# Immunisations in Enclaved Populations: the case of Chittagong Hill Tracts and Tea Estates

Abbas Bhuiya Shamim Ara Begum AMR Chowdhury

BRAC Research and Evaluation Division 75, Mohakhali, Dhaka 1212 Bangladesh

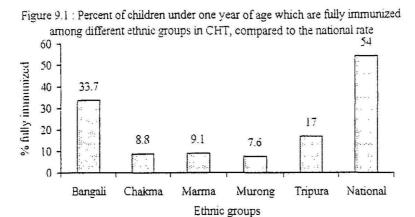
# Immunization in Enclaved Populations

The status of immunisation and its various social dimensions in the dominant Bangali population of Bangladesh have been presented in the forgoing chapters. The country is also inhabited by a large number of ethnic groups who live in isolated enclaves. The health services in most such communities are offered by the state. In some cases such as the tea estates of Moulavi Bazaar districts, the state health services are supplemented by services provided by the management of the tea gardens. In such cases, however, the state role is reduced to a minimal. This chapter presents data on the status of immunisation in the enclaved populations of Chittagong Hill Tracts and the tea estates of Moulavi Bazaar district. In addition, a case study on a cluster of villages of Bhairab, which are isolated from the rest of the mainland because of water, is presented. Details of the research methodology used for each case have been presented in Chapter II.

## Immunization in Chittagong Hill Tracts

EPI was initiated in parts of the Chittagong Hill Tracts (CHT) is 1985. Because of political and armed conflicts in the region, the programme could not make much headway. The situation was so vulnerable that no study could be done to understand the situation. As already mentioned there 14 ethnic groups who live in CHT out of which five have been studied through this research. Bangalees are settlers in the area.

Figure 9.1 shows the population of children under one year of age who were found to be fully immunised in different ethnic groups. Compared to the national achievement of 54 percent in 1998, the performance in CHT has been very low. Among the various groups, the highest coverage was found in the Bangali community (33.7%) and the lowest in the Murong community (7.6%). Chakma, which constitutes the largest group among the non-Bangali communities, had 8.8 percent of the children fully immunised.



Population of children fully immunised has been found be more among boys than girls for all groups, except the Murong. Table 9.1 shows the sex-wise coverage figures for children under two years of age.

Table 9.1: Proportion of children (0-23 months) fully immunised by sex of child and ethnic groups.

Ethnic group(n)	Children (0-23 months) fully immunised (%)						
	Boy	Girl	i I	All			
Bangali (148)	45.7	39.7	i	42.6			
Chakma (114)	18.0	5.7		12.3			
Marma (109)	19.0	17.6		19.3			
Murong (135)	3.6	12.5		8.9	TV.		
Tripura (170)	21.2	14.1	<u>!</u>	18.2			
		1	!				

Table 9.2 compares the coverage for BCG and Measles for children under two years of age. Apart from the Bangalees, the access of the different ethnic groups to immunisation services represented by BCG coverage is very low at less than 50 percent. Bangalees have greater access as they have settled in clusters which are closer to health facilities. When the BCG rate is compared with Measles rate, the dropout rate emerges: interestingly, the dropout rate is highest for the Bangalees.

Table 9.2: Coverage rate for BCG and Measles for children under two years of age for different ethnic groups.

Ethnic group	% vaccinated				
	BCG	Measles			
Bangali	72.3	29.1			
Chakma	34.2	20.2			
Marma	47.7	39.4			
Murong	17.0	8.9			
Tripura	27.1	18.2			

The coverage of women at reproductive age for TT vaccination revealed a very identical picture.

Knowledge of mothers on vaccination was poor, particularly for the non-Bangalees. Table 9.3 shows the proportion of mothers from different ethnic groups who could tell the names of at least one diseases for which vaccine is given.

Table 9.3: Proportion of mothers who could tell the names of at least one vaccine preventable diseases (VPD) for different ethnic groups

Ethnic group	% of mothers knowing the name of at least one			
	VPD			
Bangalee	64.2			
Chakma	18.8			
Marma	24.1			
Murong	11.1			
Tripura	9.4			

## FGD results and providers' perspectives

It was revealed from the FGDs that irrespective of their ethnic groups the villagers remember beginning of immunisation services around 1985 and the availability of outreach services from around 1995. Almost every group opined that the immunisation sites were conveniently located. Almost all said that at times they lacked information about the sessions. Bangalis had a mixed feeling about the efficacy of the EPI, while Chakmas were suspicious before the peace treaty, and others had full trust. Bangalis also mentioned about the negligence of the health workers in providing the service. Illiteracy among the villagers was mentioned as a barrier against acceptance of immunisation by the Bangalis and Chakmas and post immunisation fever by the Marmas.

The recent EPI sessions were reported to be held during the month preceding the study. No changes in the service delivery were reported by members of any of the ethnic groups, but the Marmas mentioned about freedom in movement after the peace treaty.

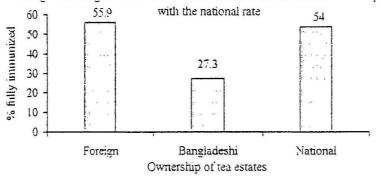
The service providers mentioned various problems faced by them in providing the immunisation services. These included, poor road communication, inadequate service points, person power, and storage facility. They also mentioned about the difficulties faced in maintaining cold chain. Villager's poor awareness about the positive effect of vaccinations was also considered to be a problem in proviiding the services effectively. The service providers also mentioned about the newly achieved freedom in movement in the area that followed that signing of the peace treaty. They also admitted that no programmatic changes had taken place after the peace treaty.

#### Immunization in Tea Estates

As mentioned in Chapter II, the tea estates of Moulavi Bazaar were stratified into two groups: estates owned by foreign companies and those owned by Bangladeshis including Bangladesh government. Figure 9.2 gives the vaccination status of children under one year of age for the two groups. It shows that the proportion of children in this age group who were fully immunised was 55.9 percent for the tea estates owned by foreign companies and 27.3 percent for the Bangladeshi

companies. It shows that the performance in foreign tea estates was quite comparable to national achievement but that in Bangladeshi estates was lagging much behind.

Figure 9.2: Percent of children under one year of age who were fully immunized in foreign and Bangladeshi owned tea estates of Moulavi Bazar District, compared



Proportion of children fully immunised were found to be more among girls than boys in foreign owned tea estates, but the converse was found in Bangladeshi owned estates. Table 9.4 shows the results for children under two years of age.

Table 9.4: Proportion of children (0-23 months) fully immunised by sex of child and ownership of tea estates

Ownership	I I	% fully immunised (0-23 months)					
	<del></del>	Boy	-	Girl	v.	.All	
Foreign	i	54.3		61.0	i	57.6	
Bangladeshi	1	36.8		32.6		34.8	

Table 9.5 compares the coverage for BCG and Measles for children under two years of age. The access as represented by BCG coverage was high. This was true even in Bangladeshi owned estates where the BCG coverage was 77.2 percent for girls and 75.5 percent for boys. The access in foreign owned tea estates was nearly 90 percent. The dropout between BCG and Measles was

remarkably high in Bangladeshi owned estates; while 77.2 percent girls had received the BCG, only 26.1 percent received the Measles. The dropout in foreign owned estates was much less.

Table 9.5: Coverage rate for BCG and Measles for children under two years of age by ownership status of tea estates.

Ownership	% vaccinated					
	BCG		Measles			
	Girl	Boy		Girl	Boy	
Foreign	89.5	88.6		•	•	8
Bangladeshi	77.2	75.5	; ;	26.1	28.3	

## The Three Villages of Bhairab

Purbokanda, Jalepara and Moheshpur are like other ordinary villages of Bangiadesh. A coverage survey in 1996 discovered a very low coverage rate for childhood immunisation in these villages. Bhairab was already a low coverage thana but the situation in these three villages was even worse. What went wrong?

The villages are small compared to typical Bangladeshi villages. There are a total of 138 households in all three of them having a population of 800. Literacy is low; twenty nine percent of the mothers of eligible children were literate in Purbokanda but it was less than 12 percent in the other two. None of the villages had a government school; two had BRAC schools only. There was a Mosque in one village. Proshika, an NGO had a credit programme for the poor in one village. These villages were close to the town but isolated by water bodies. In the dry season, people moved about on foot, as there is no road communication. For about six months in the rainy season, people rely on boats to get around. Ferry boats are hardly available in these localities and as a result poor people who can not afford to have a country boat of their own face difficulties to move and across the canal to the mainland in the rainy season. The NGO Utshargo organized three to four monthly vaccination sessions in the surrounding villages, which were situated within a

distance of one to two kilometres. Since the people living in these villages were marooned, many did not know about those vaccination centres. They were not informed about the date, time or place of vaccination sessions. The distance between the study area and the Thana Health Complex was about three to four kilometres.

Immunization coverage was very low in the three villages compared to other villages of the area. In 1996, not a single child out of 26 was fully immunised in the villages; 81% were not immunised at all. In 1998 when a revisit was done, the situation had improved with 11 percent fully immunised but 35 percent still not immunised at all.

#### Providers' views

In focus group discussions with the providers, several reasons for low immunisation coverage in these villages were identified. The providers stated that it was difficult to organize vaccination sessions in due time because these areas were considered as difficult-to-reach areas. Consequently, the vaccinators could not go there regularly for social mobilisation work. Moreover, in the rainy season, the clients could not reach the immunisation centre, which was outside the three villages, as the areas got inundated with water in the monsoon and the villages became marooned. Furthermore, ignorance and illiteracy of mothers were considered to be contributory factors for low immunisation coverage.

## Clients' views

Focus group discussions were also conducted with mothers of children. Distant location of thana health complex and non availability of vaccinators and vaccines were mentioned by the participant mothers. Some of the mothers' said that due to child's sickness, they failed to attend the vaccination session. Some of them were not aware of their child's age, therefore, did not know when to go for vaccination. The participants also mentioned that no one came to the village for social mobilisation. Some women also mentioned household work and carelessness of the mothers as major factors in the non-attendance to immunisation sessions. Some mothers admitted losing the Tika cards: this was a problem as the vaccinators did not agree to vaccinate clients without such

cards. Some respondents complained that vaccinators charged money for vaccination, and they could not afford it, as they were poor. A few mothers mentioned that there was a lack of awareness about the importance of vaccination. They also blamed the rainy season for low immunisation coverage, which kept their hamlets isolated from the rest of the world.

There was a slight improvement in immunisation coverage between 1996 and 1998. In 1998, they received messages about Tika from several sources. Some of the informants stated that the vaccinators sent messages from the vaccination centre, which was in another village, and they came to their villages before the vaccination session started. Three informants stated that, the vaccinators informed them about the vaccination session by giving a call from the other side of the canal. One informant said that she was informed about the vaccination session at the house of her parents, which was located close to the place of outreach vaccination centre across the canal.

It thus seems that physical isolation was probably the major reason for poor performance in these three small villages of Bhairab. This isolation, particularly during the monsoon, kept the HWs away from doing their background work of social mobilisation, and dissuaded the mothers to take extra hassle to go across the canal. The latter was particularly true for the poor who do not have a boat of their own to use. Setting up of a vaccination centre in the villages itself could surmount the difficulties faced by the villagers. Figure 9.1 gives a sketch of the villages and their surroundings.

Figure 9.1: A sketch of the three villages of Bhairab where immunisation coverage was found to be exceptionally low, and the surroundings.

