



IOCH
Immunization and Other Child Health Project

**Vaccination Coverage Survey of the
Comilla Municipality**

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Survey Report No. 97

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Acronyms

BCC	Behavior Change Communication
BCG	Bacillus of Calmette and Guerin
CES	Coverage Evaluation Survey
COSAS	Coverage Survey Analysis System
DPT	Diphtheria, Pertussis and Tetanus
EPI	Expanded Program on Immunization
FWC	Family Welfare Center
IOCH	Immunization and Other Child Health
Mahallah	Smaller localities (smaller than a village)
MOHFW	Ministry of Health and Family Welfare
Mouza	Smallest administrative locality in an Upazila
MSH	Management Sciences for Health
NGO	Non Governmental Organization
NID	National Immunization Day
OPV	Oral Polio Vaccine
SNID	Sub-national Immunization Day
TT	Tetanus Toxoid
WHO	World Health Organization

Terminology

This provides the meaning of some of the more technical terms used in this report and a brief explanation of their use.

By card: An immunization given to a child is termed as by card if the date of the dose is entered on an immunization card. Only doses recorded by card are treated as valid data in this survey.

By history: Immunization history collected from a parent's recall is termed as by history. Often no date will be mentioned. This information is only included in crude data.

Crude coverage rate is calculated from the doses recorded by card and/or by history. It is not ascertained whether the doses were given at the correct age and/or following the correct interval (where applicable). Crude data however, helps us to understand how much additional coverage could be achieved if all vaccines were given at the optimum age for the child and following the optimum interval. It also provides useful information on access to the EPI program and on the operational aspects of the provision of health services.

Valid coverage rate is calculated from the vaccinations recorded by card plus history. In the calculation process, first the rate of validity is calculated based on cards only, then this rate is applied to history cases too. Valid data includes only the doses of vaccines that were given after the minimum date of eligibility and/or after the minimum interval necessary to be effective and to protect the child. There is no maximum interval for a dose and therefore a dose administered after 52 weeks is still regarded as valid. By comparing crude coverage with valid coverage data of any particular antigen, one can determine how much coverage was lost due to the inability to give vaccine at the appropriate time.

Invalid doses are those administered at the wrong age and/or at the wrong interval. Doses administered before the minimum age in the case of DPT/Polio 1st doses and Measles vaccine or with less than four weeks interval in the case of DPT or Polio vaccines are classified as "invalid" doses.

The **criteria for a valid dose** used in this survey is the criteria recognized by the Bangladesh EPI program: minimum age for DPT/Polio 1st dose - 6 weeks old; minimum DPT/Polio interval - 4 weeks; minimum age for Measles vaccine - 38 weeks old.

Dropout cases refer to the children/women who have initially received at least one dose of any antigen and then failed to receive the subsequent doses to get fully immunized. Dropout rate implies the inability of the EPI to follow-up and protect the cohort of children initially reached out.

Program access is measured by the percentage of children surveyed who received DPT 1st dose (crude data – by card and history) in the routine immunization session.

Fully immunized means the child has received all the doses it requires (BCG, OPV 1-3, DPT 1-3 and measles).

Missed opportunity refers to a visit of a child to a vaccination center for a dose that he received. However at that time he was also eligible for another dose of antigen that he did not receive. If the missed dose was provided at a later date, it is a *corrected missed opportunity*. If not, it is an *uncorrected missed opportunity*.

SUMMARY RESULTS

Background

The routine EPI program in the municipalities is carried out by a variety of private and public providers at fixed (hospitals, clinics, dispensaries, etc.) and at outreach sites. NGOs and private practitioners also provide immunization services in many places. The municipal authorities are primarily responsible for providing and/or coordinating primary health care including routine EPI services in municipal areas. However, in the absence of an effective management information system and reliable service statistics at municipal level, it is often difficult to assess the level of immunization coverage of the municipal areas. In view of this situation, the IOCH decided to conduct a series of coverage evaluation surveys in the selected municipal areas to assess the level of immunization coverage in these areas. As a part of this effort, the IOCH conducted a coverage evaluation survey in the Comilla Municipality in January 2003.

Objectives

The overall objective of the survey was to assess the level of immunization coverage in the Comilla Municipality. The specific objectives were to:

- a) assess the level of routine immunization coverage of the children (12-23 months) and find out the reasons for non-immunization and partial immunization;
- b) assess the level of TT immunization coverage among women of 15-49 years of age, irrespective of their marital status, and find out the reasons for non-immunization and partial immunization; and
- c) assess the coverage levels of OPV and Vitamin A administered during the SNID Campaign- 2002.

Methodology

The survey employed the WHO recommended 30-cluster survey methodology that has been widely used in many developing countries to assess immunization coverage. In all, 30 clusters were randomly selected from the Comilla Municipality following PPS sampling procedures. A list of the selected clusters is provided in Annex- A and their locations are shown on the maps in page 12. From each cluster, 7 children 12 – 23 months and 7 women of reproductive age (15 – 49 years) irrespective of their marital status were selected following 30 cluster survey methodology to ascertain their routine immunization coverage. Also, 7 children < 5 years (0 – 59 months) were selected to assess the immunization coverage of the SNIDs- 2002

The WHO standard questionnaires were used for documenting the routine immunization status of the children and women. Also, separate questionnaires were used to collect data on SNIDs and reasons for non-immunization and dropouts. The data were collected by the experienced Field Investigators of the Survey Team of the IOCH. Data processing and analysis were done by the Monitoring & Evaluation Unit of the IOCH using COSAS 4.41¹ and EpiInfo.

¹ COSAS (Coverage Survey Analysis System) is a dedicated software for analyzing coverage evaluation survey data.

Coverage levels for the routine immunization of children

Access to child immunization: Based on crude data (card plus history), 98% children received at least one dose of antigen (DPT 1st dose in this case) from routine immunization sessions. 2% children did not receive a dose of any antigen.

Crude coverage of 12-23 months age group: 98% children received BCG, 94% children received three doses of OPV, 94% received three doses of DPT and 87% received measles vaccine. 87% children were fully immunized.

Valid coverage of 12-23 months age group: 98% children received BCG, 79% children received three doses of OPV, 79% received three doses of DPT and 83% received measles vaccine. 74% children were fully immunized.

Valid coverage by 12 months: 98% children received BCG, 79% children received three doses of OPV, 79% received three doses of DPT and 80% received measles vaccine. 72% children were fully immunized.

Routine immunization coverage by sex: There was no sex difference in accessing routine child immunization services. Boys' access to immunization, as measured by the crude coverage of DPT1, was the same as the girls (98% for boys vs. 98% for girls). However, the measles coverage of the boys was 4 percentage points higher than that of the girls, resulting in higher crude FIC for boys than that of the girls (89% crude FIC for boys vs. 84% crude FIC for girls). The proportion of invalid DPT2 and DPT3 doses was higher among the boys than the girls, resulting in almost similar valid FIC for the boys and the girls (75% valid FIC for boys vs. 74% valid FIC for girls).

Dropout rates: Although access to child immunization was quite good (98% for DPT1), the dropout rates for different antigens were high too. There were 4% dropout from DPT1 to DPT3 and 11% from DPT1 to measles.

Invalid doses: 10% of the DPT1 doses were administered before 6 weeks of age of the children, and 5% of the measles doses were administered before 38 weeks of age of the children. Besides, 1% of the DPT2 and 3% of the DPT3 doses were given before 4 weeks interval between the doses.

Missed opportunities: Total missed opportunities (uncorrected plus corrected) for different antigens ranged from 1% to 6%. The prevalence of uncorrected missed opportunities for different antigens were 1% - 2%. The composite index for total missed opportunities was 32, reflecting poor quality of screening during vaccination sessions.

EPI card retention: 97% of the children interviewed were ever given EPI cards; however, EPI cards were available with 55% of the respondents at the time of interview. EPI card retention rate was 57% only, as 43% of the EPI cards were lost.

Knowledge about required visit to immunization center for full immunization: 33% of the mothers interviewed did not have any idea about how many times a child was required to be taken to an immunization center to get fully immunized; while 20% had wrong idea about it.

Only 47% of the mothers could mention correctly the number of times (i.e. 4 times) a child is required to visit immunization center to get fully immunized.

Sources of immunization services and distance of vaccination centers: Childhood immunization in this area was provided mostly by the NGO clinics (41%), followed by the GOB clinics (20%). Municipal EPI outreach centers and GOB EPI outreach centers provided EPI services to 19% and 7% of the cases respectively. 91% of the EPI outreach centers were located within 15 minutes walking distance from the homes of the children.

Reasons for non-immunization and partial immunization or dropout of children: Only 4 children out of 210 were found non-immunized and 24 were partially immunized. The primary reason for non-immunization was that the parents were not aware of the need and importance of immunization (75%). The primary reasons for partial immunization or dropout included lack of knowledge about the need of subsequent doses or measles vaccination for getting fully immunized (34%) and sickness of the children (29%).

Coverage levels for the routine TT immunization of women

TT immunization coverage: Access to TT immunization for the women 15 – 49 years was fairly good. 91% of the women received TT1. The corresponding figures for TT2, TT3 and TT4 were 89%, 66% and 51% respectively. Only 35% of the women received TT5, which provide lifelong protection against tetanus. 9% of the women never received any TT vaccine.

Age distribution of women never receiving TT immunization: The younger women, as well as older ones are less likely to receive TT vaccine. 18% of the women under 20 years and 21% of the women over 35 years of age had never received any dose of TT vaccine; while the corresponding figures ranged from 3% to 10% for the women of other age-groups.

TT immunization dropout rates: TT immunization dropout rates were high. The dropout rate for TT2 to TT3 was 26%. The corresponding rates for TT3 to TT4 and TT4 to TT5 were 23% and 30% respectively. The dropout rate for TT1 to TT5 was as high as 61%, indicating that 61% of the women who received first dose of TT did not complete 5 doses TT immunization schedule.

Invalid TT doses: A significant proportion of TT doses were invalid as they were administered before the minimum required interval between the doses. 38% of the TT3 doses were given before 6 months interval between TT2 and TT3, and as such were invalid. 58% of the TT4 doses were invalid, since they were given before one year interval between TT3 and TT4; similarly, 57% of the TT5 doses were invalid for the same reason.

Protection against tetanus at birth: 99% of the newborn babies were found protected against tetanus, indicating that 1% newborn babies were still not protected against tetanus at birth.

Knowledge about full TT immunization: 88% of the women did not have correct knowledge about the number of TT doses required for a woman for full immunization. Only 12% women could correctly mention that a woman was required to receive 5 doses of TT vaccine for full immunization for lifelong protection against tetanus.

TT card retention: 90% of the women were ever given TT cards; however, TT cards were available with 10% of the women only at the time of interview. TT card retention rate was 11% only, as 89% of the TT cards were lost.

Sources of TT immunization: Majority of the women received TT vaccine from the NGO clinics (33%), followed by the GOB clinics (20%) and hospitals (14%). Municipal EPI outreach centers and GOB EPI outreach centers provided TT immunization to 16% and 9% of the cases respectively.

Reasons for non-immunization and partial immunization of women: The primary reason for non-immunization of TT cited by majority of the women was lack of awareness of need and importance of TT immunization (70%) and fear of injection (10%). The primary reasons for partial TT immunization or dropout were that the women were not aware of the need of subsequent doses to get fully immunized against tetanus (51%), the health workers did not specify the date of the next dose (10%) or the health workers did not advise for 5 dose TT schedule for full TT immunization for lifelong protection (24%).

Coverage levels for the SNIDs- 2002

OPV and Vitamin A coverage: 98% of the children <5 years received OPV in both the rounds of the SNIDs- 2002. The coverage for OPV was 98% in the 1st rounds; while it was 99% in the 2nd round. Vitamin A capsules were given to 96% of the eligible children (12 – 59 months of age). Besides, Vitamin A capsules were wrongly administered to 5 ineligible children who were <1 year old on the 1st Round SNID day.

Sources of OPV during the SNIDs: Most of the children received OPV from the SNID sites (98% in each round). Only 1% children received OPV during child-to-child search in the 2nd round.

Distance of SNID sites and mode of transportation used: All the SNID sites were located within 10 minutes walking distance from the homes of the children.

Households visited during child-to-child search: 86% of the households were visited by the health workers/volunteers during child-to-child search in the 2nd round of the SNIDs, as reported by the parents/respondents.

Sources of information of the SNID: Majority of the parents learned about the SNIDs from miking (65%), followed by relatives and neighbors (39%). About 34% parents came to know about the NIDs from television. Municipal worker as a source of information was cited by 13% parents.

Reasons for not receiving vaccines from the SNID sites: The primary reason for not receiving OPV from the SNID sites was that the parents were not informed of the SNID day (80% in the 1st round and 50% in the 2nd round).

Comparison with previous survey results

In October 2000, a coverage evaluation survey was conducted in the Comilla Municipality by the IOCH. A comparison of the results of that survey with the results of this one reveals that there has been considerable improvement in the coverage of TT immunization and NID campaigns over the past two years. Access to TT immunization, as measured by TT1 coverage, has increased from 81% in 2000 to 91% in 2002. The coverage of OPV during NIDs has increased from 93% in both rounds of the 7th NIDs in 1999 to 98% in both rounds of the 10th NIDs in 2002. Vitamin A coverage has also increased from 90% in the 7th NIDs to 96% in the 10th NIDs. As regards routine child immunization, access to immunization (as measured by DPT1 coverage) has remained unchanged over the past two years (possibly due to high level of access). However, percentage of valid FIC (Fully Immunized Children) by 12 months has increase from 61% in 2000 to 72% in 2002. Besides, dropout rate for DPT1 to DPT3 has reduced from 7% to 4% and invalid measles doses from 13% to 5% over the past two years, indicating some improvement in the quality of services.

Conclusions and recommendations

Access to child immunization was quite good (98% for DPT1); but this high access dropped to 87% for fully immunized children because of dropout rates of different antigens. (Dropout rate for DPT1 to DPT3 was 4% and DPT1 to measles was 11%). Similarly, access to TT immunization for the women 15 – 49 years (irrespective of their marital status) was also good. 91% of the women received the first dose of TT; but TT dropout rate was very high (61% for TT1 to TT5), resulting in very low coverage of TT5 (35%), which provides lifelong protection against tetanus. Such high dropout rates imply inability of the EPI program to follow-up and protect the cohort of children and women initially reached out.

- ***Programmatic strategies must be undertaken to reduce the existing high dropout rates in both child immunization and TT immunization. The program should focus on quality of counseling of mothers/women (on immunization) by the health workers. The health worker at the first contact must counsel the mother/woman properly to motivate her to return and to get herself and/or her child fully immunized. He/she must:***
 - *explain to mother/woman the importance of full immunization, and concept of 8 doses and 4 visits required for full immunization of a child;*
 - *tell mother/woman of reproductive age the benefit and importance of full TT immunization and the concept of 5 dose TT schedule for lifelong protection against tetanus;*
 - *issue an EPI card/TT card dully filled out and explain the mother/woman the importance of keeping the EPI card/TT card in safe and bringing it on the next due date;*
 - *tell the mother/woman clearly when she should come back for next doses, and inform her that the date is written in the EPI card/ TT card so that she can check it if forgets the date;*
 - *inform the mother/woman of possible side effects of injection and how it should be handled;*
 - *pay attention to the hospitality at the clinic/EPI center, and to supportive environment.*
- ***Program managers and field supervisors should ensure that EPI sessions are held as per plan, and at a regular and adequate interval***

- ❑ ***The service providers should be given refresher training to improve their technical skills on counseling of mothers/women on immunization***

There were also too many invalid doses in child immunization (10% for DPT1 and 5% for measles), which further reduced the crude full immunization coverage of 87% to 74% when validity of doses was taken into account. Total missed opportunities for different antigens ranged from 1% to 6%. Like child immunization, a very high proportion of TT doses were invalid (38% for TT3, 58% for TT4 and 57% for TT5). These high rates of invalid doses and missed opportunities reflect service providers' inability to screen the clients properly.

- ❑ ***Emphasis should be given on screening of clients for immunization to avoid or reduce invalid doses and missed opportunities. The service providers must:***
 - *screen properly each and every child/ woman to decide his/her eligibility for a specific dose of specific antigen;*
 - *check EPI card/ EPI register/ TT card or any other record to decide on the eligibility of a particular dose of specific antigen(s);*
 - *if a child/woman is found not eligible for a dose today, ask him/her to return at a specified date and explain the reason to her/mother clearly and patiently.*
 - *check if there is any missed opportunity for other antigens.*
- ❑ ***The service providers should be given refresher training to improve their technical skills on screening of clients for immunization.***

EPI card (child immunization card) and TT card play an important role in ensuring good quality of immunization services. It helps the mothers to adhere to immunization schedule, as well as assists the service providers to screen the children for specific doses of specific antigens. Unfortunately, the retention rates of both the EPI card and TT card were very low, 57% and 11% respectively.

- ❑ ***Mothers/women should be explained the benefits and importance of EPI cards/ TT cards for immunization of themselves and their children.***
- ❑ ***Mothers should be asked to preserve the EPI card safely until the child is 5 years old, and to bring the card with them whenever they come to the clinic/ EPI center for immunization.***
- ❑ ***Women should also be asked to carefully preserve their TT cards, and to bring their TT cards with them whenever they come to clinic/ EPI center for TT immunization.***
- ❑ ***In the case of loss of EPI card/TT card, it should be provided over and over, and the history of the earlier vaccinations accurately recorded again and again, if necessary.***

Mothers have a poor understanding of full immunization. 53% of the mothers could not mention how many times a child was required to be taken to EPI center to get fully immunized. Similarly, 88% of the women 15 – 49 years did not know how many TT doses were required for a woman for lifelong protection against tetanus.

- ❑ ***During IPC between the mother/woman and the service provider and/or at the first contact, the mother/woman should be clearly explained the importance of full immunization of children and women, and of the immunization schedule of full immunization for both children and women.***

Lack of awareness of need and importance of immunization was cited as a primary reason for non-immunization of child and women; while lack of knowledge about the need of subsequent doses to get fully immunized, and lack of knowledge as to when to return for next doses resulted in high drop out rates for child and TT immunization.

- *The program should strengthen BCC activities to inform the community of importance and benefits of immunization in general, and to motivate the mothers/women to get themselves and their children fully immunized in particular. Very selective and focused mass media campaign, in addition to IPC by health workers, may also be conducted to achieve this end.*

2% of the children 0 –59 months did not receive OPV in both the rounds of the SNIDs- 2002. 14% of the households were not visited by the health workers/volunteers during child-to-child search in the 2nd round of the SNIDs.

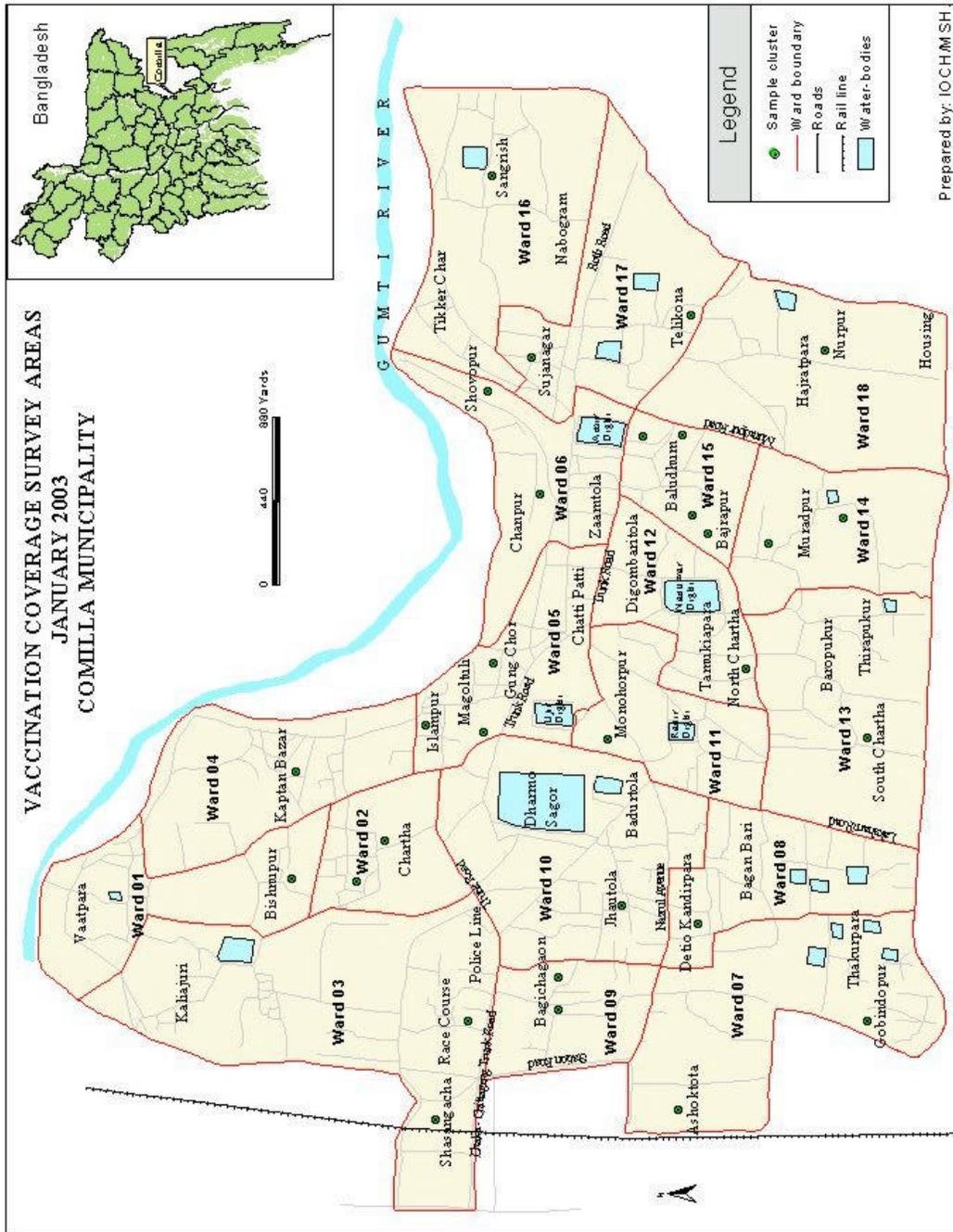
- *Area specific innovative strategies suitable to local situation have to be undertaken during the next SNIDs/NIDs to reach to the left out children. These may include, but not limited to, the following:*
 - *detailed microplanning for each activity;*
 - *use of updated map in microplanning and child-to-child search;*
 - *adequate orientation training of volunteers and workers;*
 - *adequate number of SNID/NID sites with required number of health workers and volunteers;*
 - *using masque miking, as well as Imam of the masque during Jumma Pray;*
 - *special team at railway station, bus stand, ferry-ghat etc. for traveling children*
 - *evening SNID/NID sites for working mothers; and*
 - *special mobile teams at night to vaccinate homeless and floating children.*
- *Supervision of field workers during child-to-child search needs to be further strengthened to ensure that each and every household is visited and properly marked by the workers*
- *More attention should be given to high risk areas and traveling/homeless/floating population*

Lack of information of the SNIDs as a primary reason for not receiving OPV from the SNID sites was cited by 80% of the parents in the 1st round and 50% parents in 2nd round.

- *Communication activities need to be strengthened through mass media, such as television and radio, as well as through IPC by the health workers and volunteers during next SNIDs/NIDs focusing the importance of getting each and every children vaccinated on NID day*

4% of the eligible children (12 – 59 months) did not receive Vitamin A during the 1st round of the SNIDs. Besides, Vitamin A capsules were administered wrongly to 5 ineligible children (out of 210) who were <1 year of age on the day of 1st round SNID.

- *Special attention should be given to:*
 - *ensure that each and every eligible child 12–59 months receives Vitamin A;*
 - *the exact age group to limit shortage (better screening for age); and*
 - *no Vitamin A capsules should be given to the parents to administer them to their children either at SNID/NID site or in their homes.*



TABLES AND FIGURES

Table 1: Routine immunization coverage levels of the children

Name of the Vaccine	Coverage (%) Immunization of 12-23 months age group		Coverage (%) Immunized by 12 months of age
	Crude data (Access)	Valid data	Valid data
BCG	98	98	98
OPV1	98	88	88
OPV2	95	83	83
OPV3	94	79	79
DPT1	98	88	88
DPT2	95	83	83
DPT3	94	79	79
Measles	87	83	80
Fully immunized	87	74	72
Zero Dose	2	-	-

Table 2: Routine immunization coverage levels by gender

Name of the vaccine	Coverage % Immunization of 12-23 months age group				Coverage % Immunized by 12 months	
	Crude data (Access)		Valid data		Valid data	
	Male (%)	Female (%)	Male (%)	Female (%)	Male (%)	Female (%)
BCG	98	98	98	98	98	98
OPV1	98	98	89	87	89	87
OPV2	96	95	82	84	82	84
OPV3	95	94	78	80	78	80
DPT1	98	98	89	87	89	87
DPT2	96	95	82	84	82	84
DPT3	95	93	78	80	78	80
Measles	89	85	87	77	86	73
Fully immunized	89	84	75	74	73	72
Zero dose	2	2	-	-	-	-

Figure 1: Drop-out rate for child immunization

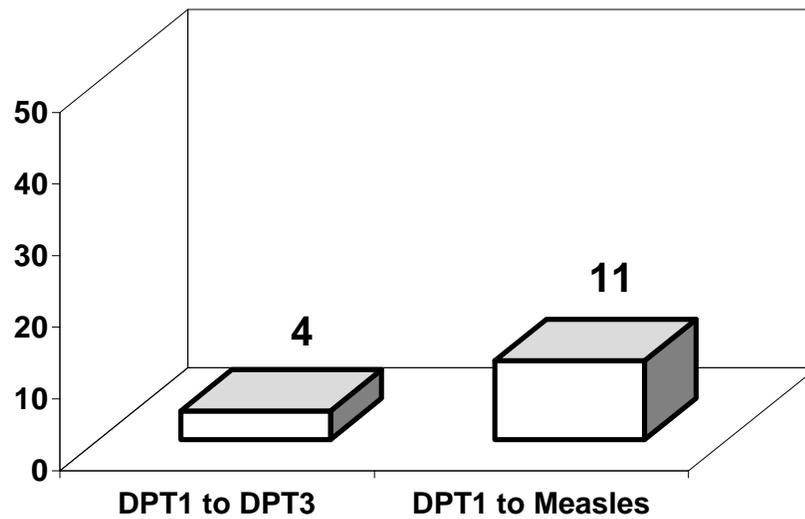


Table 3: Invalid doses of immunization provided to the children

Antigens	Percents
DPT1	10
DPT2	1
DPT3	3
Measles	5

Table 4: Missed opportunities by antigens

Name of the vaccine	Uncorrected		Corrected		Total	
	Number	Percent	Number	Percent	Number	Percent
BCG	4	2	8	4	12	6
DPT1	5	2	0	0	5	2
DTP2	2	1	0	0	2	1
DPT3	0	0	0	0	0	0
OPV1	5	2	0	0	5	2
OPV2	2	1	0	0	2	1
OPV3	0	0	0	0	0	0
Measles	5	2	1	1	6	3
*Index	32					

** The idea is to propose one composite index reflecting the quality of screening during vaccination sessions.*

Table 5: EPI cards availability and retention

Card Status	Number	Percentage
EPI card available	116	55
EPI card ever given	203	97
EPI card retention	116	57

Figure 2: Knowledge about required visits to immunization centers for full immunization

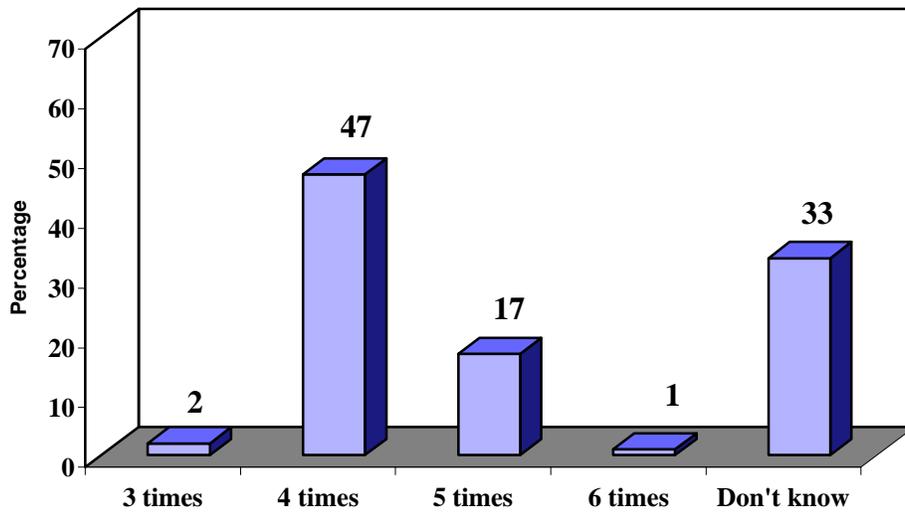


Figure 3: Sources of child immunization services

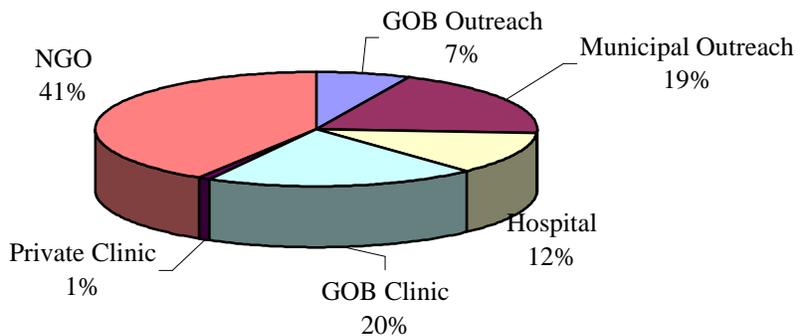


Table 6: Time required to reach the EPI center by mode of transportation

Time required	Mode of transport					
	Walking		Rickshaw		Total	
	#	%	#	%	#	%
1-5 Minutes	125	60	7	3	132	63
6-10 Minutes	54	26	14	6	68	32
11-15 Minutes	10	5	-	-	10	5
Total	189	91	21	9	210	100

Table 7: Reasons for non-immunization and partial immunization of the children

Reasons for non-immunization or partial immunization	Non-immunized (%) (N=4)	Partially immunized (%) (N=24)
Did not know about need of immunization	75	-
Did not know about need of next dose	-	21
Did not know about importance of measles vaccine	-	13
Child was sick and not taken to immunization center	-	29
Mother was busy with other works	25	-
Future plan to vaccinate the child	-	13
Vaccinator not friendly	-	12
Painful for the children	-	4
Child was away from home	-	8

Figure 4: Routine immunization coverage levels for TT among women 15-49 years

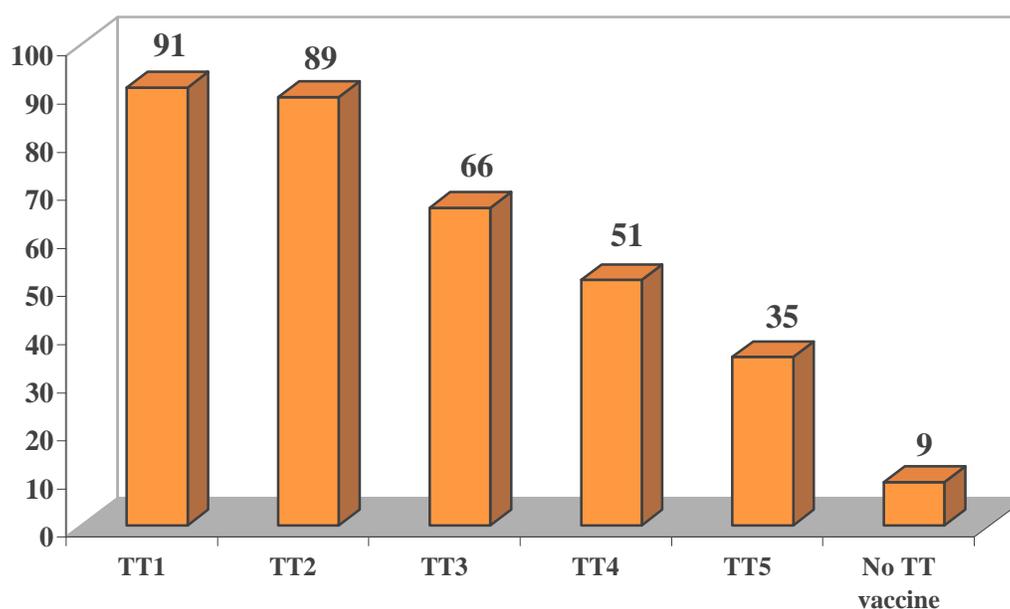


Table 8: Age distribution of women who never received TT vaccine

Age group	Received		Not received		Total	
	#	%	#	%	#	%
15-19	18	82	4	18	22	100
20-25	63	90	7	10	70	100
26-30	59	97	2	3	61	100
31-35	28	97	1	3	29	100
36-45	22	79	6	21	28	100
Total	190	90	20	10	210	100

Figure 5: TT Immunization drop-out rate among women 15-49 years

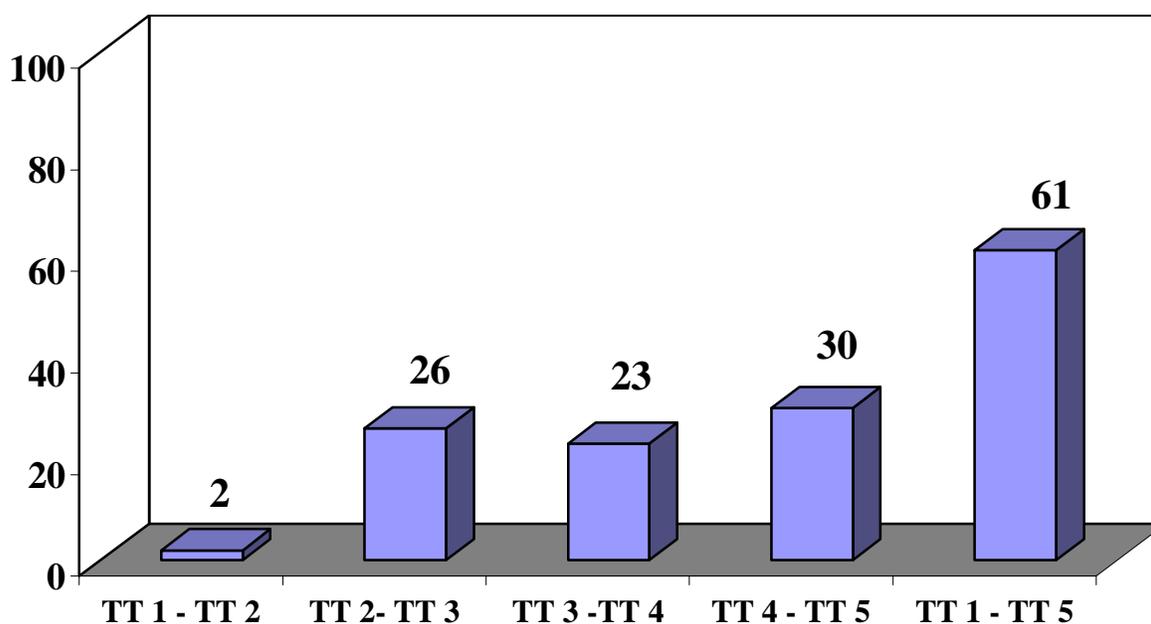


Table 9: Interval between TT1 and TT2, TT2 and TT3, TT3 and TT4, TT4 and TT5 doses

Interval between dose	<1 months		1 months+		<6 months		6 months+		<1 year		1 year +		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
TT1-TT2	1	1	146	99	-	-	-	-	-	-	-	-	147	100
TT2-TT3	-	-	-	-	34	38	55	62	-	-	-	-	89	100
TT3-TT4	-	-	-	-	-	-	-	-	33	58	24	42	57	100
TT4-TT5	-	-	-	-	-	-	-	-	17	57	13	43	30	100

Table 10: Children born protected against tetanus

Status of children born protected	Number	Percentage
Protected	207	99
Not Protected	3	1

Table 11: Knowledge about number of TT doses required for life time protection against tetanus

Answers	Number	Percentage
5 doses	26	12
Don't know/ no idea	184	88

Table 12: TT cards availability and retention

Card Status	Number	Percentage
TT card available	21	10
TT card ever given	190	90
TT card retention	21	11

Figure 6: Providers of TT immunization

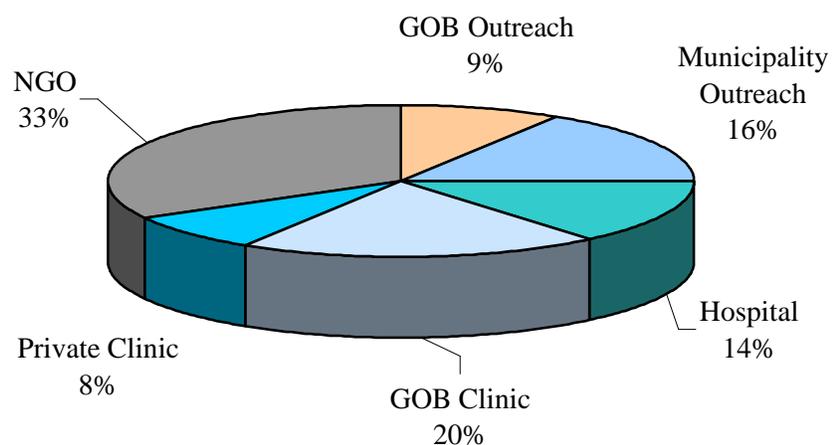


Table 13: Reasons for non-immunization and partial immunization for TT of the women

Reasons	Non-immunized (%) (N=20)	Partially immunized (%) (N=116)
Next dose is not yet due	-	10
Don't feel need for immunization	70	-
Health worker did not specify the next dose	-	10
As per HW advice 2/3 TT is enough during the pregnancy	-	24
Unaware of need of next dose	-	51
Postponed until another time	-	1
In our times TT immunization was not in practice	20	-
Fear of injection	10	3
Vaccinator was absent	-	1

**Table 14: OPV and Vitamin A Coverage during the SNIDs-2002
N=210**

Round	OPV (%)	Vitamin A (%)
1 st round	98	96
2 nd round	99	-
Both rounds	98	-
Any round	99	-

Table 15: Sources of OPV during the SNIDs-2002

Sources of OPV	1st Round		2nd Round	
	#	%	#	%
NID site	205	98	208	98
Child to child search	-	-	1	1
Mobile Team	-	-	-	-
Not received	5	2	1	1
Total	210	100	210	100

Table 16: Time required to reach the SNID sites by mode of transportation

Time required	Mode of transport			
	Walking		Total	
	#	%	#	%
1-5 Min.	176	84	176	84
6-10 Min.	34	16	34	16
Total	210	100	210	100

Table 17: Households visited during the child-to-child search of the 2nd round of the SNIDs-2002

Variable	Number	Percents
Households visited	180	86
Households not visited	30	14
Total	210	100

Figure 7: Sources of information about the SNID campaign

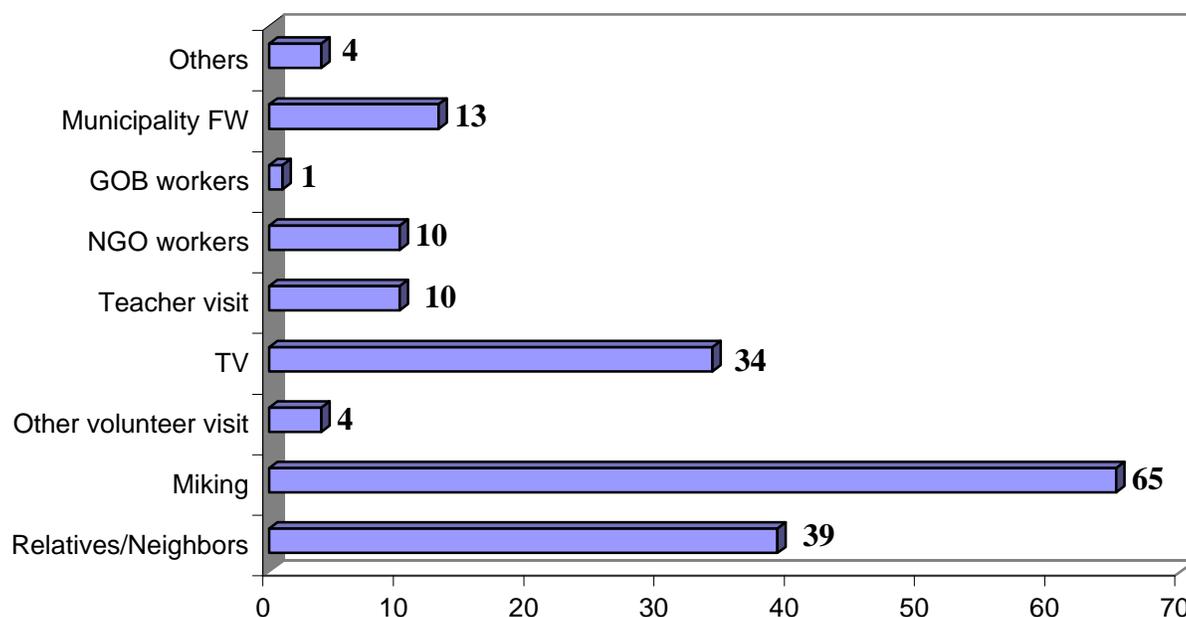


Table 18: Reasons for not receiving of OPV from SNID sites

Reasons	1 st Round (%) (N=5)	2 nd Round (%) (N=2)
Did not know about SNID	80	50
Others	20	50

Table 19: Comparison of the results of the coverage evaluation surveys conducted in Comilla Municipality by year of surveys

Variable	Results of the Surveys	
	Survey in 2000* (%)	Survey in 2002 (%)
Child immunization:		
Access (DPT1, crude data)	97	98
FIC (crude data)	85	87
FIC (valid data)	66	74
FIC by 1 yr. (valid data)	61	72
Dropout rate:		
DPT1 to DPT3	7	4
DPT1 to Measles	12	11
Invalid doses:		
DPT1	11	10
Measles	13	5
TT immunization:		
TT1	81	91
TT5	34	35
NID coverage:		
OPV in both rounds	93	98
Vitamin A	90	96

* Vaccination Coverage Survey of the Comilla Municipality- October 2000 conducted by IOCH/MSH

Annex- A**List of Selected Clusters for the Survey**

Word no.	Mouza name	Mahalla name	Total HH	Total Pop.	Cluster No.
1	Bishnupur (part-A)	Bishnupur (part-A)	653	3981	1
	Chartha	Chartha	809	6602	2, 3
	Race course	Race course	885	4871	4
	Shashangachha (Part-A)	Shashangachha (Part-A)	103	508	5
2	Chandpur (Part-A)	Chandpur (Part-A)	170	1056	6
	Gang Char	Gang Char	588	3443	7
	Islampur	Islampur	532	3198	8
	Kaptan Bazar	Kaptan Bazar	626	4045	9
	Puratan Chowdhuri Para	Puratan Chowdhuri Para	328	1954	10
	Subhapur (Part-A)	Subhapur (Part-A)	555	2930	11
3	Asoktola	Asoktola	740	4526	12
	Bagichagoan	Bagichagoan	1443	9132	13, 14
	Gobindapur	Gobindapur	717	4222	15
	Kandirpar 2 nd	Kandirpar 2 nd	1070	6620	16
4	Bajrapur	Bajrapur	279	1705	17
	Jhautala	Jhautala	368	1991	18
	Manoharpur	Manoharpur	721	4580	19
	Uttar Chartha	Uttar Chartha	740	4446	20
5	Dakshin Chartha (Part-2)	Dakshin Chartha (Part-2)	1396	8190	21
	Kasari Patti	Kasari Patti	569	3496	22
	Maulvi Para	Maulvi Para	554	3074	23
	Muradpur (Part-2)	Muradpur (Part-2)	1380	8313	24, 25
6	Katabil	Katabil	288	1593	26
	Nurpur	Nurpur	698	4065	27
	Shangrish	Shangrish	902	5347	28
	Sujanagar	Sujanagar	475	2719	29
	Telikona (muradpur)	Telikona (muradpur)	702	4038	30

Annex- B**List of Never Vaccinated Children Identified by Clusters**

Word no.	Mouza name	Mahalla name	Total HH	Total Pop.	Cluster No.	Never Vaccinated children
1	Bishnupur (part-A)	Bishnupur (part-A)	653	3981	1	1
	Chartha	Chartha	809	6602	2, 3*	1*
2	Chandpur (Part-A)	Chandpur (Part-A)	170	1056	6	1
3	Bagichagoan	Bagichagoan	1443	9132	13, 14*	1*

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