SAFE MOTHERHOOD PROMOTION PROJECT (SMPP)

SITUATIONAL ANALYSIS

In Monohardi and Raipura upazilas, Narshingdi district

Prepared for **Care Bangladesh**

by

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1. Introduction

1.1 Background:

To promote effective implementation of National Maternal Health Strategies, JICA designed an initiative named "Safe Motherhood Promotion Project" to be implemented in Narshingdi district of Dhaka division with the Directorate of Family Planning of the Government of Bangladesh.

CARE Bangladesh was invited as a partner on this project with the aim of creating "an empowering environment that enables communities to seek essential RH/MNH services from facilities that are accessible, and to contribute to the effective management and monitoring of these services."

While maternal mortality and morbidity are still high in Bangladesh, Narshingdi district shows a performance below the national average. *JICA baseline survey 2006* indicates higher fertility rates, a lower use of contraceptives, a lower rate of deliveries assisted by trained personnel and a higher Infant Mortality Rate.

1.2 Objective:

The overall objective is to improve maternal health.

Special attention is to be given to the *3 critical delays.*

- Delay at home in deciding to seek care from facilities
- Delay in reaching a medical facility
- Delay in receiving adequate treatment at the facility

The barriers faced by the poor and marginalized in accessing services and the qualities of these services will be given special importance.

1.3 The Situational Analysis - Calendar of activities

A Situational Analysis was undertaken in Monohardi and Raipura upazila of Narshingdi district from 27 February to 2nd April 2007. The exercise took place as the project is being set up. It should complement the *JICA Baseline Survey 2006*.

Here is the calendar of activities.

27 Feb.-1 March:	debriefing at the CARE office in Dhaka literature review, preparation of instruments
4 March:	Day long meeting in Narshingdi with CARE and JICA staff. Introduction and discussion of instruments
5 March:	Training on investigation methods and use of instruments
6 – 17 March:	Field investigation
18 March:	Group discussion on findings and problems encountered with CARE staff, Thérèse Blanchet and Anisa Zaman in Narshingdi
19-25 March:	Analysis of data
27 March – 2 April	Report writing

1.4. Participants:

The situation analysis involved the 12 CARE staff posted in Narshingdi: 8 field facilitators, one Technical Officer, two Program Officers and the Coordinator (See

Appendix). The balanced sex ratio (6 women, 6 men) was convenient for the topic under review. Anisa Zaman coordinated the field study and also collected data. The JICA staff sat with the CARE staff on 4 March in Narshingdi. They joined the discussion also attended by Dr Jahanguir, Dr Jubair Hussain and Thérèse Blanchet.

1.5 Limitation of the study:

A limited budget constrained the time that could be allocated to the situational analysis This affected the coverage of certain topics that require rapport building with the informant. CARE staff had not been appointed for long in the area and they were getting acquainted with it. Research was not their field of competence

The intelligence applied to the investigation and the hard work volunteered by CARE staff, however, permitted a reasonably good collection of data in a record time. Anisa did an excellent job in orienting and supervising the research. The topic was familiar to both consultants, the main consultant having worked in maternal health in Bangladesh for nearly three decades. The cut down preparation time and facilitated the analysis.

Yet, a situational analysis requires quality field investigation to check representativity, reliability, biases, etc. This was a bit short. Consultancy time to analyze data and write up the report did not permit to give the attention one would have wished. Some data were dropped for lack of time. The writing of the report was also hushed up. We did our best within limits that could not be stretched. This is a beginning. We raise fundamental issues in the delivery of MNH/RH that apply not only to the area of study but to Bangladesh as a whole. We hope it will be useful to guide future orientations.

2. Research tools and methods

The Situational Analysis was organized around two themes:

1. The management of complicated deliveries and
2. Referrals and the role of dalals (brokers)

Different research tools were designed for each theme and staff were divided, women studying component 1, men focusing on component 2.

2.1 Management of complicated deliveries

Investigation was entrusted to the 6 women field motivators employed by CARE, 2 working in Monohardi and 4 in Raipura. The situational analysis selected to work in 2 unions in Monohardi and 4 unions in Raipura.

Each of them was asked to identify and document a minimum of 20 'complicated delivery' cases which had occurred in the last 12 months. They were given a questionnaire to address to the mothers and, in case of maternal death, other senior women of the household or neighbourhood. Sufficient space was left to include special observations. Half of the cases were to be collected from unions having poor communication networks and difficult access to health facilities (e.g. chor) and half from unions with good access to health facilities.

The Complicated delivery cases were identified with the assistance of dais, FWA, FWV and others. Criteria included fits, excessive bleeding, prolonged labour, breech presentation, fever, and others. Investigating recent deliveries, complications were sometimes identified where a delivery had first been defined as 'normal'.

Case histories rested on the recollection of events recent enough and important enough to be reasonably well remembered. One advantage of the method is that it strived to record facts as experienced by the parturient and her immediate entourage, not generalities on an ill defined population. The questionnaire (see Appendix) aimed to document referrals (or non referrals) and the cost involved at each step. In addition to the mothers, 25 percent of the fathers or, in their absence, another male of the family, were interviewed.

2.2 Referral systems and the role of dalals

The role of dalals was identified as a problem in the *JICA Baseline Survey 2006* and we wished to find out more about these shadowy figures often judged as very harmful. The investigation was entrusted to the 2 male Field Facilitators. They worked full time while the Technical Officer and the two Program Officers assisted part time. Anisa Zaman also collected information.

A list of possible informants was given: rickshaw pullers, village doctors, pharmacists, etc). Field investigators were free to interview others. Here there was no questionnaire but a check list of points to cover. Case histories gave us precise information on referrals from the patients and their families' points of view. Interviewing dalals, service providers and health businessmen nicely complement this information presenting a different point of view.

3. FINDINGS

COMPLICATED DELIVERY CASES

One hundred twenty seven (127) cases of 'complicated deliveries' were documented. Together they provide a rich stock of information on a number of issues. The fact that the criteria for 'complicated delivery' may be subjective and variable should be borne in mind. While some outcomes are publicly known, for example the death of the child, others are held embarrassing or improper to expose, for example a cervical tear. The mother may hide outcomes which she finds shameful. The dai or TBA may refrain from mentioning cases which would question her competence. Such problems can be addressed with time which, again, was very short. We must bear with these shortcomings.

3.1 Age, occupation and no of children

Table 1: Age of Mother and her Husband

Age (in years)	Mother	Percent	Husband	Percent
Up to 17	10	7.9		
18 – 20	37	29.1	2	1.6
21 – 23	16	12.6	6	4.7
24 – 26	22	17.3	23	18.1
27 – 29	13	10.2	16	12.6
30 – 32	14	11.0	32	25.2
33 – 35	10	7.9	11	8.7
36 – 38	3	2.4	7	5.5
39 – 41	1	0.8	12	9.4
42 – 44			4	3.1
45 – 47	1	0.8	7	5.5
48 – 50			3	2.4
51 – 53				
54 – 56			1	0.8
Not mentioned			3	2.4
Total	**127**	**100.0**	**127**	**100.0**

Table 2: Mother's occupation

Occupation	No. of Mother	Percent
Household work (no financial return)	92	72.4
Household work (has some income)	29	22.8
Agriculturalist	2	1.6
Tailor	1	0.8
Day labourer	1	0.8
Domestic worker	1	0.8
Homeopathic practitioner	1	0.8
Total	**127**	**100.0**

Table 3: Husband's occupation

Occupation	No. of Husband	Percent
Farmer	35	27.6
Businessman	20	15.4
Migrant worker abroad	16	12.6
Rickshaw puller	14	11.0
Day labourer	5	3.9
Shop owner	5	3.9
Job holder	10	7.9
Fisherman	4	3.1
Driver	3	2.4
Tailor	2	1.6
Hawker	2	1.6
Mechanics	1	0.8
Carpenter	1	0.8
Electrician	1	0.8
Teacher	1	0.8
Mason	1	0.8
Imam	1	0.8
Beggar	1	0.8
Unemployed	4	3.1
Total	**127**	**100.0**

Migrant husbands:

Migrant husbands represent 30.7 percent of this population. 16 husbands (12.6 percent) work abroad and 23 (18.1 percent) habitually reside away from home for their work.

Occupations

If mothers' occupation nearly always center on the households, husbands are seen engaged in a wide range of activities suggesting different socio-economic levels. Poor households (e.g. rickshaw pullers, day labourers, fishermen, hawkers, beggars and unemployed) are well represented.

Table 4: Total number of children alive, died conceived, miscarried, aborted:

127 women declared:

- Having conceived: 345 times

- Having alive 248 children
- Having lost (died) 80 children
- Were miscarried: 15
- Were aborted: 2

To sum up, women lost 28 percent of the children they conceived, and 23 percent of the babies they took to term. The number of abortion and/or miscarriage could have been under reported.

Table 5: Rank of the child whose 'complicated delivery' was investigated

The mother's first child:	49
Second child:	25
Third child:	11
Fourth child:	16
Fifth child:	11
Sixth child:	12
Seventh child:	2
Ninth child:	1

Table 6: Number of children alive per woman

- No child alive: 17
- One child 48
- Two children 22
- Three children 15
- Four children 14
- Five children 5
- Six children 5

3.2 Ante natal check ups:

Went for ante natal check ups:	76 women (59.9 percent)
Received only TT injections:	15 women (11.8 percent)
Did not attend ante natal clinic And did not receive TT injections	36 women (28.3 percent)

Location of ante natal check ups (76 mothers):

- Private clinic: 26

- FWC: 10
- Satellite clinic 4
- CNP 9
- UHC 6
- MCWCA 1
- NSDP 4
- NSDP & Private C. 3
- Unspecified NGO clinic 4
- District Hospital 2
- Home 4
- Homeo. & Village doctor 5

Received only TT injections (15 mothers)

- From EPI Centre 9
- At home 3
- UHC 2
- Satellite Clinic 1

Number of ante natal visits (76 mothers)

- One: 22
- Two: 19
- Three: 16
- Four: 11
- Five: 4
- Six: 3
- Seven: 1

Reasons for not receiving ante natal check ups:

- No need: 16
- Too far, no need: 5
- No time and no need: 4
- No money 6
- Husband did not approve: 3
- Not informed: 2

Services provided at different clinics:

1. Weight
2. Blood pressure
3. Manual examination of fetus position
4. Advice about nutritive food
5. Advice about life style, rest, etc.

6. Iron tablets
7. TT injections
8. Ultra sonogram and determination of the sex of the baby
9. Urine, blood, other tests as advised

Slight variations exist between Family Welfare Centres, Satellite clinics, Community Nutrition Promoters but all offer services 1 to 5. So does NSOP but for a small cost which mothers resent as they know other places provide the same for free. Private clinics offer a package of services and tests at a price and 100-200 taka must be paid as consultation fee for the doctor. Item 8 is popular and is offered only at private clinics. We found no evidence that ultra sonograms were used to abort female fetuses. However, the knowledge that a boy is expected could motivate the family to take greater care and spend more at the time of delivery.

The behaviour of health personal is generally considered good. However, some women complained about FWC staff, whom they found rough and rude.

3.3 Place of birth:

<u>Preference for home birth:</u>

Preference for home birth is here very strongly marked. In only 4 out of 127 pregnancies, the decision was taken beforehand to deliver in a clinic.

Reasons for deciding beforehand to deliver in a clinic beforehand:

- breech presentation,
- mother expecting twins
- mother very weak
- the husband, a migrant worker in Saudi Arabia, has given instruction that his wife should deliver in a private clinic and money has been set aside for the purpose.

In the three first cases, risks signs were identified at ante natal check ups carried out at the private clinic where the delivery took place.

After complications arose, a majority of women (64.6 percent) still delivered at home while a substantial number (27.6 percent) went to private clinics. Government clinics and hospitals come in third place with a mere 7.9 percent of the deliveries. Dhaka Medical College Hospital attracted 6 cases with serious complications while the Matri Sadan and the Disctict Sadar Hospital do not appear at all in this sample. Family Welfare Centre Upazila Health Complex got 1 and 3 cases each.

Table 7: Place of birth:

Place	Sub-count	Total	Percent
• Home		82	(64.6 percent)
• Private			
clinics:	33	35	(27.6 percent)
Nurse Residence:	2		
• Government institutions:		10	(7.9 percent)
FWC:	1		
UHC	3		
MCWC:	-		
District Hospital	-		
DMCH:	6		

Note that more than 3 times as many women delivered in private clinics compared with government hospitals. How did this happen? What are the consequences for poor and marginal families? This is discussed below.

3.4 Birth attendant:

In 115 cases (90.6 percent), a dai was called or was present at first. The dai may be the mother-in-law, the aunt or any other female relative or neighbour of the parturient who has some knowledge and experience in delivering babies. In Narshingdi, TBAs are commonly called *dhatri* while *dai* is also used (we are here using the terms *dhatri, dai* and TBA interchangeably).

In difficult cases, a second dai was called. This is how 124 dai attended 115 women. Out of these, only 18 dais (14.5 percent) had received a training. The percentage is here even lower than the 26 percent found in the *JICA Baseline Survey 2006.*

Apart from the 4 women who planned a hospital birth from the start, a dai was not called in 8 cases because:

- Signs of eclampsia appeared and the parturient was taken to hospital (2 cases)
- Excessive bleeding led the family to refer immediately to hospital (1 case)
- The family called a FWA, FWV or UHC Nurse to attend the birth at home (5 cases)

Table 8: Birth Attendants:

- TBA: 79 (62.2 percent)
  - Alone: 53
  - With village doctor; 26
- In UHC, private clinic, DMCH (Physician? Bith Attendant Not specified) 42 (33 percent)
- FWV: 3
- Nurse: 3

3.5 The important role of the TBAs:

The important role played by dais is confirmed once more. Not much has changed over the years. They are the first birth attendants called in 90 percent of the cases and they perform the delivery, alone or with the assistance of the village doctor, in 61.4 percent of the cases.

Two anecdotes:

> Anecdote One: _A mother-in-a-law was asked why she did not invite a trained dai who happened to live next door to attend her daughter-in-law. She replied that she did not trust the trained dai who was, in her view, less skilled and less experienced than the untrained dai she called.

> <u>Anecdote Two</u>: At a FWC, a list of trained TBAs was posted on the wall. When the FWV was asked which ones were most active among the 15 names, she replied that three dais had died already and 2 were old and sick and did not attend births anymore.

These stories make us think. The first one calls into question the women who were selected for training. Were they women with experience in delivering babies or where they women with good connections to the Union Chairman who prepared the list favouring his own people regardless of their experience and interest in the matter. The second story shows the neglect of dais and dai training programs by government health workers. Outdated lists have been allowed to gather dust. Discussions on dai training have been going on for some 30 years in Bangladesh. There is a sense of déjà vu. We know the constraints in professionalizing the TBAs. So, what next?

3.6 TBAs and referral

Assessment of the gravity of the problem at first depends largely on the dai. She will call for help or withdraw when she decides that she cannot cope. Dais often want to prove that they can manage and the family trusts them. Admitting that the dai cannot cope is bad news for the family. There will be costs, referral elsewhere may be necessary, all of which are issues of concern, especially for poor families. Case histories show that this is where the longest delays occur, taking a decision and acting upon it.

In 39 cases out of 115 (34 percent), the dai called a village doctor to help. Village doctor are men and generally do not examine the patient to assess the progress of labour. They first listen to the situation as described by the dai and their main means of intervention is saline and 'injection' (Butapen, Oxitoxi, Citrocin, Piton) to hasten labour contractions.

In 26 out of 39 cases, the dai delivered the baby at home following the village doctor's intervention. In the remaining 13 cases, the village doctor referred the patient to hospital.

In 14 cases out of 115 (12.8 percent), the dai withdrew admitting her inability to deliver the mother. The family then took the latter to hospital.

In 2 cases, dais (in this case, trained ones) referred the patient to the FWC from where the FWV referred the patient to a private clinic. In 2 cases, the TBA referred the patient to the UHC and in 1 case, she referred the patient to the MCWC from where the doctor referred the woman to Dhaka Medical College Hospital.

Dais's help line is first the village doctor followed by government facilities. In this sample, dais did not refer patients to private clinics.

3.7 Village doctors and referral

Village doctors mostly refer to private clinics. This was the case in 9 of the 13 cases. The second component of the study shows that village doctors maintain regular connections with private clinics from which they get a commission.

3.8 Cost of referral: lower in government hospitals

The table below shows costs of delivery by attendant, place of birth and type of delivery (normal or caesarean). Costs are given as families count them, that is including official bills, transport, medicines, food for the patients and for those who accompany her, backshish to health assistants, etc.

The table shows that while government facilities do not offer free treatment, costs are definitely lower than those of private clinics. Costs at the MCWC are most reasonable and women treated there expressed satisfaction. The MCWC does not attract women from distant locations, however. Most patients come from Narsingdi Sadar or nearby locations. Many are Hindu. No woman delivered at a MCWC in

our sample, but four visits was made to this hospital and 16 patients present at these times were interviewed and asked about services, costs and whether they were satisfied or not. Most felt that they were well served at a very reasonable cost.

Dhaka Medical College Hospital receives serious cases and one may expect costs to be higher there than elsewhere. Still, it needs to be underlined that for these serious cases also costs were lower than in private clinics. Trying to recruit patients for private clinics, dalals often argue that the cost of a private clinic is the same as government hospital while the former offers better services, greater comfort and a cleaner environment. Whatever the comforts offered, in terms of cost, private clinics are dearer. Therefore, we cannot agree with the conclusions found in the *JICA Baseline Survey 2006* "that the expenditure for normal delivery and cesarean operation are similar in public and private facilities." The evidence gathered here clearly points to a different conclusion.

Table 9: Total Cost of Delivery under Different Attendants and Places of Birth

Attendant	Place of Birth	Normal Delivery/ Caesarean	Cost of Delivery (in TK.)		
			Lowest	Highest	Average
TBA	Home	-	200	450	245
TBA with Village doctor	Home	-	300	1,500	692
FWV	Home	-	300	1,000	530
FWV	FWC	-	600	1,500	966
Nurse	Home	-	300	1,500	800
Nurse	Nurse's place	-	1,500	4,500	2,833
UHC	UHC	-	600	3,000	755
Private clinic	Private Clinic	Normal	4,000	10,000	6,833
Private clinic	Private Clinic	Caesarean	12,000	30,300	21,306
MCWC	MCWC	Normal	600	1,600	750
MCWC	MCWC	Caesarean	2,200	3,500	2,625
DMCH	DMCH	Normal	5,000	6,500	5,450
DMCH	DMCH	Caesarean	10,500	19,600	14,450

3.9 Preparedness:

A majority of families (59.1 percent) did not set money aside in preparation for the birth. Another percentage (23.6 percent) set small amounts that did not cover the cost of referral.

Table 2 showed that 72.6 percent of the mothers have no income, so it is difficult for them to put money aside. Pregnant women depend on their husbands, mothers-in-law, mothers and others for the decision to incur costs and for gathering cash rapidly in case of emergency. They depend on the importance given to their needs, their plight and their suffering. They depend on the efforts deployed in

meeting these urgent requirements. Case stories strongly demonstrate mothers' dependency and powerlessness in influencing the course of events.

Most husbands do not prepare anything before their wives give birth. Only one family had adequately prepared to meet the cost of a private clinic fee for a caesarean operation. The husband is a migrant worker in the Middle East. One can see why private clinics are particularly keen to attract wives of migrant men. These families have money at hand and are often keen to demonstrate their spending capacity, a mark of their often newly acquired social standing.

Table 10: Savings in Preparation for the Birth

Amount (in TK.)	No. of Mothers	Percent
No Savings put aside	75	59.1
200 – 1,000	30	23.6
1,000 – 3,000	10	7.9
4,000 – 6,000	5	3.9
10,000	4	3.1
20,000	2	1.6
25,000	1	0.8
Total	127	100.0

The acquisition of a new blade and thread for the cutting and tying of the umbilical chord was made in 68.5 percent of the cases. As many as one quarter of the pregnant women had not prepared anything special for the birth. They had neither money nor blade and thread, nor clean cloth or plastic sheet at hand.

In Sreepur union, Raipura upazila, BRAC implements a Safe Motherhood program and offers delivery kits for a small cost, 15 taka. 21 delivery cases were documented in Sreepur union and only 3 women had purchased the kit. This small number raises question on the efficacy of the program, on its ability to reach women and convince them to prepare for the birth and invest in a small kit.

3.10 Impediments to referral:

Besides the prohibition of costs for the very poor, lack of preparedness, especially when complications occur, is evidenced in the hesitation, the delay in taking a decision, the difficulty in accessing money rapidly. Once the decision has been taken to refer, the question arises where to go.

One should add that the absence of the male head of the family, who may be a migrant worker, usually delays and may even forbid referral. In some families, explicit permission to take the wife outside the home must be obtained from the husband first. In one case, the dai, and the mother-in-law knew that whatever happened to a young wife, she would have to deliver at home because the husband was an imam and "an imam's wife does not go out". The young woman expected her first child. Pregnant, she did not visit the satellite clinic for ante natal check ups. The FWA came to her house for the TT injections. When labour pain came, she had prolonged labour. After considerable time, it was decided that a male village doctor could administer an injection. This is as far as the family would go in permitting an outsider to access the secluded woman. She delivered a still born baby and suffered from a bad cervical tear.

Unforeseen crisis situations often lead the patient to a private clinic. Private clinics offer certain advantages in that treatment usually starts without delay unlike government hospitals that require the purchase of medicine and equipment beforehand. At private clinics, the bill can be settled as the patient gets released. This gives time for family members to mortgage a piece of land or negotiate a loan to cover the costs.

In another case, the wife of a poor fisherman away on Kutubdia for six month went into labour. Two dais and one village doctor intervened but could not deliver the woman. After considerable delay, the decision was taken to take her to hospital,

otherwise she may die. The woman's *bhashur*[1] and her mother played a critical role in reaching the decision and in arranging for payment. Community solidarity also played a role as a collection of money was organized to cover the cost. Once, the decision to refer was taken, transport and treatment (a ceasarean operation) were carried out in record time. The baby was distressed but nonetheless survived. In this case, the private clinic offered two critical advantages: rapid treatment begun before money for payment could be gathered. Two lives were saved. The total cost for the family was very high however: 17,600 taka. To cover the cost, the mother's mother sold her cows and contributed 9,500 taka as a gift, the *bhashur* lent 3,500 taka while villagers lent (without interest) 3,600 taka. The latter amount was reimbursed immediately as the husband returned. The money lent by the *bhashur* remained pending 7 months later.

Years will be required for this poor family to recover from the large cost incurred. Here the private clinic prepared a bill without consideration or rebate as no one interceded on their behalf. Rebates for poor families are often mentioned by the advocates of primate clinics. How often are they actually offered?

3.11 The delivery: immediate outcomes:

<u>The mother</u>

- Maternal death: 1
- Prolapsed uterus 2
- Bad tear 8
- Excessive hemorrhage and/or fever 23
- Delivered by caesarian section 25 (19.7 percent)

[1] *Bhasur :* husband's elder brother

Baby:

- Still birth 15
- Neonatal death 12
- Head injury 7
- Leg or arm injury 4

Observation: Case histories reveal that young wives expecting their first child do not immediately inform their care takers when labour pain starts. Either they do not understand what is happening or they feel shy. When they declare having labour pain, their word is not always taken seriously. Young wives are suspected of not knowing what are true labour pains. There are communication gaps here and a hierarchy that causes delay.

3.12 Post partum problems

The mother:

- Prolonged bleeding/ anemia 24

  Action
  Do not seek treatment (8)
  Go to private hospital, get blood transfusion (2)
  Go to UHC (2)
  Treated by village doctor, kobiraj or homeopath (12)

- Cervical tear/ later painful sexual intercourse 8

  Action
  Do not seek treatment. Does not know where to get help. No money (7)
  Consults a physican privately (1)

- Fever, vaginal itch, loss of blood, swollen feet 7

  Action:
  Do not seek treatment: (4)
  Consult village doctor ((3)

- Whole body swollen (after eclampsia) 2

  Action:
  Do not seek treatment

- Lower abdominal pain 3

  Action
  Do not seek treatment

- Abdominal pain 5

  Action
  Do not seek treatment

- Prolapsed uterus 3

  Action:
  Do not seek treatment. Do not know where to go

The baby:

71 babies suffered from various problems including pneumonia and respiratory problems (17). cold (19), fever (9), fits (1), navel infection (2).

Treatment was sought at private clinics or at an MBBS doctors in 12 cases. Village doctors, homeopath and kobiraj are the most common health providers.

Three babies died within 4 days of birth

1) Died of fits (tetanus) on day 4 after birth. The mother had not gone to ante-natal clinic and had not received TT injection. She did not think it was necessary and she had no time.

2) Received head injury because of dai mishandling. The mother-in-law took the baby (but not the mother) to a private clinic on the second day. He died on day 3.

3) Had respiratory problems. The family had it treated by a kobiraj who administered magic blows (*jhaphuk).* He died on the 4th day.

Summing up, mothers' post partum problems are often neglected and left untreated. No money is available. It is not a priority. Mother's work leaves her no time. Babies are more likely to be treated but with 'soft' medicine that may not be efficient

PART TWO:

4. *REFERRAL AND THE ROLE OF DALALS*

4.1 Introduction:

One may define a dalal as a person who refers patients to private clinics or private practitioners against a commission with profit as a main motivation. A dalal is a facilitator often benefiting at both ends. He/she provides a service to those in need and brings a paying clientele to service providers who run a commercial establishment.

Profit seeking behaviour conflicts with the ideal of service expected from health providers. Exposing health as a business appears embarrassing, immoral even if it means depriving those who cannot afford to pay. That is why the profit motivations of health providers are generally covered up. In interviews, these

were not immediately revealed. The topic could be addressed in specific set ups, for example among similarly involved people.

The questions raised here bear a relation with the proclamation of universal human rights – which includes the right to health – and the lack of means deployed to realize these rights. In the health sector, in Bangladesh and elsewhere, the growth of the private health sector has multiplied the availability of services for those who can pay, producing a new inequality between rich and poor. Health has become a marketable commodity. No use making pious protests here. One should concentrate on how to ensure a minimal universal coverage and reduce maternal and neonatal mortality in the country.

As exemplified at the discussion held in Narsingdi on the 4th and th 18 th of March, positions are divided among CARE and JICA staff on the role of dalals in the health sector. Some suggested that the word dalal be dropped as its connotation was too negative. We believe the word dalal is useful to the analysis and therefore continued to use it. The discomfort it provokes should not be pushed aside, to the contrary, it should be confronted.

4.2 Informants:

The following informants were consulted on the question. Some of them refer patients for a commission. They explained how the system works, others talked of their experience as members of the public.

- Village doctor including pharmacy owner	24
- TBA:	3
- Driver of micro bus & baby taxi	2
- Rickshawpuller	2
- Small shop owner:	2
- Madrassah Teacher:	4
- Primary School Teacher	4
- Community leader	6
- Family Members of Patients	4
- FFA, FWV, SSB	7

- SAMCO 2
- Private Clinic:
  - Doctor 2
  - Manager 2
  - Publicity Agent 2
- Paramedic (Shurjo Hashi Clinic) 6
- Doctor at MCWC 1

4.3 Village doctors:

We have seen in the first part of the study that village doctors play an important role in childbirth. They are the first to be contacted when the dai cannot cope. They are also the most likely to refer a case to a private clinic.

Who are village doctors? Supposing that the 24 men interviewed for the study are representative of their class, village doctors are middle aged men between 40 and 50 years old, they have been in the profession for 10 to 25 years. Here, all had secondary education. Six had studied up to Class X, 14 stated having completed SSC and 2 having completed HSC. Two mentioned being graduates, one of them also occupying the post of primary school teacher.

Training: 16 had received a formal training as LMP or Palli Chikichok
6 had learned the trade from their father who was a village doctor
7 had learned while working with an MBBS doctor for a number of years

Private institutions provide a 6 month course for village doctors, which are approved by the civil surgeon. One village doctor admitted that he had purchased his LMP qualification for 5,000 taka. As he worked with an MBBS doctor for 12 years, he did not believe this was a big cheat.

Village doctors generally command respect in the local community. They are well known and they have influence in matters of health, especially in remote areas where the absenteeism of government health personnel is high. Village

doctors reside locally. They may be called at night, during holidays, almost anytime.

Each of the 24 village doctors interviewed admitted being in contact with private clinics, private doctors (gynecologists, obstetricians) and their agents. They were well informed about commissions. In fact, commissions from private clinics as a reward for referring patients represent a substantial part of their income. One doctor mentioned that he received every month 3,000 to 4,000 taka from clinics representing 30 to 40 percent of his monthly income.

Another doctor who runs a pharmacy said that a clinic owed him 5,000 to 6,000 taka as he had referred eight patients lately: three caesareans, 2 sonograms and 3 pathology tests. Caesarean operations are especially profitable. Commission, or *shonmani*, of 1,000 to 1,500 per patient are mentioned. "Send us rich patients, we can offer you even more", said the manager of a private clinic to one of the field workers. Rich patient are worth more as their bill gets inflated. The above doctor mentioned that he was once paid 6,000 taka for referring a caesarean patient. This was the highest amount he had ever received.

4.4 Referral against commission: a generalized practice

Private clinics pay commissions to village doctors, rickshaw pullers, van pullers, FWA, FWV, pharmacists, shop owners, NGO workers or anyone referring or bringing a patient to their clinic. This is a generalized practice confirmed by several informants. One of the consultants in this study, having identified herself as working for CARE, was offered a 10 percent commission by a private clinic manager if she could send them patients, andeven more if they were rich ones. There was no embarrassment in the offer. NGO or not, business is business.

Ten percent for caesarean patients, 30 to 50 percent for pathology tests and sonograms are standard commissions. Competition appears fierce among private clinics whose number has been growing lately.

Drivers of micro bus or tempu, rickshaw and van pullers operating in Narshingdi Sadar are familiar with the little gift of 100 to 300 taka offered for bringing a patient. As a *salami* or fee for service, the gesture is fairly innocent. However, the action of dalals standing in front of the MCWC and the Sadar Hospital is more devious. They are reported to lure patients from government hospitals and orient them to private clinics under various arguments, for example, they say that the government doctor normally working at the government hospital is absent. However, she is available at another address and the dalal offers to take the patient to the clinic who will pay the commission. At times of distress, patients and their families are vulnerable. They may not be inclined to challenge the information given by the dalall; they just want help. One rickshawallah pointed out to a neighbourhood on the outskirt of Narsingdi where men's main occupation is brokerage (*dalali kora*). Some of them were reportedly arrested by the police lately. Cleaning dalals from a number of spots (e.g. passport office) has been one of the achievements of the present government. That this should have been done for the MCWC and the Sadar Hospital in Narshingdi is noteworthy.

Dalals on the street are only the tip of the iceberg, the visible end of a much larger block which is immersed and therefore is not so easy to apprehend.

4.5 Private clinics marketing techniques

Clinics employ marketing agents who tour villages to maintain good contacts with village doctors, pharmacists and other healers likely to refer patients to them. They offer pads and pen for village doctors to write their referral note and they show them respect and consideration. Marketing approach can also be quite aggressive. In another part of the country, one CARE staff who used to conduct dai training mentioned clinic agents brazen enough to slip into the group of dais during training sessions. These dais were then visited at their homes and convinced to refer patients to a particular clinic. Dais being poor women, the

commission offered to them was quite attractive. We mentioned that, in Narsingdi, dais have not been seen acting as dalals for clinics. However, they sometime work under a village doctor who refer patients to clinics against commission. Village doctors have been known to set up networks with a dai and some trusted rickshaw puller or other type of driver that will carry out the village doctor's instructions. This is important not to loose the commission. For example, should a driver decide to take the patient to a clinic of his own choice, he, not the village doctor, would get the commission. Village doctors often accompany the patient or pay for their transport to a specific clinic beforehand. Such actions are much appreciated by the family in distress, they are interpreted as caring gestures. They may also serve the purpose of securing or augmenting the commission received by the village doctor from the clinic.

The village doctor or the FWV who refers a patient to a private clinic cannot impose their price but they can switch to a clinic offering more. Clinics are is sharp competition and must attact clients. They behave well with their partners. One village doctor mentioned that, while he was given low consideration in government hospitals, he was shown much importance in private clinics. That respect pleased him as much as the commission.

4.6 Private clinics' erratic price policy

In private clinics, poor families are said to be given a special price, generally after some patron (a union parishad member, or the village doctor) has interceded in their favour. The system requires patrons and allows private clinics to practice charity, or so it seems. Actually, prices seem to vary indefinitely. The pricing system is both confusing and opaque. But on the whole, private clinics practice high prices and this was well shown in Table 9 above. The bill charged for caesarean sections can be much inflated and one understands here the high incentive to perform this type of operation which is highly profitable to both, private clinics and their brokers. Tests are also carried out at exorbitant prices judging from the large commissions offered.

4.7 Inventive marketing techniques

One of the field workers interviewed the principal of a madrassah and learned that the latter also was enrolled in the recruitment of patients for a particular clinic. In return, the clinic offered a special prize at the madrassah annual competition and provided medical check ups free of charge for all students once a year.

Payment may take the form of a reward or a rebate on the bill presented for one's family members. Special favour or consideration are used to tie up people into faithful clients or suppliers of clients

4.8 The perception of village people:

Interestingly, the opinion of villagers, community leaders and others on these practices is no so negative. Here is the opinion of poor village man.

> *Those who take patients to the hospital are people from our community: pharmacy doctor, rickshaw pullers, van pullers, tempu drivers. They are beneficial to us. We don't know where to get good care and treatment. They have the information. We are village people. If we go alone, hospitals don't give us attention but if we are recommended by someone we get good service*

Another man added:

> *In time of crisis, they help us. Their aim is not to do any harm. If something unfortunate occurs, it is our bad luck. They don't ask us for money. They sometime pay their own money and give their time to bring a patient to hospital. At such time, if we did not get their help, what would we do?*
>
> *If they get something from a clinic, it is not our problem. Of course, if the clinic inflates the bill we must pay, then it is not good for us.*

Only one Union Parishad Member rose the question that profit motivations could lead to detrimental practices.

> *Sometimes, private clinics perform caesarean unnecessarily or prescribe medicine sold at inflated prices. For poor people, that is really a problem.…*
> *Not all village doctor see this. Some think of their profit only. We call such doctor dalal. Others who keep in mind people's condition, we see them as benevolent service providers.*

4.9 The function of dalal or broker

It can be said that brokers emerge where the public does not know how to access goods or services that are badly wanted. Dalals facilitate access. They bridge a gap, for a fee. The service badly needed which one does not know how to access applies to obstetric emergencies. Where does one go in a crisis situation?

The words of the first village man quoted above express this helplessness, the search for reliable people one can trust and who are knowledgeable. The man has the sentiment that a villager will not be given importance at the hospital unless he/she is referred. Sociologically speaking, this is a telling statement. The man's words show a pathetic distance separating the family needing service and the service providers.

Is this physical distance (bad roads and communication), social barriers (class hierarchy), cultural alienation or distance stemming from poverty that prevents one from knocking at a door of service providers directly? Village doctors guide and reassure the family in crisis. The cost will be manageable, they say. They have influence and will intercede on behalf of their patients/clients and demand special consideration. The health provider here may well play a double game, say one thing, do another. After all, the size of his/her commission depends on the amount of the bill. The opacity, the double game are all common techniques of dalals.

Brokers carve their niche in the gap separating those needing services from the service providers. In another domain we studied, migration , we found that dalals tend to be self perpetuating. Once established, it is in their interest that the gap justifying their role be maintained. They must show how essential they are. Dalals may fudge up information that does not suit their purpose. They thrive where government services are erratic, rules obscure, fees arbitrary and delays intolerable. Eliminating the role of dalals is a challenge. It requires political will. Cleaning up operations can be successful but dalals will soon reappear if gaps remain and services continue not to reach out to those who need them.

Informants mentionedthe social proximity of those who take patients to hospitals: They "*are people from our community: pharmacy doctor, rickshaw pullers, van pullers, tempu drivers. They are beneficial to us*." Village doctors themselves underline the social proximity and empathy they share with their patients. This may well be so but there is an ulterior motive. In fact, the proximity that would lead a village doctor to waive his commission applies to very few people.

We can see that two facets of health providers work stand in tension. The contradictions cannot be openly reconciled, that is why screens and cover ups are required. Again, in the open discussions held on 4th and 18th of March, CARE and JICA staff, some seemed highly critical of the broker side of health providers and felt that the qualification dalal applied to most of them, including doctors at Upazila Health Complex who entrusted to others the task of collecting illegal fees or direct patients to their private chambers. Others showed some appreciation for the services offered through this system. For those who could pay the price, services could be got.

We have touched upon aspects of the health system which are not sufficiently studied with a cold mind. What is clear is that the system has overt and covert layers and remaining at the service gives only a superficial understanding inadequate to solve problems of quality and access of health services.

4. Conclusion and Recommendations

What can we concluded and what line of action can we recommend following this brief overview of Maternal and Neonatal Health/ Reproductive Health in two upazilas of Narshingdi.

POINT ONE:

One can say that the success of the private sector in the eyes of the public largely reflects the failures and the inadequacies of the government health system. One can make a list of critical issues in Emergency Obstetrics where private clinics fare better that government facilities at upazila and district levels. These are:

1. Rapid Action. Immediate treatment of the patient even though the family at this stage does not have money at hand.

2. Time given (a few days) to collect money for payment.

3. Staff more considerate towards the patient and her family. Cleaner. Greater comfort. Service from staff not conditional on backshish.

4. One stop service. The family need not run around for medicines, pathology tests and other material.

5. Better linkages with grass root health providers (village doctors, pharmacists) who can introduce and follow up their patient.

The problem with private clinics is the profit motivations which lead to inflated bills debilitating to poor families as well as unnecessary interventions and tests. Villagers are particularly concerned about costs. No one looks at the long term effects of this indebtedness on poor families. Another problem identified is the aggressive publicity methods sometimes used with agents and dalals that detract patients from government facilities through unfair means.

Recommendations:

Services provided by private clinics should be submitted to stricter price and quality control. The system ought to be made more transparent. The policy of erratic prices is confusing. This is a task which the present government may wish Diagnosis centres practice unfair prices. Another area of concern are the battery of tests carried out at ante natal clinics which have begun to attract women. In one case, a poor woman who had not bothered to attend ante natal clinic went to get a confirmation that she was expecting a son, a news she was anxiously waiting for after giving birth to three daughters. The abortion of baby girls is a major problem in parts of India and vigilance should be exerted here.

POING TWO:

The situational analysis showed once more the powerlessness of mothers to affect the course of events. We have seen young wives expecting their first child who are not listened to and not given importance. They dare not speak up for their position in their in-laws home does not allow a forceful voice. We have seen a majority of women without income who are totally dependant on husbands , mothers-in-law and others both, for taking a decision regarding referral and for incurring costs. Unless mothers are empowered, how can they take care of their needs?

Recommendation:

NGO programs designed to empower women (savings group, awareness programs etc) should pay attention to pregnant women, talk about needs in pregnancy, at the time of delivery, and during the post partum period. There are two components here: women giving importance to their own needs and having access to money to back their decisions.

POINT THREE

Interviews with husbands and other senior males of the household showed that most of them regard childbirth as a normal event that does not require special thought. They are totally unprepared to deal with possible complications. When it happens, they are taken by surprise. Where to go, where to find the money? Husbands do not know how to recognize signs of danger. Yet, they are the ones making decisions and controlling the purse. The lack of interest of husbands in their wives' pregnancy (they are interested in the outcome) and the lack of preparation when complications occur causes harmful delays.

Recommendation:

Thought should be given on how to reach husbands and other senior males in charge of decision making regarding the needs of pregnant wives, the signs of danger and the possible course of action in emergency. If husbands were better informed, they may not fall so easily in the trap of dalals. We have seen the Head of a madrassah being enlisted by a private clinic for the recruitment of delivery cases. This clinic certainly understood the importance of reaching out to men to attract pregnant women. What can the government sector do?

POINT FOUR

The situational analysis underlined the important role played by TBAs or dais. Dais are effectively the first birth attendants. They are key actors in reading danger signs and in suggesting referral. Untrained dai often delay and try delivering the mother taking much risks. The important role of dais cannot be ignored. At the same time, how much can be expected of them. Let us not forget that they are the least paid of the health attendants (see chart on Costs).
If dais are not 'given importance' by the government health system, they may be enlisted by the private sector. Interestingly, the 3 dais who referred their patient to the FWC or UHC were trained dais. The patients were referred elsewhere as neither the FWC nor the UHC were equipped to deal with the complication. But the dais faithfully followed the training they had received.

Dai training should be revived without unrealistic expectations and with the recognition that the private sector has developed and the official referral chain established by the government may not be effective. Dais should be 'given importance' and there is much to be learned from the private sector in this respect, both examples to imitate and others to avoid.

POINT FIVE

The numerous NGO programs operating in the two upazilas could not be reviewed adequately. A small observation: in Sreepur union of Raipura, when a Safe Motherhood program is being implemented that comprise the sale of delivery kits for 15 taka and only 3 mothers out of 21 mothers purchase the kit, questions may be raised. How to evaluate the multiplicity of NGO programs? Impressions on the whole are favourable.

Recommendation

Perhaps more attention should be paid to pregnant women who do not attend ante natal clinics and do not prepare for the birth. One baby died of tetanus with a mother too busy to go for TT injection. Much progress has been made but there is still work to do.

POINT SIX:

Half of the case histories were collected in remote areas. The problem there is not only the difficulty of communication for referral but the sparse health personnel and NGO workers. Such areas appear will covered on paper but in practice, they are not. On the other hand, remote areas manifest greater community solidarity at times of crisis.

Recommendation:

CARE could concentrate its efforts in remote areas for the organization of community response to Obstetric Emergencies. But let us not forget, village doctors are central figures here and they want to be recognized and 'given importance'.

POINT SEVEN:

The government health sector will continue to work along the private sector. The former has fed the latter in many ways by investing hugely in the training and the formation of health personnel. It is well known that health specialists steal time away from their government posts or snatch patients for their private practice.

Recommendation

Clearer definitions of posts, duty, and rules are very much needed. Second, their enforcement should be imposed. The public should be able to complain about gross misconduct and breech of professional ethics.

POINT EIGHT:

The government health sector suffers from bad publicity. The private sector does not miss a chance to point out its deficiencies in order to boost its own image. This is sometimes done by unfair means. We see that even government employees contribute to damage the image of government sectors, sometime to recruit their own private clientele. These practices are unethical. They are also unfair to patients who cannot afford private clinics and deserve better. FWA, FWV, UHC Nurses give different advice regarding referral depending on their perception of the patient's condition. These health specialists elaborate different standards and, often, different ethics for different classes of society. How far can this go? Is it not dangerous to settle for low standard when the patient is poor?

Recommendation:

Government services may contribute to equality or they may exacerbate inequality. Let us ensure that the forces pulling towards inequality do not get stronger. Universal schooling, historically, has been a major factor of equality. The same is true of universal basic health coverage. The reputation of UHC and Sadar Hospital are not very good presently. The situation should not be allowed to deteriorate further. Three women delivered at the UHC in this study. In spite of the bad reputation of the establishment, the women received assistance and the cost was low.

Appendix One

Charting out referral

Stage One:

Total number of Cases: 127	The course of events
• Called TBA --------------------- 115	
• Planned hospital delivery ----- 4 Family took decision to refer seeing danger signs --------------------- 3	These 7 patients were taken to private clinics
• Called Nurse, FWV, SSB ------ 5	2 cases were delivered at home 1 case was referred by SSB to UHC and then UHC referred to a private clinic 2 cases were referred by nurse/FWV to private clinic

<u>Stage two</u>:

	The course of events
The 115 Cases handl e by TBA	• Delivery at home by traditional techniques.: 52 cases • 1 case referred to FWC after delivery
	• Called village doctor:……………………… 39 cases • Out of these, 26 mothers gave birth at home and 13 cases were referred to other places (see the annex box 1).
	• TBA gave up and families made their own decision for referral (see the annex box 2)…………………14 cases
	• Family called nurse, FWV, FWA…………….. 5 cases • (see the annex box 3)
	• TBA refer to FWC – 2 cases, then again referred to private clinic UHC – 2 cases MCWC – 1 case, again refer to DMCH

<u>Annex box 2:</u>	**The course of events**
TBA (*Dai*) withdraws from 14 cases	Families took the patient to a private clinic in 9 cases. Among them, 2 cases were referred to DMCH.
	Families took the patient to UHC in 3 cases. UHC doctor sent 2 patients to private clinic
	Called a nurse at home in 1 case.
	Family takes patient to FWC. FWV refers the case to a private clinic, and then the private clinic referred to DMCH. But the family, having no money, retuned home where the patient was delivered by a TBA.

Annex box 3:	The course of events
TBA refers 5 cases	To a Nurse in 2 cases. But 1 case was referred to private clinic
	To a FWV in 2 cases. The FWV referred both the cases to private clinics. Later, the clinic doctor referred 1 case to the DMCH.
	To a FWA in 1 case. FWA referred the patient to a private clinic and the patient was finally referred to DMCH.

Annex box 1:	The course of events
The 13 cases referred by village doctor	1 case referred to UHC nurse and she again referred to a private clinic
	1 case referred to FWV. FWV referred to UHC then again referred to a private clinic and lastly the patient was referred to DMCH.
	1 case referred to UHC then the UHC doctor referred the patient to a private clinic.
	1 case referred to DH. DH demanded money so the family refused the service and returned to a private clinic.
	Village doctor referred 9 cases to private clinic. Among them 8 patients received service there and 1 patient refused their service and returned to TBA who took her to a nurse residence.

Appendix Two

SITUATIONAL ANALYSIS - SMMP
Prepared for Care Bangladesh

by
Thérèse Blanchet
And Anisa Zaman,
Dhaka, March 2007

Questions addressed to mothers who gave birth with complications in the last 12 months

IDENTIFICATION

Mother:

1. Name……………..Village…………… Union……………Upazila………..
2. Age……………..
3. Education…………….
4. Occupation…………………..
5. No of children conceived……… Alive………..Died
   (Explain)……………………………………………………………………

6. Do you live in a joined household with in-laws?..........
7. Do you have a co-wife?...

Your husband:

1. Name………….
2. Age………………..:
3. Education……………..
4. Occupation……………….
5. Normal place of work (migration status)……………
6. No of times married………………………………….

LAST PREGNANCY

1. Any problem: physical
   Mental
   Economic

Source of support (explain):

2. Food:
   Did you eat more or less?
   Food strictly avoided:
   Food preferably eaten

3. Because of pregnancy, any change in
   - movement
   - work load
   - sexual activity

4. Did you have ante-natal check ups?
   If yes, where?
   How many times?
   Service, message received (Explain)

   Your assessment of health providers seen:
   - friendly
   - helpful
   - supportive
   - respectful
   - knowledgeable

   If no, why did you not attend ante natal clinic?
   - No need
   - No time
   - Too far
   - Other reason

5. Did you prepare for the birth with:
   - Savings set aside
   - Clean cloth
   - Plastic sheet
   - New blade and thread
   - Any preparation made for the baby?

If no preparation were made, why?

- No need
- No money
- Bad omen (omongol hobe)

DELIVERY

6. How did you read the signs that time had come?

7. What did you do?
   Who did you call?

8. Who was there to assist?

9. Duration of labour?

10. Where did you give birth? (describe)

11. Who delivered the baby?
    Medicine used?
    Techniques (describe)

12. Who cut the umbilical cord? How?

13. How long did it take before placenta came out?

14. Bleeding
    How long. (Too long?)
    How much (Too much?)

15. Fever
    How much?

16. Outcome of delivery: In what state was the baby?

    Was special care required?

Who provided it?

17. In cases of referral:
    - Who took the decision? At what stage? How quickly?

    - Places of referral
    -

18. Mode of transport. Cost.

19. Services received at referral points. Describe them and give your opinion on health providers (FWV, ayah, nurse, doctor and other important actors)

20. Cost involved at each step (give details)

- Sum total……

Who provided the money?............

POST PARTUM CARE

21. Care received in the 42 days following the birth. Describe:
    - For yourself:

    - For the baby:

    Your opinion about post partum care from different sources.
    - how useful was it?

22. Any lasting problem following the birth:

23. Describe your present state of health:

Describe the baby's health:

FOR THE INVESTIGATOR: Give your view on the informant's behaviour in requesting health services from specific health providers or in abstaining from doing so.

Appendix Three

Situation Analysis - Safe Motherhood Promotion Project, Narshingdi Project Office, CARE, Bangladesh.

Attendants at the planning meeting held in JICA Project office, Narshingdi on 4th of March 2007
• Thérèse Blanchet, Social Anthropologist, Drishti Research Centre, Dhaka • Dr. Jahangir Hossain, Health Advisor, CARE, Bangladesh • Anisa Zaman, Research Coordinator, Drishti Research Centre, Dhaka • Dr. Jubair Hossain, Project Manger, SMPP, JICA • Dr. Ahsanul Islam, SMPP Project Manger, CARE, Narshingdi • SMPP Project staff, JICA Norshingdi • CARE, SMPP Project staff, Narshingdi

CARE staff who collected data and facilitated the study at various levels
• S. R. Mazumdar, PO, SMPP Project, CARE, Narshingdi • Md. Sharif, PO, SMPP Project, CARE, Narshingdi • Taufique Ahmed, TO, (ME & D), SMPP Project, CARE, Narshingdi • Ms. Laila Begum – FF, SMPP Project, CARE, Narshingdi • Ms. Nazma Begum – FF, SMPP Project, CARE, Narshingdi • Shukla Tagor, - FF, SMPP Project, CARE, Narshingdi • Ms. Rina Rani Nag, - FF, SMPP Project, CARE, Narshingdi • Swapna Rani Das - FF, SMPP Project, CARE, Narshingdi • Dilara Talukdar - FF, SMPP Project, CARE, Narshingdi • Ananto Kumar Pal - FF, SMPP Project, CARE, Narshingdi • Shah Alam - FF, SMPP Project, CARE, Narshingdi

Appendix Four

Abbreviations

ANC	Ante-natal Care
CNC	Community Nutrition Centre
CNP	Community Nutrition Promoter
DH	District Hospital
DMCH	Dhaka Medical College Hospital
EOC	Emergency Obstetric Care
EPI	Extended Program on Immunization
FP	Family Planning
FWA	Family Welfare Assistant
FWV	Family Welfare Visitor
FWC	Family Welfare Centre
HA	Health Assistant
JICA	Japan International Cooperation Agency
MCWC	Maternal and Child Welfare Centre
MOHFW	Ministry of Health and Family Welfare
MO-MCH	Medical Officer (Maternal and Child Health)
SACMO	Sub-Assistant Community Medical Officer
SBA	Skilled Birth Attendants
SS	Shasthya Shebika
TBA	Traditional Birth Attendants
TT	Tetanus Toxoid
UHC	Upazila Health Complex
UHFWC	Union Health and Family Welfare Centre