little space to set a toilet, traditional practice of open defecation, the use of hanging latrines, and lack of knowledge about hand washing pose a serious threat to health.

Source of Water

The people of Mohammadpur Bashbari slum mentioned that they use supply water of WASA and tube well water for the purpose of drinking, bathing, toileting, cooking and household needs.

Table 3.17: Practices of boiling drinking water

SI	Response	Frequency	Percentage %
1	Yes	03	4
2	No	72	96
	Total	75	100

Analysis:

Table 3.17 indicates most of the respondents (96%) answered they did not boil water for drinking. Only 4% respondents used boiled water to drink.

The respondents who do not boil water they said that, as fuel for cooking is expensive so they cannot think of boiling water for drinking. They were also not aware of the effectiveness of pure drinking water.

Table 3.18: Practice of washing hand before and after eating

SI	Response	before eating		after ea	ting
		N	%	N	%
1	Yes	74	99	73	97
2	No	01	1		
	Total	75	100	75	100

This table indicates that most of (99%) the respondents replied positively about washing their hands before and after eating. On the other hand, only one percent respondents do not wash their hand before eating.

Table 3.19: Material use to wash hand

SI	Response	Before		Af	ter
		N	%	N	%
1	Soap	14	19	12	17
2	Only water	66	90	65	93
3	Ash	01	01	-	-
4	No information	01	-	03	-
	Total	81		80	-

^{*}Multiple responses

Analysis:

Most of the respondents (90%) use only water to wash before and after eating.

Table 3.20: Types of latrine

SI	Types of latrine	Frequency	Percentage
			%
1	Hygienic	04	5
2	Non-hygienic	71	95
	Total	75	100

Analysis:

The slums are always densely populated and for their poor financial condition living style of the slum dweller is also sometimes unhealthy. For a large number of slum dwellers there is limited number of latrine. Table 5.20 shows that 95% of the respondent said latrines of their slum were unhygienic.

Table 3.21: Materials to wash hand after urinate/ defecation

SI	Name of materials	Frequency	Percentage
			%
1	Soap	46	61
2	Ash	27	36
3	Only water	14	19
3	Sometimes wash or do not wash hand	01	1
	Total	88	

^{*}Multiple Responses

Table 3.21 shows that nearly two third of the respondents (61%) mentioned that they use soap to wash hand after urinating/ defecation. Ash is used by 36% of the respondents 19% use water and only one percent said that they sometimes washed or did not wash hand after urinating/ defecation.

Table 3.22: Methods of cleaning latrine

SI	Process of cleaning toilet	Frequency	Percentage %
1	with water	61	81
2	with bleaching powder, washing powder and sand	14	19
	Total	75	100

Analysis:

Table 3.22 shows that most (81%) of the respondents of this slum mentioned that they washed their latrine only with water after defecation. 19% occasionally used bleaching powder or washing powder to clean the latrines.

Table 3.23: Practices about using Sandal

SI	Responses	Frequency	Percentage %
1	Yes	70	93
2	No	02	3
3	Sometimes	03	4
	Total	75	100

Analysis:

Table 3.23 shows that in most cases (93%) the interviewed families responded positively to using sandals. Only 3% replied negatively and 4% sometimes used sandal.

Table 3.24: Brushing Materials

SI	Name of Materials	Frequency	Percentage %
1	Coal	21	28
2	Tooth powder	35	47
3	Ash	14	19
4	Tooth paste	13	17
	Total	83	

^{*}Multiple Responses

Table 3.24 shows that 47% of the respondents mentioned that they used tooth powder to brush teeth, following that 28% used ash. 19% respondents used ash to brush teeth. It is an interesting finding that only 17% slum dwellers used toothpaste as brushing materials. As the families living in Bashbari slum were very poor they could not afford to buy toothpaste. However, tooth powder and ash may be as good as tooth paste for brushing teeth.

Table 3.25: Place for dumping/dropping garbage

SI	Place for garbage	Frequency	Percentage %
1	Ditch below the platform of the house	75	100
2	Dustbin	-	
	Total	75	100

Analysis:

Table 3.25 shows that all the respondents of Bashbari slum said that they drop the garbage into the ditch below the platform of the house which definitely creates an unhygienic environment.

E. Health Related Information

i) General health information:

Table 3.26: Common Diseases suffered by the respondents

SI	The diseases	f	Causes of Diseases	Types of treatment
1	Headache	70	 Excessive tension Excessive heat while cooking Eye problem (low power) Work load Drenched in Rain Do not know 	Take medicine from prescribed doctor of the nearest hospital
2	Fever, Cough and cold	70	Excessive use of waterTake shower lateDo not know	Take medicine from prescribed doctor of the nearest hospital
3	Gastric/ Ulcer	63	 Irregularity in taking food For taking excessive spicy, fatty food 	Take medicine Kabiraji treatment
4	Anemia	34	Lack of food	Take oral saline Do not take medicine
5	Jaundice	30	 Take unhygienic food Lack of fresh drinking water For not boiling water They do not know 	Jharfuk Kabiraji treatment
6	Toothache	28	Eat excessive betel leafPyorrhea	Take medicine from nearest hospital Mouthwash with boiled salted water Do not take medicine
7	A Maggot/ Worm (An intestinal parasite)	25	Lack of soap for washing handsDo not know	Take homeopathy medicine
8	Skin Disease	19	 For using polluted/non boiled water For wearing unclean dresses Do not take shower properly 	Take medicine Kabiraji treatment Do not take medicine
9	Diarrhoea	18	For eating stale food Irregularity in taking food For not boiling water	Take oral saline Take medicine from prescribed doctor of the nearest hospital
10	Blood Pressure	80	For excessive heat during cooking	Take medicine Drink lemon mixed with salt
11	Dysentery	08	Take unhygienic foodLack of fresh drinking waterIrregularity in taking food	Take medicine Oral saline
12	Asthma	80	From cold Heavy work load	Do not take medicine
13	Diabetes	03	For taking sweet foods excessively	
14	Measles	02	Do not know	Did not take any treatment
15	Malaria	01	For mosquito bite	Take medicine from the nearest health center

The respondents reported that generally they suffer from Intestinal infections such as Diarrhea, Dysentery, and Intestinal parasite. Other diseases mentioned are Malaria, Measles, Headache, Fever, Cough and cold, Gastric/ Ulcer, Blood Pressure Jaundice, Diabetes, Anemia, Asthma, Skin Disease, Toothache etc. The table shows that in some cases they have some idea about the causes of the diseases, but in most cases they are not aware of real causes of diseases. Most of the respondents reported that they go for modern medical assistance. Some of them also use traditional medicine such as Kabiraji, homeopathy etc.

The most common diseases mentioned by the slum dwellers from which they suffered were headache (70 respondents) and fever, cough and cold (70 respondents). Respondents who suffered from these diseases mentioned some specific causes but there were such people who did not know the cause of the diseases, they did not even think of it. But they said that they took **medicine from prescribed doctor of the nearest hospital to receive treatment**

The second highest diseases among the slum women is gastric/ulcer (63 respondents). As the slum people live from hand to mouth so the women sometimes cannot even eat three times a day. For irregularity in eating the study found that 63 respondents suffered from gastric/ulcer problem. They take medicine for it and even receive kabiraji treatment.

For lack of proper food 34 respondents mentioned that they are suffering from anemia. Most of the times they did not take any medicine. They just took orsaline to get cured.

Among the respondents 30 women suffered from jaundice. They said the cause of jaundice was for taking unhygienic food, lack of fresh drinking water in slum area and for not drink boiled water. Even some respondent said that they did not know the cause of jaundice. As treatment they receive Kabiraji and treatment from guacks.

Another common ailment in this slum area is toothache. 28 respondents mentioned about toothache, which was the cause of eating excessive betel leaf and pyorrhea. But they did not know that pyorrhea itself is disease and toothache is caused by that. Sometimes they use their general knowledge to cure from the diseases such as they use mouthwash with boiled salted water to get relief from toothache.

Another common disease in the slum area is getting infected by maggot/ worm (An intestinal parasite). Among the slum women 25 of them said that because of lack of adequate soap for washing hand might be a cause of their infection. They did not know the exact cause of the disease. They took homeopathy medicine for it.

Skin infection is another common disease mentioned by the slum dwellers (19 respondents). The respondents said that for drinking polluted/UN boiled water, for wearing unclean dresses and for not taking shower properly might be the cause of skin disease. They could not distinguish between eczema and other skin diseases. For treatment sometimes they took medicine or Kabiraji treatment.

Diarrhoea was one of the most common diseases mentioned by 18 respondents. They said that for eating stale food, drinking unboiled water they suffered from diarrhoea. But they did not know that it is water born disease. They took orasaline and medicine from prescribed doctor of the nearest hospital as treatment.

Besides these some other diseases found in the slum area are blood pressure (8 respondents), asthma (8 respondents), dysentery (8 respondents), measles (2 respondents), malaria (1 respondent), and diabetes (3 respondents). It is noticeable that the slum dwellers did not know the cause of measles and asthma and they did not take any treatment for these. They also said that they took advice from the shop keeper or shop owner of their nearest medicine store and got medicine from pharmacy or dispensary or clinic to get cured.

The study found that in most cases the slum dwellers suffer from lack of knowledge about disease and their symptoms.

Table 3.27: Knowledge about Health care Center

SI	Responses	Frequency	Percentage %
1	Yes	63	86
2	No	10	14
3	No information	02	
	Total	75	100

Analysis:

Table 3.27 shows the dwellers of this slum are much conscious about the existence of health care centers. Most of the respondents (86%) said that they knew about the existence of health care centers in their area. On the contrary 14% of them said there were no health care centers in the locality.

Table 3.28: Types of health care center

SI	Types of health Center	Frequency	Percentage %
1	Government hospital	30	57
2	Private hospital	04	8
3	NGO Clinic	53	100
4	Others	10	19
5	No information	10	
		Total 110	

^{*}Multiple responses

Analysis:

Table 3.28 reveals that, all of the respondents mentioned about NGO clinics from where they received treatment. More than half (57%) mentioned about Government hospitals and only 8% of the respondents said that they received treatment from Private Hospitals. Private hospitals are too costly and beyond the reach of these slum families. The rest of the

respondent (19%) said that they received treatment from some other sources, such as pharmacy (8) and kabiraji chamber (2).

Table 3.29: Response about receiving treatment for sickness

SI	Response	\Box	Frequency	Percentage %
1	Always		16	21
2	Sometimes		59	79
4	No information		-	-
		Total	75	100

Analysis:

Table 3.29 shows that, more than three fourth of the respondents (79%) sometimes received treatment for sickness, 21% respondent always received treatment for sickness.

Table 3.30: Types of treatment

SI	Types of treatment	Frequency	Percentage%
1	Allopathic	75	100
2	Homeopathic	09	12
3	Kabiraji	27	36
4	Jharfuk	28	37
	То	tal 139	_

^{*}Multiple Responses

Analysis:

Table 3.30 shows that the slum dwellers were conscious of modern medicines. Seventy five percent go for allopathic treatment when family members were sick. But besides taking allopathic treatment some respondents also takes some other treatment such as homeopathic (12%), 'kabiraji' (36%) and quack doctors 'jharfuk' (37%).

Table 3.31: Response about taking medicine when ill

SI	Responses		Frequency	Percentage %
1	Yes		71	97
2	No		01	1
3	Take treatment but do not take medicine		01	1
	No information		02	1
		Total	75	100

Analysis:

Table 3.31 reveals that most of the respondent (97%) responded positively in response to taking medicine. Only one percent said that they did not take medicine when they were sick and one percent said that they used to take treatment but did not take medicine any more.

Table 3.32: Monthly Expenditure (approximate) for treatment

SI	Monthly Expenditure (approximate) for treatment (In Taka)	Frequency	Percentage %
1	Up to 500 taka	40	54
2	501-800	18	24
3	801-1100	07	10
4	1101-1400	05	7
5	1401 and above	04	5
6	No information	01	
	Total	75	100

The respondent of Bashbari slum mentioned that as their monthly income was not enough to run the family so it was hard for the family to spend money for health care. In spite of that more than half (54%) of the respondent said that they spend up to 500 taka monthly for the purpose of treatment. Nearly one fourth (24%) of the respondent spend taka 501 to 800 for treatment, 10% spend taka 801 to 1100, 7% spend taka 1101-1400 and only 5% spend taka 1401and above for the purpose of treatment.

Table 3.33: Response about satisfaction of existing health service

SI		Responses	Frequency	Percentage %
1	Yes		48	64
2	No		27	36
		Total	75	100

Analysis:

Nearly two third (64%) of the respondents mentioned that they are satisfied with the existing health services. Rest of the respondents (36%) replied negatively.

ii) Reproductive health information:

Table 3.34: Number of Children

SI	Number of children	Frequency	Percentage %		
1	No children (newly married)	08			
2	1-2	43	67		
3	3-4	17	27		
4	5-6	4	6		
5	7 and above	-			
6	Pregnant	03			
Total					

Analysis: Table 3.34 reveals that more than two third of the respondents (67%) have 1-2 children. 31% have 3-4 children. The rest had 5-6 children (6%). Eight respondents

mentioned that they were newly married and had no children. (Table 5.40 shows that 67% respondent practice family planning method)

Table 3.35: Response about taking health care during pregnancy period

SI	Responses	Frequency	Percentage %
1	Yes	35	54
2	No	30	46
3	Not yet conceived	07	
4	No information	03	
	T	otal 75	100

Analysis:

More than half (54%) of the respondents replied that they have taken health care service during pregnancy period. Thirty of them did not take health care service during pregnancy period.

Table 3.36: Mostly visited place for health care service

SI	Place of health service	Frequency	Percentage %
1	Government Hospital	09	26
2	NGO Clinic	32	91
3	Others	07	20
	Tota	ıl 48	

^{*}Multiple responses

Analysis:

The respondents who had taken health care services during pregnancy period among them most of the respondents (91%) went to NGO Clinic for pregnancy related issues. More than one fourth (26%) respondents mentioned about Government hospital. Other (20%) indicated taking help from foster mother, home care etc.

Table 3.37: Reason behind not going to the health care center

SI	Reasons	Frequency	Percentage %
1	Financial Problem	07	23
2	Not aware of health care need during pregnancy	18	60
4	Nobody taken her to hospital (husband/guardian)	03	10
5	Did not know about health facilities	02	07
	Total	30	100

Analysis:

The respondents who did not go to health care center during pregnancy were asked the reason for not going. The study found that 23% respondent did not go to health care center

during pregnancy due to financial problem and 60% did not know the need for health care during pregnancy period. 10% respondent said that nobody from her family took her to the hospital, so she did not get health care service. Only 7% did not know that health care service was available in the area for pregnant mothers.

Table 3.38: Response about taking vaccine during pregnancy period

SI	Responses	Frequency	Percentage %
1	Yes	45	62
2	No	27	37
3	No information	03	
	Total	75	100

Analysis:

Table 3.38 reveals that nearly two third (62%) of the respondents said that they took vaccine during pregnancy period, and 37% of the respondents did not take vaccination.

Respondents who did not take vaccination gave various reasons. They thought they did not need vaccine as they were fit, they were in the village, unaware about such health services, husband/guardians did not take her to the center etc.

Table 3.39: Place of taking vaccine

SI	Place of taking vaccine	Frequency	Percentage %
1	Government Hospital	15	33
2	NGO clinic	41	91
3	Others	04	9
	Tota	l 60	

^{*}Multiple responses

Analysis:

Table 3.39 shows that respondents who had taken vaccine during pregnancy period most of them (91%) received it from NGO clinic, one third (33%) of them were from Government hospitals and 9% from other places such as health visitors from government hospitals.

The respondents mentioned that on every holiday doctors and nurses from Government hospitals visited the slum areas and arranged campaign program on vaccination. By these campaigns they sensitized the slum dwellers on various diseases, its prevention procedure and provided free vaccine, free medicine etc.

Table 3.40: Information on Family Planning Practice, methods used and reason

SI	Responses	N	%			Name	N	Q	%
1	Yes	48	64		1	Ingestible	22	4	-6
				Methods	2	Pill	24	5	0
				used for FP	3	Copper T	02	4	4
						Total	48	10	00
2	No	27	36			Reasons		N	%
					1	Husband fo	llows FP	80	29
						method	(condom,		
				Reasons for		vasectomy)			
				not receiving	2	For want of children		04	15
				FP	3	Husband do no	t want	02	7
					4	Maintain safe p	eriod	03	11
					5	Respondent do	not like	03	11
					6	Ovary was	perated for	01	3
						tumor			
					7	•	at breast	01	3
						feeding of he			
						baby might be	e hampered		
						by FP			
					8	Kabiraji treatme	ent	01	3
					9	Not applicable		05	18
	Total	75	100				Total	27	100

Numbers of respondents practicing family planning methods were found to be more than half (64%). The interviewed respondents informed that they are aware of Family Planning method and they practiced different FP methods for controlling child birth. The respondents who practiced family planning methods were conscious of the positive effect of the FP methods. In most cases wives were the major clients of FP methods. Among these group of respondents half (59%) of them took pill to control child birth, nearly half (46%) of them took ingestible and 4% took Copper T.

More than one third of the respondents (36%) who did not practice any family planning method mentioned different reasons for not practicing FP methods such as they wanted more children. 11% mentioned that they followed safe period so that they had no need to receive FP method. The other reasons were respondents did not like (11%) to practice birth control methods; ovary was operated for tumor (3%), thought that her new born baby's breast feeding might be hampered if she practiced FP (3%) and 3% followed kabiraji treatment. For 18% respondents FP method was not applicable as they were separated or deserted.

Table 3.41: Responses about any Physical problems faced in using family planning methods

SI	Responses	Frequency	Percentage %
1	Yes	19	43
2	No	25	57
3	No information	04	
	Total	48	100

Table 3.41 shows that more than half of the respondents (57%) did not face any physical problem in using family planning method. Following that 43% mentioned that they faced some problem for using FP method.

Table 3.42: Physical problems faced for receiving family planning methods

SI	Responses	Frequency	Percentage %
1	Feel dizzy	10	53
2	Irregular period/ Excessive bleeding	06	32
3	Headache	04	21
4	Pain in waist	04	21
	Total	24	

^{*}Multiple responses

Analysis:

Table 3.42 shows that the respondents who faced problem for receiving family planning method, among them more than half (53%) said that they felt dizzy, other problems were irregular period/ excessive bleeding (32%), headache (21%) and pain in waist (21%).

RECOMMENDATION BY THE RESPONDENTS OF MOHAMMADPUR BASHBAR SLUM:

Following steps should be taken to improve the quality of health service of this area:

- More Government Hospitals and clinic and health care center needed to be set up in the locality.
- Medicine should be provided free of cost
- Health service should be provided from door to door of the slum area by Government and non Government organization.
- Quality of health service needed to be improved.
- Doctors and health service providers' behavior needed to be more cordial and polite.
- The price of medicine and health care service should be reduced.
- Quality of sanitation facilities needed to be improved.
- Female doctor needed to be appointed in the maternal child health center.
- Environment of health care center should be more healthy and hygienic.

CHAPTER: FOUR DATA ANALYSIS AND FINDINGS

Bauniya-Bandh Slum

A. General Information:

Table 4.1: Age of the Respondents

SI	Age Range	Frequency	Percentage %
1	15-19	05	6
2	20-24	22	28
3	25-29	25	32
4	30-34	12	15
5	35-39	06	8
6	40-44	06	8
7	45-49	1	1
8	No Information	04	-
	Total	78	100

Analysis:

Table 4.1 shows that respondents were mostly (75%) within the age group of 20 to 34 years.

Table 4.2: Marital Status

SI	Marital Status	Frequency	Percentage %
1	Married	73	94
2	Widow	01	1
3	Separated	03	4
4	Deserted	01	1
	Total	78	100

Analysis:

Table 4.2 shows that majority (94%) of the respondents were married, whereas only six percent were separated, widowed and divorced. In slum whereas generally it is difficult for single women to live without guardianship of men.

Table 4.3: Types of family

SI	Types of family	Frequency	Percentage
			%
1	Nuclear	54	69
2	Joint	24	36
	Total	78	100

Table 4.3 shows that more than two third (69%) of the respondents belonged to nuclear family i.e. husband, wife and children and in other cases one or two relatives living with them.

Table 4.4: Number of family member

SI	Number of family member	Frequency	Percentage
			%
1	1-2	08	8
2	3-4	30	31
3	5-6	34	34
4	7-8	03	22
5	9 and above	03	4
	Total	78	100

Analysis:

Table 4.4 shows that 39% have small families ranging from one to four members. One third (34%) of the respondent said that the number of their family member was in the range of 5 to 6. 26% has large families ranging 7 to 9 and above members.

Table 4.5: Educational Qualification

SI	Educational Qualification	Frequency	Percentage %
1	Illiterate	07	9
2	Can write name	29	37
3	Primary	25	32
4	Lower secondary	15	19
5	Secondary	2	3
	Total	78	100

Analysis:

It is obvious that the educational level of the respondents in slums was low. From this study it was found that near about half (46%) of the respondents were illiterate among which 37% could only write their names. National figure of adult female literacy rate is 49.8%. Among the rest of the participants, 32% have completed primary level of education, 19% have completed lower secondary level and only three percent have completed secondary level.

Table 4.6: Duration of living in this slum

SI	Duration of living in this slum (In year)	Frequency	Percentage
			%
1	Below 1 year	04	5
2	1-3	18	23
3	4-6	09	12
4	7-9	08	10
5	10-12	05	6
6	12 and above	20	26
7	Since birth	14	18
	Total	78	100

Thirty two percent respondents lived in this slum for 10 years and above, 22% resided here between 4-9 years and another 23% lived for 1-3 years. Only five percent moved in this slum recently. 18% respondents reported that they were living in this slum since their birth.

Table 4.7: Occupation of the respondents

SI	Occupation	Frequency	Percentage %
1	House wife/Home maker	35	45
2	Seamstress	23	29
3	Domestic worker	08	11
5	Garment worker	07	9
6	Others	05	6
	Total	78	100

Analysis:

Table 4.7 shows that almost half of the respondents (45%) were home makers. Those who were involved in income earning (40), 53% were seamstress. Other occupations include domestic work, garment work, labor, foster mothering, and working at the chinese restaurant.

Table 4.8: Working hour of working women

SI	Working hour	Frequency	Percentage
			%
1	2-4	16	40
2	5-7	10	25
3	8-10	08	20
4	11 and above	06	15
5	No information	03	-
	Total	43	100

Analysis:

Table 4.8 indicates 40% of the respondents working hour was 2 to 4 hour and rest of the time they spend at home. One forth of the respondents working hour is 5 to 7 hours and 35% worked long hours i.e. 8 hours and above.

Table 4.9: Monthly Income (Approximate) of the family

SI	Monthly income (Approximate) of the family (In taka)	Frequency	Percentage %
1	2001-4000	06	8
2	4001-6000	14	18
3	6001-8000	20	26
4	8001-10000	17	22
5	10001-12000	09	12
6	120001-15000	07	9
7	15000 and above	03	4
8	No information (N/I)	02	-
	Total	78	100

It is a joint effort of all the family members in their struggle for existence. These earnings met daily economic needs of the family members. Monthly income of the family varied from taka 2001 to 12000 and above. Monthly income of 26% families was very low Tk.6, 000/- and below i.e. Tk. 200/- (\$3) and below per family daily and another one fourth of the families' monthly income varies between Tk.6001 to Tk. 8000 which was also low i.e. Tk. 266 (\$4) and below per day. With a family of four members these families earned below MDG goal of \$1 a day. Rest 47% cases family income ranged from Tk.8001 to Tk 15,000 and above.

Table 4.10: Monthly Income (Approximate) of the respondent

SI	Monthly Income (Approximate) of the respondent (In taka)	Frequency	Percentage %
1	Up to 1000	18	42
2	1001-2000	12	28
3	2001-3000	03	7
4	3001-4000	05	12
5	4001 and above	03	7
6	No information	02	4
	Total	43	100

Analysis:

Monthly income of the respondent varied from taka 1001 to taka 4000 and above. Monthly income of near about half (44%) of the respondent was within the range up to 1000 taka, 29% respondents had income range from taka 1001 to taka 2000, 13% were in the income group of taka 3001 to taka 4000. Taka 2001 to taka 3000 and taka 4001 and above, both the ranges covered 7% of respondents. This shows that the respondents engaged in income earning contributed substantial amount in family income.

B. Housing Condition:

Table 4.11: Description of the house hold

SI	Number of	Frequen	Percentage	SI		Number of	:	Frequer	псу	Percentag
	room	cy	%			window			,	е
		_								%
1	One	68	87	1	(One		32		41
2	Two	10	13	2	1	Гwо		07		9
	Total	78	10	3		Γhree		02		3
			0	4	F	ive		02		3
				5	1	No window		35		44
						T	otal	78		100
S	Number	Frequen	Percentage		SI	Electricit	Fre	quenc	Р	ercentage
ı	of door	су	%			у		У		%
1	One	56	72		1	Yes		78		100
2	Two	14	18		2	No		-		-
3	Three	07	9			Total		78		100
3	Four	01	1							
	Total	78	100							
S	Roof of	Frequen	Percentage		SI	Types of	Fre	quenc	P	ercentage
I	the room	су	%			floor		у		%
1	Tin and	36	46		1	filthy		13		17
	bamboo									
	trellis									
2	Tin	42	54		2	Brick built		65		83
	Total	78	100			Total		78		100

Analysis:

Majority (87%) of the respondents of the Bauniya-Bandh slum live in one room with their whole family. Only 13% families have two rooms.

Majority (72%) of the slum had only one door. While 44% respondent mentioned that there were no windows in their small room which was unhealthy for the people living in those rooms. 41 % respondent mentioned that they had only one window in their room, and 15% has 2-5 windows. Those who had more than one door and window had bigger living space with more than one room in the slum.

More than half (54%) of the rooms were built with tin whereas other 46% rooms were made of tin and bamboo trellis. Majority (83%) rooms of the slum had brick built floor. Rest of the rooms had filthy floor. All the houses have electricity.

Table 4.12: Place for cooking

SI	Place of cooking	Frequency	Percentage
			%
1	Court Yard adjacent to house	32	42
2	In room	12	15
3	Common kitchen	28	36
4	Others	06	7
	Total	78	100

Bauniya-Bandh slum is quite different from the other two slums. Two types of living place existed there. One comparatively congested made with bamboo fence, other type was relatively better; brick built with tin roof. They had to live in the slum in great difficulty in one or two rooms, so the desire for a separate kitchen was beyond their imagination. Near about half (42%) of the respondents said that they used open space adjacent to house for cooking purpose. More than one third (36%) of the respondents reported that they used common kitchen for cooking. Gas burners were mostly used by the respondents along with heater in the common kitchen. Respondents had to pay monthly rent for gas. Fifteen percent of them cooked inside their room.

Table 4.13: fuel for cooking

SI	fuel for cooking	Frequency	Percentage
			%
1	Firewood	39	44
2	Husk	21	23
3	Bio-gas	3	3
4	Gas	25	28
5	Electricity	2	2
6	No information	2	-
	Total	92	100

^{*}Multiple Responses

Analysis:

Table 4.13 reveals that near about half (44%) of the respondents used firewood for cooking, 28% used gas and 23% used husk in this purpose. Only 3% respondent use bio-gas and 1% used electric stove for cooking.

C. Nutrition:

Table 4.14: Food Chart

SI	Food Chart	Da	aily	We	eekly Monthly		Special Ne Occasion		ver	No info		
		N	%	N	%	N	%	N	%	N	%	
1	Rice	78	100	-	-	-	-	-	-	-	-	-
2	Vegetables	29	37	42	54	04	5	-	-	03	4	-
3	Fish	41	53	33	42	03	4	-	-	01	1	-
4	Meat	01	1	25	32	33	42	10	13	09	12	-
5	Milk	11	14	14	18	17	22	17	22	19	24	-
6	Egg	11	14	47	60	11	14	03	4	06	8	-
7	Bread	14	18	21	27	15	19	07	9	21	27	-
8	Others	09	12	07	9	10	13	29	38	21	28	02

^{*}Others- Fruits and Snacks

Analysis:

A balanced diet is the combination of food like carbohydrate, protein, fat, vitamin and mineral, which is essential for every human being. But as the living condition of the slum dwellers was very poor and sometimes they lived from hand to mouth, so that they could not afford balanced diet. The study found that, all the respondent ate rice daily, following that 37% ate vegetable daily and 54% ate vegetable on weekly basis, 5% ate vegetables monthly. Among the respondents 53% ate fish daily, 42% ate fish weekly and only 4% ate monthly. In response to another protein item meat 32% respondent said they used to have meat on weekly basis, 42% monthly, 13% on special occasion and 12% mentioned that they never ate meat even for a single day as because of their poor financial condition. Only one respondent mentioned that she ate meat regularly. In response to having milk the responses were daily (14%), weekly (18%), monthly (22%), on special occasion (22%) and 24% of the respondent never had milk. The table reveals that 14% of the respondents ate egg daily, while near about two third (60%) of them ate egg on weekly basis. The other responses were monthly (14%), on special occasion (4%) and never (8%). In response to having bread 27% of the respondent said that they never ate bread as meal. The other responses were daily (18%), weekly (27%), monthly (19%) and on special occasion (9%).

This show that in large number (47%) of cases daily food content was only rice and rice with fish (53%) and or vegetables (37%). Fourteen percent reported that they had eggs and/or milk daily. Only one respondent reported that they can afford to have meat daily.

Table 4.15: Monthly Expenditure (approximate) for food

SI	Monthly Expenditure for food (In taka)	Frequency	Percentage
			%
2	1001-2000	03	4
3	2001-3000	05	7
4	3001-4000	20	26
5	4001-5000	10	13
6	5001-6000	17	22
7	6001-7000	10	13
5	7001 and above	11	14
6	No information	02	-
	Total	78	100

Table 4.15 shows that, more than one third (39%) of the respondents spend more than taka 3001 to taka 5000 monthly for food, nearly half (49%) of the respondents spend taka within the range of taka 5001 to 7001 and above for food. Only 11% the respondents expend taka 1001 to 3000 taka for food purpose. Compare it with table 11, i.e. family income of the respondents, it reveals that considerable amount of the income is spent on food items of the family.

Table 4.16: Source of Food

SI	Source of Food	Frequency	Percentage
			%
1	Cook herself	76	97
2	Food bring from others house	02	3
	Total	78	100

Analysis:

Table 4.16 reveals that most of the respondents (97%) cooked food at home and only 3% respondents mentioned that they collected their food from their mothers' residence.

D. Water-Sanitation & Hygiene:

Source of Water:

All the people of Baunia Bandh slum mentioned that they used tap water for the purpose of drinking, bathing, toileting, cooking and household needs. Majority (85%) of the respondents of the slum have installed private tube well connecting the WASA supply line. They directly collected water from tube well and stored water in bucket and pitchers in their house. Whereas, rest of the respondents collected water from WASA supply line through public tube well and stored them in their house.

Table 4.17: Practices of boiling drinking water

SI	Response	Frequency	Percentage
			%
1	Yes	28	36
2	No	48	62
3	Sometime	02	3
	Total	78	100

Table 4.17 indicates more than half of the respondents (62%) answered negatively in case of boiled drinking water. More than one third of the (36%) respondents boiled water to drink. The respondents who did not boil water they said that, as fuel for cooking was expensive so they thought boiling water for drinking is extravagance for them. They also were not aware of the effectiveness of pure drinking water.

Table 4.18: Practice of washing hand before and after eating

SI	Response	before eating		after eating	
		N	%	N	%
1	Yes	76	97	78	100
2	No	02	3	-	-
	Total	78	100	78	100

Analysis:

This table indicates that most (97%) of the respondents replied positively about washing their hand before eating and all of them (100%) washed their hand after eating. On the other hand, only three percent respondents did not wash their hand before eating.

Table 4.19: If "yes" then material use to wash hand

SI	Response	Be		After		
		N	%	Ī	N	%
1	Soap	24	32	Ī	22	29
2	Only water	52	68		55	71
3	Ash	-	-	Ī	-	-
4	No information	2	-	1	1	-
	Total	78	100	1	78	100

Analysis:

This table reveals that, 32% respondents use soap to washed hand before eating and only 29% used soap after eating. More than two third of the respondents (68%) used only water to washed before eating and most of the respondents (71%) washed their hands by using only water. Among 71% respondents, some mentioned that usually they useed water to clean their hands after eating but when they are meat then they washed their hands with soap.

Table 4.20: Types of latrine

SI	Types of latrine	Frequency	Percentage
			%
1	Hygienic	70	90
2	Non-hygienic	08	10
	Total	78	100

We have found interesting findings from this slum. Table 12 shows that 90% of the respondent said that latrines of this slum were hygienic, only ten percent mentioned them as unhygienic.

There were families who had their own toilets and some other families used common toilets. Similarly, there were families having separate bathing place where as other families shared common bathing place.

Table 4.21: Materials to wash hand after urinating/ defecation

SI	Name of materials	Frequency	Percentage
			%
1	Soap	72	84
2	Ash	09	11
3	Do not wash hand	01	1
4	Only water	03	4
5	No information	01	-
	Total	86	100

^{*}Multiple Responses

Analysis:

Table 4.21 shows that ninety five percent respondents washed their hand properly with soap or ash after defecation which is a hygienic practice. Among them majority of the respondents (84%) mentioned that they use soap to wash hand after urinating/ defecation. Ash was used by 11% of the respondents. 4% respondent said that they use only water to wash hand. Only one percent said that they did not wash hand after urinating/ defecation.

Table 4.22: Methods of cleaning latrine

SI	Process of cleaning toilet	Frequency	Percentage %
1	With water	07	9
2	With sand	10	13
3	With bleaching powder	54	69
4	With shop	02	3
4	No system for cleaning	05	6
	Total	78	100

Table 4.22 shows that more than half (69%) of the respondents of this slum mentioned that periodically they used bleaching powder to clean the toilets. Following that 13% of the respondents said that they washed their latrine with sand whenever they could. 9% cleaned with only water after defecation and six percent mentioned that there was no system to clean the latrines.

Table 4.23: Practices about using Sandal

SI	Responses	Frequency	Percentage
			%
1	Yes	73	94
2	No	01	1
3	Sometime	4	5
	Total	78	100

Analysis:

Table 4.23 shows that in most cases the interviewed families responded positively to using sandal. Only 1% replied negatively.

Table 4.24: Brushing Materials

SI	Name of Materials	Frequency	Percentage
			%
1	Ash	07	9
2	Tooth powder	31	38
3	Ash	08	10
4	Tooth paste	35	42
5	Others	01	1
	Total	82	100

Analysis:

From table 4.24 it is prominent that the most of the slum dwellers except one respondent brushed teeth regularly. Table 15 shows that 42% of the respondents mentioned that they used tooth paste to brush teeth, following that 38% of them used tooth powder. 10% respondents used ash to brush teeth. Only 9% slum dwellers used ash as brushing materials. The rest three percent said that they used brushing materials according to availability.

Table 4.25: Place for dumping garbage

SI	Place for garbage	Frequency	Percentage
			%
1	Scavenger's van	56	72
2	Into the pond	12	15
3	Drain	07	9
4	Dustbin	03	4
	Total	78	100

Table shows that three fourth of the respondents dump garbage into Scavenger's van. Rest of the respondents dumped garbage in the pond (15%), drain (9%), and dustbin (4%).

E. Health Related Information:

i) General health information:

Table 4.26: Common Diseases suffered by the respondents

SI	Name of the diseases	f	Causes of Diseases	Types of treatment
1	Gastric/ Ulcer	50	 Irregularity in taking food For taking excessive spicy food Stale food Do not know 	 Take medicine irregularly Take medicine daily Do not take treatment
2	Fever, Cough and cold	47	 Excessive heat Excessive cold Virus Domestic violence Drenched in Rain Work pressure 	 Take medicine from prescribed doctor of the nearest hospital Do not take treatment
3	Headache	42	 Excessive tension Excessive heat Excessive cold For taking family planning method Sleeping problem Work pressure 	 Take medicine with doctor's advice Use ointment (like vix, nix) Take rest Eye doctor Do not take medicine
4	Blood Pressure (high or low)	21	 For excessive tension Feel dizzy Weakness For not taking nutritious food Do not know 	 Take medicine with doctor's advice Take lemonade or tamarind juice
5	Toothache	20	Brush irregularlyDental carriagePyorrheaEating excessive Betel leaf	 Take medicine with the advice of doctor Extract tooth Do not take medicine

			Do not know	
6	Jaundice	18	 Irregularity in taking food Excessive work load Drinking less water Do not know 	JharphukKabiraji treatmentApple poraGaaa dhoa
7	Anemia	17	Excessive bleedingMalnutritionPregnancy hazardNo appetite	Take medicine with doctor's adviceVitamin CVitamin tablet
8	Skin Disease	16	Excessive heatFor allergyExcessive water workEczema	Take medicineUse detol soap, powderDo not take medicine
9	Diarrhea	13	For eating stale foodDrink polluted water	 Take orsaline Take medicine from prescribed doctor of the nearest hospital (icddr, b)
10	A Maggot/ Worm (An intestinal parasite)	12	 Lack of awareness about using sandal. Lack of awareness about cleanliness For eating excessive sweet food 	 Take medicine in 6 months gap (twice a year) Do not take medicine
11	Dysentery	04	Lack of fresh drinking waterDo not know	Take medicine Do not take medicine
12	Asthma	04	DustDo not know	Take medicine
13	Others	09	•	InjectionKabirajiTake treatment from hospital

The respondents reported that generally they suffer from Intestinal infections such as diarrhea, dysentery, and intestinal parasite. Other diseases mentioned were headache, fever, cough and cold, gastric/ ulcer, blood pressure, jaundice, diabetes, anemia, skin disease, toothache etc. The table shows that in some cases they have some idea about the causes of the diseases, but in most cases they were not aware of real causes of diseases. Most of the respondents reported that they go for modern medical assistance. Some of them also use traditional medicine such as such as Kabiraji, homeopathy etc.

The most common diseases mentioned by the slum women from which they suffered from were gastric/ulcer (50 respondents). As the slum people live from hand to mouth so that the women sometimes cannot even eat three times a day. For irregularity in eating, for eating excessive spicy food and stale food, respondents suffered from gastric/ ulcer problem. Some took medicine for it and some did not.

The second highest disease among the slum women was (47 respondents) fever, cough and cold. Respondents who suffered from these diseases mentioned some specific reasons but besides these respondents of this slum also mentioned that because of domestic

violence sometimes they suffered from fever. But they said that they took medicine from prescribed doctor of the nearest hospital to receive treatment. Following those 42 respondents said that they had headache. As the causes of headache they mentioned excessive tension, excessive heat, excessive cold, sleeping problem, work pressure and for taking family planning method. They took medicine on doctor's advice, used ointment, and even visited eye doctor. Some of them did not take medicine.

Another major health hazard among slum women (21 respondents) was high or low blood pressure. For excessive tension, for not taking nutritious food and for being weak they suffered from high or low blood pressure. Some of the women did not know the exact reason of pressure. They took medicine on doctor's advice and sometimes took lemonade or tamarind as treatment.

Another common disease in this slum area was toothache. 20 respondents mentioned about toothache, which is caused for eating excessive betel leaf, having irregular brushing, tooth decay and pyorrhea. But they did not know that pyorrhea caused toothache. They took medicine on advice of doctor for getting cured or tooth extraction. So, it can be said that they do not have much knowledge about diseases, their causes and their prevention.

Among the respondents 18 women were found to suffer from jaundice. They said the cause of jaundice was irregularity in taking food, drinking less water, excessive workload etc. Some respondent said that they did not know the cause of jaundice. As treatment they received kabiraji and 'jharphuk' treatment. Besides they also mentioned about 'Apple pora' and taking bath as treatment for jaundice.

17 respondents of Bauniabadh slum mentioned about anemia. For excessive bleeding during pregnancy period, malnutrition, pregnancy hazards women suffered from anemia. They took medicine on doctor's advice; ate food containing vitamin C and took vitamin tablets.

Skin disease was another common diseases mentioned by the slum dwellers (16 respondents). They said that for constant handling water at work, allergy, and eczema and for excessive heat in the slum area might be the causes of skin disease. They did not know whether it was eczema or other skin diseases. For treatment sometimes they took medicine or used detol soap and powder.

Diarrhoea was one of the most common diseases mentioned by 13 respondents. They said that for eating stale food, drinking polluted water they suffered from diarrhoea. But they did not know that it was water borne disease. They took orasaline and medicine from doctor of the nearest hospital (icddr,b) for treatment.

Another common disease in the slum area was infection by maggot/ worm (Intestinal parasite). Among the slum women 12 of them said that this may be caused of lack of awareness about protecting foot by using sandal and cleanliness, and for eating excessive sweet foods. They did not know the exact cause of the disease. Some of them took medicine (Alben) once in 6 months (twice a year) while some others did not take any medicine.

Besides these some other diseases the dwellers suffered from in the slum area were asthma (4 respondents), dysentery (4 respondents), and others (9 respondents) which includes appendicitis, gynecological problem, work related health hazard, pain in abdomen, gall bladder stone, and previous pregnancy complications etc.

The study found that in most cases the slum dwellers had very little knowledge about diseases and their symptoms.

Table 4.27: Knowledge about Health Care Center

SI	Responses	Frequency	Percentage
			%
1	Yes	73	94
2	No	-	-
3	Don't Know	05	6
4	No information	-	-
	Total	78	100

Analysis:

Table 4.27 shows the dwellers of this slum were very much conscious about the existence of health care centers. Most (94%) of the respondents knew that there were health care centers in their area. Only 6% did not know of any health care centers in their area.

Table 4.28: Types of health care center

SI	Types of health Center	Frequency	Percentage
			%
1	Government hospital	43	61
2	Private hospital	34	49
3	NGO Clinic	33	47
4	Others	10	13
5	No information	08	-
	Total	128	100

^{*}Multiple Responses

Analysis:

Table 4.28 reveals that, more than half of the respondents (61%) said about Government hospitals from where they received treatment. Almost equal number (49% & 47%) of the respondents mentioned about private hospital and NGO clinic. The rest of the respondent (13%) said that they received treatment at home from Health Visitors.

Table 4.29: Response about receiving treatment for sickness

SI	Response	Frequency	Percentage
			%
1	Always	16	21
2	Sometimes	59	76
3	Never	03	4
	Total	78	100

Analysis:

Table 4.29 shows that, near about three fourth of the respondents (76%) sometimes received treatment for sickness, around one fourth of them (21%) always received treatment for sickness, only 4% of the respondents never received any treatment when they got sick.

Table 4.30: Types of treatment

SI	Types of treatment	Frequency	Percentage
			%
1	Allopathic	73	94
2	Homeopathic	11	14
3	Kabiraji	10	13
4	Jhar-fuk	16	21
5	Others	01	1
	Total	111	-

^{*}Multiple Responses

The study found that most of the slum dwellers (94%) receive allopathic treatment, which signifies that they were not ignorant of modern treatment service. Almost equal (14% & 13%) number of respondents mentioned that they received homeopathy and Kabiraji treatment and 21% respondents reported that they received Jhar-fuk (quack doctor's treatment). Only 1% respondents practiced other methods.

Table 4.31: Response about taking medicine

SI	Responses	Frequency	Percentage
			%
1	Yes	32	42
2	No	09	12
3	Take treatment but do not take medicine	14	18
4	Sometime	21	28
	No information	02	-
	Total	78	100

Analysis:

Table 4.31 reveals that nearly half (42%) of the respondents replied positively about taking medicine and 18% said that they see doctors but did not take medicine. More than one fourth (28%) respondent said they sometime take medicine. Only twelve percent said that they did not take medicine for sickness.

Table 4.32: Monthly Expenditure (approximate) for treatment

SI	Monthly Expenditure (approximate) for	Frequency	Percentage
	treatment		%
	(In Taka)		
1	Below tk. 200	80	11
2	Tk. 201-Tk. 400	10	15
3	Tk. 401-Tk. 600	20	29
4	Tk. 601-Tk. 800	07	10
5	Tk. 801- Tk. 1000	08	11
6	Tk. 1001- Tk. Above 2000	17	24
7	Do not take treatment but take free medicine	03	
8	Have no specific routine of taking treatment	05	
	Total	78	100

More than one fourth (26%) of the respondents' monthly expenditure for treatment varied from taka 401- taka 600 and 45% respondents spent taka 601 to taka 2000 and above for treatment. Comparing income of the families, the respondents spent a substantial amount on health care.

Table 4.33: Response about getting any health service from Government/ non-Government health service provider

SI	Responses	Frequency	Percentage
			%
1	Yes	36	46
2	No	38	49
3	Do not know	04	10
	Total	78	100

Analysis:

Around half (49%) of the respondents reported that no government or non government organizations have ever provided any health services. 46% respondents mentioned that they have received health care services from GO-NGO. Only 10% respondents reported that they have no knowledge about such services.

Table 4.34: Response about satisfaction of existing health service

SI	Responses	Frequency	Percentage
			%
1	Yes	41	62
2	No	25	38
3	No information	12	-
	Total	67	100

Analysis:

Around two third (62%) of the respondents opined that they were satisfied with the existing health service.

ii) Reproductive health information:

Table 4.35: Number of Children

SI	Number of children	Frequency	Percentage
			%
1	No children	07	9
2	1-2	48	62
3	3-4	22	28
4	5-6	1	1
	Total	78	100

Analysis:

Around two third (62%) respondents had small families with children ranging from 1-2. More than one fourth (28%) respondents had 3-4 children. 9% respondents had no children. Only one respondent reported of having 5-6 children.

Table 4.36: Response about taking health care in pregnancy period

SI	Responses	Frequency	Percentage
			%
1	Yes	60	78
2	No	14	18
3	Others	02	2
4	No information	02	2
	Total	78	100

Analysis:

Majority (78%) of the respondents reported that they took health care service during their pregnancy period which shows that majority of the respondents were conscious about the need for pre-natal care. Only 18% respondent did not get any kind of health care during their pregnancy period.

Table 4.37: Mostly visited places for pre-natal health care services

SI	Place of health service	Frequency	Percentage
		(60)	%
1	Hospital	09	15
2	Health worker	-	-
3	Surjer Hashi Clinic	07	12
4	NGO Clinic	45	75
5	Others	05	08
	Total	66	

^{*}Multiple Responses

Majority (97%) of the respondents reported that they mostly visited NGO clinic including 'Shurjer Hashi' Clinic.

Table 4.38: Reason behind not going to the health care center

SI	Reasons	Frequency	Percentage
		(14)	%
1	No health Center in the area	02	14
2	No need of taking treatment	10	72
3	Others	02	14
	Total	14	100

Analysis:

Out of fourteen respondents who did not go for health care, ten of them reported that they did not feel any need for taking treatment. Only two said that there was no health care center in their locality.

Table 4.39: Response about taking vaccine during pregnancy period

SI	Responses	Frequency	Percentage
			%
1	Yes	63	88
2	No	09	12
3	No information	04	-
4	Not applicable	02	-
	Total	78	100

Analysis:

Majority (88%) of the respondents have taken vaccine during pregnancy period.

Table 4.40: Place of taking vaccine

SI	Place of taking vaccine	Frequency	Percentage
			%
1	Government Hospital	13	19
2	Private Hospital	01	1
2	NGO clinic	50	76
3	Others	03	4
4	No information	15	-
	Total	82	100

^{*}Multiple Responses

Majority (76%) of the respondents mentioned that they go to NGO clinic for taking vaccines. Other places they went for vaccination were government hospitals (19%), private hospitals (1%) and others (4%)

Table 4.41: Information on Family Planning Practices and Methods used

SI	Responses	N	%			Name	N	c	%
1	Yes	50	64		1	Inject able	27	5	54
				Methods used	2	Pill	23	4	-6
				for FP		Total	50	10	00
2	No	28	36	Reasons		N	%		
					1	No children		04	14
				2 Do not know			02	7	
				Reasons for	3	For want of chi	ild	04	14
				not taking FP	4	Husband fol method	lows the	04	14
					5	Fear of being s	sick	07	25
					6	Maintain safe p	period	02	7
					7 Respondent do not like		05	19	
	Total	78	100				Total	28	100

Analysis:

Near about two third (64%) of the respondents reported that they use family planning methods. Among them more than half (54%) of the respondents reported that they use injectable and 46% used pill. The interviewed respondents informed that they were aware of Family Planning method and they practiced different FP methods for controlling child birth. The respondents who practiced family planning methods were conscious of the positive effect of the FP methods. In most cases wives used FP methods.

One third of the respondents (36%) who did not practice any family planning method they mentioned different reason for not practicing FP. Among these group of respondents one fourth (25%) said that they did not use FP method because they were afraid of being sick, 19% respondents did not like using family planning methods. Equally 14% reported that their husbands used FP methods. 7% mentioned that they did not know about FP method and they practiced safe period.

Table 4.42: If any Physical problems faced for taking family planning methods

SI	Responses	Frequency	Percentage
			%
1	Yes	27	54
2	No	23	46
3	Not applicable	28	-
	Total	78	100

Among 50 respondents who used family planning methods, more than half (54%) of the respondents mentioned that they faced some physical problems for using FP method.

Table 4.43: Problems faced for taking family planning methods

SI	Responses	Frequency	Percentage		
			%		
1	Feel dizzy	16	59		
2	Irregular period	09	33		
3	Excessive bleeding	03	11		
4	Obesity	05	19		
5	Weakness	02	7		
6	Others	02	7		
	Total	37	-		

^{*}Multiple Responses

Analysis:

Problems faced by the respondents were feeing dizziness, irregular period, excessive bleeding, obesity, weakness etc.

Table 4.44: Measures taken after facing the problems related to family planning practices

SI	Responses	Frequency	Percentage
			%
1	Avoid the method	05	19
2	Do not take any measures	20	74
3	Taking alternative method	03	11
4	Taking medicine	05	19
	Total	37	-

Analysis:

Nearly three fourth (74%) of the respondents reported that they did not take any measure after facing any kind of side effect in using FP method. Equally 19% respondents mentioned that they avoid using method temporarily and take medicine. Only 11% said that they used alternative method.

RECOMMENDATION BY THE RESPONDENTS:

Following steps should be taken to improve the quality of health service of this area:

- Hospital and more health care centers should be established in the locality.
- Medicine should be provided at free of cost
- Door to door health service should be provided in the slum area by Government and non Government organization.
- Quality of health services should be improved.
- Doctors and health service provider's behavior needed to be more cordial.
- The reduced price of medicine so that slum people can afford it.
- Quality of sanitation facilities needed to be improved.
- Distribution of iron tablet and vitamin tablet by the Government in the locality is needed.
- Government and non-government organization should work in increasing awareness on different health issues.
- MCH doctors and health workers should take proper care of the pregnant women and new born babies and spread adequate knowledge and information to the respondents.

Besides these recommendations the respondents had more to say. They mentioned that there is a need for:

- Regular spraying to controlling mosquito in the locality.
- Proper garbage cleaning facility by City Corporation.

CHAPTER: FIVE

Conclusions and Recommendations

The study was carried out to understand health status of women living in slums of Dhaka City including their treatment seeking behavior for various health problems and health services availed by them. Data was collected through face to face interview from seventy five married women living in three selected slums. The report reflects the problems related to housing condition, water-sanitation and hygienic behavior, food consumption patters, diseases that slum women suffer from and reproductive health information.

Health problems of the slum women can be solved by themselves with a little support from Government City Corporation and NGOs working in the areas.

The NGOs can organize health education and counseling services for the slum dwellers to make them aware of causes of different diseases, the basic knowledge on water, sanitation, hygiene, balanced diet, services provided by the Government and NGOs etc.

Government and City Corporation can support with basic amenities such as

- Proper sanitation, safe water for all purposes, health facilities and common electricity with minimal charges.
- Free weekly medical and healthcare facilities.
- Reproductive training and facilities.

Further studies should be initiated on.

- Child Marriage and its effect on Neonatal, Infant and Maternal mortality and morbidity in Slum areas of Dhaka city
- Assessment of the Health Care Services available for Slum Dwellers in Dhaka City
- Expenditure on Health Care in relation to Income of Slum Dwellers in Dhaka City.

REFERENCES:

- S. Mookherji and Bishai, D., *The Demand for Health Care Among Urban Slum Residents in Dhaka, Bangladesh;* Paper of the American Society of Health Economists, TBA, Madison, 2006.
- Md Mobarak H Khan and Alexander Kraemer, Socio-economic factors explain differences in public health-related variables among women in Bangladesh: A cross-sectional study, 23 July 2008.
- SLUMS IN DHAKA CITY: Life of Misery by MD. Rubel, A report published on the daily news paper The Daily Star
- Slum health: Diseases of neglected populations, conducted by Divisions of Infectious Disease and Epidemiology, School of Public Health, University of California, Berkeley, California, USA, 7 March 2007.
- Haaga, E. 1992. A Case Study of the Slum Improvement Project, Bangladesh. Dhaka: UNICEF.
- Government of Bangladesh. 1994. Bangladesh Population Census 1991: Analytical Report. Vol. 1. Dhaka: Bangladesh Bureau of Statistics, Statistics Division, Ministry of Planning.
- World Urban Forum: *Dialogue on the urban poor: improving the lives of slum-dwellers. HSP/WUF/2/6.* Barcelona: World Urban Forum; 2004
- Centre for Urban Studies (CUS), National Institute of Population Survey and Training (NIPORT) and Measure Evaluation: *Slums of Urban Bangladesh: Mapping and Census*, *2005*. Dhaka, Bangladesh and Chapel Hill, USA; 2006.
- Sclar ED, Garau P, Carolini G: The 21st century health challenge of slums and cities. *Lancet* 2005, 365:901-903
- Pryer JA, Rogers S, Rahman A: Factors affecting nutritional status in female adults in Dhaka slums, Bangladesh.
- Uzma A, Underwood P, Atkinson D, Thackrah R: Postpartum health in a Dhaka slum, *Soc Sci Med* 1999,
- Rahim MA, Vaaler S, Keramat Ali SM, Khan AK, Hussain A, Nahar Q: Prevalence of type 2 diabetes in urban slums of Dhaka, Bangladesh.
- Rahman S, Banu S, Nessa F: Health situation of slum dwellers of metropolitan area of Dhaka.
- Ahmed F: Nutritional situation of Dhaka, **Southeast Asian J Trop Med Public Health** 1992
- Izutsu T, Tsutsumi A, Islam AM, Kato S, Wakai S, Kurita H: Mental health, quality of life, and nutritional status of adolescents in Dhaka, Bangladesh: comparison between an urban slum and a non-slum area.
- Pryer JA, Rogers S: Epidemiology of under nutrition in adults in Dhaka slum households, Bangladesh, 2006.

ANNEX- I

List of the participants:

- 1. Sonia Rashid
- 2. Sabrina Mahtab
- 3. Kazi Lakiya Hassan
- 4. Rifat Jahan
- 5. Tajnuva Tajreen6. Zannat-UL- Ferdous7. Tanvir Ahmad
- 8. Shihabul Mohaimin Bhuiyan
- 9. Kamrun Nahar
- 10. Sumsun Nahar
- 11. Abul Bashar Md. Humayun Kabir 12. Shanaz Ahmed Mahfuz