NEWSLETTER
Issue 6 June 2011

Shahjadpur Integrated MNH Project

Shahjadpur Integrated Maternal and Neonatal Health (MNH) project is in its final year of implementation. Prior to entering into this final stage of implementation, a midline evaluation was conducted during October to November 2010. This issue focuses mainly on the findings of the midline evaluation. The objective of this evaluation is to observe the progress of the project interventions in Shahjadpur sub-district and was undertaken with the assistance of the AusAID Mobile Phone project. The decision to conduct the midline evaluation was taken because of the inconsistency in the service statistics collected from the public institutions by the project personals on monthly basis. On analysis, the services statistics data appeared to be overstated and full of duplications. Although some trend in delivery by different category of CSBAs as well as place of delivery was shown in the previous issue, the need for a midline evaluation was necessary to get a better picture of the interventions in the sub-district. The result of the midline evaluation showed increase in the use of skilled attendant at birth, ANC uptake and in referral compared to the baseline survey.

However the implementation process was not free of challenges. The collaborating NGO Palli Shisu Foundation (PSF) whose health workers from the community were trained as CSBAs were less supportive in the implementation phase and the volunteerism attitude was less among the community support groups (CSGs). The members of the different tiers of the CSGs wanted some sort of financial benefits, may be in the form of honorium and some were also asking for jobs. During the follow-up visits to the CSGs, members were always full of questions regarding the need of money to bring about changes in the CSGs activities and sustainability. The project was also aware of the demands but was unable to pay attention to the different request. Even after that there are CSGs and members who are very active and dedicated to the noble cause.

Findings from midline evaluation (October-November 2010):

The survey was undertaken among the mothers of the Shahjadpur with financial and supervision support from the Mobile Phone project to assess the progress of the interventions as well as to plan new strategies. A structured questionnaire was developed and included important maternal and neonatal health indicators of the baseline survey. After pre-testing in September 2010, the data collection was conducted during October to November 2010 under supervision of the MNH and Mobile Phone study teams. All mothers who gave birth 3 months prior to the interview date are included in the survey. All the 13 unions and the lone municipality of the sub-district were included in the survey.

Sixty young female data collectors having a minimum of SSC degree were locally selected from the respective unions. One data collector was assigned to cover ~10,000 people (2000 households). Each data collector had to cover ~40 households per day and completed the data collection within 50 working days assigned to them to cover the ~2000 households, thereby covering all the unions and the lone municipality of the upazila of ~ 600,000 populations.

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Training sessions for the midline evaluation data collectors at Shahajdpur MNH project field office

Two-day long training was conducted for each batch consisting of 16 data collectors in the MNH project field office at Shahjadpur assisted by Dhaka and Shahjadpur project personnel of the MNH and Mobile Phone study teams. Specific geographical area was allotted to the data collectors at the end of the training. A follow-up round will be conducted in the month of April 2011 and will be continued till May 2011.

Findings of the midline evaluation (October-November 2010) as compared to the baseline (January-February 2009) are presented below:

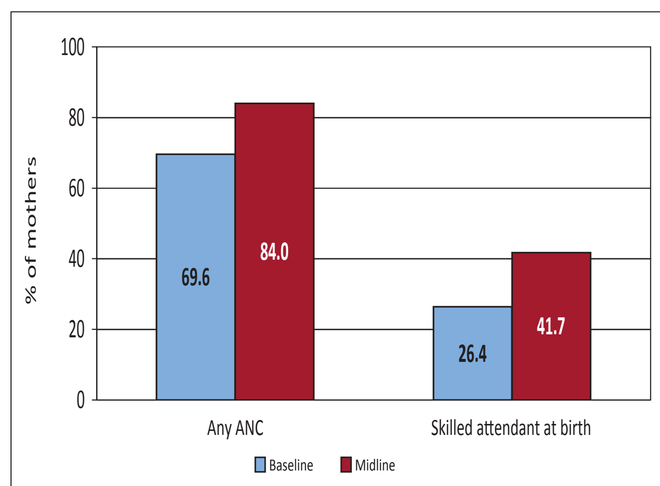

Fig1: Any ANC and skilled attendant at birth during baseline and midline

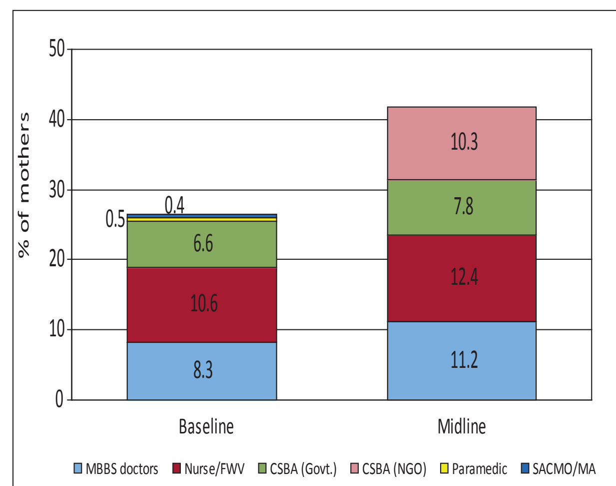

Fig 2: Different category of SBAs at basline and midline; NGO & governemnt CSBAs shown separtely (Gov 30 & NGO 32)

The results of the midline evaluation show an overall progress in the maternal and neonatal health status in Shahjadpur sub-district. The rate of any ANC increased from 69.6% to 84% and the skilled attendant at birth improved from 26.4% to 41.7% (Fig 1). After the placement of required number of CSBAs in the sub-district as a part of the project interevntion, there was substatntial increase (6.6% to 18.1%) in the number of delivery conducted by the CSBAs. A small increase in delivery by registered doctors (8.3% to 11.2%) is also seen. (Fig 2). At midline, 10.3% of the deliveries were conducted by NGO CSBAs and 7.8% by the Government CSBAs . It may be mentioned that there was no NGO CSBAs placed in the sub-district at the baseline.

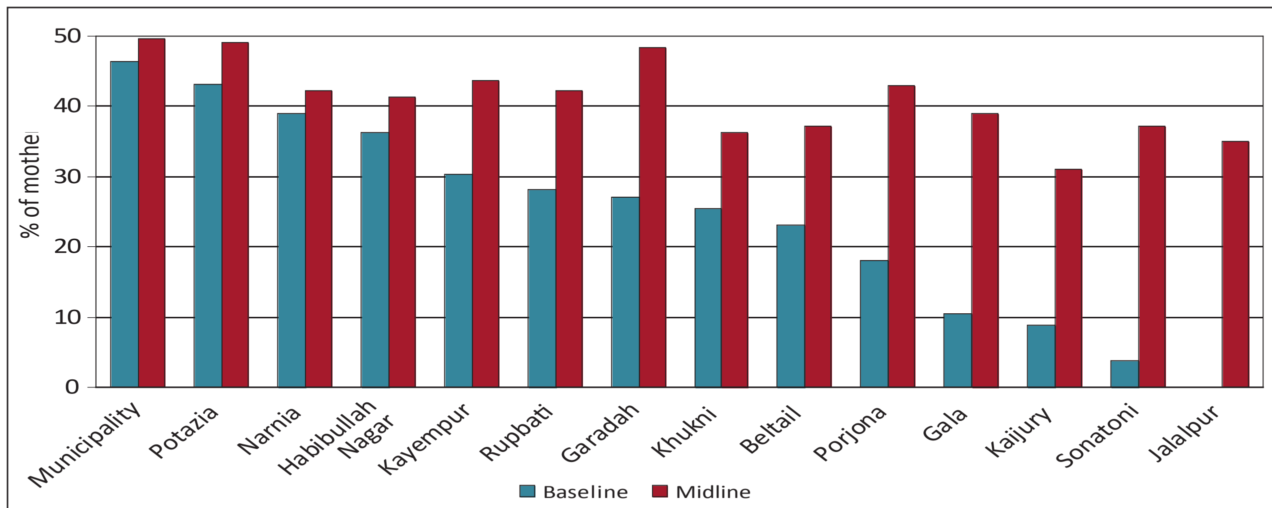

Fig 3 : Union wise skilled attendant at birth during baseline and midline

In figure 3, the improvements are shown by unions. There were radical changes in Sonatoni, Kaijury, Gala and Porjona unions all very low performing unions at baseline. The changes were less notable in the high performing unions at baseline like the Municipality, Potazia and Habibullah Nagar. In the baseline, no data was collected from Jalalpur union. The indicators might have been better if the DSF facilities were not temporarily stopped for the NGO CSBAs by the respective authorities.

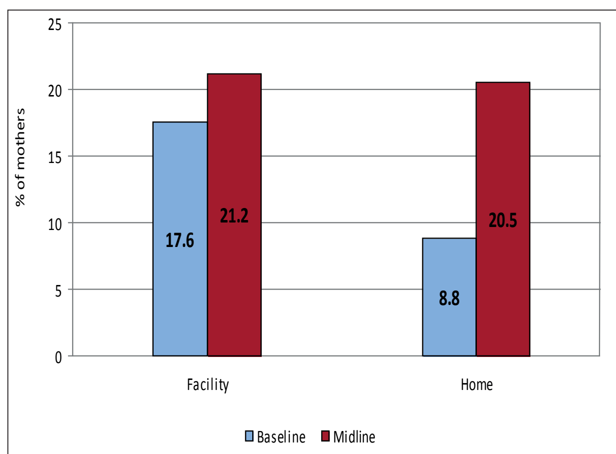

Fig 4 : Facility versus home skilled delivery at baseline and midline Shahjadpur MNH project

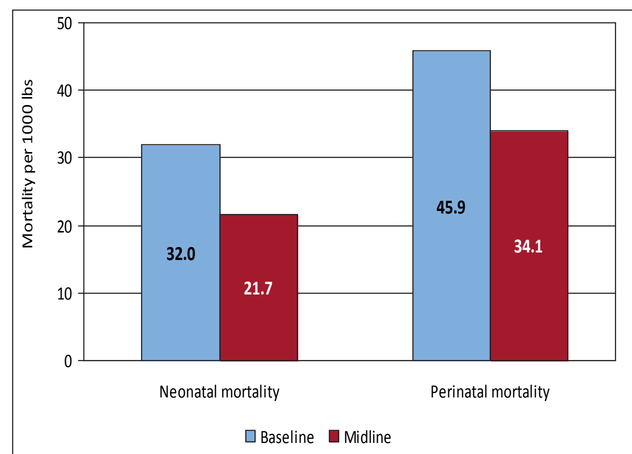

Fig 5 : Neonatal and perinatal mortality at baseline and midline Shahjadpur MNH Project

There is increase in the skilled attendant at home delivery (Fig 4) from 8.8% to 20.5% as compared to the baseline survey. This was due to placement of NGO CSBAs as per requirements in the community which could have been much better with proper supervision and monitoring of the CSBAs activities by the government and local NGO PSF. The facility delivery also increased from 17.6% to 21.2%. There was noticeable decrease in the neonatal and perinatal mortality rates (Fig 5).

It is also seen that mothers who attended the CSGs courtyard-sessions are more likely to avail skilled attendance at delivery (Fig 6) then those who did not. The finding is significant ($p< 0.01$). The referral of mothers and neonates for the management of complications has also increased from 18.1% to 40.8% and 6.1% to 34.6% respectively as seen in the midline data compared to the baseline (Fig 7).

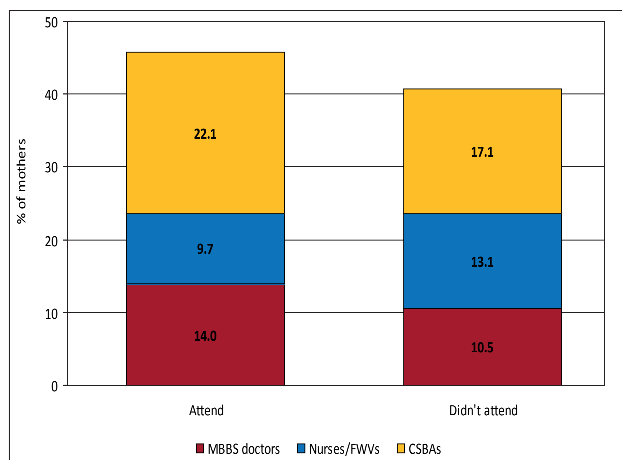

Fig 6 : Mothers seeking skilled attendant at delivery who attended CSGs courtyard-sessions

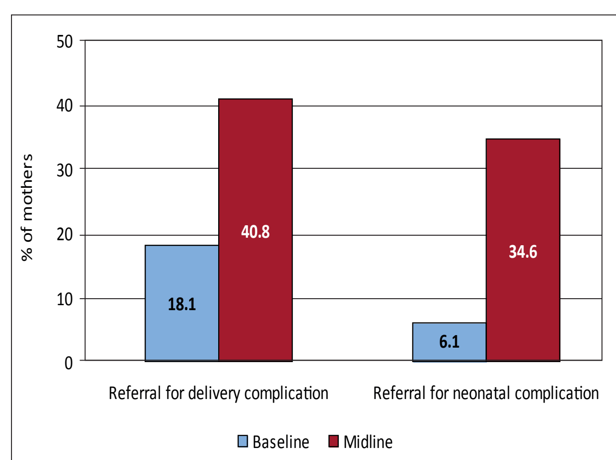

Fig 7 : Referral for delivery and neonatal complications at baseline and midline survey

Community Skilled Birth Attendants (CSBAs) supervision by the project personal at Shahjadpur:

CSBAs are one of the major elements of the MNH project at Shahjadpur sub-district for providing the package of integrated evidence-based interventions. At the commencement, there was only 28 government CSBAs in Shahjadpur sub-district having a population of ~ 600,000 not enough to cover the total sub-district. To fill-up the gap, thirty two new local health workers of the NGO PSF were trained as CSBAs as per the government criteria at Tangail and Comilla Family Welfare Visitors and Training Institute (FWVTI). The total number of CSBAs became sixty which fulfilled the needed, one CSBA for ~ 10000 people to cover the entire sub-district.

CSBAs are providing pregnancy-related services including skilled home delivery. A tool was developed for monitoring NGO CSBAs performance especially regarding active involvement in home delivery. This supervision tool was introduced in December 2010. Names and address of the mothers delivered by the CSBAs are collected on monthly basis. The delivered mothers are visited randomly with a checklist by the project field staffs to verify any inconsistency in the information provided by the CSBAs.

Dhaka and Shahjadpur-based ICDDR, B personal at NGO CSBAs home (Left) and at Rural Dispensary (RD) as part of the supervision and monitoring process

The checklist consists of date of delivery, person conducting the delivery, presence of complication in mother and newborn during delivery or post delivery, referral for complication, use of safe delivery-kit (SDK), satisfaction of services by the mother, source of information about CSBAs etc.

Table 1: Consistency in CSBA's information and performance review-December 2010 to February 2011

Month	# of NGO CSBAs	# of delivery by CSBAs	# of delivered mothers information	Random verification by field team	Inconsistent information	% of inconsistent information	Action Taken
Dec'10	29	191	75	30	7	23%	▪ Motivate CSBAs for giving more attention for conducting delivery at home by themselves , Discussion with PSF local office and Headquarters ▪ Motivate to provide consistent information ▪ Increase communication with CSGs ▪ Build rapport with religious and social leaders
Jan'11	29	181	73	36	3	8%	
Feb'11	29	119	58	33	1	3%	

Community skilled birth attendants (CSBAs) attending courtyard-session discussing the mobile communication pathway and the danger signs initiating the referral mechanism-Mobile Project

Case studies from Shahjadpur MNH project:

Table 2: Steps in addressing maternal complications

	TIME			
Case 01	2.00 am	5.00 am	1.00 pm	4.10 pm
Hand prolapse	Onset of labor pain, members were calling nearby TBA but mother called the CSBA using toll–free mobile number	CSBA came and found the prolapse, then referred to hospital	Family members were hesitant to take the mother to the hospital, were looking for excuses but due to CSG member's interference they agreed to take the mother to the hospital. Reached the sub-district hospital (UHC) but was refused admission due to unknown reasons.	Reached district hospital support of CSG and CSBA. At midnight C/S section done. CSBA managed blood donor at the hospital. Positive outcome for both.

	TIME				
Case 02	4.00 pm	5.00 pm	5.00 -10.00 pm	11.00 pm	
Breach presentation	Onset of labor pain, neighbor called TBA but husband called CSBA by using toll-free mobile connection	CSBA came and found breach presentation, then referred the mother to the upazilla health complex.	Reached at UHC which required five long hours and strenuous journey.	Caesarian section (C/S) conducted at the upazilla health complex. Mother and baby are fine	
Case 03	2.00 am	3.00 -4.00 am	5.30 am	6.00 am	9.00 am
Cervix opening small/slow cervical dilation	Licking membrane	Mobile phone call to CSBA and CSG's president for advise, CSG president requested the CSBA to come urgently	CSBA came and found that uterus not dilated properly	Referred to UHC by the CSBA	Reached the UHC and C/S conducted. Mother and baby are fine.
Case 04	8.00 am	4.00-5.00 pm	6.00 pm	6.30 -7.00 pm	8.00 pm
Eclampsia	Onset of labor pain, the family members called the TBA	When delivery did not take place then the CSBA was called using toll-free mobile number	CSBA reached, found high BP and edema, conducted normal delivery . Talked with SLG over phone and the expert advised the CSBA to give a loading dose of $MgSO_4$ to prevent convulsion and then to refer.	Bleeding occurred, referred to UHC and CSBA and a CSG member accompanied her.	On the way convulsive fit occurred, CSBA then gave the loading dose of $MgSO_4$, mother managed at the hospital.

Emerging Issues:

Delay:

- Delay in deciding to seek health facility care, reluctance within family to send the woman to a health care facility due to distance and probably poor transportation.
- Delay is caused by a lack of access to a referral health facility due to poor infrastructure or lack of appropriate means of transport, delay happened due to inability of service at a CEmOC
- Many of the CSBAs were not able to access the care immediately because of late night hours
- Delay stems from a failure to recognize danger signs. This is usually a consequence of a non skilled person attending the birth

Outcomes:

- Family members first preferred TBA, however mother and husband called CSBA
- CSBA managed complications within their capacity and referred others immediately for management
- CSG had a vital role in two cases
- In all cases CSBAs were called
- Control of eclamptic fits by $MgSO_4$ on the way to referral facility
- In all cases mothers and babies lives were saved

Community Support Groups(CSGs)

Eighty CSGs have been formed till writing of these newsletter. The positive role of the CSGs have been described above as found in the midline evaluation. It was found that people in areas with CSGs availed more skilled services during pregnacy than areas without CSGs. The role of the CSGs could have been further strentghed if some kind of incentives could have been provided as volanteerism is no more a popular activity and as the livelihood of the people as a whole have become hard and challenging.

Advocacy Meeting for the formation of CSGs and Volanteers Training sessions

Visit by Research Team from Columbia University, Canada to Shahajadpur and Sirajganj:

A research team of Columbia University, Canada comprising Professor Dr. Peter Von Dadelszem, Diaane Sawchuck and Dr. Tabassum Firoz visited Sirajganj district and Shahjadpur sub-district on 22 March 2011. They observed the different activities of ICDDR,B's "Shahjadpur Integrated Maternal and Neonatal Health (MNH) Intervention Project" as well as explored possibilities for conducting research in the field of pre-eclampsia and eclampsia at Sirajganj. The team was accompanied by Dr. Laura Reichenbach, Head, Reproductive Health Unit and Dr. M A Quaiyum, Associate Scientist, Reproductive Health Unit, ICDDR.B. The visit started with a meeting between Dr. Md Razzakul Islam, Civil Surgeon and Dr. Sakina Begum, Consultant (Gynae & Obstetrics) at the Civil Surgeon office, Sirajganj. Then the visitors went to the district hospital, where they visited the Gynae & Obstetric ward and talked with medical officers and nurses. They also visited 31-Bedded Upazilla Health Complex (UHC), at Shahjadpur. They talked with Dr. Nurul Islam, Upazilla Health and Family Planning Officer (UH&FPO), Shahjadpur and Mst. Amena, Senior Stuff Nurse (SSN) and discussed different aspects of eclampsia prevalence, management in the community.

The Columbia University research team sharing with NGO CSBA Nazmun Nahar's experience at Shahjadpur sub-district

Columbia University research team with the Shahajdpur MNH team having discussion with Civil Surgeon of Sirajganj district on matters related to maternal and neonatal health

The team also visited a health-education session conducted by CSG volunteers at Madla in Shahjadpur sub-district and at Khukni union met an NGO CSBA, Nazmun Nahar who managed an eclampsia case at the field and referred to the health facility. She shared her extraordinary experience with the visiting team.

Next Issue:

The next issue of the Shahjadpur Integrated MNH project newsletter will include the results of the second phase of the midline evaluation by sub-district and unions. These midline results hope to provide a clear scenario of the targeted indicators to be achieved through this integrated project at this mid-point of the intervention. It will also present the recommendations based on the midline evaluation. It will also include case studies of different unions on maternal complication management.

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