

Process Evaluation of the First National Immunization Day in Bangladesh

Karabi Bhattacharyya

Rokeya Khanam

In cooperation with
Expanded Programme on Immunization
Directorate General of Health Services
Ministry of Health and Family Welfare
Government of Bangladesh

BASICS

BASICS is funded by the Office of Health and Nutrition of the Bureau for Global Programs, Field Support, and Research of the U.S. Agency for International Development (USAID). BASICS is conducted by the Partnership for Child Health Care, Inc. (contract no. HRN-C-00-93-00031-00, formerly HRN-6006-C-00-3031-00). Partners are the Academy for Educational Development, John Snow, Inc., and Management Sciences for Health. Subcontractors are the Office of International Programs of Clark Atlanta University, Emory University, The Johns Hopkins University's School of Hygiene and Public Health, Porter/Novelli, and Program for Appropriate Technology in Health.

This document does not represent the views or opinions of USAID. It may be reproduced if credit is given to BASICS.

Abstract

As part of a global program to eradicate polio, Bangladesh held its first round of National Immunization Day (NID) on March 16 and April 16, 1995. During and immediately following the first NID, a process evaluation was conducted to identify operational difficulties and potential solutions in order to improve the implementation of future NIDs in Bangladesh. The process evaluation placed emphasis on the NID activities for the urban poor, who are considered to be a hard-to-reach and underserved population. A total of 100 vaccination sites were observed during the NID and 286 exit interviews were conducted in these sites. Immediately following the NID, focus group discussions were held in four city corporations and four district municipalities with local managers, caretakers who participated in the NID, and caretakers who did not participate in the NID. Recommendations include (1) improving site organization; (2) developing a strategy to recruit more participants; (3) advising parents to bring their children back for routine immunization; (4) publicizing results of NIDs; and (5) obtaining help from government organizations, political parties, national and local leaders, the media, businesses, teachers, medical personnel, and social organizations.

Recommended Citation

Bhattacharyya, Karabi, and Rokeya Khanam. 1998. *Process Evaluation of the First National Immunization Day in Bangladesh*. Published for the U.S. Agency for International Development by the Basic Support for Institutionalizing Child Survival (BASICS) Project. Arlington, Va.

Cataloging-in-Publication Data

Bhattacharyya, Karabi.

Process evaluation of the first national immunization day in Bangladesh. / Karabi Bhattacharyya, Rokeya Khanam. — Arlington, Va. : BASICS, 1998.
59 p. ; 28 cm.

1. Immunization—Bangladesh. 2. Poliomyelitis—vaccination. 3. Child health services—developing countries. I. Khanam, Rokeya. II. BASICS Project. III. Title.

RA638B575p 1998

Credit

Cover photograph courtesy of Ministry of Health and Family Welfare

BASICS

1600 Wilson Blvd., Suite 300
Arlington, VA 22209 USA
Phone: 703-312-6800
Fax: 703-312-6900
E-mail: infoctr@basics.org
Internet: www.basics.org

Contents

Acronyms and Glossary	v
Acknowledgments	vii
Executive Summary and Recommendations	ix
Introduction	ix
Methodology	ix
Results	ix
Planning and Management	ix
Operations on the Day of the NID	x
Social Mobilization	xi
Recommendations	xii
Planning and Management	xii
Operations	xiii
Social Mobilization	xiii
Introduction	1
Methodology	3
Sampling	3
Data Collection Procedures	4
Observations	4
Focus Group Discussions	4
Exit Interviews	4
Results	5
Planning and Resource Mobilization	5
Operations	9
Overall Operations	9
Difficulties in Participating in the NID	13
Social Mobilization and Communication	14
Registration	14
Communication Channels	15
Beliefs and Knowledge of Vaccines in General	16
Reasons for Participating in the NID	17
Reasons for Not Participating in the NID	18
Recommendations of Local Managers and Observers	23
National Level	23
Local Level	25
Effects of the NID on Other Health Promotion Activities	27
Debriefing	28

Process Evaluation of the First NID in Bangladesh

- Annex A. NID Preparation Checklist
- Annex B. NID Observation Form for Vaccination Post
- Annex C. Focus Group Discussion Guides
- Annex D. NID Exit Interview Form

Tables

Table 1.	Observations of Site Preparations One Week Before the NID (N=55)	6
Table 2.	Planning and Resource Mobilization According to Local Managers (Focus Group Discussion with Local Managers)	7
Table 3.	Rating of Overall Operations (Percentage of Sites)	10
Table 4.	Percentage of Sites That Received Forms (N=100; NID Observations)	10
Table 5.	Methods of Recording Vaccinations Given (Percentage of Sites; NID Observations)	10
Table 6.	Operations on the Day of the NID According to Local Managers (Focus Group Discussion with Local Managers)	11
Table 7.	Mode of Transportation to the Site (Percentage of Respondents; Exit Interviews)	13
Table 8.	Length of Time to Reach Site (Percentage of Respondents; Exit Interviews)	13
Table 9.	Length of Time Waited (Percentage of Respondents; Exit Interviews)	13
Table 10.	Registration in Selected Urban Areas (FGD with Local Managers)	14
Table 11.	Percentage of Sites Receiving Printed Materials (NID Observations)	15
Table 12.	Ways Site Could Be Identified ((N=100; NID Observations)	15
Table 13.	Messages Given to Clients During the NID (Percentage of Sites; NID Observations)	15
Table 14.	Sources of Information about the NID (Percentage of Respondents; Exit Interviews)	16
Table 15.	When Clients Found Out about the NID (Percentage of Respondents; Exit Interviews)	16
Table 16.	Children Who Should Not Receive the Vaccine (Percentage of Respondents; Exit Interviews)	18
Table 17.	Reasons for Nonparticipation in the NID (FGD with Nonparticipants)	21
Table 18.	Local Managers' Recommendations to Improve National-Level NID Activities (FGD with Local Managers)	23
Table 19.	Local Managers' Recommendations to Improve Local-Level NID Activities	26
Table 20.	The First NID: Strengths, Weaknesses, and Recommendations (Debriefing of Observers)	28

Boxes

Planning Process in Khulna City Corporation	5
The Day of the NID in Khulna City Corporation	9

Acronyms and Glossary

BASICS	Basic Support for Institutionalizing Child Survival (USAID project)
BNP	Bangladesh National Party
BRAC	Bangladesh Rural Advancement Committee
CARE	Cooperative for American Relief Everywhere
EPI	Expanded Program on Immunization
FGD	focus group discussion
FP	family planning
GOB	Government of Bangladesh
KCC	Khulna City Corporation
KG	kindergarten
LGRD	[Ministry of] Local Government and Rural Development
NGO	nongovernmental organization
NID	National Immunization Day
OPV	oral polio vaccine
Tk.	taka (basic monetary unit)
TT	tetanus toxoid
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VDP	Village Defense Party
WC	ward commissioner
WHO	World Health Organization

Glossary of Bengali Terms

ausudh	medicine taken orally
bustee	slum
Chaitra	Bengali month that occurs from March through April
Eid	religious festival of Muslim community
gherao	disturbances created by an organization to meet demands
gorimoshi	negligence
haam	measles or rash
hartal	suspension of work, business, and transport, especially as a political protest
imam	prayer leader of a mosque
jarigan	folk song
juma	prayer day
khutba	discussion of religious and social issues

Process Evaluation of the First NID in Bangladesh

Krishimela	exposition of agricultural products and goods
kutchra house	house made of mud
madrassa	Islamic school
para	neighborhood
pourasava	municipality
Ramadan	ninth month of the Islamic year in which fasting is practiced from dawn to sunset
thana	police station, administrative unit
tika	injection of medicine

Acknowledgments

The process evaluation involved the work of many people from various organizations. The following people were especially helpful: Dr. M. A. Majid, former project director, Expanded Programme on Immunization (EPI); Dr. Shamsul Hoque, project director, EPI; Dr. Anwar Hossain and Mr. Mafuzur Rahman from the EPI project; David Piet, Richard Green, John Thomas, and Zareen Khair from the U.S. Agency for International Development/Bangladesh; and R. N. Basu from the World Health Organization.

The data were collected by the following independent observers and trained researchers: Julaya Akhter, Nargis Akhter, Quamrunnessa Babli, Sharifa Begum, Sushil Benjamin Costa, Habibir Rahman, Mohammed Abdur Razzaq, and Dilara Sultana.

All of the Basic Support for Institutionalizing Child Survival (BASICS)/Bangladesh staff played a crucial role in conducting the process evaluation. Despite their being busy with the National Immunization Day implementation, BASICS/Bangladesh staff provided great advice and support. Special thanks are extended to Mary Carnell, Iqbal Hussein, and Robert Weierbach at BASICS.

Last but not least, we acknowledge the respondents—the local managers and caretakers—who made the first National Immunization Day a success.

Executive Summary and Recommendations

Introduction

As part of a global program to eradicate polio, Bangladesh held its first round of the National Immunization Day (NID) on March 16, 1995, and April 16, 1995. The Government of Bangladesh (GOB) has committed to the implementation of two NIDs per year for the next three years. The objectives of the NIDs are to

1. Provide two doses of polio vaccine at an interval of four to six weeks to all children under five (20 million children), irrespective of their previous immunization status;
2. Flush out the wild polio virus from the environment by replacing it with the vaccine virus; and
3. Provide vitamin A supplements to all one-to-four year old children during the second NID.

On March 16, 15.9 million children received a dose of polio vaccine, and 17.5 million children received a dose on April 16. Cluster surveys showed that 83.1% of children 0–4 years received two doses of OPV (Foster, S. 1996. Government of the People’s Republic of Bangladesh Expanded Programme on Immunization Evaluation of 1995 National Immunization Days, June 16–29, 1995. Trip Report. Arlington, Va.: BASICS project, for USAID). Based on this information, the NIDs were considered a tremendous success despite significant obstacles. During and immediately following the first NID, a process evaluation was conducted to identify operational difficulties and potential solutions to improve the implementation of future NIDs in Bangladesh. The process evaluation emphasized the NID activities for the urban poor, who are considered to be a hard-to-reach and underserved population.

Methodology

The process evaluation used several data collection procedures, including observations before and during the NID, interviews with mothers leaving the vaccination sites, and focus group discussions with local managers and mothers. The instruments for all the procedures are in the annexes.

A total of 100 vaccination sites were observed during the NID and 286 exit interviews were conducted at these sites. Immediately following the NID, focus group discussions were held in four city corporations and four district municipalities with local managers, mothers who participated in the NID, and mothers who did not participate in the NID.

Results

Planning and Management

The main problems in planning and management that managers cited were the lack of preparation time, shortage of people, and inadequate supplies of communication materials. There was a lack of time for several reasons.

1. The GOB agreed to the NIDs in December 1994, allowing only three months of preparation time; WHO recommends at least eight months.

Process Evaluation of the First NID in Bangladesh

1. Ramadan occurred during February, which meant that schools were closed and people worked shorter hours.
4. There were frequent *hartals* and strikes.

The lack of preparation time meant that there was little communication from the central level about the roles and responsibilities of various groups. Letters from the line ministries were received too late to facilitate cooperation and coordination. The lack of lead time was exacerbated by holidays for Ramadan and Eid as well as the frequent *hartals*. During Ramadan, things slow down in general and schools are closed, which made it difficult to recruit teachers as volunteers or use older children as mobilizers. Also many people leave the cities for the rural areas during Eid, which meant that some parents did not know where to take their children for the NID.

The shortage of preparation time also meant that the list of new sites in urban areas was not prepared in advance. In some areas, this meant that staff made two household visits—first to register and tell the family about the NID and second to give the referral slip with the vaccine site written on it.

Overall most cities reported very good cooperation among city officials, the civil surgeon's office, teachers, and nongovernmental organizations (NGOs). Mymensingh, however, had difficulty maintaining cooperation. The managers from Mymensingh said that there was “little coordination due to misunderstandings of individual responsibilities.” Private practitioners were not briefed or involved in the NID. There was no orientation of the Pediatric Society or other associations. As a result, there were reports that educated people were told by their private doctors that they did not need to participate.

Operations on the Day of the NID

During the debriefing workshop, all observers commented that the first NID had run much more smoothly than anyone expected. As a rough indicator, observers rated only 4 percent of the sites visited as “extremely chaotic.” Similarly, few sites were observed to have poor teamwork, a poor building site, poor crowd management, or poor client interactions.

Vaccination sites were located nearby, according to most respondents. Eighty-seven percent of exit interview respondents said they walked to the center, and 76 percent of respondents said it took less than 10 minutes. On average, 18 children were waiting in line, but in some centers more than 100 were estimated to be waiting in line. The hours that centers were open varied somewhat: at 8 A.M., 59 percent of the centers opened, and at 9 A.M., 31 percent opened. Twenty-nine percent of the centers closed at 2 P.M., but 32 percent were open until 4 P.M.

The root problem at many centers was either a staff shortage or inadequate training of available staff. The staff shortages caused some centers to open late, long lines, and crowds so some parents just left. Overall, sites averaged five staff in total, four of them volunteers who had received three-and-a-half hours of training; there were very few supervisors. The volunteer training was inadequate for administering the vaccine or for marking the tally sheets. Some observers reported that children were receiving one to four drops depending on their age (with more drops for older children), and some volunteers held vials in their hands to “keep them cold.”

Even the trained health workers had to adjust to the different procedures for the NID. Some problems were due to the fact that cold-chain and record-keeping procedures for the NID differed from routine immunization procedures. For example, there is a heavy emphasis on maintaining records on cards for routine immunization, yet for the NID, only tally sheets were required. (Actually, everyone used the registration lists anyway.)

In some areas, the cold chain also had some weaknesses. The ice in the sputum cups melted very quickly. Although innovative, the cardboard vaccine carriers were not very durable and the styrofoam pieces were not always properly inserted.

Everyone (with a few notable exceptions, such as Radda Barnum staff) checked each child off the registration lists (lists of names were often 10 to 15 pages long); this caused tremendous lines in many places. Seventy-four percent of the sites observed used registration lists to screen children, and 25 percent used them to record the vaccines given. Some observers reported talking to clients who left because of the long lines.

There was a shortage of supplies such as forms and ice in some areas. Some centers experienced vaccine shortages that lasted for a couple of hours until the vaccine could be obtained from another nearby center. There were reports that both 10- and 20-dose vials were used, which caused confusion and some temporary shortages.

Social Mobilization

The GOB decided that every child under 5 years should be registered in order to estimate the vaccine vials, sites, and other supplies needed for the NID. In addition, registration was to be used as a major channel of communication to families about the NID. The registration process had a number of problems. The most important were the lack of time and human resources. All managers reported that Ramadan hampered the social mobilization efforts. In urban areas, many new temporary vaccination sites had to be created and the location communicated to families. At registration time, the location of some sites had not yet been determined, and some NGOs actually made two visits to each household in their catchment areas to communicate the site location.

By far the most important information sources were health workers and registration. (Since a health worker usually conducted registration, the two categories should be viewed as one.) The second most important information source was miking (i.e., using a microphone); 34 percent of respondents cited this source. This rate is lower than might be expected because miking is commonly used for political campaigns in the urban poor areas. During the focus groups, some clients said that they do not pay attention to miking. As one woman said, “Miking is done for various things which aren’t important to me.”

Most of the focus group participants thought that vaccines provide general protection against all diseases rather than specific diseases. However, many respondents reported that vaccines are not effective if only a few doses are taken. In Dhaka, a respondent said, “To receive *tika* is good and if you give *tika*, you should give all of them,” going on to say that if a child had not received the earlier vaccines, it was of no use to get the later vaccines. Many respondents believed that the side effects of fever and swelling (of other immunizations such as BCG or measles) mean that the vaccine is working and that poisonous things are coming out of the body. In Mymensingh, one woman said, “If the place is swollen, then

Process Evaluation of the First NID in Bangladesh

poisonous things come out of the child's body, but if it is not swollen, the poisonous things stay inside the body.”

When NID participants were asked why they attended the NID, most responded that they attended because the health worker told them to attend. NID participants also said that their families were very supportive of immunization in general. Some respondents said that they were poor and did not have any money for treatment if their child got sick. Another reason why people participated in the NID is that they believed the vaccine was a “new medicine for a new disease.”

The exit interview results showed that 8 percent of respondents knew someone who did not plan to attend the NID. When asked which children should not receive the vaccine, 15 percent of exit interview respondents said a sick child, 9 percent said a child under one month old, and 7 percent said fully immunized children should not receive the vaccine. The reasons for not participating in the NID can be divided into three broad categories:

- Beliefs and knowledge about vaccines, including confusion about the NID
- Limited access to vaccination sites
- Social factors, including lack of family support and previous experience with health workers

Many caretakers thought their children were fully immunized and did not need the oral polio vaccine (OPV). They were afraid of harmful side effects of “too many doses,” especially when the child had already had the routine polio vaccine. Many urban poor women work in factories or as domestic help from morning until night and could not come to the site during the hours it was open. Other mothers reported that family members did not allow them to take the child to be immunized either because it would affect their household work or because they did not believe the immunization was necessary.

Recommendations

The following recommendations resulted from the process evaluation:

Planning and Management

- The NID should be made a national priority.
- Increased political support is needed at the national level.
- Opposition party support should be enlisted.
- Letters are needed from line ministries showing support and outlining the various roles and responsibilities.
- Efforts should be made to declare the NID a national holiday.
- The local NID budget should be increased, and the budgets should be provided earlier.
- The full implications of holding the NIDs so close to Ramadan should be carefully considered so that the necessary arrangements to identify sites and involve schools can be made.
- Vaccination sites in urban areas need to be selected further in advance.

Operations

- The hours that centers are open should be extended, since many mothers could not attend because of their work outside the home.
- Volunteers and other staff need to be better trained in vaccine administration, marking the tally sheets, and cold-chain maintenance.
- Special attention should be given to emphasize key differences between the NID and routine vaccination services for the trained health workers.

Social Mobilization

- During the NID, every effort should be made to encourage clients to continue to bring their children for routine immunization.
- More social mobilization efforts are needed, and they need to begin earlier.
- Since most information was carried through face-to-face communication, innovative strategies are needed to cover the wide areas in the given amount of time. Messages should encourage people to “tell your neighbor,” “bring five kids in,” and the like.

Introduction

As part of a global program to eradicate polio, Bangladesh held its first round of the National Immunization Day (NID) on March 16, 1995, and April 16, 1995. As part of its participation in the global program, the Government of Bangladesh (GOB) has committed to the implementation of two NIDs per year for the next three years. The objectives of the NIDs are to

1. Provide two doses of polio vaccine at an interval of four to six weeks to all children under five (20 million children) irrespective of their previous immunization status;
2. Flush out the wild polio virus from the environment by replacing it with the vaccine virus; and
3. Provide vitamin A supplements to all one- to five-year-old children.

On March 16, 15.9 million children received a dose of polio vaccine, and 17.5 million children received a dose on April 16. Cluster surveys showed that 83.1% of children 0–4 years received two doses of OPV (Foster, S. 1996. Government of the People’s Republic of Bangladesh Expanded Programme on Immunization Evaluation of 1995 National Immunization Days, June 16–29, 1995. Trip Report. Arlington, Va.: BASICS project, for USAID). During and immediately following the first NID, a process evaluation was conducted to identify operational difficulties and potential solutions to improve the implementation of future NIDs in Bangladesh. The process evaluation placed emphasis on the NID activities for the urban poor, who are considered to be a hard-to-reach and underserved population. Specifically, the process evaluation objectives were to understand the successes and difficulties of the NID, including the following:

- Overall management and planning at the local level
- Operations on the day of the NID
- Communication and social mobilization
- Reasons for nonparticipation

This report discusses only the experiences of the first NID that was held on March 16, 1995.

Methodology

The process evaluation used several data collection procedures, including observations before and during the NID, interviews with caretakers leaving the vaccination sites, and focus group discussions with local managers and caretakers.

Sampling

A purposive sample of vaccination sites was selected in urban poor areas in four city corporations and four district municipalities. The selection criterion for district municipalities was that they should be large enough to include urban poor areas where some difficulties were expected.

Five specific vaccination sites within each city or municipality were selected. Selection criteria stated that the vaccination sites had to

- be in an urban poor area,
- be in an underserved area, e.g., one with no large nongovernmental organization (NGO) in the area,
- include two government outreach or new sites,
- be NGO outreach or new sites,
- include one fixed site,
- be a mix of sites staffed by volunteers and health staff,
- be places where difficulties were expected, and
- include one site at which focus group participants could be recruited after the NID; eight sites were emphasized.

Focus group participants were identified and recruited by the urban operations officers in each of the cities and municipalities. The criteria for NID managers to participate in the focus group were the following:

- The manager should have been included in NID management and planning for the sites observed.
- A mix of NGO and government managers were to be included, if appropriate.
- People who were willing and able to discuss the operational and management problems of the NID openly were to be included to improve future NIDs.
- The group was *not* to include different levels of people so that open discussions were not inhibited.

Participants for the focus groups with mothers were recruited by the urban operations officers with the assistance of NGOs and government field staff. Criteria for recruitment were that the mothers should

- all be considered urban poor,
- all live in the catchment area of one of the vaccination sites observed during the NID,

Process Evaluation of the First NID in Bangladesh

- include six to eight mothers of children ages one to four years who did *not* attend the NID,
- include six to eight mothers of children under one year old who did *not* attend the NID, and
- include six to eight mothers of children under five years old who attended the NID.

Data Collection Procedures

Observations

Approximately 40 independent observers from the Ministry of Health, Basic Support for Institutionalizing Child Survival (BASICS), Bangladesh Rural Advancement Committee (BRAC), Cooperative for American Relief Everywhere (CARE), World Health Organization (WHO), United Nations Children’s Fund (UNICEF), and other international health organizations observed NID preparations around the country in the week before the NID. Observers visited a total of 100 vaccination sites on the day of the NID. Observation forms were developed and are included as Annexes A, B, and D. At both times, observations were made on the maintenance of the cold chain, social mobilization, and logistics. The independent observers held a debriefing two days after the NID.

Focus Group Discussions

Focus group discussions were held with four types of respondents:

1. Local managers
2. Mothers who participated in the NID
3. Mothers of children under one year old who did not participate in the NID
4. Mothers of children one to four years old who did not participate in the NID

The discussion guide for managers in Annex C focused on the overall planning and management process for logistics, cold-chain maintenance, and social mobilization.

The discussion with caretakers of children who were vaccinated during the NID focused on sources of information about the NID, reasons for participation, and possible confusion between the routine Expanded Program on Immunization (EPI) and the NID.

In the week after the NID, at one site in each of the eight cities or municipalities, two focus group discussions were held with six to eight caretakers of children who were *not* vaccinated during the NID. The primary purpose of these two discussions was to understand the reasons for nonparticipation. One focus group was conducted with caretakers of children under one year old and the second was conducted with caretakers of children under five years old.

Exit Interviews

On the day of the NID, the independent observers conducted 286 exit interviews at the sites visited. These forms are included in Annex D.

Results

Planning and Resource Mobilization

A total of 55 sites were visited one week before the NID. Results from the pre-NID observations showed that five sites did not have an NID coordination committee and four had not held any advocacy or planning meeting. Sixteen sites (29 percent) calculated their target population using census data, and 31 (56 percent) used registration lists to estimate their target population. Table 1 shows some key observations made during the pre-NID monitoring.

During the focus group discussions, managers were asked about their experiences with planning and resource mobilization. Despite real constraints, all planning and management of the first NID was quite successful in urban areas. In most cities and municipalities, advocacy and planning meetings were held with ward commissioners, NGOs, teachers, religious organizations, and other social leaders.

Most managers reported that cooperation was very good among city officials, the civil surgeon's office, teachers, and NGOs. However, Mymensingh had difficulty maintaining cooperation. The managers from Mymensingh said that there was "little coordination due to misunderstandings of individual responsibilities." One manager said that the lack of coordination was partially due to the fact that there was no letter from the government that delineated individual responsibilities; the Poura Corporation thought that the civil surgeon's office would perform the activities.

The main problems that managers cited were lack of preparation time, shortage of people, and inadequate supplies of communication materials. There was a lack of time for several reasons.

1. The GOB agreed to the NIDs in December 1994, allowing only three months of preparation time; WHO recommends at least eight months.
2. Ramadan occurred during February, which meant that schools were closed and people worked shorter hours.
3. There were frequent *hartals* and strikes.

The lack of preparation time meant that there was little communication from the central level about the roles and responsibilities of various groups. In Chittagong, there was poor attendance by ward commissioners because some thought that the NID was motivated by the Bangladesh National Party (BNP) for political reasons. Managers in Chittagong reported that they talked to some pharmaceutical companies but could not effectively involve them because of time constraints.

Planning Process in Khulna City Corporation

The urban operations officer sent a letter to the mayor of Khulna City Corporation (KCC) on January 5, 1995, to inform him of the NID. On January 15, 1995, the first planning and advocacy meeting was held with all allied departments, NGOs, and ward commissioners. KCC has 31 wards in two zones. On February 8, 1995, there was a workshop to orient ward secretaries and hold ward advocacy meetings. Eighty percent of ward advocacy meetings were held by Eid, but there was political instability in a few of the wards. On February 19, 1995, the health officer was suspended and an acting officer-in-charge installed. Registration began on February 1, 1995; communication materials were received on March 1, 1995; and vaccine also arrived at the civil surgeon's office on March 1, 1995. There was a shortage of vaccine carriers, but it was resolved. KCC did not receive the tetanus toxoid (TT) dropout forms or supervisory checklists.

Process Evaluation of the First NID in Bangladesh

Table 1. Observations of Site Preparations One Week Before the NID (N=55)

Pre-NID Observation	Yes (Percentage)	No (Percentage)
Forms received	46 (84)	9 (16)
Communication materials received	45 (82)	10 (18)
Vaccine received	47 (82)	8 (18)
Cold-chain equipment adequate	42 (76)	12 (22)
Local source of ice identified	28 (51)	15 (27)
Transportation to site confirmed	42 (76)	4 (7)
Supervisory plan prepared	47 (85)	7 (13)
Plan for hard-to-reach areas in place	28 (51)	14 (26)
Measles and TT dropout list prepared	31 (56)	11 (20)
All volunteers trained	35 (64)	16 (29)
Social mobilization strategy adequate	35 (64)	14 (25)
Special mobilization strategy for high-risk areas in place	26 (47)	12 (22)
Communication materials developed	19 (35)	33 (60)
Local resources tapped	16 (29)	24 (44)

Note: Because of missing data, percentages do not add to 100.

The lack of time also caused difficulty in recruiting and training volunteers. Some managers (in Saidpur, Mymensingh, and Khulna) reported that they did not have enough volunteers. In Saidpur, the shortage of people to deliver the vaccine meant that centers opened late and mothers went home; workers went house to house to cover that area.

Table 2 presents the highlights of the planning and resource mobilization activities in eight cities and municipalities.

The Day of the NID in Khulna City Corporation

All the vaccine was stored in one of the zonal offices. All available ice packs were frozen, and ice had been made in sputum containers. The night before the NID, a team of people worked all night long to put together the cardboard vaccine boxes. The boxes consisted of a thin cardboard box that had to be folded and a piece of styrofoam inserted against each of the six sides. A label that showed the ward and center where the box was to go was pasted onto each box. The box and some tally forms were put in a plastic bag for distribution. On the morning of the NID, right after the morning prayers, the vaccine was packed in the boxes. First, the ice pack or sputum container was put into the box, then the vaccine vials were counted out. At 7 A.M., trucks started taking the vaccine to each ward office; from there someone carried the vaccine to each site by 8 A.M. All workers were instructed to get vaccine from a nearby site if they ran out. Mobile trucks were also going around with some vaccine. Mothers and children started drifting in to the sites as the vaccine arrived. At 9 A.M., the mayor of Khulna arrived at a site to formally inaugurate the NID and administer the vaccine to a few children. The media were there to document the event. By 10 A.M., most sites were filled with children waiting to be vaccinated. There was a concerted effort to bring children in early for fear the strong heat would destroy the vaccine's potency. Volunteers and older children canvassed the areas to encourage parents to bring their children in. Few sites reported running out of vaccine. By noon, workers at many sites had vaccinated more than 300 children (often more than were registered) and were winding down their operations. By 1 P.M., most of the sites were closed.

At 7 P.M., the vaccine and tally sheets were returned to the zone office. As each vaccine box was returned, the used vials were put in a pile to be counted. Unused vials were marked with a red pen and returned to the refrigerator. The tally sheets were compiled. Several workers counted the marks and entered them into a summary sheet for each ward. Many tally sheets had not come in, and the sanitary inspector said that the workers would probably have to go collect them. The sanitary inspector had been working for 36 hours nonstop and at about 8 P.M. announced that he had to go home to sleep. He was completely exhausted.

Operations

Overall Operations

During the debriefing, most of the independent observers commented that the NID had surpassed their expectations for success. Few vaccine shortages were reported. However, some areas used both 10- and 20-dose vials, which were difficult to distinguish and did create some shortages. Though it was not ideal, the cold chain was maintained using available ice packs and ice made in sputum containers. Observers found that the ice packs were still frozen at 66 percent of the sites visited.

Using a structured form (see Annex B), observers made notes about various aspects of the site operations on the day of the NID. Observers were asked to rate their perceptions of the overall operations of each site they visited.¹ Only 4 percent of the sites were rated as extremely chaotic; the rest of the sites were evenly split between “somewhat chaotic” and “quite efficient.” Table 3 presents the independent observers' ratings of specific operational characteristics. Very few sites were rated poor on teamwork, building size, crowd management, or client interactions.

The hours that sites were open varied somewhat: 59 percent of sites opened at 8 A.M. and 31 percent at 9 A.M.; closing times ranged from noon at one site to 5 P.M. at 14 sites.

Most of the vaccination sites received tally sheets, registration forms, and referral slips, but only 32 percent received the measles and TT dropout forms (see table 4).

Most sites (74 percent) used the registration lists to screen each child who arrived to be vaccinated. Usually, this meant searching the list for the child's or father's name. In the focus group discussions, managers reported that comparing the referral slips with registration lists took much too long and often led to long lines of people. Managers thought that centers should not administer OPV without

¹ These ratings are subjective and likely to have low interrater reliability; they should be interpreted with caution.

Process Evaluation of the First NID in Bangladesh

registering the children. (WHO recommends recording only the number of doses administered on the tally sheets and not using registration lists.) In Comilla, one respondent said that she took her child to a nearby center, but the health worker refused to vaccinate the child because the child was not registered. As table 5 shows, 25 percent of the sites recorded the given vaccinations on the registration sheets instead of the tally sheets. In urban areas, 18 percent of the sites recorded vaccinations on the vaccination cards. Since there is no specific place for the NIDs to be entered on the cards, the NID dose may have been recorded as a routine dose of OPV.

All sites observed had four to six workers, but some had an all-volunteer staff. Some managers reported that they had a staff shortage and many staff were inadequately trained. The staff shortage meant delays in opening sites (because of late arrival of the vaccine); in Mymensingh, some sites could not be opened at all.

On average, volunteers received three-and-one-half hours of training and orientation. The lack of adequate training led to some improper OPV administration. For example, some vaccinators held the vaccine vials in their hands for a long time “to keep them cold” instead of immediately returning them to the ice. Other volunteers did not understand the two-drop requirement and gave three to four drops to older children and one drop to younger children. Some volunteers cut their hands while opening the vials and felt they needed vial cutters, which are not routinely required for OPV.

Table 6 presents the main operational difficulties and successes in eight cities and municipalities.

Table 3. Rating of Overall Operations (Percentage of Sites)

Observations	Excellent	Good	Poor
Staff teamwork (N=91)	52	46	2
Building size (N=87)	45	40	15
Crowd management (N=69)	32	56	12
Client interactions (N=86)	35	53	12

Table 4. Percentage of Sites That Received Forms (N=100; NID Observations)

Item	Percent
Tally sheets	87
Registration forms	91
Referral slips	88
Measles and TT dropout forms	32

Table 5. Methods of Recording Vaccinations Given (Percentage of Sites; NID Observations)

Item	Rural (N=33)	Urban (N=40)	Overall (N=100)
Tally sheet	79	83	79
Registration list	21	35	25
Vaccination card	9	18	11

Note: Some forms were returned that did not specify whether the site was rural or urban. These sites are included in the percentages but not in the breakdown between rural and urban sites; for this reason, the sum of the number of rural and urban sites does not equal the overall total.

Difficulties in Participating in the NID

During the exit interviews and the focus group discussions, caretakers who brought their children for the NID were asked if they had any difficulties in participating. Most caretakers reported that they faced no problems at all. In Chittagong, some mothers said that they brought the children of people who were unable to attend. The centers were located close to where the caretakers lived. As tables 7 and 8 show, more than 80 percent of caretakers walked to the vaccination sites; for more than 70 percent, reaching the sites took less than 10 minutes. Table 9 shows the length of time that respondents reported waiting; 69 percent waited less than 15 minutes to be vaccinated.

During the focus group discussions, caretakers who participated in the NID mentioned a number of problems that were due to both the amount of time they had to spend and the scheduled time that centers were open. In general, respondents said that the centers should be less crowded and the number of vaccinators increased so that the line would move quickly. In Barishal, respondents reported that, because of the crowds, they went to the site and then went home and came back later. Some reported that they had to make several trips. In Comilla, respondents said that the centers should remain open until 5 P.M.; in Rajshahi, one respondent said, “We came early but the vaccine came late.” A woman in Dhaka said, “I am a garments worker. That day I went to work at 11 A.M. but there was no problem because I was granted leave on this account.” Dhaka respondents said that it would be better for the NID to be held on a Friday because offices are closed that day. Thursday would be their second choice because there is only a half day at the office.

Respondents also made suggestions to improve the NID experience. Some Barishal respondents said that some seating arrangements would improve the situation. NID participants in Khulna said that they suffered from heat because the room was so small. Several respondents asked that drinking water be made available. A Barishal woman said that someone should be there to clean up the babies’ stools and urine to prevent the offensive smell. A Khulna respondent suggested that medicine for worms also be given at the same time.

Table 7. Mode of Transportation to the Site (Percentage of Respondents; Exit Interviews)

Mode	Rural (N=52)	Urban (N=231)	Overall (N=283)
Walking	92	85	87
Rickshaw	6	13	12
Bus	2	0.4	1
Baby taxi	0	1	1

Table 8. Length of Time to Reach Site (Percentage of Respondents; Exit Interviews)

Time	Rural (N=52)	Urban (N=228)	Overall (N=280)
Less than 10 minutes	85	74	76
11 to 20 minutes	14	21	19
21 to 30 minutes	0	5	4
More than 30 minutes	2	1	1

Table 9. Length of Time Waited (Percentage of Respondents; Exit Interviews)

Time	Rural (N=53)	Urban (N=231)	Overall (N=284)
< 15 minutes	59	71	69
15 to 30 minutes	25	15	17
> 30 minutes	17	13	14

Social Mobilization and Communication

Registration

Before the NID, attempts were made to register every child under five in Bangladesh, an estimated 20 million children. The registration was to estimate the number of sites and the amount of vaccine and other supplies needed for the NID, and to inform and motivate households to bring their children to the NID. In addition to registering children under 5 years old, the process was also supposed to identify pregnant women who had not been immunized against tetanus toxoid (TT) and children 9 to 12 months old who had not been immunized against measles. During registration, households were given referral slips with the NID date and the immunization site location. Table 10 shows local managers' estimates of the registration coverage in selected urban areas.

There were a number of problems in the registration process. All managers reported that Ramadan hampered the social mobilization efforts. In urban areas, many new temporary vaccination sites had to be created and the location communicated to families. At registration time, the location of some sites had not yet been determined; some NGOs made two visits to each household in their catchment areas to communicate the final site location.

No area in the country could complete the listing of measles and TT dropouts. In Chittagong, managers explained that listing children for measles dropouts and pregnant women for TT dropouts created many problems and was not carried out in the end. Volunteers could not ask mothers about pregnancy because they did not know them well enough to ask such a personal question.

Table 10. Registration in Selected Urban Areas (FGD with Local Managers)

City	Percentage Registered	Comments by Managers
Rajshahi	80	Registration was difficult because of staff and time shortages. Forms arrived late and were scarce.
Chittagong	70–80	The number of registered children was much fewer than the 70 percent estimated because of few children in commercial areas.
Comilla	60	This number was based on estimates, but it was 80 percent according to "our own statistics." <i>Hartals</i> reduced the number of people registered.
Khulna	80	Many children were not registered because of staff and time shortages.
Barishal	85	Worker and time shortage: "Volunteers had to spend a lot of time to motivate mothers because many of them asked why it was needed when their child is fully immunized."
Dhaka	Almost everyone	Twice the number of registered people came, so maybe registration was only 50 percent. "Registration was a time-consuming affair." A female voice was used for miking; it created interest among people. People were informed when they came to the clinic for other services.
Mymensingh	50	Only half the target population was registered because there were not enough workers.

Communication Channels

Many printed materials and TV spots were developed at EPI headquarters in Dhaka for use nationwide. The printed materials included posters, two pamphlets, a bumper sticker, a smaller sticker, banners, and flags. TV spots began airing the week before the NIDs. All managers reported a shortage of printed materials.

There were many local initiatives in social mobilization. Some cities prepared their own cinema slides or tapes for miking. In the urban poor areas, house-to-house visits were made and miking was used heavily to inform families about the NID. In sites where there was miking, the miking was started three-and-one-half days before the NID. In the focus group discussions, local managers reported using the following communication channels:

- Miking in mosques
- Special radio bulletins
- Local newspapers
- House-to-house visits for registration
- Miking through local club members
- Preparing cinema slides in Comilla
- Holding public meetings in Khulna and Barishal
- Mobilizing imams

Table 11 shows the percentage of sites that received printed materials. The most available item was the poster, which 77 percent of the sites received; however, as table 12 shows, only 57 percent used the posters to identify themselves.

During the first NID, health workers were supposed to tell caretakers to come back for the second NID on April 16, 1995. Table 13 shows the messages health workers gave as observed by the independent observers. At 88 percent of the sites, clients were told to return for the next NID, but at only 23 percent (9 percent in rural areas) were clients told to return for routine immunization visits. During the exit interviews, 69 percent of the respondents knew the date of the second NID (April 16, 1995).

During the exit interviews and focus group discussions, clients were asked how they heard about the NID and knew where to come. Table 14 shows the sources of information about the NID. By far the most important information sources were health workers and registration. (Because a health worker usually

Table 11. Percentage of Sites Receiving Printed Materials (NID Observations)

Items	Rural (N=33)	Urban (N=40)	Overall (N=100)
Stickers	30	33	31
Leaflets	52	43	44
Posters	82	85	77
Flag or banner	33	5	56

Table 12. Ways Site Could Be Identified (N=100; NID Observations)

Items	Percentage of Sites
Banner	34
Flag	39
Posters	57

Table 13. Messages Given to Clients During the NID (Percentage of Sites; NID Observations)

Message	Rural (N=33)	Urban (N=40)	Overall (N=100)
Come back April 16, 1995.	82	93	88
Come back for routine visits.	9	25	23
Tell others to come.	27	15	17
This is separate from routine EPI.	9	10	8

Table 14. Sources of Information about the NID (Percentage of Respondents; Exit Interviews)

Source	Rural (N=53)	Urban (N=233)	Overall (N=286)
Registration	28	47	44
TV	11	23	21
Radio	6	17	15
Health worker	81	62	65
Friend or relative	8	26	23
Posters or leaflets	2	4	4
Miking	28	35	34
School	2	1	1

Table 15. When Clients Found Out about the NID (Percentage of Respondents; Exit Interviews)

When	Rural (N=53)	Urban (N=231)	Overall (N=284)
Today	32	11	15
1–7 days ago	38	55	51
8–14 days ago	15	18	17
More than 14 days ago	15	17	17

conducted registration, the two categories should be viewed as one.) The second most important information source was miking; 34 percent of the respondents cited this source. This rate is lower than might be expected because miking is often used for political campaigns. During the focus group discussions, some mothers said that they do not pay attention to miking. As one woman said, “Miking is done for various things which aren’t important to me.” One NGO in Dhaka used a woman’s voice for the miking, which seemed to be more effective in attracting women’s attention.

Table 15 shows when the clients heard about the NID. Most of the respondents had heard about the NID during the previous week.

When asked about how they know about immunization in general, most respondents said the health worker tells them when to come or they refer to the immunization card. A respondent in Chittagong said, “The health worker tells us after measles vaccination that no more vaccines are needed.” In Dhaka, one woman explained that the card helps her remember when to return for the vaccination: “The first time we go to receive a *tika*, they give us a card where the next receiving date is mentioned. We don’t read but we show this card to a literate person in the *bustee* and they tell us the actual date.” In Mymensingh, women explained that literate people read the card and know when to return for the next vaccine.

Beliefs and Knowledge of Vaccines in General

Some focus group discussions with caretakers explored the caretakers’ beliefs about vaccines in general. This study cannot assess how widespread these beliefs are among the urban poor.

Most focus group participants thought that vaccines provide general protection against all diseases rather than preventing specific diseases. Clients said, “If you complete all the vaccinations, no diseases will attack,” and “The child will remain in good health and he will have no disease.” Others said that vaccines prevent coughs in children and ensure that if a child is attacked by any disease, it will not be harmful or serious. A woman in Mymensingh said that her older daughter did not receive the measles vaccine and had a serious attack of measles (*haam*), but her younger daughter was immunized against measles and had only a mild attack. (The Bengali term *haam* often includes many other types of rashes in addition to measles.) Taking this logic one step further, one respondent in Chittagong reported, “If a child is healthy enough, then it will do if that child is not vaccinated or given partial doses.”

Most respondents were aware that children should receive a series of immunizations. In Comilla and Barishal, almost all caretakers said that, after taking the measles vaccine, their children should not take any more vaccines because the children were now fully immunized. However, many respondents believed that vaccines are not effective if only a few doses are taken. In Dhaka, a respondent said, “To receive *tika* is good and, if you give *tika*, you should give all of them,” going on to say that, if a child had not received the earlier vaccines, getting the later vaccines was of no use.

Several caretakers said that vaccines improve the eyesight of babies (they were probably referring to vitamin A capsules that are given twice a year). This belief also relates to the confusion between vaccinations and curative injections. Bengali distinguishes between *tika* (injection) and *ausudh* (medicine taken orally). Although most people seem to understand that some injections and medicine are preventive and others curative, there is no distinct term for “vaccine” or “immunization.”

When discussing the side effects, most respondents said that vaccinations had no harmful side effects. Fever and sores occur, but they are not serious and go away after a while. Many respondents believed that the side effects of fever and swelling mean that the vaccine is working and that poisonous things are coming out of the body. In Mymensingh, one woman said, “If the place is swollen, then poisonous things come out of the child’s body; but if it is not swollen, the poisonous things stay inside the body.”

However, in most of the focus group discussions, there was a story about a bad experience with vaccines. In Khulna, a mother said, “After my child was given the third dose of vaccine, pus accumulated and it had to be operated. For this reason, my child is afraid and the measles vaccine could not be given.” In Saidpur, one respondent said that a child’s thigh became infected after the *tika*, and the child later required an operation. Respondents also said that fever after vaccination would turn into other diseases. There is also a belief that vaccines can be harmful and even fatal when given incorrectly; the vaccines “touch the bone” or are given “on a vein.” One respondent in Mymensingh said that a child was attacked by tetanus and died “when the *tika* was pushed and touched the bone.” In Mymensingh, one woman reported, “My husband thinks that the female worker does not know how and where to give the vaccine. If they push the vaccine on a vein, the child may die.”

Reasons for Participating in the NID

When NID participants were asked why they attended the NID, most responded that they attended because the health worker told them to attend. A woman in Khulna said, “At first we were scared thinking that our children got a vaccine dose just a few days ago and why get another one. Then the health worker explained the reasons to me and I was convinced and got my child vaccinated again.” The face-to-face communication was crucial not only from health workers but from community members who took the initiative to convince their neighbors to attend. In Saidpur, one woman said that her neighbor was not planning to take her child for the NID but then “I personally convinced her and after that she came for the vaccine.”

NID participants also said that their families were very supportive of immunization in general. In Khulna, one respondent said that her husband and mother-in-law said, “First give the vaccine and then we can eat.” In Barishal, one respondent said, “My mother-in-law said, ‘First go to the center for *tika*; there is no need to do housework.’”

Some respondents said that they were poor and did not have any money for treatment if their child got sick. In Saidpur, one woman said, “We are poor; we could not spend money for treatment, so if we take

Process Evaluation of the First NID in Bangladesh

this vaccine, our children will be in good health.” There is also a belief that there are many more diseases during the Bengali month of Chaitra (March-April): “During the month of Chaitra, children suffer from all sorts of diseases.”

Another reason people participated in the NID is that they believed the vaccine was a “new medicine for a new disease.” A Dhaka respondent said, “A new disease has come up, so the government tells us to take our children to the center on 16th March so our children will not be limping.” A Saidpur respondent reported that one of her elderly neighbors said there used to be no diseases but now “there is excess medicine and excess diseases.”

Reasons for Not Participating in the NID

The process evaluation emphasized understanding the reasons for nonparticipation in the NID so that corrective steps can be taken for the next NID.

The results of the exit interviews showed that 8 percent of respondents knew someone who did not plan to attend the NID. The reasons for not participating in the NID can be divided into three broad categories:

1. Beliefs and knowledge about vaccines including confusion about the NID
2. Limited access to vaccination sites
3. Social factors, including lack of family support and previous experience with health workers

Beliefs and Knowledge

Beliefs about immunization in general (discussed in the previous section) also applied to the NID. Table 16 shows the answers to the question “Who should not receive the vaccine?” In general, a greater percentage of rural caretakers gave the incorrect answers. Between 15 and 19 percent of respondents reported that sick children, fully immunized children, and children under 1 month old should not receive the vaccine. In urban areas, the percentages ranged from 6 to 14 percent. A woman in Khulna who had lost many children was afraid her child would die if vaccinated. In Saidpur, one woman said that one of her neighbor’s children suffered from measles and chickenpox after receiving the vaccine. After this experience, some people thought there was no point to the vaccinations and did not take their children.

There was some confusion about the purpose of the NID and how it was the same or different from routine immunization. As a manager in Rajshahi said, “There was confusion between routine

Table 16. Children Who Should Not Receive the Vaccine (Percentage of Respondents; Exit Interviews)

Child’s Condition or Age	Rural (N=53)	Urban (N=233)	Overall (N=286)
Sick	19	14	15
Over 5 years old ¹	53	73	70
Fully immunized	15	6	7
Under 1 month old	15	7	9

¹ Correct response

immunization and the NID in each and every level of the people.” The confusion among mothers was at several levels. Many mothers thought their children were fully immunized and did not need the OPV. They were afraid of harmful side effects of “too many doses,” especially when the child had already had the routine polio vaccine.

Many thought the NID was for an injection. This belief may have been due to the use of the Bengali term *tika*, which refers to injections but has also

come to mean vaccination to many, but not all, people. There were rumors that an injection would be given to children in their mouths. A respondent in Comilla said that she knew a mother who did not attend because “The baby was too young and will be hurt if injected. She knows that all vaccines are given by needles.”

Many nonparticipants simply did not know about the NID. During the focus group discussions in Chittagong, no one had heard about the NID except for two mothers. In Mymensingh, many respondents reported that no one (health worker) came to their house and they did not know why the polio vaccine was given on March 16, 1995. There was also some misunderstanding of the messages that were given. Some people thought that the two days of the NID were March 16 and 17, and others thought they would attend next month *instead* of this month, not realizing that both months were necessary. Other respondents thought the vaccinator would come to their house.

Local managers reported that the educated people were more confused than the poor people. A manager in Chittagong stated, “Illiterate and poor people did not question the immunization on the NID because they depend on the health worker’s instructions. But the literate people want to be sure about what is given and why.”

In general, private doctors were not briefed on the NID’s purpose and therefore did not encourage their clients to participate. In Khulna, because of the doctors’ confusion, many educated caretakers did not receive the OPV. In Dhaka, clients said, “Why should we give polio to our children without instruction of renowned doctors?”

Access to Vaccination Sites

For many nonparticipants, access to the sites was limited for several reasons. Many urban poor women work in factories or as domestic help from morning until night and could not come to the site during the hours it was open. In Khulna and Dhaka, respondents reported that many working mothers could not leave work to get vaccines because their wages would be cut. Many mothers also reported that they were busy with their housework and either could not go to the center or went too late. In Dhaka and Mymensingh, mothers went to the center after finishing their housework and found the center closed. In Rajshahi, one mother said, “We know about the tika very well, but we have no time to take the children to the center.” Another mother commented on the time it takes because of crowds: “I did not finish all the doses because of my household work like cow and goat rearing—the center takes a lot of time because of the crowds.” In Dhaka, several mothers reported that they had gone to the sites several times but always returned home because the lines were extremely long.

The distance of the center from the house made access difficult in some areas. In Barishal, all respondents said there was no vaccination center near their house. In Mymensingh, some people could not come because the center was far from their house. Other people were out of town and did not know where to go or thought they had to go to the assigned center.

There were a few reports that health workers turned children away. In Rajshahi, one woman was visiting her mother and took her child to the nearby vaccination center. But because the child was not registered there, the health workers refused to vaccinate the child. In Comilla, one mother said that a health worker told her that her child should not be vaccinated when the child had a cough.

Social Factors

Many mothers reported that family members did not allow them to take the child to be immunized, either because it would affect their household work or because they did not believe the immunization was necessary. Husbands and in-laws said to do household work before taking the child for vaccination. Some respondents said about their neighbors, “If they did not finish their housework and cooking, their husband beats them. By the time their work is finished, the center is closed.”

Some respondents said that their mothers-in-law did not allow them to go, saying, “In the olden days, there was no *tika* and we did not face any trouble,” or “We didn’t need the vaccines, so why do they?” In Mymensingh, one respondent said, “My husband says, ‘We did not take vaccine—are we not alive?’ He thinks the child may be attacked by disease when he receives vaccine.” There were also reports that husbands and in-laws do not like the immunizations because they make the children afraid and cry, and others think there is no need to go to the center because they have money to purchase medicines if the child gets sick.

During the focus group discussions, respondents talked about their previous experience with health workers, which may affect their willingness to participate in NID activities. In general, respondents spoke favorably about the way health workers treat them. Respondents in Mymensingh said that the health worker treats them well because the worker asks them to sit down, “gives the vaccine carefully with a smiling face,” talks about the fever and soreness, and tells them to take care of the immunization card. A Khulna respondent said that the health worker is very nice because she gives water to drink. Respondents like the health workers because they use pictures and flip charts to tell them about feeding.

Many respondents reported that the health worker does not say anything because of the large crowds and lack of time, saying that, “The health worker treats us well but gets angry when there is a rush.” A Comilla respondent said that the first time she took her child to be vaccinated, she was refused because there were not enough children for a vial to be opened. So she left without receiving the vaccine. Health workers often will not vaccinate children without a card, as one respondent noted: “I came to Dhaka and lost my card. So, without the card, they will not give the *tika*; that is why I did not go.”

Table 17 summarizes the reasons for nonparticipation mentioned by respondents in each of the eight cities and municipalities.

Table 17. Reasons for Nonparticipation in the NID (FGD with Nonparticipants)

City	Reasons
Dhaka	<p>Did not hear of the NID. Was at grandmother's house. Could not wait in the crowd because of household work. Completed all immunizations. Lost the card, so did not come. Working in other houses and had no time. No need for <i>tika</i> because it is up to Allah.</p>
Mymensingh	<p>Husband prevented participation in the NID. Mother-in-law did not give permission. Did not know about the NID. Was in the village. Center was already closed (at 5 P.M.).</p>
Chittagong	<p>Did not hear about the NID. Health worker refused to vaccinate child because she was an outsider. Did not know center location.</p>
Comilla	<p>Did not know about the NID. Was in mother's village and did not know about the NID. Center was closed by the time respondent came. Did not know what vaccine would be given, so thought it better not to go. Husband was confused about what would be done, so he did not want child taken. Will vaccinate child later. Child was too young, only 1 month old. Baby had cough.</p>
Rajshahi	<p>Had no time. There were crowds. Had too much household work. Child had a skin disease. Thought vaccinators would come to our house. Didn't know location of center. There was negligence (<i>gorimoshi</i>). Refused at center because child was not registered. Did not know at what age child should be vaccinated.</p>
Saidpur	<p>Was out of the city. Was busy with housework. Mother-in-law was too busy to take child. Had left referral slip behind, so did not go. Was visiting relatives and did not know location of the center.</p>
Khulna	<p>Did not know ahead of time. Child did not want to go.</p>
Barishal	<p>Was at father's house and did not hear about the NID. Did not return from father's house in time (did not know of other centers). Was at relative's house. Child was ill. No center was near our house.</p>

Recommendations of Local Managers and Observers

The following section presents recommendations for future NIDs that local managers made during the focus group discussions. Managers were asked what changes they would recommend at the national and local levels. The last part of this section presents the results of the debriefing that was held with the NID observers.

National Level

Table 18 presents the recommended changes for the national level made by local managers in each of the selected cities and municipalities. There is a need for increased political support at the national level, an increase in the NID budget and supplies, changes in NID scheduling, and increased social mobilization.

Table 18. Local Managers' Recommendations to Improve National-Level NID Activities (FGD with Local Managers)

City	Recommendation
Dhaka	<ul style="list-style-type: none"> National media coverage should start earlier. Opposition party should express support for the NID. Next NID date should not be changed. Centers should be opened one hour before garment factories. The NID should be inaugurated jointly by the Ministry of Local Government and Rural Development and the city corporation. The Information Ministry should be involved through a daily newspaper column on the NID. Funds are needed for volunteer refreshments. Certificates should be provided for volunteers. Posters, stickers, and leaflets should be supplied earlier and in greater numbers.
Mymensingh	<ul style="list-style-type: none"> Budget should be received much earlier. The number of vial cutters should be increased. More referral slips should be distributed. Posters, stickers, and leaflets should be supplied earlier and in greater numbers. Ice packs should be supplied. The budget amount should be increased. Each worker should receive Tk. 100. The budget was placed only with the pourasava and not the civil surgeon. Letters should be sent to all concerned, e.g., block supervisors. The opposition party should express support for the NID and cancel <i>hartals</i>. Work should be clearly delineated.

Process Evaluation of the First NID in Bangladesh

Table 18. Local Managers' Recommendations to Improve National-Level NID Activities (FGD with Local Managers) (continued)

City	Recommendation
Chittagong	<p>Information about the national program should be disseminated earlier.</p> <p>TV and newspaper coverage should be started three months before the NID.</p> <p>Letters with clear instructions and guidelines are needed from line ministries, including Education, LGRD, Cooperative, Religion, etc.</p> <p>The NID should be held during December or January to avoid Ramadan and the hot season.</p> <p>Political commitment is needed from both the ruling and opposition parties.</p> <p>Religious avenues such as <i>juma</i> during <i>khutba</i> (religious discussion) should be used more.</p> <p>A documentary film should be prepared and shown on TV to orient volunteers.</p> <p>TT and measles dropout identifications should be excluded.</p>
Comilla	<p>TT and measles dropout identifications should be excluded.</p> <p>Letters from line ministries should be ensured.</p> <p>The NID should be held during winter.</p> <p>TV and newspaper involvement should be increased.</p>
Rajshahi	<p>National-level announcements and media coverage should occur earlier.</p> <p>All ministries should be involved to instruct local authorities.</p> <p>The NID should be declared a national holiday.</p> <p>Kindergarten school should be closed.</p> <p>The prime minister should give a speech earlier.</p>
Saidpur	<p>The NID should be given priority at the national level.</p> <p>More radio and TV coverage is needed.</p> <p>Financial support should be provided for volunteer training.</p> <p>The NID should be held in December or January.</p> <p>Photos of disabled children should be used on posters, leaflets, and banners.</p> <p>The NID seal should be used on the routine immunization card.</p> <p>The referral slip should be like the routine immunization card.</p> <p>Members of Parliament and political leaders should be involved.</p> <p>No <i>gherao</i>, Krishimela, or disturbances should be created.</p> <p>The NID should continue for three days.</p>
Khulna	<p>National announcements should be made earlier.</p> <p>Letters from the government should be given to ward commissioners.</p> <p>The NID should be scheduled around Eid, school closings, etc.</p> <p>Publicity should be increased through TV, radio, and newspapers.</p> <p>NID hours should be from 8 A.M. (not 9 A.M.) TO 2 P.M.</p> <p>Some money and refreshments should be given to volunteers.</p> <p>Registration forms should be sent two months ahead of time.</p> <p>Letters should be sent to city corporations.</p>
Barishal	<p>TV, radio, and newspapers should be used earlier.</p> <p>Each department needs letters from ministries to ensure cooperation.</p> <p>The NID should be scheduled around Eid, school closings, etc.</p>

Managers reported that the NID should be a national priority and the prime minister's declaration should have occurred much earlier. In addition, they made the following recommendations:

- Opposition party support should be considered essential to ensure that everyone is involved; several managers suggested that *hartals* should not be held.

Recommendations of Local Managers and Observers

- All members of the parliament and other political leaders should express their support.
- It is especially important for relevant line ministries (Health and Family Welfare, Local Government and Rural Development, Education, and Religion) to communicate with local officials to clearly delineate roles and responsibilities.

Managers reported that local budgets were needed earlier and needed to be increased to include volunteer training and refreshments. One manager suggested that workers should be paid taka (Tk.) 100. More vaccine carriers, droppers, and ice packs were needed in some areas. There were reports that because of the lack of vial cutters, volunteers cut their hands trying to open the vials. Chittagong managers said that the volume of supplies should be calculated based on the estimated target population and items should be procured well ahead of time.

The NID scheduling was discussed at length. Many managers reported difficulties because of Ramadan and the *hartals* and suggested that the NID be scheduled sometime from December to February, before Ramadan. One manager suggested that the dates stay the same so that people will remember them. Many managers recognized that working mothers had difficulty attending the NID because of a conflict in the hours that sites were open. To address this problem, some recommended that the NID be declared a national holiday, that it be held for three days, and that sites open one hour earlier than the factories. Because many vaccination sites were at schools, those schools should be closed on the NID.

For the social mobilization and communication activities, more activities and materials were needed earlier. For registration, more registration forms and referral slips were needed and should preferably have been received at least two months before the NID. Most managers said there should have been more television and radio coverage and that these spots should have started earlier. One manager suggested getting Sanowara Corporation to advertise the NID on Zee TV; another suggested that separate TV spots and communication materials be developed for literate and illiterate people. The NID should be promoted by well-known personalities such as Professor Badruddoza Choudhury, prominent doctors, or movie and TV actors. Managers also needed increased supplies of materials such as posters, leaflets, banners, booklets, miking cassettes, and cinema slides. One manager suggested a daily newspaper column, and others recommended that religious leaders increase their role in social mobilization. One manager in Chittagong said that one message stated, “During the NID, all under-5 children will be given OPV and there is no harm in it,” but some literate people interpreted the message to mean that the NID was not mandatory. Instead, the message should emphasize that the NID is mandatory regardless of vaccination status.

Local Level

Table 19 presents the local managers’ recommendations for changes at the local level. The main recommendations are that a wide range of local people need to be involved and coordinated in various aspects of the NID, some operational issues need to be addressed, and social mobilization efforts should be increased.

Although most cities and municipalities involved people from many sectors, there was a sense that this involvement should also be increased. Ward commissioners were seen as essential to local planning and coordination efforts. Other local political leaders, teachers, local media, and family planning workers had important roles to play, especially in social mobilization. Some managers recommended that leaders

Process Evaluation of the First NID in Bangladesh

Table 19. Local Managers' Recommendations to Improve Local-Level NID Activities

City	Recommendation
Dhaka	Posters should be mounted in garment factories. Posters should be mounted in schools, colleges, and markets. Mobile vaccine carriers should be used for "floating populations." Teachers in poor urban areas should be involved.
Mymensingh	Ward commissioners should be involved. The central Poursava committee should form subcommittees and allocate responsibilities. Vaccinators should visit the centers ahead of time. Teachers, the Village Defense Party, local elites, and Scouts should be involved. Workers should work in the same centers for each NID. Workers should carry the vaccines and materials. Banners and posters should be ready well ahead of time.
Chittagong	Liaison with the local press should be improved. Initiatives should be undertaken to include elites and local political leaders.
Comilla	Communication with allied NGOs and departments should be increased.
Rajshahi	Each center should be responsible for providing refreshments for volunteers. Every mosque should announce the NID. Volunteers should be told of the location of the assigned center the day before the NID. NGOs and the government should coordinate the registration. Local organizations should provide certificates for volunteers. Each ward should have one or two coordinators with a motorcycle to run errands. For the next NID, there should be one vaccinator for OPV and one for vitamin A. Vitamin A and OPV should be given separately because children might vomit. Some centers should be open until 5 P.M. and people should be sent there.
Saidpur	The chairman, WC, and social leaders should be actively involved. Volunteer training should be arranged by area. Center locations should be fixed ahead of time. Community leaders should provide money and refreshment for volunteers. Providing vitamin A in the next round may cause problems because of a shortage of volunteers.
Khulna	Local publicity should be arranged. Meetings should be held with influential local leaders. Family planning workers should be requested to cooperate. More meetings with teachers should be organized. More cooperation with local commissioners should be promoted. More meetings should be held with Imams and teachers of <i>madrassas</i> . Volunteer orientation should be improved.
Barishal	Meetings should be arranged in each ward long before the NID. Advocacy should be increased in schools, colleges, <i>madrassas</i> and mosques. The chairman and WCs should organize advocacy meetings. Teachers and Imams should be mobilized. Volunteers and workers should be selected well in advance to give them an orientation.

mobilize medical and pharmaceutical associations and include private practitioners. The coordination of all these people was thought to be essential. Managers reported that letters from line ministries and meetings to assign responsibilities were also important. Several managers recommended ward-level meetings.

Recommendations were made to improve operations on the day of the NID. The volunteers and sites should be selected ahead of time so that volunteers and workers can visit the sites before the NID. Managers also recommended that workers be assigned to the same sites for each NID.

Transportation of the vaccine and other supplies posed difficulties in some areas. Managers suggested that workers could carry the vaccine and other supplies with them. Also, workers with motorcycles should be organized in each ward to manage shortages on the day of the NID. Shortages could be minimized by keeping extra vaccine at certain centers. A Dhaka manager suggested that mobile vaccine carriers be used to vaccinate “floating populations.”

Availability of ice also posed some problems. In Rajshahi, managers said that ice should be collected from nearby houses, and managers in Saidpur recommended that arrangements be made with ice cream factories to provide ice. Managers also suggested that local arrangements be made to provide refreshments to volunteers.

Managers recommended that posters and banners be available earlier so they can be put in schools, colleges, and factories. Group theater and folk songs (*jarigan*) as well as announcements in the mosques could also be used to increase social mobilization.

Effects of the NID on Other Health Promotion Activities

The NID had a number of effects that could potentially support other health promotion activities. During the focus group discussions, managers spoke very positively about the longer term effects of the NID. Most managers felt that the NID will increase awareness of EPI in general. Since many family planning workers were involved in the NID, this involvement may increase the acceptance of family planning. A Dhaka manager said that the NID generated a lot of new family planning clients, and the family planning workers were able to develop better relationships with mothers.

In each city and municipality visited, managers and observers both commented on the intersectoral cooperation and coordination. In many places, this was the first time that there was such coordination. In Chittagong, all managers commented that the success of the NID was the result of multisectoral cooperation, and that this experience will help with routine immunization and other health programs. In Comilla, managers were very positive about their NID experience and said that this was the first time they had undertaken such a huge activity. They now have a better idea of how to mobilize different groups of people and resources to manage mass programs. This knowledge will help them manage routine immunization and other health programs.

In all the cities and municipalities, creative local initiatives made the NID run smoothly. For example, in Rajshahi, ice was obtained from ice cream sellers and nearby households. At one center, volunteers purchased ice cream bars from a hawker to maintain the cold chain. Mayors in several areas decided to hold a lottery of all referral slips that were turned in after the second NID. Pharmaceutical companies were involved, and some distributed balloons to children who participated.

Debriefing

A debriefing was held two days after the first NID for all the people who observed the NID operations. The meeting was chaired by the EPI project director and included participants from CARE, UNICEF, and BRAC; the WHO adviser; and seven people from BASICS. Hence, many of the comments had an urban bias. Participants were asked to think of the strengths and weaknesses of the first NID. Table 20 contains their recommendations for the next NID.

Table 20. The First NID: Strengths, Weaknesses, and Recommendations (Debriefing of Observers)

Strengths	<p>There was cooperation among sectors. Local political support was strong. NGO support was strong. Mobilization of volunteers and the community was strong. Logistics and the cold chain were handled well locally. Miking and interpersonal communication were very effective.</p>
Weaknesses	<p>Ward commissioner involvement was varied but critical. There were no letters from line ministries (LGRD, Education, etc.). Volunteer training was inadequate. The cold chain was weak in some areas. There was confusion between the NID and routine vaccination. There was low coverage among the elite. Registration lists were used to check off children causing long lines and delays. NID procedures differed from routine immunization procedures (records, cold chain, etc.). The NID was too soon after Ramadan. New sites were not known in advance. In some areas, vaccine arrived only at 10 A.M. The Pediatric Society and health practitioners had no orientation. Some children were receiving one to four drops, depending on their age.</p>
Recommendations	<p>Drop vitamin A in the second round, primarily because of the additional time needed to screen for age. Improve site organization—use only the tally sheets. Develop a strategy to recruit people who did not participate in the first NID. During the second NID, tell parents of children under 1 year old to return for their routine immunization visits. Publicize the NID results. Reinforce the idea that registration is for interpersonal communication only.</p>

Annex A. NID Preparation Checklist

Date of visit: ___ / ___ / ___ Place of visit: _____

Visit to which level (circle): city corporation / district / municipality / thana

Person interviewed: CS / DD(FP) / HO / THFPO / TFPO / MO(EPI) / _____

1 Advocacy, Planning, and Logistics

1.1 Is there a NID coordination committee?

Yes	No

1.2 Are NID advocacy and planning meetings held at this level?

1.3 Have all record/report forms been received?

1.4 Have communication materials been received (poster, leaflet, car sticker, etc.)?

1.5 Has required amount of vaccines (OPV) been received?

1.6 Is cold-chain equipment adequate?

If no, what is the shortage?

Type

Number

1.7 Has a local source of ice been identified (in case of shortage of ice packs)?

Yes	No
Yes	No

1.8 Is vaccine transportation to the sites confirmed?

If yes, by what means (circle)?

car / motor / bicycle / animal / foot / other

1.9 Has a supervisory plan been prepared?

Yes	No
Yes	No
Yes	No

1.10 Is there an alternate plan for hard-to-reach areas (if applicable)?

1.11 Have activities been carried out as per plan?

1.12 How was the target population calculated (circle)?

census / registration

1.13 What is the ratio of target population/post?

1 post per target population of _____

1.14 Approximately what percentage of the target population has been registered?

_____ %

Have you prepared a list of measles and TT dropouts?

Yes	No
-----	----

How will you use the dropout list? _____

1.15 How many vaccination sites need to be created (especially in urban areas)?

How many are complete?

How will sites be identifiable to clients? _____

1.16 How will you identify the left-out children? _____

What is the strategy for bringing the left-out children to the session? _____

Process Evaluation of the First NID in Bangladesh

1.17 What is the strategy for additional vaccine if the supply runs out? _____

1.18 How many volunteers have been recruited as vaccinators? _____

What is the requirement? _____

1.19 How many volunteers have been recruited as mobilizers? _____

What is the requirement? _____

1.20 Have staff at this level been trained?

Yes	No
Yes	No
Yes	No

1.21 Have all volunteers been trained?

1.22 Have enough NID guides been received (by managers)?

2. Social Mobilization

2.1 Are local social mobilization strategies adequate?

Yes	No

2.2 Are there special social mobilization strategies for high-risk or hard-to-reach populations?

2.3 Are strategies being implemented according to plan?

2.4 Have brochures, posters, and other communication materials been developed at this level?

2.5 Have local resources been tapped?

If yes, mention type and amount. Type: _____ Amount: _____

2.6 Ask four health workers at this level the following four questions:

“What are the dates of the NID?” # of correct responses: _____ of 4

“What is the target age group for the NID?” # of correct responses: _____ of 4

“If the child has completed the routine OPV series, will you vaccinate the child during the NID?” # of correct responses: _____ of 4

“Will you vaccinate a sick child?” # of correct responses: _____ of 4

2.7 Ask five caretakers of children under age 5 the following four questions:

“What are the dates of the NID?” # of correct responses: _____ of 5

“What is the target age group for the NID?” # of correct responses: _____ of 5

“Where are vaccines given during the NID?” # of correct responses: _____ of 5

“If the child has completed the routine OPV series, will you bring the child for vaccination during the NID?” # of correct responses: _____ of 5

3. Problems identified during this visit:

4. Recommended actions to solve problems (specify WHO, WHAT, WHEN, and WHERE):

Name of the supervisor: _____

Designation/organization of the supervisor: _____

Signature of the supervisor: _____

Annex B. NID Observation Form for Vaccination Post

ID Number: _____

Division: ___ (1) Dhaka ___ (2) Khulna ___ (3) Rajshahi ___ (4) Chittagong ___ (5) Barishal

District: _____ City/Municipality/Thana: _____

Site: _____ Interviewer: _____

Characteristics of Site (Check all that apply): ___ (1) New or ___ (2) Existing; ___ (3) Outreach or ___ (4) Fixed; ___ (5) Government or ___ (6) NGO

ASK THESE QUESTIONS TO STAFF AT VACCINATION POST

1. What is the number of under-5s expected? _____
2. How was the number of under-5s estimated?
___ (1) Census ___ (2) Registration ___ (3) Other _____
3. How many vaccine vials have been received? _____
4. Is the number of vials X 20 more than the number of under-5s? ___ (1) Yes ___ (2) No
5. What is the strategy for additional vaccine if the supply runs out? _____

6. What is the total number of staff at this site? _____
7. What is the number of government, NGO, and volunteer staff?
_____ Government _____ NGO _____ Volunteer
8. How many hours of training did the volunteers receive? _____
9. Mark the forms that were received.
___ (1) Tally ___ (2) Registration ___ (3) Referral slips
___ (4) Measles & TT dropout ___ (5) Supervisory checklist
10. What are the planned hours of operation? From _____ to _____
11. Approximately what percentage of the target population has been registered? _____ %
12. During registration, were measles and TT dropouts identified?
___ (1) Yes (ask to see list) ___ (2) No
If yes, what will be done to decrease the number of dropouts after the NID? _____

Process Evaluation of the First NID in Bangladesh

ID Number: _____

13. What were the main problems in conducting the registration? _____

14. What communication materials have been received? (Check all that apply.)

___ (1) Stickers ___ (2) Leaflets ___ (3) Posters

15. How many days ago did miking begin in the area? _____

16. Will there be miking today? ___ (1) Yes ___ (2) No

17. What is the strategy for house-to-house visits on the day of the NID? _____

18. What hard-to-reach populations are in the area? What are the plans for reaching them?

19. Ask five health workers or volunteers the following questions and record all responses:

	Correct	Incorrect
a. When is the next NID? (Correct response is "April 16.")	_____	_____
b. What is the target age group? (Correct response is "Under 5 years.")	_____	_____
c. Will you vaccinate sick children? (Correct response is "Yes.")	_____	_____

OBSERVE THE FOLLOWING

20. How is the vaccine kept cold?

___ (1) Vaccine carrier ___ (2) Ice ___ (3) Other (specify): _____

21. Are the ice or ice packs still frozen? ___ (1) Yes ___ (2) No

22. Do clients stand in only one line for services? ___ (1) Yes ___ (2) No ▶▶ How many? ___

23. How are children being screened?

___ (1) Age only ___ (2) Registration lists ___ (3) Other _____

24. Is any child under 5 turned away?

___ (1) Yes (reasons): _____

___ (2) No

25. Are vials opened one at a time? ___ (1) Yes ___ (2) No

NID Observation Form for Vaccination Post

ID Number: _____

26. What are clients told by health workers? (Check all that apply.)

- (1) Come back on April 16. (2) Come back for routine visits (if the child is under 1 year old.)
 (3) Tell others to come. (4) This is separate from the routine EPI.

27. What questions do clients ask health workers and volunteers? (List the most common questions.)

28. How are vaccinations being recorded? (Check all that apply.)

- (1) Tally sheet (2) Vaccination card (3) Other _____

29. Roughly how many children are waiting in line to be vaccinated? _____

30. Rate the level of efficiency and orderliness in the site.

- (1) Extremely chaotic, high frustration among clients and staff
 (2) Somewhat chaotic but under control
 (3) Quite efficient—most understand the process

31. Rate the following overall operational aspects of the site:

- a. Teamwork among staff (1) Excellent (2) Good (3) Poor
b. Size of site building (1) Excellent (2) Good (3) Poor
c. Crowd management (if applicable) (1) Excellent (2) Good (3) Poor
d. Interaction with clients (1) Excellent (2) Good (3) Poor

32. How can the site be identified from the outside? (Check all that apply.)

- (1) Banner (2) Posters (3) Flag
 (4) Other _____

WALK OUTSIDE THE SITE INTO THE COMMUNITY

33. How would you characterize the neighborhood? (Check all that apply.)

- (1) Slum (2) Open drains (3) Mostly kutcha houses/shacks (4) Rural
 (5) Densely populated (6) Few paved streets (7) Poor water supply

Process Evaluation of the First NID in Bangladesh

ID Number: _____

34. Ask at least five people *in the community* with young children the following questions and keep a tally:

- | | Yes | No |
|---|-------|-------|
| a. Have you heard about the NID? | _____ | _____ |
| b. Which children should be vaccinated? (Check "Yes" if correct response is given.) | _____ | _____ |
| c. Have you already been or are you planning to go? | _____ | _____ |

If not planning to attend the NID, list reasons: _____

CONDUCT FIVE EXIT INTERVIEWS WITH PEOPLE LEAVING THE SITE

Total length of time at site: _____ hours Number of exit interviews completed: _____

Recommendations to improve this site: _____

RETURN ALL FORMS BY MARCH 19 TO
Dr. Rokeya Khanam, BASICS; House #15, Road #103, Gulshan

Annex C. Focus Group Discussion Guides

Local Managers of NIDs

OBJECTIVES: To identify operational difficulties during the first NID To recommend changes at the national and local levels for future NIDs
--

Introduction: *Thank you for coming here today. We are talking to NID managers in urban areas around the country in order to understand the planning and operation of the first NID and to give managers the opportunity to recommend changes in the way the second NID is conducted. The purpose of this is not to blame anyone or any organization for problems but to understand how the NID should be changed for the next round and in future years.*

Planning Process:

1. How did you mobilize local resources? Specifically, how did you coordinate with NGOs, local government, ministry of health and family welfare, schools, and the private sector (such as hotels and private health practitioners)? What was the involvement of ward commissioners and local social or political leaders? Do you usually coordinate with these organizations or was this new for the NID?
2. What operational difficulties did you encounter on the day of the NID? How did you handle them? [*Probes: How were vaccine shortages in centers identified and addressed? How were very high or low turnouts dealt with? Were there any difficulties in staff and volunteer mobilization?*]
3. What changes would you make in the planning process at the *national* level?
4. What changes would you make in the planning process at the *local* level?

Logistics and Cold Chain:

5. What logistical problems did you face and how did you handle them? What difficulties did you have in maintaining the cold chain? [*Probes: Did you have enough vaccine and other supplies (forms, carriers, droppers, etc.)? How did you transport the vaccine to the vaccination sites?*]
6. What changes would you make in the logistics and cold chain at the *national* level?
7. What changes would you make in the logistics and cold chain at the *local* level?

Communication and Social Mobilization:

8. Approximately what percentage of the target population was registered? How did you register participants and what did you tell them? What difficulties did you encounter during registration?
9. What other methods did you use to tell people about the NID? [*Probes: e.g., miking, posters, leaflets, stickers, rallies*]
10. What changes would you make in the social mobilization process at the *national* level?

Process Evaluation of the First NID in Bangladesh

11. What changes would you make in the social mobilization process at the *local* level?

Confusion between Routine Immunization and the NID:

12. As you know, there are some important differences between routine immunization and the NID. Do you think that people confused the NID with routine immunization? Specifically, were health workers and private practitioners confused? Were administrative officials confused? Was the general public, especially the press, confused? And were caretakers of young children confused?

13. What problems did this confusion create or will it create in the future?

14. How should such confusion be avoided in future NIDs?

Finally ...

15. How do you think the NIDs will affect routine immunization and other health programs?

Closing: I'd like to thank all of you for taking the time to discuss these issues. We will be preparing a report of all the discussions, which will be presented to EPI headquarters in Dhaka and will be used in making modifications to the NID process. Thank you very much.

Mothers of Children Under 5—NID Participants

OBJECTIVES: To identify any difficulties that caretakers had during the first NID
To identify any misconceptions between the NID and routine immunization
To identify reasons for nonparticipation of participants' neighbors and relatives

Introduction: Thank you for coming here today. We would like to discuss your children's immunizations with you. We want to understand any problems you are having so that we can improve the services. There are no right or wrong answers, and you should feel completely at ease talking with us.

1. About a week ago, on March 16, all of you took your child to be vaccinated. Do you remember what was given to your child on that day? Which children were supposed to receive the vaccine? [*Probes: What age children should participate? Are there any children under 5 who should not participate?*]

Difficulties:

2. What difficulties did you have in bringing your child for the NID? [*Probes: Was the center close to your house? Was the time of day convenient for you? Did anyone oppose your bringing the child?*]

Misconceptions:

3. As you know, very young children need several different types of immunizations. How do you know WHICH immunizations your child needs?
4. How do you know WHEN to bring your child for an immunization? [*Probes: When should you bring your child for the next immunization? How do you know when your child doesn't need any more immunizations?*]
5. Are there any harmful effects of immunizations? What happens if you give two or more vaccinations very close to each other?

Reasons for Nonparticipation:

6. Some people in your community did not come to the NID. What do you think are some of the reasons that people didn't come for the NID? [*Probes: What are some of the difficulties parents in your community face in bringing their children for immunizations? For example, did some people say that their child doesn't need to be vaccinated? Why do you think they think that? Or was it difficult for some people to find time to bring their child? How could we make sure that doesn't happen in the future?*]
7. What should we do to encourage more people to come for the next NID?

Next NID:

8. Have you heard about the next NID? When is it? [*If no one in the group knows about the next NID, explain that another NID will be held on April 16.*] What do you think should be changed for the next NID? How should it be done differently so that it is easier for you?

Closing: Thank you very much for taking the time to talk to us about your children's immunizations. This will help us to improve these services for you. Please don't forget that there will be a second NID on April 16. All children under 5 should attend, no matter how many other vaccines they have received. I hope you will tell everyone about the next NID on April 16. Thank you.

Mothers of Children Under 5 and Under 1—NID Nonparticipants

OBJECTIVES: To understand the reasons for not participating in the NIDs

Introduction: *Thank you for coming here today. We would like to discuss your children's immunizations with you. We want to understand any problems you are having so we can improve the services. There are no right or wrong answers, and you should feel completely at ease talking with us.*

Beliefs:

1. What have you heard about vaccinations for children? How many doses does a child need?
2. What effects do vaccinations have on the child? Are there any harmful side effects? Do you think some children should not be vaccinated at all or receive only some of them?

Social:

3. What do others in your household say about vaccinating your child? What does your husband say? your mother-in-law? your sisters-in-law?
4. Have you vaccinated your child or children before? What was your experience at that time? When was the last time your child was vaccinated?
5. How are you treated at the clinics and vaccination sites? How long do you have to wait? What do the health workers say to you?

NID:

6. Did you hear about the NID that was held on March 16? [*If no one had heard of the NID, explain that an NID was held on March 16 and ask again if anyone heard of it. If there is still no response, probe for the reason: Were you out of town? Did a health worker come to your house? Do you ever watch TV or listen to the radio? Did anyone in your para mention an immunization day?*]

[If some people in the group have heard of the NID, ask the following.]

7. What was the purpose of the NID? Who should have participated? Did your child receive the vaccine?
8. What are the main reasons that your child did not receive the vaccine? [*Probes: Was there a vaccination center near your house? Were the hours that it was open convenient? Did you think your child should not be vaccinated? Why or why not?*]

Closing: *Thank you very much for taking the time to talk to us about your children's immunizations. This will help us to improve these services for you. Please don't forget that there will be a second NID on April 16. All children under 5 should attend, no matter how many other vaccines they have received. I hope you will tell everyone about the next NID on April 16. Thank you.*

Annex D. NID Exit Interview Form

Ask Adults Who Brought a Child for Vaccination

Division: ___ (1) Dhaka ___ (2) Khulna ___ (3) Rajshahi ___ (4) Chittagong ___ (5) Barishal

District: _____ City/Municipality/Thana: _____

Site: _____ Interviewer: _____

1. Age of child: _____ months Sex of child: ___ (1) Male ___ (2) Female
2. What vaccine did your child receive today?
___ (1) Polio ___ (2) No vaccine was received ___ (3) Don't know ___ (4) Other _____
3. [If child is under 1 year] Did you bring the child's card today?
___ (1) Yes ___ (2) No ___ (3) Child has no card ___ (4) Child over 1 year
4. How long did you have to wait for the vaccination?
___ (1) Less than 15 min ___ (2) 15–30 min ___ (3) More than 30 min
5. How did you know where and when to come for the vaccine? (DO NOT READ RESPONSES; check all that apply.)
___ (1) Registration ___ (2) TV ___ (3) Health worker/volunteer
___ (4) Friend/relative ___ (5) Radio ___ (6) Posters, leaflets
___ (7) Miking ___ (8) School ___ (9) Other _____
6. How many days ago did you find out about this immunization day?
___ (1) Today ___ (2) 1–7 days ago ___ (3) 8–14 days ago ___ (4) More than 14 days ago
7. Do you know anyone who is not planning to bring their child here today?
___ (1) No, do not know anyone ___ (2) Yes, because _____
8. Which children should NOT receive this vaccine? (READ RESPONSES; check all that apply.)
___ (1) Sick child ___ (2) Child over 5 years ___ (3) Fully immunized child
___ (4) Child under 1 month ___ (5) Other _____
9. How did you come here today?
___ (1) Walk ___ (2) Rickshaw ___ (3) Bus ___ (4) Baby taxi ___ (5) Other
10. How long did it take you to reach the site?
___ (1) Less than 10 min ___ (2) 11–20 min ___ (3) 21–30 min ___ (4) More than 30 min
11. What difficulties did you face in coming here today?

12. When is the next NID?
___ (1) April 16 ___ (2) Don't know ___ (3) Other _____

Remind Respondents about the Next NID on April 16.

ID Number: _____