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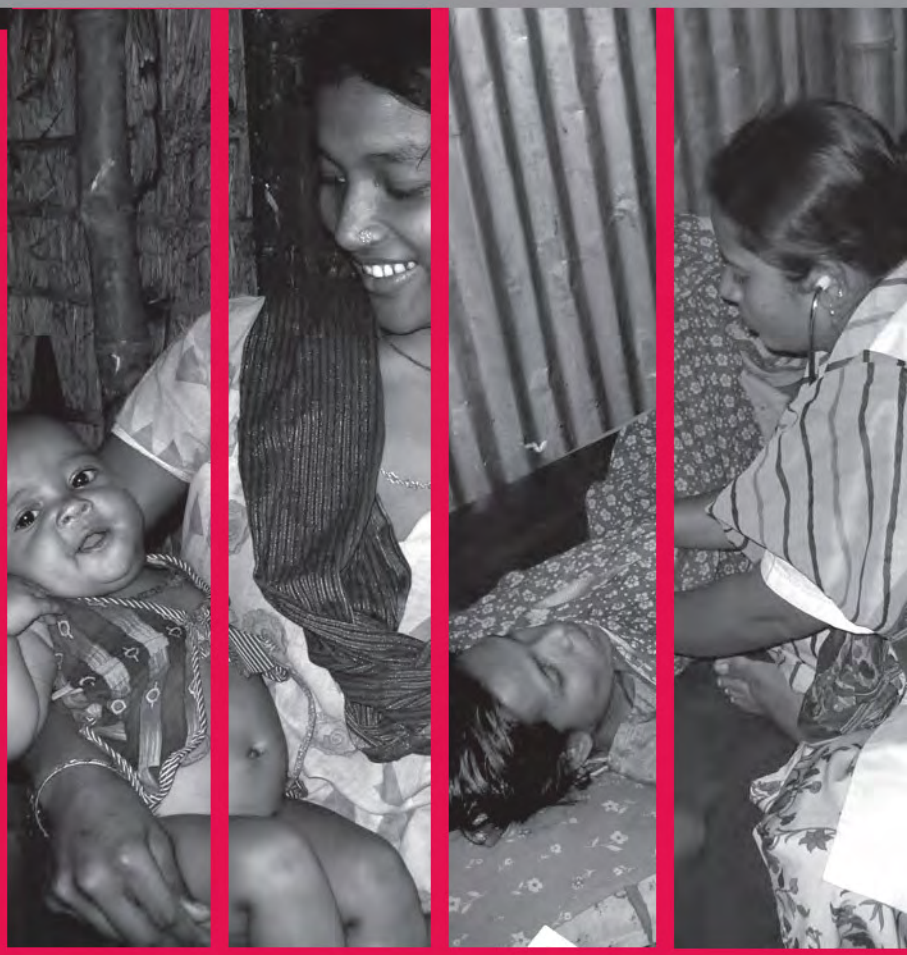
The Perceptions of Community Groups to Improve MNCH in Urban Slums

An Exploratory Case Study of KorailSlum in Dhaka



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icddr,b
KNOWLEDGE FOR GLOBAL LIFESAVING SOLUTIONS

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EXECUTIVE SUMMARY

Manoshi, a maternal, neonatal and child health (MNCH) project implemented by Bangladesh Rural Advancement Committee (BRAC) is aimed at involving community groups and organization to reduce maternal, neonatal and child mortality and morbidity in slums of Bangladesh. This study was implemented in *Korail* of Dhaka city to identify the existing groups (Clubs, women's groups of other NGOs, groups of village organization (VO) members) in the slum, document the perception of community group members about the MNCH problems and understand their priorities, explore the ways through which community groups can contribute to improve MNCH situation and report suggestions from the community groups about further improvement of *Manoshi*.

Primarily qualitative methods were administered to collect data for the study. The methods included transect walk and informal discussion with community people, listing of community groups/organizations, listing of influential people in the community, Focus group discussion (FGD) with the community group members, in-depth interview (IDI) with community group leaders, and preference ranking exercise. Data from transect walk helped to develop the profile of the slum, the roles of the existing groups and organizations were reported under key areas of activity (e.g., education, health, economic, environmental, socio-political, recreational etc). Data from FGD and IDI were analyzed to identify key thematic areas in relation to the objectives of the study. The analysis of FGD and IDI also helped to generate a list of priorities about MNCH problems, strategies to address the problems, suggestions for *Manoshi* etc. The list was used for preference ranking exercise to further prioritize the MNCH problems, issues and suggestions.

Korail is located in ward 19 of Dhaka City Corporation. It has 140,000-182,000 population who came primarily from *Barisal*, *Bhola*, *Sherpur*, *Barguna*, *Comilla*, *Jamalpur*, *Mymensingh*, *Kishoreganj*, and *Faridpur*. They are mostly Muslim and their professions include carpenter, plumber, construction worker, rickshaw driver, cart puller, day labourer, garments worker, government employees, housemaids, grocer, restaurant workers, boatmen, and beggar. Primary health care is available from different NGOs but there is no secondary or tertiary health facility in the area. It was found that influential people in the area had multiple involvement: e.g., with political parties, business, socio-cultural/ economic/

health/ education organizations including organization of freedom fighters, health services (as traditional birth attendants, medical practitioners: allopathic/ herbalist etc) etc. Their reasons of influence are tied to the nature and extent of their affiliation with community groups and organizations.

The leaders and members of the community groups are involved with a range of health care activities which include advice to seek care, financial help, space for expanded program on immunization (EPI) centres etc. They are willing to take part in raising awareness among the slum dwellers, forming committees for improving MNCH, sending people to seek health services etc.

The key MNCH problems identified by the community group leaders and members are:

Pregnancy	**Swelling of hands and feet, eclampsia, anemia , weakness, malnutrition, jaundice, blurring of vision, excessive vaginal discharge, bleeding, loss of appetite, pain in the lower abdomen, vertigo**
Delivery	**Prolonged labor, mouth of the womb does not open, inadequate opening of the womb, vaginal watering (rupture of membrane), inadequate labor pain, intermittent labor pain (*baytha uthe komey jai*), breech presentation (*bachcha ooltey ashey)*, hand or feet prolapse, retained placenta, death of the child inside the womb, bleeding, blurring of vision, eclampsia, tearing of the birth passage**
Postpartum	**Bleeding, fever, pain in the lower abdomen, convulsion/eclampsia, weakness, anemia, lump in the abdomen, vertigo**
Neonates	**Pneumonia, difficulty in initiation of respiration after birth, common cold/cough, tetanus, inability to suck breast milk, ulceration of mouth and tongue, malnutrition, fever, rash, stoppage of urination and defecation, infection of cord stump, unable to cry, loose motion, jaundice**
Child	**Malnutrition, diarrhea, common cold/cough, pneumonia, jaundice, fever, skin infection (*khujli/pachra*), measles, worm infestation, head becomes bigger, pox, dysentery/blood dysentery**

The community members emphasized on good doctor, availability of services 24 hours a day, health centres inside the slum, financial help for health care, trained/good traditional birth attendants (TBA), supply of pure water for the whole day, training for the local people, recruitment of local people, free treatment, arrangement for pathology and ultra sonogram, treatment at low cost, remuneration for volunteers, appropriate referral, quality medicine, female doctor for female patient, child health specialist for children as the need of the community. They suggested that Manoshi should have spacious delivery centre, arrangement of Bachelor in Medicine and Bachelor in Surgery (MBBS) doctor for 24 hours a day, free treatment/financial assistance to ultra poor, arrangement of caesarean section in the delivery centre, specific mobile phone number for communication, adequate supply of medicines, ambulance. They also think that *Manoshi* program staff should seek advice from the local people, inform people about the delivery centre of BRAC, provide quality health care for mothers, make arrangement so that sick babies can be at hospitals till they get cured etc.

The leaders and members of the community groups are willing to help to find places for BRAC health facilities, accompany patients, offer voluntary services, collect donation from affluent people to assist poor people to utilize services.

These findings from the research helped to understand the nature and scope of community participation, MNCH problems as perceived by the community groups, and solutions to the problems as suggested by the community groups. Based on the findings, the *Manoshi* program can find ways to involve the community groups to improve MNCH and move towards a community-managed health care. In future an operation research can be designed to document feasibility and effectiveness of community involvement approaches implemented by *Manoshi*.

INTRODUCTION

Involvement of community in public health programs gained momentum when, in 1978, the Alma Ata conference organized by the World Health Organization emphasized the use of community participation to provide primary health care for all (Zackus J. and Lysack C. 1998). This approach emphasized the empowerment of a community to obtain self-reliance and control over the factors that affect their health (Hossain S.M. et al. 2004). The approach allowed for a broad focus that could include attention to a range of issues relevant for community health, ranging from water or sanitation issues, training community-based health workers or volunteers, to education and credit. (Mathur S. et al. 2005)

The idea of engaging key stakeholders and other community members in program design and implementation has a long history in various fields of development, and in community-based activism. Participatory approaches for community development have been developed to involve target communities to assess need for projects, explore perceptions in relevant areas, implement projects, increase involvement of marginalized groups, and engage civil society in local decision-making and wider political processes. Participatory approaches involve the use of a variety of tools that enable people to express and analyze the realities of their lives and conditions, to plan themselves what action to take, and to monitor and evaluate the results. Advocates of participatory approaches argue that these methodologies allow for interactive problem solving and critical engagement of local expertise. While the questions of how to define and evaluate community participation continue to be debated, most agree that community empowerment and ownership are key aspects of participatory programs and approaches (Chambers R. and Blackburn J. 1996; Bell E. and Brambilla P. 2001).

In terms of health, community involvement effort was largely taken on by non-governmental development organizations to fill gaps in government-funded health systems. Participatory community health programs have a long history in south Asia, the most prominent examples of which include longstanding such programs in Jamkhed and Gadchiroli in India (Hossain S.M. et al. 2004). Three important components of public health planning are fulfilled through the use of participatory approaches (Bhattacharyya K. and Murray J. 2000). These are: decentralization of primary health care services, integrating maternal and child

health programs and most importantly, engaging local communities in order to encourage contribution in health programs.

The fundamental principles of community participation that make it especially appealing for primary health care are that effective community engagement and mobilization can:

- *Foster a better understanding of the ideas, needs, and concerns of people*
- *Foster skills and capacities of community members to assess their own needs*
- *Design better programs that enable community members to meet their health objectives and advocate on their own behalf*
- *Create transparency and local accountability*
- *Foster community empowerment and ownership*
- *Increase skills of a community to create or maintain structures to implement solutions, assess their impact, and modify programs as necessary. (Mathur S. et al. 2005)*

According to the World Health Organization (WHO), community mobilization is fundamental to creating and implementing successful and sustainable health programs. WHO suggested the following steps and milestones in community mobilization:

STEP 1: *Networks of community members and organizations, health professionals and policy-makers are established for information sharing, consultation, and collaboration.*

STEP 2: *Community-based programs for health are formed, and then implemented and evaluated.*

STEP 3: *Communities assume responsibility for ongoing implementation and monitoring of health programs (WHO 2007).*

In the mid-1990s, the realization that participatory models could help facilitate discussions on sensitive and taboo issues such as gender and sex made them increasingly popular in reproductive health, especially in HIV and AIDS programs (Cornwall A. and Welbourne A. 2000). Four models of community-based health care have been particularly popular in this regard (Hossain S.M. et al. 2004).

The first, most commonly used model is training local health volunteers. A few recent studies in Africa have shown such a community engagement and mobilization approach to be successful. A project in Cameroon, for example, selected and trained two prominent and influential members of each target community as "relais" or middlemen. Results suggest that the intervention had significant influence with noticeable positive effects on knowledge and practices of family planning, knowledge and attitudes about HIV and AIDS and STIs, and use of health services (Babalola S. et al. 2001). A similar initiative in Tanzania trained local health volunteers, involved village leaders to encourage women's participation in developing transport systems for obstetric emergencies and build support for village health workers. The project also involved a second type of community-based health care model – the development of community financing for local health programs. The project was able to increase community participation in maternal health, increase support for village health workers, and improve women's access to transport systems for obstetric emergencies (Ahluwalia et al. 2003).

A third model is the health education model, which aims at raising awareness on a single issue in a community with the engagement of that community. A perinatal health project in Turkey using a community health education strategy found that knowledge and skill increased in the community study group, the community's participation in decision making increased over the life of the project, and some indicators suggested that activities would be sustainable beyond the project life cycle (Turan et al. 2003). Similar project was slightly less successful among immigrant communities in the developed world (Bhagat et al. 2002).

The final model is that of a comprehensive or integrated community-based approach. It includes training of local volunteers, rural development activities, health activities, and use of local resources.

The growing interest in community participation in health care is also due to the failure of primary health care providers to deliver substantial health benefits to those most in need of it and recent evidence from the activities of community support groups in improving maternal and child health. Lack of local ownership, effective involvement, difference in perceptions of priorities between project personnel and communities, capture of resources by powerful groups were cited as causes of failure of health projects in different parts of the world. (Morrison et

al. 2005). There is growing body of evidence that increased community involvement can have a significant positive impact on maternal and child health outcomes.

Traditional birthing attendants were found to be beneficial for improved connections with hospitals in rural areas and improved transportation in emergency situations to prevent maternal deaths (Fawcus et al. 1996). This finding can be applied to urban birthing attendants there are issues related to access to the hospital in the urban slums. Community mobilization can be valuable is in increasing delivery planning and preparedness for complications, awareness of local services in case of emergency and most importantly, setting up a network to provide funds or transportation during emergencies to prevent maternal and neonatal morbidity and mortality (Nanda et al. 2005, Manandhar 2005, Gonzales 1998). To ensure that these approaches are beneficial, they should be culturally-specific and adjusted to local communities.

***Manoshi*:** Community Health Solutions Program of BRAC has been developed to establish community based health program targeted to reducing maternal and child mortality in urban slums of Bangladesh. The program aims at decreasing illness and death in mothers, newborns, and children in urban slums in Bangladesh through the development and delivery of an integrated, community-based package of essential health services.

The program has been built on findings from the pilot projects and research studies that have demonstrated the role of community and household mobilization process in attaining cost-effective improvements in newborn and maternal health. The program has undertaken several inter-linked strategies characterized by community health actions, and community empowerment and participation. It emphasized community mobilization and involvement to increase knowledge of individuals, households and community, increase skill and motivation of human resources to offer services, enhance and strengthen referral linkages, increase demand for safe motherhood services, facilitate scaling up of successful approaches, involve all stakeholders and strengthen their capacities to effectively participate in all stages of the program and develop a supportive network to support the program initiatives. It was important therefore to understand perception and potential role of the existing community groups for the sustained improvement of maternal, neonatal, and child health in the urban slums.

OBJECTIVES

The objectives of the study were to:

- Identify the existing groups (clubs, women's groups of other NGOs, groups of VO members) in the slum community and explore their roles
- Document the perception of community group members about the MNCH problems and understand their priorities
- Explore the ways through which community groups can contribute to improve MNCH situation
- Report suggestions from the community groups about further improvement of Manoshi

METHODOLOGY

Study Area

The study was implemented in Korail slum in Dhaka City Corporation.

Study Tools

Transect walk and informal discussion with the community

The study started with a transect walk in the study area to have an understanding about the geographic location, community groups and organizations, housing patterns, and water and sanitation facilities. The activity was aimed at building rapport with people in the community. During the transect walk, informal discussions with the people in the slum community helped to acquire information about slum population size, age/sex ratio, land ownership, location, geography, districts they came from, eviction threats, access routes, socio-economic activities inside the slum, organizations and groups in the slum, and occupation of slum residents. The information also helped to generate historical profile of health services in the slum.

Listing of community groups/organizations

Listing of community groups/organizations were carried out. Listing exercise commenced with discussions with the community people using a specified

checklist. When some groups and organizations were identified both the community people and members of the group or employees of the organizations were asked for information about other groups or organizations. Discussions with the community people and snow-balling with the identified groups or organizations took place simultaneously until a point of redundancy (when no more community groups or organizations were identifiable) was reached. During the exercise, information was collected on name of the organization or group, contact person, broad areas of activities, year of inception, ownership of office space inside the slum, number of community groups in case of organizations, type of people in the community group. When a group or organization was identified, the researchers visited them to verify information given by the community people or other group or organization. Information missing was also collected during the visit. Though the slum is officially divided into two units as per the city's administrative map, but the residents identified about six demarcated territories in the slum. They were: *Boubazar, Jamaibazar, Beltoli Bosti*, T & T *Bosti, Baida Bosti* and *Goodown Bosti*.

Listing of influential people in the community

Listing was carried out to identify the influential people in the slum. The community groups listing ascertained that some people had multiple affiliations and sometimes, identity and influence of a person was not directly linked through their associations, but through involvements in specific activities. During the listing exercise information on name of influential person, affiliation with group or organization, main reason of influence, and involvement with health care activities was collected. The activity revealed a dispersed effect with influential people through all the demarcations of the slum and most in *Boubazar* (4), and Jamaibazar (6)

Focus group discussions with the community group members

Five focus group discussions were carried out to explore perceptions of group members as a whole. The participants of focus group discussion were from *Alokujjal Jubokalyan Samabay Somity* (a local group involved with micro-credit programme); *Bostibasi Odhikar Suraksha* Committee (one of the 43 committees linked with coalition for urban poor in Korail slum, whose activities are to improve the infrastructure of the slum (drainage system, sanitation, education, electricity, and health); BRAC micro-credit group; *Korail Bhumihin Somity* (works for ensuring rights); and Parents' Committee of Intervida School. These

groups were chosen to explore a wider range of view-points on the topics of FGDs. The areas explored during the FGDs were: Role of the organization(s) or group(s) affiliated with, collaboration with other group(s) and organization(s), key health problems of mothers, newborns, and children below 5 years of age, current role of group(s) and organization(s) to solve the health problems of mothers, newborns, and children below five years of age, scope of group(s) and organization(s) to solve the health problems of mothers, newborns, and children below five years of age, additional need for support to solve health problems of mothers, newborns, and children below five years of age, suggestions for and scope of involvement with Manoshi project, ways to improve demand for maternal, neonatal, and child health services from qualified health care providers in the slum, and ways to identify ultra poor people in the slums.

In-depth interviews with community group leaders

Based on the information collected from the previous activities, a sampling criteria for in-depth interviews was developed. The criteria included age, sex, education and years of living in the slums. We wanted to include representatives from both sexes (male and female), different age groups (35 years or less, 36-50 years, 51 and more), specific education classes (no education, 1-5 years of education, and more than five years of education), and different duration of stay in the slums (10 years or less, 11-15 years, and 16 years or more). A total of 21 in-depth interviews were conducted. During the in-depth interviews information was collected to further explore the ideas from FGDs. Information collected from FGD and in-depth interview helped to triangulate data from similar areas to compare and contrast emerging ideas and issues.

Preference ranking exercise

Based on the information generated from in-depth interviews and FGDs, a list of key health problems of mothers, newborn and children under five year of age, ways to improve health of mothers, newborns, and children, areas where support is needed to expand maternal, neonatal and child health activities, and suggestions for and possible involvement with Manoshi was prepared. The list was developed based on the top 20 frequently mentioned problems/issues/ideas in FGDs and IDIs. Three of five FGD groups were then revisited to conduct preference-ranking exercise using a 100 point rating scale.

Data Analysis

Data from the transect walk and informal discussions were compiled immediately after their collection to review and take decisions about the next steps of the study. Data from transect walk helped develop the slum profile.

The criteria used included origin, geographical location, access routes, number of territories and sections inside the slums, total area, land ownership, housing, approximate population, age-sex ration, source of communities, religion, socio-economic activities inside the slum boundary, key occupations of the slum dwellers, seasonal variation of occupation in the slum, cultural events, religious events, recreation, health facilities, evolution of health services, water and sanitation, community groups and NGOs inside the slum, eviction threats.

Data from the listing of community groups and leaders and organizations were compiled based on the key activities. The organizations were grouped under the following key activity areas: education, economic (micro-credit), environment, health, socio-political, recreational and others. If an organization was found to provide services in more than one of the key activity areas, they were reported under all the key activity areas. Quantitative content analysis was applied to data collected from FGDs, and IDIs were conducted as a result.

The key themes identified through content analysis were perceptions of MNCH health problems, current role of community groups and leaders to solve MNCH problems, perceived need of the community to improve MNCH, strategies that can be implemented by the community groups and leaders to improve MNCH care, suggestions for Manoshi, and probable areas of help for the Manoshi project. Data from preference ranking exercises were entered into a data-base template developed using SPSS 11.0 and analyzed using the same software.

A priority list was then prepared, which was based on the average score of listed components (key health problems of mothers, newborn and children under 5 year of age, ways to improve health of mothers, newborns, and children, areas where support is needed to expand maternal, neonatal and child health activities, and suggestions for and possible involvement with *Manoshi* from three preference-ranking exercises.

RESULTS

The activity results are divided into the following sub groups. Findings presented in the sub-sections were generated from data from FGDs and in-depth interviews with community groups and leaders of community group respectively. Slum profile; description of community groups and organizations inside the slums; current involvement of community groups/members of the group in health activities; perception of community groups/members of the group about maternal, neonatal, and child health problems; strategies suggested by them to solve these problems; suggestions for *Manoshi* and scope of involvement; and, power structure in the slums.

Korail's history began in 1961, during Pakistani governance, when the area was designated for the department of Telephone & Telegraph (T&T). Prior to this, it was under private ownership. An important aspect of this purchase was the stringent condition that this land could only be used by T&T. In 1990, the then T&T Chairman, *Maksud Ali Khan,* and Minister *Kazi Firoz Rashid,* jointly discharged 90 acres of the land to the Public Works Department of Bangladesh (PWD), violating the initial agreement. When PWD began development of this newly acquired land, the previous private owners sued T&T for "breach of contract". They demanded that the land be returned to them for their private ownership again. In order to avoid further legal complications, T&T reclaimed the 90 acres of land they had given to PWD. Furthermore, they presented the previous development work begun by PWD as illegitimate. At this stage, three parties became clear stakeholders in today's Korail slum area- T&T, PWD and the former private landowners.

In the middle of the 1990's, uninhabited pieces of land among the original 180 acres, slowly became illegally captured by various T&T affiliates, staff as well as gang leaders and "godfathers" and city ward commissioners. These individuals then began to rent out land and housing to low-income and impoverished populations at low rates. As a result of the growing demand for inexpensive housing, these inhabitants slowly expanded to create Korail slum as it is today. Presently, many of the inhabitants at *Korail* are becoming owners of their spaces by illegally purchasing from their current landlords, who initially seized the land unlawfully as well. This created a cycle of ownership issues and impacted the social structure of the slum, with slum dwellers living in constant anxiety of

evictions. In 1991, 1998 and 2001 there were attempts for evictions. In 1999 the a part of the slum was evicted, which has remained unpopulated since.

Korail is an urban centre slum, located in Dhaka City. It is like a peninsula, which is situated in the northern side of *Mohakhali-Gulshan* Road of Dhaka City. The slum can be accessed by many roads leading in and out of it. The slum is also accessible by water over the Gulshan Lake. The main two units of *Korail* are known as *Jamaibazar* (unit-1) and *Boubazar* (unit-2). Within *Boubazar*, there are four sub-sections known as *Ka, Kha, Ga* and *Gha*. However, for the purpose of the Manoshi project, the adjacent and surrounding sectors have also been included as a part of *Korail* slum. These additional sections are *Beltoli Bosti*, T&T *Bosti*, *Baida Bosti* and *Goodown Bosti*. The area of the slum is highly speculative among its residents as they claim it to be roughly between 180 to 220 acres. Most of the houses are made by corrugated iron. The houses are overcrowded; in most of the households there are more than 5 to 6 members. Rent for houses range from Tk 300 to 1200. Houses having higher rent are more spacious, situated in better locations, have cement floors, better drainage, and water supply. Houses closer to the water bodies had relatively lower rent. The population is also speculated by the slum dwellers. The range of total population as mentioned by the slum dwellers was 86,200—182,000. According to the slum people who claimed the total population to be 86,200, asserted there were 31, 950 male; 37,050 female; and, 17,200 under five children.

According to local perceptions, the earliest inhabitants of *Korail* arrived mainly from the *Comilla* district. Gradually, settlers from other districts began to arrive, including *Barisal, Bhola, Sherpur, Barguna, Chandpur, Jamalpur, Mymensingh, Kishoreganj, Faridpur* etc. Groups from these districts tend to live together in clusters dispersed throughout *Korail*, i.e. *Barisal party*, *Comilla party and Mymensingh party* etc. Primarily, people moved from these districts to reside in the slums due to economic (lack of employment in their original districts), and habitat (scarcity of land due to erosion from river overflows) problems.

To meet the needs of such a large population, many markets and shops are found in *Korail*. Shops include pharmacies, tailors, salons, grocery shops, electronics, clothing, etc. Some of the larger shops provide a social gathering place where the community members can enjoy watching television, movies, listening to music and engaging in discussions. There are also markets that sell fresh produce.

There is a diversity of occupations found in *Korail* among men, women and even children to generate income. Men's roles include masons, rickshaw or van pullers, carpenters, wheelbarrow pushers, day labourers, garments workers, T&T employees, businessmen, and boatmen. Women's professions include housemaids, garments workers, cooking firewood (locally known as *lakri*) vendors, and grocery store owners. Children are also involved in these types of work such as domestic work, scavengers, and office or restaurant employees. Begging is a popular livelihood for children as well. The monsoon season restricts movement to and from the slum due to flooding. However, the effects have been minimal in the last few years, during which some people lose their earning sources and depend on taking loans from community individuals, groups or organizations; it especially makes difficult the livelihood for day labourers.

There is no legal supply of electricity and water, government health, educational, and social security facilities are non-existent. NGOs are working on some relevant issues like health, economic, education, water and sanitation activities. There are 31 schools by 14 NGOs in Korail. In micro-credit programmes 20 groups are from BRAC, 143 groups from Proshika, and many others groups from 15 other NGOs. There are 3 NGOs working on environmental development, and 10 NGOs in health sector have been identified. Several economic, social, religious and political groups are also found in *Korail*. These groups are led by both internal community members and individuals from outside. Community group leaders include people that are elderly, relatively educated and religious leaders such as imams. Locally-formed groups including *Bazaar* (market) committee, regional committee, youth groups and women's groups are all working to accelerate socio-economic development. These groups also work to maintain law and order, prevent conflict and offer protection from terrorists and extortionists (*chandabaz*). There are 11 mosques including 1 *moktob* (informal and unregulated religious school), 6 *madrasas* (regulated religious school), 2 orphanages, 2 *kazi* offices (marriage registration office), and 2 day care centres in the slum.

The types of marriages seen in *Korail* include love marriages, arranged marriages and elopement. The general tendency is to find partners from their original districts. In recent years, the perceptions have shifted, but community members still give preference to brides or bridegrooms from their original regions for the convenience of collecting information about the potential spouse through a large

network of family and friends in the home district. A community woman stated that "*bidesher rui-o bhalo na, desher puti-o bhalo*", "a little fish from home is still better than a bigger fish from a foreign place." Furthermore, the woman commented, it is possible to track down a runaway spouse much faster if they are known in the network of the home district. The average age of marriage for girls is about 18, and the men are about 20. Premarital sexual relations are unacceptable, and punishable as crimes in the slum. However, if there is an open attraction between a man and a woman within *Korail*, then guardians are generally supportive of this and help them to settle down to discourage elopement. Apart from the social and religious ceremonies, sports, cultural programmes, and electronic media are the major sources of recreation. Additionally, there were some cable connections for those who could afford.

In the early stages of settlement, dwellers only had access to health services outside slum boundaries. They included Dhaka Medical College Hospital, Shishu Hospital (Children's Hospital), Cholera Hospital[1] (ICDDR,B), Progati Samaj Kollyan Parishad (PSKP), TB Hospital, etc. There were also some private healthcare providers available, including a child specialist. During the 90's, female health workers came to Korail to promote family planning, child immunizations and provide contraceptive methods. Additionally, members of the Diabetic Hospital used public service announcements ("megaphone announcements") within Korail to convey messages about health and provided basic health services. Since the slum developed on T&T land where T&T staff resided in their quarters, there were some established pharmacies in the areas outside of the slum. One T&T staff provided pharmaceutical services through his personal establishment. He dealt with common seasonal problems such as fever, cold, etc. Today, several Bachelor of Medicine and Surgery (MBBS) doctors, from Dhaka Medical College, practice at this pharmacy. At that time, several members from the T&T staff quarter took this opportunity and began to open up pharmacies within the slum to meet the needs of the population.

Gradually as the slum developed, so did the number and dispersal of pharmacies. In these pharmacies, the availability of quality medicines and variety is very limited. Pharmacists do not receive adequate medicines and resort to selling overpriced products. There are also a few village doctors, or "quacks", who provide some primary health care services. Many pharmacists have enrolled in

[1] In its earlier days, the ICDDR,B Dhaka Hospital was known as the Cholera Hospital.

local accredited medical assistant and family-planning programmes (LMAF), which allow them to provide further primary health care services.

Community members have played a vital role from the beginning when addressing maternal health. During times of delivery, certain community women were always assisting pregnant women during labour. These women assisted during delivery and births and took care of newly delivered babies. Community helpers would receive soap, one meal and clothing such as a *sharee* as a payment from the family for assisting with the delivery. Gradually many women, especially elderly women within the slum began to attend the deliveries, absorbing and learning the methods of care. They eventually learned these skills and began to offer their services to pregnant women, and play an informal role. As these practices became more routine and well-known, the role of a *dai* or traditional birth attendant became established. One of the earliest women to provide such services is the wife of a T&T staff member.

Although primary health care is provided through several NGOs, this is insufficient according to inhabitants. There are no established clinics, or a public hospital within the slum. However, several pharmacies, *kabiraj*, *dai* and village doctors (*palli chikithshak*) are providing additional primary health care services to the slum dwellers.

In rainy season most of the slum people suffer from diarrhoea, cholera, scabies, fever, cough and cold etc. In winter, children suffer from fever, cough and cold, pneumonia, chicken pox, and older people suffer from asthma, fever, cough and cold etc. In summer, slum people suffer from diarrhoea, fever, cough and cold, headache, skin diseases etc.

There is illegal water supply from Water and Sanitation Authority (WASA) and electric supply in Korail, and these do not meet the needs of most dwellers. There is no gas line connection, which lends to problems with cooking, poor sanitation facilities such as sewage and lack of clean water supply. Many homes in the slum have wells for washing utensils, clothes, and bathing. Sewage lines are directly linked with these wells. Poor quality housing and insufficient cemented lanes exacerbate the problems of sanitation.

The community groups and organizations working inside the slums can be grouped under six broad categories: educational, economic, environmental,

health, socio-political, and others. The groups and organizations in the educational categories provide education support to both children and adolescents in the slums. The groups or organizations under economic category work on micro-credit programmes. Organizations and groups falling under the environment category mainly work on water and sanitation issues. Health organizations or groups facilitate primary health care in the slum. Socio-political category includes informal pressure groups and local offices of national political parties. The religious and social institutions make up the 'others' category. It is pertinent to mention that some organizations have multiple involvements and therefore, can be found in more than one category. A description of these organizations and groups are given below (see Table 1).

A total of 189 influential people could be identified through 17 listing exercises in the slum. 82% of them were male and 41% of the influential people were from *Boubazar* areas. 21% of the influential people mentioned *Comilla* as their district of origin, followed by *Barishal* (14%), *Bhola* (7%), and *Mymensingh* (7%). Though the influential people are involved with different groups and organizations, their involvement with political parties primarily enable them to exert influence on slum dwellers.

A total of 48 participants took part in 5 FGDs (8 in FGD-1, 13 in FGD-2, 9 in FGD-3, 10 in FGD-4, 8 in FGD-5). Proportions of male and female participants were almost equal (54% male and 46% female). 42% of them belonged to '35 years or less' age category, 48% of them were illiterate, and 71% of them were living in the slum for more than 10 years. In in-depth interviews, 71% of the interviewees were male, 43% belonged to '36-50 years' age group, and 71% of them were living in the slum for more than 10 years.

Maternal Health Problems during Pregnancy

After analyzing data from FGDs and IDIs a very wide range of maternal health problems that arise during pregnancy were identified. The preference-ranking exercise was conducted to identify priority health problems during pregnancy. Prioritization was based on severity and commonality of health conditions, which need to be addressed.

"They are poor people who don't get to eat properly. Their bodies become weak due to lack of nutritious food and they cannot deliver properly at the time of labour. They have to be taken to the Medical (Hospital) for a Caesarean. They have bleeding, [and] diarrhoea. Diarrhoea happens because of polluted water. There are some bad, corrupt people who, because of their greed for money mix pond water with the water supply, resulting in polluted water, which causes diarrhoea. Lots of diseases happen because of lack of nutrition. They cannot go for check-ups because of lack of money. Ill-winds touch the pregnant mother and she is paralysed, has tetanus, jaundice, and cannot move around properly for 7-8 months. Her body becomes weak and the child in the womb does not move properly" (Male of 55 years, illiterate, retired soldier, living in the slum for 12 years)

"In the first three months of pregnancy, a pregnant mother is very disturbed, some eat paanta (fermented rice), some have sour food, in the fifth month they develop five souls; pain is experienced in the seventh and eighth months and comfort in the fourth month" (FGD-2, female of 70 years, housewife, illiterate, living in the slum for 15 years)

Table 1: Priority health problems during pregnancy and preference-ranking score

Rank	Health Problem	Score
1	Swelling of hands and feet (haat paye pani asha)	**90**
2	Eclampsia; Generalized weakness	**80**
3	Anemia; Malnutrition	**70**
4	Jaundice; Blurring of vision	**63**
5	Pain in the abdomen or lower abdomen; Excessive whitish discharge per vagina	**57**
6	Vaginal bleeding	**53**
7	Loss of appetite	**50**
8	Tetanus	**47**
9	Vertigo	**45**
10	Fever/excessive fever	**40**

Maternal Health Problems during Delivery

Data from IDIs and FGDs revealed a number of health problems during delivery of the baby.

"There was a woman whose baby did not move for 15/20 days. An ultra sonogram found that the baby was dead. The baby's placenta gets stuck and moves upwards. If there is failure to catch hold of the cord as soon as the baby is delivered it moves upwards and then the mother dies. Frequently the (baby's) hand or feet comes first, which requires a doctor. There is no problem if the head comes first; there is a problem if the reverse happens. When the mother notices that something wrong has gone wrong, she is supposed to lie still. If the (labour) pain is not sufficient then quite frequently water with spiritual properties is given. I had a tabeej (amulet with spiritual properties) from Montaj Ali in Brahminbaria. The baby would be released quickly if the mother drank the water, which the tabeej was washed in. Sometimes drinking water in which the Mariam flower has been washed in also helps" (Female of 45 years, 4 years of education, small business, living in the slum for 9 years)

"In one of the houses next door, the birth attendants pulled off the arm of a baby during delivery. Then we all raised money and sent her to the hospital" (FGD-3, female of 36 years, housewife, illiterate, staying in the slum for 12 years)

"I hear in my locality that if delivery doesn't happen at the appropriate time, the baby grows and becomes too large in the womb and then you have to take her (pregnant mother) to the hospital. A Caesarean section has to be done. I can't tell you any more than this" (FGD-4, male of 47 years, government service, 10 years of education, living in the slum for 27 years)

Table 2: Priority health problems during delivery and preference-ranking score

Rank	Health Problem	Score
1	Prolonged labour or delayed labour	97
2	Mouth of the womb does not open, mouth of the womb is small	93
3	Watering per vagina	77
4	Prolapsed hand or foot (haat ba paa agey asha), baby in reverse position (bachcha oolta asha); Lack of labour pain, inadequate labour pain	63
5	Retained placenta	60
6	Blurring of vision	50
7	Eclampsia; Vaginal bleeding; Fever/excessive fever	47
8	Tetanus	43
9	Rupture of uterus	40
10	Tear of birth canal	30

Maternal Health Problems after Delivery

The respondents of FGD and in-depth interview also opined about the problems of mothers after delivery.

"Some problems faced are bleeding, lack of vitamins, bishbetha (extreme pain), and fever, catching a cold, tetanus, and severe pain in the lower abdomen, convulsions, fainting. Mothers do not get the necessary extra food. They cannot take adequate rest. They have to leave for work within a few days of the baby's birth" (Male of 70, 4 years of education, unemployed, living in the slum for 26 years)

"There is too much bleeding after the baby's birth, the mother becomes very pale. Sometimes the bleeding is less and there is a lump in the abdomen, the abdomen appears very large. The mother cannot eat. She has fever and convulsions. The delivery tract should be kept dry and clean .The mother may have headache" (FGD-3, female of 40 years, housewife, illiterate, living in the slum for 19 years)

Table 3: Priority health problems after delivery and preference-ranking score

Rank	Health Problem	Score
1	Excessive vaginal bleeding	87
2	Womb comes out itself (prolapsed uterus)	80
3	Pain in the abdomen	77
4	Jaundice	70
5	Malnutrition	67
6	Eclampsia/seizure	63
7	Anemia	60
8	Lump in the abdomen	57
9	Blurring of vision	47
10	Tetanus	40

Neonatal Health Problems

After analyzing data from FGDs and IDIs a very wide range of neonatal health problems that arise were identified. The preference-ranking exercise was conducted to prioritize, which was based on severity and commonality of health conditions, which need to be addressed.

"The baby catches a cold, coughs, has rash on its body, has breathing difficulties (phlegm) and is unable to suck breast milk. It is lethargic and has pus in the navel. The body may turn blue and the soft area on the top of the head may become depressed. Doctors say the baby has pneumonia, and the fakir (traditional healer) says that an ill-wind has touched the baby. The baby may have typhoid, rash, erosions and pustules on its body. The baby's tongue might also have erosions. In this case the fakir gives clarified butter with spiritual properties" (Male of 70, 4 years of education, unemployed, living in the slum for 26 years)

"The baby brings jaundice with it from the abdomen; the hands and legs are bent, the eyes do not open, there are breathing difficulties, the baby coughs and has lack of oxygen. Lots of babies are not able to cry, do not pass urine or stool, have navel problems-the navel appears raw, doesn't dry up. They have measles and rash, pneumonia in the birthing chamber and lesions in the mouth" (FGD-3, female of 30 years, housewife, 12 years of education, staying in the slum for 14 years)

Table 4: Priority health problems of the newborn and preference-ranking score

Rank	Health Problem	Score
1	Pneumonia	97
2	Difficulty in breathing	80
3	Cough or cold	77
4	Tetanus	67
5	Ulceration of tongue or mouth; Unable to suck breast milk	63
6	Fever	60
7	Measles (lunthi or phara)	57
8	Cessation of defecation and urination	50
9	Pus or blood or watery discharge or swelling in the navel, worm in the navel, navel does not become dry	43
10	Failure to cry	40

Health Problems of Children under Five

After analyzing data from FGDs and IDIs a very wide range of child health problems that arise were identified. The preference-ranking exercise was conducted to prioritize, based on severity and commonality of health conditions, which need to be addressed.

"Some problems seen are fever, diarrhoea, tuberculosis, breaking arms and legs, pneumonia, chicken pox, and tetanus. If immunization is not properly done, the child's body becomes wasted and he/she becomes weak. During summer children have chicken pox and diarrhoea. In winter they have fever, colds and pneumonia. In the rainy season the children swim in dirty water and when they drink that water, they have diarrhoea" (Male of 55 years, unemployed, 9 years of education, living in the slum for 12 years)

"They have raatkana (night blindness). They lack nutrition. As they lack iodine, the arms and legs become thin while the head and abdomen become big. The child has pneumonia, the pupils of the eye seem to be protruding and the dome of the head flattens and four divisions can be seen" (FGD-2, female of 21 years, housewife, 5 years of education, staying in the slum for 10 years)

"Usually scabies, loose stools after eating food, and vomiting-these are increasing nowadays. Go and see – at least 50 people are jumping in the water. When it rains – the children jump and play in the drains" (FGD-4, male of 40 years, Rickshaw-puller, illiterate, living in the slum for 4 years)

Table 5: Priority health problems of children up to age 5 and preference-ranking score

Rank	Health Problem	Score
1	Malnutrition, emaciation, lack of energy	93
2	Diarrhoea or loose motion	87
3	Cough or cold; Pneumonia or breathing difficulties	77
4	Jaundice	67
5	Fever	63
6	Skin diseases (impetigo)	60
7	Measles	57
8	Worm infestation	53
9	Head becomes larger	50
10	Chicken pox	43

The respondents generally solved key problems for mothers, neonates and children by providing them with financial help through intra-communal fundraising for seeking treatment and medicines if they were too poor. They refer them to treatment centres or doctors they think are good (e.g., Marie Stopes, Shishu Hospital) and usually arrange transportation (e.g. CNG auto rickshaw) and someone to go with them. They also advise hospitals and also provide

guardians for hospitalized children who have working mothers. Sometimes, they also help with getting admissions to these hospitals by calling party leaders or influential people who make the necessary arrangement.

The other areas of involvement of community groups include training of mothers on health matters, advising people to find appropriate health care facilities, arranging blood, providing health education, accompanying during transportation to hospital, communication with NGOs to establish health centres, providing with space for EPI centre or satellite centre; attending meeting of the committees of health NGOs as members and arranging burial.

"Those that have money go for treatment. I help those who don't have money by providing them with financial help. Those suffering because of lack of treatment, I make arrangements for them to be taken to a treatment centre and give the money for transportation. If it seems that someone's disease has become complicated, then we go with him/her. I also tell people where good treatment is available. I often fix transportation for patients to be taken to the doctor/hospital" (Male of 48 years, quack, 10 years of education, living in the slum for 13 years)

"(Bastibashi surokhya committee) gives financial help, even helps with transportation to the hospital. If the baby is late, being born, then we raise money from everyone and take her to the hospital. Those who conduct deliveries try to keep her here because of their payment. In those cases we ask them, can you save her? If you want to take the risk, then sign here or else we will take her to the hospital. In this way we take serious patients to the hospital" (FGD-3, female of 30 years, housewife, 12 years of education, living in the slum for 14 years)

Strategies to Improve MNCH

Community groups talked extensively about some strategies to improve MNCH in the slums. Some of them included setting up larger hospitals with help from local members of parliament and the government of Bangladesh, delivery of health care from a clean and congenial place, improve sanitation facilities in the slum to prevent spread of diseases, raising awareness among parents to ensure cleanliness of their children, repairing the drainage system, ensure safe water in the slum, publicize health programmes from different organizations, ensure

appropriate referral, prepare a list of patients using night guards in the slum, ensure presence of female doctors for female patients, collect donation to help poor people during emergency health problems, identify dedicated organizations and help them to provide health services in the slum, arrange coordination meeting of all health care organizations in the slum, involve local elites and leaders of groups in the delivery of health care, ensure better coordination among the NGOs inside the slums, form a committee with representatives from each area in the slum and include teachers and guardians in the committee, ensure that patients get appropriate care and behaviour from the referral places, ensure quality services, ensure safety of health service provider training of health service providers, provide with any kind of support based of the need of the organizations, and ensure correct diagnosis and appropriate treatment.

"It is difficult to provide for the mother's treatment working alone without any help from outside. If money were available then we could set up a hospital with good doctors and nurses. Nothing is possible without money. We cannot treat anyone but we can do voluntary work and help any organization willing to help us. Maybe the government or an MP can help us. If such a hospital were set up, we would advise and make sure mothers went there for their check-ups" (Male of 47 years, Government service, 10 years of education, living in the slum for 27 years)

"We can inform everyone and find the patients" (FGD-2, female of 35 years, housewife, 10 years of education, living in the slum for 14 years)

Table 6: Priority strategies to improve MNCH

Rank	Strategies	Score
1	Ensure safety of health service providers	97
2	Send patients to health service center	93
3	Assist to send serious patients to referral centers, if a reference is available	83
4	Publicize health activities available in the slums	77
5	Maintenance of health centers; Collect donation to support health care of poor people	73
6	Prepare a list of patients with the help from night guards	67
7	Assist to ensure better coordination among the NGOs in the slum	57
8	Provide with any kind of support based of the need of the organizations	53
9	Help raise awareness among parents to ensure cleanliness of their children	43
10	Provide physical labour in case of need	40

Apart from the activities, which could be implemented by the community groups, the respondents also talked about various other needs to improve MNCH in the community in the in-depth interviews and FGDs.

"We need a treatment centre like Marie Stopes. At this centre there will be a doctor available 24 hrs a day. There should be two compounders and two nurses and it would be very good if they are female. People working 24 hrs should be given salaries. There should be a day-care centre where children's food and clothing will be available. The organization should have a separate house. The people working there should be given health-related training so that they can understand the mothers. The roads should be drained so that it is easy to take patients to the hospital. If a Municipality cleaner swept the slum the children would have less illnesses" (Male of 58 years, small business, 10 years of education, living in the slum for 14 years)

"I see a lot of women, helpless and poor. Their arms and legs have swollen, they can't walk, can't move around. I see this sort of problems in the slum. Then the Bazaar Committee members ask the women and help them with money" (FGD-5, male of 65 years, Government service (retired), 10 years of education, living in the slum for 20 years)

Table 7: Priority need of the community to improve MNCH

Rank	Community need	Score
1	Qualified doctor and nurse; Availability of health services 24 hours a day	100
2	Hospital or clinic; Financial help for seeking care	93
3	More space in the health center	90
4	Free medicine, free treatment and free immunization for pregnant women and babies; Facilities for pathological tests and ultra sonogram; Employment of local health workers; Health training for local people	87
5	Health services at low cost	83
6	Arrangement of appropriate referral; Monetary incentives for local health volunteers	80
7	Arrangement for caesarean section inside the slum	77
8	Quality medicine	73
9	Women doctors for women and child specialists for children	63

Table 8: Suggestions for Manoshi

Rank	Suggestions	Score
1	More convenient spaces for congenial and hygienic delivery centers (at least 1 room each for a doctor, patient, medicine and equipment, and bathroom); Ensure availability of services by MBBS doctors 24 hours a day	100
2	Free treatment and financial help for ultra poor	97
3	Adequate supply of medicine; Ensure supply of electricity and safe water; Arrangement of caesarean section at delivery center	93
4	Free treatment or free medicine; Mobile telephone number for emergency communication; Qualified doctor or nurse	90
5	Ambulance support	87
6	Setting up health center at a specific place	86
7	Consultation with local people; Delivery center should remain open for at least 18 hours	83
8	Inform people of delivery center; Ensure that children are not discharged from referral places before their recovery	77
9	Search for patients at household level and provide services at doorsteps	73
10	Quality care for mothers and children (adequate resources and personnel); Arrange regular meeting with representatives from groups in the slum and NGOs; The activities of BRAC should be aligned with activities written in the paper: proper monitoring to ensure that nobody takes money in the name of free treatment, BRAC programmes should not be withdrawn and delivered with good will	70

"A separate centre should be set up. There should be a senior doctor at all times. Poor people should be given treatment for small amounts of money. It should be open all the time. People should be informed all the time. We have to find the patients. I have heard that BRAC will give the vaccines but there has been no arrangement for it. It would be very good if BRAC gave these" (FGD-2, Female of 20 years, 5 years of education, housewife, living in the slum for 7 years)

"After delivery the new mother is sent home. If it is serious then the mother does not recover even after 12 hours. If only new mothers could be kept for 2/3 nights under the observation of a doctor. A mother has many problems once her baby is born. When a serious delivery patient is returned from a delivery centre, then the patient dies on the way to the hospital. Taking someone far away is risky. There should be arrangements such that the patient does not need to be taken far away. There should be provision for giving saline here" (FGD-3, Female of 37 years, illiterate, private service, living in the slum for 12 years)

The community groups felt that they can offer some help to Manoshi as well.

"The place that they have a room in is too congested. If it were in an open area then everyone would see it and recognize it, it would be good for publicity. There should be 2 doctors inside all the time. There should be 2/3 big rooms. There should be a system like the medical (hospitals)-bed system. We will publicize it and raise awareness among the mothers. But they have to be given proper treatment. If one mother comes back healthy after delivery with no pain then others will follow. We can create a committee like the Red Crescent Society. If a mother falls ill then we can arrange to provide blood. If she is too ill then we can take her to a hospital. This committee will be in the name of your hospital. We will give money to help if necessary. We will do this selflessly but it would be good if free treatment were given" (Male of 46 years, leader of a political party, 8 years of education, living in the slum for 13 years)

"We can remind each other of dates and appointments and services. If they cannot remember, we will remind them. There are a lot of problems. It would be good if children were given free treatment. We can inform everyone around us, and help by providing people" (FGD-2, Female of 40 years, 5 years of education, small business, living in the slum for 5 years)

"You have set up a hospital. It won't be possible for you to keep an eye on it all the time. That responsibility is ours. We pay our Night Guard's salary from our committee. The hospital can be run in the same way. Even if we collect 1 Tk from each home, that means a total amount of 14,763 Tk. from 14 thousand 7 hundred and 63 homes. It will be possible to run the hospital with this amount of money. In addition to the Night Guard, we pay for 11 people of our Madrasa in the same way. Even if all homes do not give money, some homes will, so in this manner it will proceed" (FGD-3, Female of 30 years, 12 years of education, housewife, living in the slum for 14 years)

"It's not good to do anything in advance; you shouldn't milk a pregnant cow. Nothing done in advance is of any good. If you want, you can tell us what you plan to do. I have just told you, I will give you space, if needed I will give you people. Our committee has a room; you can take that if you wish" (FGD-4, male of 65 years, 10 years of education, private service, living in the slum for 10 years)

Table 9: Probable areas of help for Manoshi from the community groups

Rank	Probable areas of help	Score
1	Find suitable office space for *Manoshi*	100
2	Send people to *Manish* health centers	83
3	Ensure safety of doctors/nurse and health centers	80
4	Arrange night guards to guard health centers at night; Free physical labour	77
5	Keep *Manoshi* safe from terrorists and extortionists; Help to arrange discussion meetings, assist to gather elite people from the area	77
6	Raise awareness/publicize *Manoshi*	70
7	Advise patients to go to health centers	67
8	Provide with financial help, initiate collection of donation from richer people in the slum and collect donation	57

DISCUSSION

The majority of urban dwellers in developing countries live in poverty, characterized by household and neighbourhood environmental deprivation and circumstances of extreme social and economic stress (Stephens, 1996). The health issues for urban slum dwellers are quite unique and often severe. For this significant population and workforce to be neglected in basic healthcare services can prove dearly. This section aims at interpreting the results of the study and discusses the result in the context of findings from relevant studies in rural and urban settings.

The slums, where the study was carried out, are on the government property. The inhabitants therefore, are vulnerable to eviction. This creates that level of insecurity and stress, which may have an indirect impact on their health. The people in the slum come from different districts of Bangladesh and as a result social cohesion structure and support network can be poorly developed.

One study from Vietnam (Tuan, 2005), showed a positive connection with child health and maternal social support. Furthermore, the study also revealed that high level of maternal social support, an educated partner, and living in an urban area have beneficial effects of maternal mental health. Levinton L. documented the role of social networks of urban dwellers and commented that despite the weakened ties, the social networks of urban dwellers can be a potent force for

health (Levinton L. 2000). Strengthening the existing social networks or setting up new networks in the slums can play a crucial role in improving MNCH in the slums. The seasonal variation in disease patterns in urban slums calls for specific actions during different seasons of the year. During the rainy season, diarrhoeal diseases become more common whereas the incidences of cough and cold rise during winter. Understanding more about the seasonal pattern of diseases can help health programmes to plan and be prepared for outbreaks, procurement of drugs, and deployment of human resources. Activities for prevention of communicable diseases e.g., improvement of water and sanitation condition is a prerequisite to any improvements of health of the people in the slums and community groups can have significant involvements in such activities.

The community groups inside the slums cover a wide spectrum of social sciences and as such the versatility to improve the general quality of life has massive potential. However, some of the groups are informal and can be best termed as 'informal pressure groups'. Many of these pressure groups have political polarization, which is known to the community people. Political polarization can restrict these groups from wider interaction and work for every stratum of people in the slum. Nonetheless, these groups tend to interact better when there is a crisis e.g., eviction threat. The groups tend to mingle with other groups or organizations, which have no political agenda. The influential people in the slums also exert their influence primarily because of their affiliation with the political parties, not because of their involvement with different groups or organizations. Lack of coordination among the organizations was also noticed resulting in overlapping of activities in the area of micro-credit and health.

The members in the community groups have substantial levels of understanding about maternal, neonatal, and child health problems. In general, the women were more knowledgeable about the maternal health problems than the male members in the group. Though swelling of hands and feet and eclampsia were identified as problems with highest priority, common problems of pregnancy (loss of appetite, pain in the abdomen, vertigo, excessive whitish discharge per vagina) and nutritional problems (anaemia, malnutrition, generalized weakness) were also identified as key problems of pregnancy. The members of the community groups also talked about bleeding, jaundice and tetanus. These findings have the implications for delivering antenatal care services in the urban slums. The nutritional education and counselling, iron and folic supplementation,

identification and treatment of pre-eclampsia, strengthening tetanus immunizations, birth preparedness, and setting up referral links need to be prioritized. Findings from a community-based collaborative approach to shared antenatal care services in Australia was found to be beneficial in increasing access to antenatal care and was associated with fewer preterm births among Indigenous women in Townsville. (Panaretto K.S. et al. 2005). Such ideas and need to be further explored in the slums of Bangladesh.

The priority health problems during delivery call for identification of prolonged labour, bleeding, and eclampsia and make appropriate referral for each of these conditions. The members of community groups not only talked about the immediate postpartum problems (vaginal bleeding, prolapse, eclampsia, excessive abdominal pain etc.), but also chronic morbidities (lump in the abdomen, jaundice, anaemia, blurring of vision, malnutrition etc.). Therefore, there is a need to address not only the immediate problems of postpartum period but also the chronic problems. The groups did not talk about symptoms of postpartum infection reflecting that postpartum infection is either uncommon or unimportant as a postpartum problem.

The community groups also identified priority health problems of newborns and children. In case of newborns, respiratory problems (Pneumonia, difficulty in breathing/birth asphyxia, cough and cold) were given highest priority. Tetanus, ulceration of tongue or mouth, inability to suck breast milk, fever, measles (*lunthi or phara*), cessation of defecation and urination, pus or blood or watery discharge or swelling in the navel were also prioritized as newborn problems. The community groups seem to have misconception about measles. It was evident that, the groups termed any kind of skin rash as measles. Thus, the findings reflect on the necessity of improving immunization, and community management of birth asphyxia, fungal infection in the mouth cavity, neonatal sepsis and umbilical infection.

In case of children, malnutrition was identified as the problem of highest priority. This was surprising because community people often prioritize more visible problems. Other common problems of childhood mortality and morbidity including diarrhoea, pneumonia, jaundice, fever, skin diseases, measles, warm infestation, and chicken pox were identified as priority problems. The findings call for more activities to explore the seasonal variation of childhood illnesses and appropriate management of diarrhoea, pneumonia, jaundice, fever, skin

diseases, measles, warm infestation, and chicken pox. Mass distribution of anti-helminthic drugs at regular interval can also be considered.

The community groups were found to be involved with a wide range health activity primarily to address emergency condition. They help people to find appropriate health provider or facility. They also arrange transportation of patients, accompany the patient to the health facility, make arrangements for blood transfusions, collect donations, and offer space to run satellite health centres. The members of the community groups also sit on the committees of different health NGOs. The groups were found willing to improve health situation in the slums. If the sporadic health activities of the groups can be coordinated, there is a probability that, they will be able to help community people in raising awareness about the importance of treating MNCH problems, generating community fund to provide financial help, advising people to find appropriate providers or referral centres, and creating and overall demand of MNCH services.

The community groups also talked about strategies they can implement to improve MNCH in the slums. They were willing to ensure safety of health service providers and health centre, which reflect their concern about the poor law and order situation in the slums. They also identified that the activities they can undertake are primarily associated with creating demand for MNCH services (publicize health activities, raise awareness, prepare a list of patients using night guards) and accumulating financial contribution to initiate a community fund. Close linkages with community leaders and community health workers are necessary to implement the strategy identified by the community groups.

Community groups also highlighted the need for qualified doctors or nurse, availability of health services 24 hours a day, and health services at low cost. They also think that employment of local health workers will be helpful in delivering health services in the community.

When the community members were asked about suggestions to improve the health programme of BRAC, they also thought that BRAC needed to talk to local people before initiating the activities. There was a sense of lack of trust among the community groups about the NGO activities and that is why they wanted an arrangement so that regular meetings with representatives from the community groups and NGOs can take place.

The health of urban populations has changed as cities have evolved. The role that the urban environment plays in shaping health and disease is of vital importance in our era. The urban health interventions in the past did not involve community groups as they believed that community groups are incapable of exerting much influence in the context of poor social cohesion in the urban areas. Health promotion interventions can engage people through their social networks, even in urban areas. Health promotion and involvement of community groups can also be viewed as a way to improve connectedness and social cohesion in urban slums. Involvement of community groups is effective in improving health not only because of their collective capacity in communities to solve problems but also for the reason that they make voices heard by people with power.

MANOSHI IMPLICATIONS & CONCLUSION

The Manoshi programme already has strong community mobilization components and emphasized involvement of community groups to increase knowledge of individuals, households and communities, increase skill and motivation of human resources to offer services at household and community levels, enhance and strengthen referral linkages, increase demand of services, facilitate scaling up of successful approaches, involve all stakeholders and strengthen their capacities to effectively participate in all stages of the programme, develop a supportive network to support communities and individual households to sustain the services.

The mapping study identified that members of community groups especially women, have a solid understanding of their own and their children's health problems. Interventions based on these perceptions are beneficial because they are more likely to be acknowledged by the community. They are cost-effective and sustainable with scaling up potential with appropriate political commitment (Manandhar D. 2005). Community ideas being recognized by policy-makers and women's mobilization within populations is perhaps the most critical element for resolving issues in maternal and child health (Rosato M. 2006).

The programme has involved community health workers from the local areas, initiated formation of women's groups and MNCH committees, and started delivering doorstep MNCH services. The study team recommends the following

activities to improve the current programme to meet MNCH needs of the community:

Antenatal care provided by CHWs should focus on counselling, nutrition education, iron and folic supplementation, identification and treatment of pre-eclampsia, tetanus immunization, birth preparedness and information on danger signs and referral centres.

Services during delivery need to emphasize clean delivery; and identification and management of prolonged labour, bleeding, and eclampsia. Appropriate referral is an important component of management of these problems. In places, where literate urban birth attendants and *Shasthya Shebika* are available, the programme can think of initiating use of simplified pantograph in birthing huts.

Postpartum services need to emphasize management of bleeding, prolapse, eclampsia, jaundice and malnutrition. The programme already has an intensive postpartum visitation schedule. The components of postpartum visit needs to be redesigned in line with the findings from this study.

Certain conditions like, breastfeeding, management of birth asphyxia, pneumonia, umbilical infection, fungal infection in the mouth cavity, and neonatal sepsis need to be emphasized when providing newborn care services. Health promotion activities should also address the importance of immunization and eradicate misconception of measles.

There is a need for carrying out a study on the effects of malnutrition in the urban slums. Data available from Hellen Keller International (an NGO working in Korail) can be helpful in this regard. Apart from management of diarrhoea and pneumonia, the programme can also consider management of jaundice, fever, skin diseases (scabies and impetigo), measles, helminthiasis and chicken pox.

Further research is warranted to investigate seasonal variation of diseases in the slums and make the programme implementation team prepared and versatile to address the different need at different times.

In collaboration with the research team, the programme can make a list of organizations and community groups, and key people involved with the groups. The key people in the groups need to be involved with inception, implementation

and monitoring and evaluation of the programme. The list will also be helpful while forming MNCH committee and special health focal women's group.

The community groups have potential to contribute through involvement with Manoshi by contributing to improving MNCH in urban slums. They can be involved with specific activities of the programme e.g., finding out a suitable space for birthing hut, ensuring safety of birthing huts and health care providers, selection of community health workers, setting up community health funds, arranging coordination meetings, creating demand for MNCH services, arranging transport to the referral facilities, and building effective link with the referral facilities A two-prong monitoring strategy can be piloted in selected areas. This means the programme will not only be accountable to BRAC but also to the community people. The programme staff can sit with the MNCH committees and women's groups every month to inform them of the performance of the programme and seek assistance from the members in the committee or women's groups to solve problems of implementation. The performance of the programme can also be displayed in the birthing huts.

The programme needs to be aware of political polarization of community groups. The members of the programme implementation team should not be actively involved with political activity to maintain the political neutral image of BRAC.

The problem action cycle, used to unite and activate community groups in MIRA project of Nepal, can also be piloted in some of the programme areas to facilitate the MNCH committees and women's groups to prioritize MNCH problems in the community, identify and prioritize strategies to solve the problems, and act on the identified strategies.

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