

Shahjadpur Integrated MNH Project

Bangladesh is committed to achieving Millennium Development Goal (MDG) 4 and 5 by 2015. However, with a current maternal mortality rate (MMR) of 320 per 100,000 livebirths and 18% skilled attendance at delivery, the country is less likely to attain the MDG 5 targets. Although child mortality has declined significantly, neonatal mortality is still high at 37 per 1000 livebirths. The major causes of maternal mortality (postpartum haemorrhage, eclampsia, infection) and neonatal mortality (birth asphyxia, infection) are preventable, and evidence-based low-cost interventions are available.

To achieve the MDG targets on time, ICDDR,B, in collaboration with the Ministry of Health and Family Welfare (MoHFW) and other stakeholders, including NGOs and the private sector, has initiated a research project that aims at operationalizing the available evidence-based low-cost interventions in an integrated manner. The project will be carried out in Shahjadpur upazilla (covering ~600,000 population) of Sirajgonj district, 110 km northwest of Dhaka.



Location of Shahjadpur subdistrict within Sirajgonj district (in orange), Bangladesh

A package of integrated evidence-based maternal and neonatal health (MNH) interventions will be provided in Shahjadpur to pregnant women and their newborn, including:

- Counselling for pregnant women and their families on birth and newborn care preparedness
- Updated safe delivery-kit distribution
- Reinforced management of postpartum haemorrhage, the first major cause of maternal death
- Reinforced management of eclampsia, the second major cause of maternal mortality
- Home-based essential newborn care

Effectiveness of this integrated MNH intervention package will be tested in:

- Increasing the utilization of skilled birthcare (from 18% to 50%);
- Decreasing the rich-poor gap in the use of skilled care (from 6:1 to 2:1);
- Increasing met need for obstetric complications (from 27% to 75%);
- Decreasing neonatal mortality (from 37 to 20 per 1000 livebirths); and
- Improving the quality of maternal and newborn care (perceived and technical).

The study will be evaluated with a pre- and post-design, including qualitative and quantitative research method. The major activities in the 4-year project period (January 2008–December 2011) will include:

- Preparatory and orientation activities—1st year;
- Intervention package delivery—2nd and 3rd year;
- Research-related activities and monitoring and evaluation—1st, 2nd, 3rd and 4th year;
- Scale-up of intervention in all subdistricts of Sirajgonj (covering a population of 2 million)—4th year.

Government, NGOs, private providers and communities will collaborate in the implementation of the project by strengthening of the maternal and newborn health system.



Mothers and their children receiving services at a Shahjadpur satellite clinic



PREPARATORY AND ORIENTATION ACTIVITIES

Field Office Set-up

The field site office of the Reproductive Health Unit (RHU) of ICDDR,B in Chuniakhali Para, Shahjadpur, started its activities from 1 October 2008. The first floor is the site office, and the second floor will function as a guest house for project researchers and visitors. The 7-member field research team [1 Project Manager, 2 Field Research Officers (1 senior), and 4 Field Research Supervisors] and 1 office attendant are posted locally. Dhaka-based researchers liaise with the team members and oversee project activities.



Field Team at Shahjadpur Field Office

Stakeholder Activities at Multiple Levels

Level & Activity	Purpose	Members/Participants	Outcome
National Formation of Technical Interest Group (TIG)	<ul style="list-style-type: none"> ■ Endorsement of the project ■ Finalization of intervention package and TOR of the TIG 	Twenty-three members chaired by Joint Chief (Planning), MoHFW Members: from the MoHFW, researchers, programme managers, development partners, UN agencies, NGOs working in maternal and neonatal health, and representatives from professional bodies	<ul style="list-style-type: none"> ■ Twenty-three member TIG formed and first meeting held on 19 November 2008 ■ Project endorsed; intervention package and TOR of TIG finalized ■ Twice a year meeting of the TIG planned to guide implementation and advocate scale-up
District Formation of District Maternal and Neonatal Health (MNH) Committee	To obtain support, cooperation and guidance for project implementation	Eight members headed by Civil Surgeon of Sirajgonj Members: from Health Services and Family Planning wings (GoB), relevant NGOs representatives from professional bodies	<ul style="list-style-type: none"> ■ Eight member committee formed on 29 January 2008 to provide guidance for smooth implementation ■ Civil surgeon and Deputy Director, Family Planning finalized TOR for the Committee
Upazila Formation of Upazila Maternal and Neonatal Health (MNH) Committee Upazila orientation meeting	To obtain support, cooperation, and guidance for project implementation <ul style="list-style-type: none"> ■ To inform the community of the importance of the study ■ To obtain support for implementation 	Twenty-one members headed by Upazila Nirbahi Officer (UNO) Members: from the Upazila Parishad, Upazila Health and Family Welfare departments, relevant NGOs, representatives from local and professional bodies Eighty participants Chair: Upazilla Nirbahi Officer (UNO) Programme managers, providers, Union Council chairmen, community leaders and local elite	<ul style="list-style-type: none"> ■ Twenty-one member committee formed on 24 November 2008. ■ TOR finalized to provide guidance on implementation ■ Upazilla orientation meeting held on 29 January 2009 ■ Support and cooperation for project implementation was assured
Union 14 union orientation meetings	<ul style="list-style-type: none"> ■ To inform the community of the importance of the study ■ To obtain support for successful delivery 	Chair: Union Council Chairman Elected members of Union Council, health workers, religious leaders, teachers, community leaders, and NGO representatives	<ul style="list-style-type: none"> ■ Union orientation meetings took place from 16 February 2009 to 10 March 2009 ■ Support for the project was assured
Community Formation of Community Support Groups (CSGs)	CSGs will sensitize the community for using skilled care, safe delivery-kit, essential obstetric and newborn care, birth preparedness (funds and transport arrangement), etc.	Collaboration with CARE and local government bodies Representatives of local people, community leaders, health care providers, and women's representatives	Currently, five CSGs are functioning. Forty-two CSGs (in total) to be formed and running by April 2010

Strengthening of services at community and facility levels

Proper implementation of the project is dependent on the strengthening of government and NGO health services already available at Shahjadpur. For this, activities have been targeted at different providers, by supplementing their skills and giving additional training as well as targeting specific schemes and systems to improve efficiency in service-delivery.

a. Community level

An estimated 60 community skilled birth attendants (CSBAs) will be needed for skilled delivery at home in the Shahjadpur upazila, assuming that 85% of these deliveries take place at home and one CSBA is able to attend 10 home-deliveries per month. Twenty-eight CSBAs are available through the government training programme, and the remaining 32 have been recruited from the existing health workers of the NGO (Palli Shishu Foundation). Selection according to requisite criteria (age 20 to 45 years, local resident woman with minimum secondary education, etc.) was done by a government upazila-level selection committee.

A four-day orientation training on the maternal and neonatal health component of the Essential Services Package (ESP) was provided by Master trainers from the emergency obstetric care (EmOC) programme. Practical sessions included conducting normal deliveries and other activities in the Upazila Health Complex. Theory classes covered the Government Maternal and Child health Programme, health and family-planning service-delivery, antenatal, delivery, postnatal care and Expanded Programme on Immunization (EPI). Pre- and post-testing showed higher knowledge levels after training. Following this, a six-month basic CSBA training course will be administered by the Government at selected district hospitals. These CSBAs will then be deployed in the community for home-based skilled delivery and essential newborn care and referral for complications.



Upazilla MNH committee meeting in Shahjadpur, presided by UNO Mr S M Nazimuddin



Participants of the training on the Maternal and Neonatal health component of the Essential Services Package

b. Facility Level

At the facility level, there will be identification of training needs and provision of refresher training courses for healthcare providers (doctors, nurses and the 28 existing CSBAs) in the management of haemorrhage, eclampsia, and EmOC. Assessment and strengthening in the facilities for blood-transfusion services, record-keeping, and waste management will also be carried out.

c. Maternal vouchers (demand-side financing)

The government maternal health voucher scheme (MHVS) is available to all women fulfilling the government criteria in Shahjadpur upazila. The gaps and problems in implementation of MHVS will be identified and shared with concerned authorities. During union level orientation, dissemination and discussion of the different components have been carried out with the participants.

e. Record-keeping and monitoring systems

Systems in place to identify pregnant women, newborn and poor households will be strengthened by assessing the current reporting system by audits, reviews of forms, and formats of field data collection. Implementable modification will be made after consultation with concerned government counterparts to increase efficiency of the current reporting systems.

RESEARCH ACTIVITIES

a. Formative Research-Training and Data collection

The qualitative research aims to gain understanding of the community's existing maternal and newborn care knowledge, attitudes, and practices and to identify gaps in care-seeking to develop recommendations for refinement and implementation of the intervention package. It was initiated in November 2008. A team of one male and two female Field Research Officers (FROs) received extensive training on the study, methods and data collection instruments. Data-collection started in December 2008 and was preceded by a pre-testing and field practice. Twenty-seven in-depth interviews (IDIs) were conducted with women, their husbands, and one other female family member, for both normal and complicated deliveries. Facility-based providers (MBBS doctors and nurses/Family Welfare Visitors) were interviewed for 20 IDIs. Six focus-group discussions (FGDs) were conducted with community healthcare providers (CSBAs, traditional birth attendants, and village doctors). In

addition, 14 key-informant IDIs with community leaders, programme managers, and religious leaders were completed. Preliminary analysis will be completed by March, and the findings will be shared with other team members to help finalize the intervention package.



A field research officer conducting an in-depth interview with a mother who delivered recently



A field research officer interviewing the husband of a mother who delivered recently

b. Baseline Survey-Training and data collection

A three-month (November 2008-January 2009) community baseline survey was conducted in Shahjadpur among 3,480 women who delivered within the last 6 months prior to the survey date. After the 2-year intervention period, an endline survey will be conducted for another group of approximately 3,000 women who recently delivered using the same questionnaire and methodology. The women in the baseline survey were asked about their socioeconomic characteristics, care-seeking patterns for the last pregnancy/delivery, post-partum and newborn care; perceived quality of care; and neonatal outcomes, including causes of deaths.

For this survey, a 9-day (3-12 November 2008) baseline survey training was conducted for 19 data collectors. On completion of training, 16 data collectors were selected, and 3,160 completed questionnaires were collected from 80 randomly-selected (out of 194) segments of Shahjadpur upazila. Data entry has been completed, and data cleaning is going on.

c. Facility Assessment and Home Delivery Observation- Tools and Data collection

Facility audits have been conducted in all the government, NGO and private facilities (those providing both basic and EmOC services) of Shahjadpur to assess the quality of obstetric and newborn services. Fifty purposively-selected home-deliveries attended by CSBAs are being observed to assess the quality of home-based basic obstetric and essential newborn care. CSBA skills, and availability of equipment and supplies for home-delivery are being assessed as well.

The tools for health facility assessment and observation of home delivery by CSBAs were pre-tested and finalized, and data collection started on 4 January and 7 January 2009 respectively. Data collection for the facility audit has been completed, and to date, data from 14 deliveries have been collected.

Next Issue

The next issue of the Shahjadpur Integrated MNH Project Newsletter will include details of the intervention package and the preliminary results of the research activities.

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