

**REPORT
ON
SURVEY FOR PROJECT AREAS IN URBAN SLUMS
OF MIRPUR AND KARAIL, DHAKA**

Submitted to:

**United Nations Children Fund (UNICEF)
Dhaka, Bangladesh**

Prepared by:

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Dhaka: January 29, 2015

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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
ARI	Acute Respiratory Infection
BCC	Behavior Change Communication
BCG	Bacillus Chalmette Guetine
BDHS	Bangladesh Demographic and Health Survey
BDWS	Bangladesh Drinking Water Standard
BUHS	Bangladesh Urban Health survey
CFU	Colony Forming Unit
CRHC	Comprehensive Reproductive Health Care
CSBA	Community-skilled Birth Attendant
CSD	Cesarean Delivery
DCC	Dhaka City Corporation
DCI	Data Collection Instrument
DPHE	Department of Public Health and Engineering
DPT	Diphtheria, Pertusis Tetanus
DSK	Dusto Shastho Kendro
EPA	Enemy Property Act
EPI	Extended Programme on Immunization
FC	Faecal Coliform
FGD	Focus Group Discussion
FWA	Family Welfare Assistant
FWV	Family Welfare Visitor
GIS	Geographical Information System
GOB	Government of Bangladesh
GPS	Global Positioning System
H&M	Hennes and Mauritz
HA	Health Assistant
HDRC	Human Development Research Center
HH	Household
HIV	Human Immunodeficiency Virus
IFA	Iron Folic Acid

IYCF	Infant and Young Child Feeding
JMP	Joint Monitoring Programme
KII	Key Informant Interview
LGED	Local Government Engineering Department
M&S	Marks and Spencers
MA	Medical Assistant
MCH & FP	Maternal Child Health and Family Planning
MCV	Meningo-coccal Vaccine
MICS	Multiple Indicator Cluster Survey
MOHFW	Ministry of Health and Family Welfare
MTP	Medically Trained Provider
MUAC	Mid Upper Arm Circumference
NGO	Non-Government Organization
NSD	Normal Vaginal Delivery
OPV	Oral Polio Vaccine
ORS	Oral Rehydration Salt
PNC	Postnatal Care
PPM	Parts per Million
PPS	Probability Proportional to Size
SACMO	Sub-assistant Community Medical Officer
SD	Standard Deviation
SPPME	Social Policy, Planning, Monitoring & Evaluation
SHEWA-B	Sanitation, Hygiene, Education and Water Supply in Bangladesh
TBA	Traditional Birth Attendant
UNDP	United Nations Development Program
UNICEF	United Nations Children Fund
UPHCSDP	Urban Primary Health Care Service Delivery Project
WASA	Water and Sewerage Authority
WASH	Water, Sanitation and Hygiene
WES	Water and Environmental Sanitation
WHO	World Health Organization

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Executive Summary

In Bangladesh, urbanization has started growing fast since eighties, with the poor people subsisting on very poor or low public utility services. Around 4 million people are living in nearly 400 urban slums in Dhaka. The situation of access to health, education, safe-water supply, sanitation and waste management, both liquid and solid is very much limited for the urban poor and migrant communities, surrounding garment factories. As a result of deprivation of social services, and lack of knowledge and unsafe practices by parents and caregivers linked to child-caring and rearing, children's survival and development is also in jeopardy.

Considering this grave situation of urban slums, UNICEF is implementing projects in Mirpur and Karail slum of Dhaka supported by Marks and Spencers (M&S) and Hennes and Mauritz (H&M) companies with a view to alleviating poverty, strengthening child rights, preventing and eliminating child labour, and reducing the number and proportion of children out of school among the families in the slum areas. The programmes are strategically linked to child protection, communication for development, education, health, nutrition and water and environmental sanitation (WES) together with specific interventions for children under 18 years, at each stage of development.

The survey has been undertaken by Human Development Research Center (HDRC) for Social Policy, Planning, Monitoring & Evaluation (SPPME) Section of UNICEF in project areas in urban slums in Mirpur and Karail, Dhaka. It is expected that the information collected through this survey will help further development and implementation of the programme.

Objectives of the Survey

Overall objective of the survey is to collect information to assess the present state of conditions of living, health, nutrition, WASH among the slum dwellers in and around the areas covered by the project and beyond in the slum of Mirpur and Karail of Dhaka (or the project area).

Specific objectives of the survey are:

1. To establish the socio-economic and demographic profiles of the population living in the project areas;
2. To carry out a mapping of all health, nutrition, WASH, education and other facilities and services in the project areas;
3. To assess the health, nutrition, education and protection status of the child population in the project area;
4. To assess the knowledge, attitudes and practices of families and communities pertaining to child health, care, nutrition and hygiene practices, child development and protection in the project areas; and
5. To identify the key barriers in the obtainment of services by the communities, available in public and private facilities.

Methodology

Both quantitative and qualitative approach has been used for the survey. A *two-stage cluster sampling approach with equal size* has been adopted to select respondents for quantitative survey. Survey for Mirpur and Karail slums has been conducted following cluster sampling approach with an aim to generate estimates for the slum level by Mirpur and Karail (considered as survey units) in Dhaka. From each survey unit 30 clusters each consisting of 300 households has been selected. Slums having more than 300 households have been divided into several segments of 300 households and one segment has been selected randomly.

Households within selected clusters have been listed prior to household survey. Using information collected through household listing, separate sampling frame of households with eligible respondents has been prepared. From each sampling frame within a cluster, a fixed number of respondents have been targeted and selected in order for the conduct of interviews with households. From selected households information has been collected on all eligible respondents. Household survey was conducted using 3 separate questionnaires: Household survey questionnaire, Questionnaire for Women aged 15-49 years, and Questionnaire for Children under-5.

Key Informant Interviews have been conducted with resource persons having first-hand knowledge about the issues concerned. Focus Group Discussions have been held with the community women and community leaders to construct logical connectivity related to all 'why' and 'how' questions existing in quantitative questionnaires.

Water samples have been collected from water source(s) and sub-sampled households in a cluster for bacteriological test and Arsenic level detection. Geographical Information System (GIS) has been used to identify exact location of important infrastructure (HH location, service point, i.e. health service facilities, educational institutes, water supply points, community latrines, solid waste disposal, etc.), especially to develop spatial database in order to prepare GIS maps of the project areas.

Key Findings

Characteristics of Household: Most of the households (93.8%) in Mirpur slums and Karail (91.1%) are headed by the males. The sex ratio in Mirpur slums is 97.4 males per 100 females. The corresponding ratio in Karail slum is 94.0 males per 100 females. The proportion of economically active population in the age bracket of 15-64 years is 68.5 percent in Mirpur slums and 72.4 percent in Karail slum.

Major source of income in Mirpur slums is wage labour (49.9%), followed by salaried income (26.4%) and income from small business/trading (23.6%). In Karail, prime source of income of the slum dwellers is wage labour (48.5%) followed salaried income (26.2%) and small business/trading (24.7%).

Most of the households (61.6%) in Mirpur slums are rented, 28.6 percent are owned and 9.8 percent are occupied without rent. In Karail slum, dwelling houses are largely (70.8%) rented, 20.9 percent are owned and 8.3 percent are rent free occupied households.

In Mirpur slums, most pronounced assets of the households are mobile phone (84.4%) and television (63.1%). Other durable commodities are almirah or wardrobe (35.9%), watch (23.4%) and refrigerator (19.0%). Besides, 98.7 percent of households have electricity. In Karail slum, the most widely reported durable commodities are also mobile phone (84.7%) and television (53.9%). Less reported commodities are Almirah or Wardrobe (17.9%), watch

(13.5%) and refrigerator (9.7%). Almost all (99.6%) surveyed houses in Karail slum have electricity.

The most common flooring material in Mirpur slums is of finished material (69.2%), followed by natural in 24.2 percent households. Roofs of 92.6 percent households are rudimentary, followed by finished material (6.6%). More than half of the walls (60.9%) are rudimentary in nature and one-thirds (33.7%) are made of finished material. In Karail, floors of the majority dwelling houses (81.0%) are finished in nature. Almost all the roofs (98.8%) and walls (91.1%) are rudimentary in nature.

Dwelling houses of Mirpur slums are largely (86.3%) single-room with average number of household members per room is 3.7 persons which require 3 rooms. In Karail slum, 91.7 percent of the dwelling houses is single- room with an average number of household member per room is 3.6 persons, deserve 3 rooms for sleeping.

In Mirpur slums, 85.4 percent households are absolutely landless, 13.4 percent are functionally landless (<50 decimals) and merely 1.1 percent are marginal land owner (50-150 decimals). Majority (87.3%) households in Karail slums are absolute landless, 11.4 percent functionally landless and a few (1.3%) are marginal land owner (50-150 decimals).

Respondent characteristics: In Mirpur slums, 41.3 percent of the surveyed women are at young ages between 15 and 24 years and more than three-fifth (62.5%) is under the age of 30 years. Majority (89.7%) of them is ever married and 86.0 percent of them have given birth at least once. Some 13.6 percent has completed primary and 7.0 percent secondary or higher. Nearly half (49.8%) percent women have no education. Economically, 23.1 percent are living in richest quintile where 17.2 percent subsist in the poorest quintile against 23.1 in richest quintile. In Karail, 45.9 percent of the surveyed women are at young ages (15-24 years) and two-third (67.0%) is under the age of 30 years. Women are largely (94.0%) ever married and majority (89.7%) have given birth at least once. Some 11.7 percent has completed primary and only 6.6 secondary or higher education, where 50.1 percent has no education. Quintile wise, 19.1 percent of the women respondents are in poorest quintile and 20.2 percent in richest quintile.

In Mirpur slums, 17.2 percent (5.6% male and 11.6% female) of the surveyed populations are at young age group (15-24 years). Some 9.8 percent of them are illiterate, 1.7 percent has completed primary and 1.2 percent secondary or higher education. The population of young ages living in poorest and richest quintiles is 2.9 and 4.5 percent respectively. In Karail slum, 13.3 percent (5.5% male and 11.8% female) of the population is young. Some 1.9 percent has completed primary and 1.9 percent secondary or higher education, and 7.0 percent has no education. The young people are living in poorest and richest quintiles are 3.5 and 3.9 percent respectively.

Out of the surveyed under-5 children in Mirpur slums, 54.4 percent are boys and 44.6 percent are girls. Of them, 8.6 percent are below the age group of 1 year or infant. Around one-third of the mothers has no education. Nonetheless, 12.3 percent has completed primary and 3.5 percent secondary or higher education. One-fifth children are living in richest quintile against 18.5 percent in poorest.

In Karail slum, percentage of under-5 boys and girls are 46.6 and 53.4 percent respectively. Nearly 15 percent are below 1 year or infants. Some 44.2 percent mothers are illiterate, where 15.2 and 2.9 percent has completed primary and secondary education or higher respectively. Percentage of under-5 children living in poorest and richest wealth quintiles are 17.5 and 22.2 percent in order.

Education: In Mirpur slums, 53.0 percent of the surveyed household heads have no education. Nonetheless, 11.7 percent have completed primary and 7.4 percent secondary or higher education. On the other hand, 52.1 percent household heads in Karail slum have no education. Percentage of household heads with completed primary and secondary or higher education account 12.1 and 6.3 percent respectively.

In Mirpur slums, 39.2 percent of the surveyed household members have no education. Nonetheless, 10.5 percent have completed primary and 5.2 percent secondary or higher education. In Karail, 39.0 percent household members have no education. Household members with completed primary and secondary or higher education account 13.1 and 3.7 percent respectively.

In Mirpur slums, 16.1 percent of children aged 36-59 months (13.3% boys and 19.2% girls) are attending early childhood education. In Karail slum, percentage of children aged 36-59 months attending early childhood education is 12.7 percent (13.5% boys and 12.3% girls). Furthermore, 18.0 percent children in Mirpur slums and 23.4 percent in Karail are studying in first grade at the time of survey that was in pre-school program during previous year.

Reportedly, 31.0 percent of children aged 5-17 years in Mirpur slums are out of school. Of the total children aged 5-17 years, 21.7 percent has never attended school. Additionally, 20.3 percent has dropped out from primary and 27.3 percent from secondary school. In Karail, percentage of children out of school is 23.8 percent. Where, 18.2 percent out of the total children aged 5-17 years has never attended school. Besides, 14.9 percent has dropped out from primary and 5.5 percent from secondary school.

In Mirpur slums, 53.2 percent of the young female respondents (15-24 years) are literate. However, literacy rate of them is higher among the female respondents under 20 years (64.0%) as compared to those above 20 years (47.3%). In Karail, reported literacy of the young female aged 15-24 years is 48.2 percent. Literacy is higher among the age group of 20 years and higher (49.2%) than their counterpart below 20 years (46.8%).

Coverage analysis of educational services and community satisfaction: The most commonly reported facility for pre-school education in Mirpur slums is NGO provided pre-school/Kindergarten (60.1%), followed by private pre-school /Kindergarten (55.8%), govt. pre-school/baby class attached to primary school (34.8%), and mosque based moktob (32.0%). Some 34.4 percent of the households are likely to send their children for pre-school education. The most pronounced (55.2%) reason behind not sending their children for pre-school education is inability to afford the expense of education, followed by non availability pre-school facility nearby (22.7%), and poor quality of preschool education (14.8%).

In Karail, the most frequently reported pre-school facility is provided by NGO provided pre-school/Kindergarten (83.7%), followed by privately owned pre-school/kindergarten (51.8%), govt. pre-school/baby class attached to primary school (35.6%) and mosque based moktob (25.4%). Households with children of pre-school age likely to send their children to pre-school in Karail slum is 46.4 percent. The most commonly stated reasons behind not sending their children for pre-school education is their inability to afford the expense of education (53.9%), followed by lack of quality pre-school (21.6%), and non-availability of pre-school at near distant (17.3%).

In Mirpur slums, most frequently reported facility for primary education is Government primary school (43.9%), followed by NGO provided primary school (41.5%), non-registered and registered private primary school is 18.4 and 15.3 percent respectively. Nearly four-fifths

(79.3%) of the households with children of primary school age send their children to school. Inability to bear the expense of education (54.9%) is the key reason behind not sending their children to school, followed by engagement of the children in wage earning (14.5%) and baby care (11.3%).

The most frequently reported primary school facility in Karail slum is NGO provided primary school (58.7%), followed by non-registered private (21.6%) and government primary school (20.2%). More so, ebteyee madrassa attached to high alia madrassa is 11.3 percent. Notably, 73.0 percent of the households with children of primary school age send their children to school. The crucial reason behind not sending their children to school is their inability to bear the expense of education (53.9%), followed lack of quality primary school (18.7%), engagement of the children in wage earning (13.8%) and baby care (11.0%).

The commonly reported facilities for secondary education in and around Mirpur slums are private high school for boys and girls (42.7%) and government high school for boys and girls (25.9%). Some 93.8 percent of the households send their children to high school. The primary reason behind not sending to school is involvement of children in wage earning (79.7%), followed by inability to bear expense of education (34.7%), and to do household chores (14.4%).

The commonly reported facilities for secondary education in and around Karail slum is private school for the boys and girl (31.3%), private boys high school (13.5%) and private girls high school (12.7%). Notably, 84.5 percent of households with children of secondary school age send their children to high school. Engagement of children in wage earning (58.3%) is the prime reason behind not sending to school, followed by inability to bear the expense of education (44.4%), and to do household chores (27.8%).

Child health: Proportions of fully immunized children (aged 12-23 months) in Mirpur and Karail slums are 77.5 percent and 80.6 percent respectively. In Mirpur slums, 85.1 percent children (12-23 months) have received BCG and first dose of DPT/Pentavalent and Polio vaccines. The same in Karail is 91.5 percent. In both areas there is a decline of subsequent doses and vaccines. 44.5 percent mothers and/or care givers in Mirpur and 50.5 percent in Karail have been able to show the vaccination card.

Among under-5 children 14.5 percent in Mirpur and 12.0 percent in Karail slums reportedly had diarrhea within 2 weeks preceding the survey. Of those who had diarrhea, 26.8 percent and 31.7 percent respectively have received proper treatment [i.e., any combination of pair between (fluids from ORS packet or salt sugar-water or pre-packed ORS fluid) and (zinc tablet or Zinc Syrup)].

About 22 percent under-5 children in Mirpur slums and 27 percent in Karail had cough within 2 weeks preceding the survey. Of them, 60.5 percent children in Mirpur and 58.6 percent in Karail reportedly had problems like breathing faster than usual with short, quick breaths or have difficulty in breathing. In Mirpur, about 77 percent children having breathing problem have sought treatment from any provider, and of them 50 percent have sought services from medically trained providers. In Karail, the respective proportions are 85 percent and 31 percent.

In Mirpur slums, about 43 percent children (0-59) are stunted and 25 percent severely stunted, about 27 percent of children had wasting and 10 percent wasting severely. Around 45 percent under-5 children are underweight and 17 percent severely underweight. In Karail, 35

percent under-5 children are stunted (severe stunting: 15%), 24 percent wasted (severe wasting: 9%), and 36 percent underweight (severe underweight: 10%).

In Mirpur, 13 percent children (0-23 months) were breastfed within one hour of birth and 17 percent within one day after birth. In Karail, respective figures were 12 percent and 20 percent. About 38 percent children under-2 in Mirpur and 42 percent in Karail were given honey/ sugar mixed water or mustard oil, etc. immediately after birth.

In Mirpur, about 23 percent children 0-59 months took juice/sweetened water and 22 percent milk during the day prior to survey. About 96 percent took porridge, bread, rice, noodles, or other foods made from grain, white potatoes, or foods made from roots, 51 percent took any meat items, fish (fresh or dried), shellfish, or seafood, and 47 percent took food made from beans, peas, lentils, nuts, or seeds. Around one-third each ate egg and green leafy vegetables or any type of fruits.

In Karail, about 18 percent children 0-59 months took juice/sweetened water and 22 percent milk during the day prior to survey. About 92 percent took porridge, bread, rice, noodles, or other foods made from grain, white potatoes, or foods made from roots, 53 percent took any meat items, fish items, and 54 percent took foods made from beans, peas, lentils, nuts, or seeds. Around 29 percent ate egg and 22 percent green leafy vegetables or any type of fruits.

Around 86 percent households each in Mirpur and Karail consumed salt containing ≥ 15 PPM iodine.

Access to water: In Mirpur slums, entire population of the surveyed households has access to improved sources of drinking water. The most pronounced improved source of drinking water is piped water connection inside the user's dwelling, plot, or yard (62.8%), followed by public tap/standpipe (15.9%) and tube-well connected to WASA pipeline (13.5%).

All sources of drinking water of the surveyed household population in Karail slums are improved by category. The most commonly used improved source of drinking water is piped water connection inside the user's dwelling, plot, or yard (67.7%), followed by tube-well connected to WASA pipeline (17.1%), and public tap/standpipe (8.5%).

Almost all the household population in Mirpur (98.8%) and Karail (98.5%) slums use improved sources of drinking water for cooking and washing purpose.

Water quality: None of the population of water quality tested households in Mirpur slums is exposed to arsenic contaminated water either from stored water or from water at source. However, arsenic content of 4.6 percent households in stored water and 3.2 percent in source water of Mirpur slums exceed the WHO limit. In Karail, none of the water samples either from stored or from sources exceed the limit of Bangladesh and WHO as well.

Alarmingly, stored water of 98.9 percent and source water of 85.9 percent water quality tested household population in Mirpur slums have failed to meet BDWS standard (CFU 0/100 ml of water) and polluted. In Karail, among the water quality tested households, stored water of 93.4 percent of household population and source water of 82.6 percent contain one or more faecal coliform(s) per 100 ml of water and polluted as per BDWS standard.

Adequacy of water: Overall, 68.7 percent of households of Mirpur slums reportedly get adequate (>20 liters) amount of water per person per day to meet their different domestic basic need like drinking, cooking, washing/cleaning. The corresponding percentage of households availing adequate amount of water in Karail slum is 76.6 percent.

Duration of water supply: The mean duration of water supply in the surveyed slums of Mirpur is 7.3 hours in dry and 7.9 hours in wet season. According to 44.4 percent households in dry and 39.1 percent in wet season, duration of water supply is 3 hours or less. Nonetheless, 19.2 percent households in dry and 20.8 percent in wet season enjoy continuous supply of piped water throughout day. The mean duration of water supply in the surveyed Karail slum is 4.7 hours in dry and 5.2 in wet season. The water supply in Karail stays for 3 hours or less to 70.0 percent households in dry and 66.2 percent in wet season. Conversely, 10.6 percent households in dry and 13.0 percent in wet season avail continuous supply of piped water throughout the day.

The average time taken for collection of water for household consumption in Mirpur slums is 9.9 minutes and that in Karail slum is 8.2 minutes.

Distance of water point: The distance of almost all (>99.0%) the surveyed households in Mirpur and Karail slums is less than 150 meters both from the functional water point for drinking as well as cooking. However, there are 96.0 percent of the households in Mirpur and 94.0 percent in Karail slums where distance between the households and functional water point for drinking and cooking is 50 meters or less.

Effective coverage of drinking water supply: Considering acceptable distance of water point, adequacy of water supply and arsenic as well as pathogenic bacteria safe drinking water, estimated percentage of households with effective coverage of drinking water supply is 8.3 percent in Mirpur slums and 10.0 percent in Karail slum.

Merely 24.4 percent of households in Mirpur and 22.3 percent in Karail treat water before drinking. The most widely used means of treating water in Mirpur and Karail slums is boiling, accounts 65.2 and 80.6 percent respectively. Other notable means of purifying water both in Mirpur (34.8%) and Karail (23.8%) slums is straining through cloth.

Sanitation: Overall, 37.5 percent population of Mirpur slums use sanitary means of excreta disposal. However, 12.9 percent of these population shares their sanitation facilities with two or more household, thus adjusted percentage of population using improved sanitation facility in Mirpur slums is 24.6 percent. In Karail slum, percentage of population using sanitary means of excreta disposal is 41.8 percent. Nonetheless, adjusted percentage of population using improved sanitation facility in Mirpur slums is 31.6 percent. Sanitation facility of more than 45 percent of population in surveyed Mirpur and Karail slums links to open place.

Hygiene and environmental health: The most widely known critical times of hand washing in Mirpur slums are after using latrine (90.9%) and before taking food (84.5%), followed by after cleaning baby's bottom (34.0%). In Karail, most pronounced critical times of hand washing are also after using latrine (96.9%) and before taking food (76.6%), followed by after cleaning baby's bottom (42.7%). Water is there at the place of hand washing in 45.4 percent households in Mirpur slums and 34.5 percent in Karail slum. Among the households having hand-washing place, soap/detergent at the convenient place of hand washing is observed in 41.4 percent of the households in Mirpur slums and 19.5 percent in Karail. Reportedly, 71.7 percent of the respondents in Mirpur slums wash their hands with soap and water after defaecation. It is 78.1 percent for households in Karail slum.

Coverage analysis of water supply, solid and liquid waste disposal services: In Mirpur slums, 49.9 percent of the households consider that existing sources water supply is enough/adequate for their community. In contrast, more than half (53.6%) of the households in Karail slum believes that present sources water supply is not enough/adequate for their community.

Three-fifth (61.3%) of the households in Mirpur slums and 69.6 percent in Karail dump their solid waste randomly in open place or ditch. Conversely, 21.7 percent households in Mirpur slums and 5.3 percent in Karail dispose their solid waste in City Corporation dust bin/ barrel and 18.5 percent in Mirpur slums and 25.1 percent in Karail do so by appointing a waste collector through community initiative.

Liquid waste of 54.3 percent of the households in Mirpur slums either flows away to the covered (25.7%) or open (28.6%) channels of paved drains, followed by 32.8 percent to surrounding ditch and 8.9 percent to unconstructed channels open drain. In Karail slum, liquid waste from half (51.1%) of the households is disposed to surrounding ditch. Of the rest, liquid waste from 14.0 percent households drains to the covered and 25.6 percent to open channels of paved drain. Besides, liquid waste of 7.1 percent of the households drains to unconstructed channels of open drain.

Reproductive health status of women: Although, the marriageable age of women in Bangladesh is 18 years, in Mirpur slum 67.3 percent, and in Karail slum 70.3 percent ever married women aged 15- 49 years reported that they have married before 18 years age.

Overall, in Mirpur slum, 85.9 percent, and in Karail slum, 89.6 percent of women aged 15-49 years reported that they were ever pregnant in their life. On an average, they reported 2.5 pregnancies in their life in Mirpur, and 2.9 pregnancies in Karail slum. Number of pregnancy is less in women who have completed SSC or higher.

Overall, 84.5 percent of women in Mirpur slum and 87.9 percent of women in Karail slum reported that they had live birth ever. However, 53.2 percent of women in Mirpur slum and 56.1 percent in Karail slum reported that they had live birth in last 3 years.

Antenatal care coverage: Overall, 27.3 percent of women in Mirpur slum and 29.2 percent in Karail slum reported that they didn't receive any ANC. In Mirpur, 37.0 percent, and in Karail, 28.9 percent of women reported receipt of 4 or more ANCs from any provider. About, 49.8 percent of women in Mirpur slum and 48.6 percent in Karail slum went to medically trained providers. Overall, 34.2 percent of women in Mirpur slum and 26.3 percent in Karail slum reported that, they went to qualified doctor.

Around 18.1 percent women in Mirpur slum reported that, they went to public sector health facility, 35.7 percent women went to NGO facilities and 11.4 percent in private clinics. About 13.4 percent of women in Karail slum went to public sector health facility, and 45.5 percent, 32.5 percent went to NGO facilities and 13 percent to private clinics for last ANC. Overall, 90.1 percent of women in Mirpur slum and 82.8 percent in Karail slum receiving ANC reported that, their weight was taken during last ANC.

Regarding not receiving ANC, overall, 44.2 percent of women in Mirpur slum, and 61.9 percent women in Karail slum reported 'no need of ANC'.

Consumption of IFA tablets during last pregnancy: Overall, 69.1 percent of women women in Mirpur slum and 63.1 percent in Karail slum reported that they have consumed IFA tablets. About 79.4 percent of women in Mirpur slum and 81.7 percent of women in Karail slum consumed IFA tables during last pregnancy reported consuming less than 100 IFA tablets during last pregnancy.

About 55.5 percent of women in Mirpur slum and 55.7 percent women in Karail slum reported that they have collected IFA tablets from NGO Hospitals or clinics during last pregnancy.

Assistance at delivery: Overall, 52.6 percent of women in Mirpur slum and 22.9 percent in Karail slum went to medically trained provider for assistance during last delivery. While analyzed, it shows increasing trend in higher education groups, and richer wealth quintile groups.

Overall, 48.7 percent of women in Mirpur slum and 43.6 percent in Karail slum reported that, they delivered in health facility during last delivery. Delivery in health facility shows increasing trend in higher education groups, and richer wealth quintile groups. Regarding reasons for not going to health facility during last delivery, overall, two-thirds of women in both Mirpur slum and Karail reported that ‘it was not necessary’.

Postnatal care: Overall, 37.8 percent of women in Mirpur slum and 35.5 percent in Karail slum reported receipt of post-natal health check from MTP within two days of last birth. About 16.8 percent of women in Mirpur slum and 14.2 percent of such women in Karail slum reported that they have received post-natal health check within two days of last birth from qualified doctor.

Coverage analysis of health services: Reportedly, local pharmacies are the most widely known health care facilities in Mirpur slums, followed by NGO clinics. The most utilized health care provider is also local pharmacists (69.1%), followed by NGO health care providers, qualified medical practitioners, private clinic health providers, public sector health providers, and traditional practitioners. Majorities in Karail slum also reported receipt of medical care from local pharmacies (85.4%), followed by qualified and unqualified medical practitioners, NGO clinics, private hospital/ clinics, and public health facilities. Non availability of public sector health facilities nearby is the most pronounced barrier in availing their services.

Inventory of health care facilities: Out of the four surveyed health centres in Mirpur slums, one centre is under UPHCSDP and rests are NGO provided health centres. All the surveyed health centres have electric connection. Except the UPHCSDP, all other centres are offering health care services to the clients as out-door basis. Only UPHCSDP has the facility for delivery care and is providing 24 hours indoor services to the delivery cases. Service for ANC and PNC is available in all the centres. In most of the centres, health care is provided by qualified physician. Services for basic laboratory tests are available in all the centres to a variable extent.

In Karail, all the health care facilities are providing services on outdoor basis and the centres do not conduct any delivery. The basic services for ANC and PNC are available in all the facilities. Basic laboratory tests are not available in the surveyed health care facilities in Karail.

Knowledge of HIV/AIDS: Overall, in Mirpur slum, 76.6 percent, and in Karail 78.8 percent young men have heard about HIV. They were then asked questions related to HIV/AIDS. Only 9.9 percent of the young men of Mirpur slum, only 12.3 percent in Karail have comprehensive knowledge of HIV/AIDS.

Overall, in Mirpur slum, 78.9 percent, and in Karail 83.6 percent young women reported that they have heard of HIV. Only 7.8 percent of the young women of Mirpur slum and 7.6 percent of Karail slum have comprehensive knowledge of HIV/AIDS.

Birth registration: About 63 percent mothers (having children the age group 0-59 months) in Mirpur know how to register child’s birth and 15 percent under 5 children in Mirpur has birth registration certificate; and 1.3 percent children were registered within 45 days after

birth. In Karail, about 73 percent of eligible mothers reportedly know how to register a child's birth, 11 percent children (0-59 months) have birth registration and proportion of registered within 45 days after birth is 3 percent.

Child labour: Prevalence of child labour in both Mirpur and Karail slums is 8.4 percent each (male child 10.0% vs. female child 7.0% in Mirpur, and 12.6% vs. 4.6% in Karail slum) with majority working outside home.

Corporal punishment: While majority (53.6%) of household heads in Mirpur slums are in favour, the largest part (56.5%) of household heads in Karail are against physical punishment to raise or educate their children. Some 39.9 percent of household heads in Mirpur slums and 33.5 percent in Karail reports that adult household members are likely to beat their children at home to rise from sleep and/or for education. Around one-fourth household heads each in Mirpur slums and Karail also report that teacher often beat their children at school in relation to home work and/or education.

Attitude towards domestic violence against women The young women aged 15-25 years were interviewed to know their attitude about domestic violence. For this purpose, they were asked to justify 5 types of domestic violence against them. A 74.9 percent young woman in Mirpur slums, and a 76.2 percent young woman in Karail slum reported any of the five reasons of domestic violence as justified. While analyzed by education of women, the proportion reporting any of the five reasons of domestic violence against women as justified decreases with increase in education.

Exposure to media: Around 55 percent literate males and 89 percent literate females aged 15-49 years in Mirpur slums do not read news papers in any way. Corresponding figures for Karail slum are 52.2 and 96.3 percent. Majority of Mirpur (81.1% male and 93.0% female) as well as Karail (79.2% male and 93.7% female) slums does not listen to radio. In contrast, television is most popular and attractive media in Mirpur (65.3% male and 73.8% female) and Karail (60.9% male and 68.6% female) slums.

Recommendations

Considering the situation prevailing in Mirpur and Karail slums, for provision of basic services including services for nutrition of mother and children, and development of children, the recommendations of HDRC research team are as follows:

1. Water should be supplied through government sources at lower price and to be available for more time.
2. Measures should be taken by the government for safe disposal of liquid waste through construction of new drains and cleaning/maintenance of the old ones.
3. Measures should be taken by the government for safe disposal of solid waste through placing dustbins in slum areas and regular evacuation of those through DCC vehicles.
4. Special BCC programme should be taken by the government and NGOs to increase awareness of people regarding treatment of drinking water.
5. Pre-school services in slums should be provided by the government as well.
6. More primary schools should be established by the government and NGOs in and around slums.
7. In addition to establishment of some new schools for secondary education, those poor households of slums sending their children for secondary education should be given

some financial support by to cover the wage lost through sending their children at school.

8. Some tiffins should be provided to the children coming to schools from slum areas.
9. Special BCC programme should be taken by the government and NGOs to increase awareness of people for sending their children for pre-school, primary and secondary education.
10. More Nagar Shastho Kendra should be established in and around slums for provision of general health, and maternal and neonatal health, especially delivery services at low cost and supply medicine free of cost.
11. As pharmacists are the main service providers in Mirpur and Karail slum, the community leaders suggested running the pharmacies by Medical Assistants, so that they can counsel the patients while providing services.
12. Special BCC programme should be taken by the government and NGOs to increase awareness of people for immunization and prevention of diseases, nutrition of mother and children, maternal and neonatal health care, and prevention of AIDS.
13. Government and NGOs should take awareness programme for changing mindset of people to decrease the incidence of domestic violence against women, and corporal punishment of children.
14. Special media effort should be there for slum people who residing in urban areas are leading miserable life worse than that of the rural areas.