Survey on Current Status of Maternal & Neonatal Health Initiatives in Bangladesh

Implemented by

Ministry of Health and Family Welfare (MOHFW)

Supported by UNFPA unicef World Health Organization

Conducted by

HDRC

Human Development Research Centre

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Dhaka: November 2013

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Conducted by

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Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
BDHS	Bangladesh Demographic and Health Survey
CNP	Community Nutrition Promoter
CSBA	Community Skilled Birth Attendant
CSG	Community Support Group
DGFP	Directorate General of Family Planning
DHS	Demographic and Health Survey
ELCO	Eligible couples
EmOC	Emergency Obstetric Care
ENC	Essential Newborn Care
FGD	Focus Group Discussion
FP	Family Planning
FWC	Family Welfare Center
GOB	Government of Bangladesh
HDRC	Human Development Research Centre
HIV	Human Immunodeficiency Virus
IUD	Intrauterine Device
KII	Key Informant Interview
LAM	Lactational Amenorrhea
LBW	Low Birth Weight
MDG	Millennium Development Goal
MIS	Management Information System
MMR	Maternal Mortality Rate
MNH	Maternal and Neonatal Health
MNHIB	Maternal and Neonatal Health Initiative in Bangladesh
MOHFW	Ministry of Health and Family Welfare
MR	Menstrual Regulation
NC	Neonatal Care
NGO	Non-Government Organization
NIPORT	National Institute of Population Research and Training
PCA	Principal Component Analysis
PNC	Postnatal Care
PPS	Probability Proportionate to Size
RTI	Reproductive Tract Infection
STI	Sexually Transmitted Infection
TBA	Traditional Birth Attendant
TWG	Technical Working Group
UHC	Upazila Health Complex
UHFWC	Union Health and Family Welfare Centre
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
VGD	Vulnerable Group Development
VGF	Vulnerable Group Feeding
VLBW	Very Low Birth Weight
WHO	World Health Organization

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Executive Summary

As part of extensive efforts motivated towards reducing maternal and neonatal mortality and morbidity across the country, the Government of Bangladesh and United Nations have launched the First Phase of 'Maternal and Neonatal Health Initiatives in Bangladesh (MNHIB)' in 2007. The Government of Bangladesh, United Nations Population Fund (UNFPA), United Nations Children's Fund (UNICEF), and World Health Organization (WHO) are working together in order to implement the project. MNHIB aims at reduction of maternal and neonatal mortality and morbidity. The project is being implemented in two phases. Phase I, being implemented in 4 districts (Jamalpur, Moulvibazar, Narail and Thakurgaon), and rolling out the Phase II (2011-2016) in 7 more districts (Bagerhat, Panchgarh, Sunamganj, Serajganj, Borguna, Patuakhali and Rangamati). The accompanying report is "Survey on Current Status of Maternal and Neonatal Health Initiatives in Bangladesh" on Phase I & Phase II districts (11 MNHI project districts).

The prime objective of the end-line survey involved collecting data on the current health-situation, especially maternal and neonatal health indicators that relate to maternal and neonatal health care access, utilization, quality of care, knowledge, source and demand of service in project districts. The survey has used representative sample of women having pregnancy outcome during past one year for each upazila.

Demographic and socio-economic character of the respondents: The mean age of the respondents is 24.7 years and a little more than 80 percent of them are below 30 years, the prime reproductive age. Almost three-fifths of the respondents got married before the age of 18 years, with an average age of 17.0 years. Over four-fifths of the respondents are literate where more than half (53.8%) the respondents has completed primary and 13.6 percent secondary education. As compared to the respondents, primary completion rate of their husbands is lower in primary education (41.9%), however, higher in secondary education (17.3%). The proportion of respondents involved in primary gainful employment is very low (1.6%), nonetheless, around 20.0 are reportedly engaged in gainful secondary occupation. About one-fourth (25.1%) of the respondents are involved with any microcredit or non-government organization. The average household size is 5.5 and most of the respondents believe that economic condition of their household is same as that of other households in their locality. According to vulnerability index, Jamalpur is the most vulnerable and Moulvibazar is the least vulnerable district surveyed.

Reproduction and last pregnancy outcome: Overall, more than three-fifths (62.2%) of women became pregnant once in their lifetime. The average number of ever pregnancy was 2.4. The mean age at first pregnancy was 18.5 years with a high rate (70.7%) of teenage pregnancy before the age of 20 years. Outcome of the pregnancies were largely live birth (96.4%), usually (70.0%) once or twice in number. Overall, 8.35 percent respondents ever experienced of stillbirth. The pregnancy outcome of the respondents during last one year is mostly live birth (88.5%), miscarriage (5.6%), induced abortion (1.3%), menstrual regulation or MR (2.4%), and stillbirth (2.2%). A 3.2 percent of the babies died after they born alive. More than half of these newborns died within one week and nearly three-fourths within four weeks of their birth.

Antenatal care: Despite the awareness of majority (82.9 %) of respondents about minimum number of four antenatal visits to be done by a pregnant woman, merely 30.4 percent of them received 4 or more ANC from medically trained providers in the surveyed districts. Overall,

median number of ANC visit in the surveyed 11 districts is 2 and median month of pregnancy at 1st ANC visit was 5. The most regarded place for ANC was health facility (75.1%), primarily public facility (43.3%)

Birth preparedness: Most of the respondents had some preparations for the birth of their newborn. Reported preparations were primarily confined to two issues namely selection of place (89.9%) and attendance at delivery (79.9%). Conversely, important issues like arrangement of transport, savings of money, arrangement of delivery kit and identification of blood donor got minimum or no attention to the most. Overall home is the prime choice for place of delivery (76.9%) and traditional birth attendant (63.4%) to assist delivery.

Delivery care: The most regarded place of delivery is home (68.6%). Of the facility delivery, utilization of public and private facilities is almost similar, accounting 14.8 percent and 15.1 percent respectively. The deliveries attended by medically trained providers were 37.9%, where 17.1 percent deliveries were conducted by caesarean section.

Postnatal care: Overall percentage of 1st PNC from medically trained providers was 32.6; against 38.5 percent from any providers. Almost all (32.4%) these PNCs from medically trained provider were largely undertaken within 2 days of delivery. The common places of PNC were private (16.7%) and public facility (13.2%). However, 7.6 percent received so at home. On the other hand, percentage of newborn received postnatal check-up from medically trained providers within 2 days of delivery was 27.2 percent. Alike mother, neonatal PNCs were mostly taken from private (18.4%) and public (11.1%) facilities and to some extent at home (6.5%).

Essential neonatal care: *Thermal care* – the most common practice is wrapping the baby with clothes or blanket (85.3%) after wiping the baby's body (65.3%) immediately after birth. Additionally, 47.6 percent respondents delayed bath to their babies till 3 days of delivery and 56.7 percent mothers shaved the babies scalp after 7 days of delivery.

Care of cord – mostly (57.3%) sterile instrument (sterilized blade from delivery kit, boiled blade and scissor) is used to cut the umbilical cord. Similarly, materials used to tie the umbilical cord are largely (62.24%) sterile including cord clump (15.6%), sterile thread (17.1%), and boiled thread (29.5%).

Resuscitation of birth asphyxia – reported occurrence of 5.8 percent birth asphyxia were largely managed by medically trained providers (52.9%), primarily by Nurse/Midwife/Paramedic (31.8%) in most of the districts.

Newborn Illness: In addition to birth asphyxia, notable neonatal illnesses reported are common cold (20.9%), pneumonia (10.3%), and jaundice (6.9%). Public facilities are more preferable place for seeking treatment of neonatal illness. However, homeopathic doctor's chamber is some districts. More so, health professional in general and qualified MBBS doctor in particular is the most desired provider for most of the reported neonatal illnesses in almost all the districts.

Post abortion care: Only 3.6 percent of the surveyed women went for any induced abortion or MR during their last pregnancy. Around half of them reports going to public health facilities for induced abortion or MR. 'Inadequate drug supply' has been mentioned by 43.6 percent women as the main reason for not seeking services from hospital or clinic for induced abortion or MR. Only 5.5 percent woman went for miscarriage or spontaneous abortion.

More than half of these women visited medical service provider after miscarriage, abortion and MR. 'Home' is the main place to meet with service provider for post-miscarriage, abortion or MR service during last pregnancy reported by more than half. Around three-fifths of women having miscarriage, abortion or MR reported that they didn't experience any complication after it. More than half of women having complications after miscarriage or abortion have reported that they sought treatment or hospital care. More than half of women did not use family planning method after miscarriage, abortion or MR.

Women's rights in decision making: Most women in the overall sample (68%) report that birth initiative has been taken by husband and wife both, whereas only 11 percent of the respondent women report that they independently made the birth plan during last pregnancy. Women's in-laws and other members of their husband's family refer notice-worthy portion of the sample (13%) in this regard exhibiting their greater involvement and dominating role in birth preparedness. More than 70 percent women in most of the districts have discussed with their husbands regarding the number of children they want to have. In addition, more than 90 percent woman states that they have agreed with their husbands about this issue, which is a promising scenario of women's decision making rights in family planning.

Quality of care: 'Quality of care' of MNH services that has been assessed here in this study as to extent of use of MNH services those are dependent on the same. It is reported that, 11 percent women suffered from complications during antenatal period, among which 79 percent went for treatment. Around 19 percent women suffered from delivery complications, among which 70 percent went for treatment, and 12 percent women suffered from complications during postnatal period and 43 percent of them went for treatment. Pre-eclampsia during antenatal period, prolonged/obstructed labor during delivery period, and severe bleeding post-delivery period are the major obstetric complications the women experienced. Around half of them went to public hospitals/clinics for treatment of obstetric complications. On an average it took 515, 110, and 292 minutes respectively to take decision for treatment for antenatal, delivery, and post-natal complications. Only 15.4 percent women sought treatment within 45 minutes of onset of obstetric complications. For treatment of antenatal complications, it took 44.8 minutes on average to reach a facility from home since the decision-making moment. During delivery complications it took 55.6 minutes, and during postnatal complications, it took 50.2 minutes on average to reach a facility from home. Only 15.4 percent women sought treatment within 45 minutes of onset of obstetric complications. Most of them reported start of treatment immediately after they attended facilities. And, in most cases they obtained required treatment there, expressing satisfaction over the type of medical-services they received. More than 90 percent women are also satisfied with ANC, delivery and PNC services they received from health facilities. Overall, 45 percent women reported that they were counseled on delivery preparations, 34 percent on danger signs of mother, and 29 percent on danger signs of neonates. Around 26 percent women received 2 or more TT vaccines during last pregnancy. Only 14 percent woman reports consuming 120 or more iron tablets during antenatal period, and 27 percent reports intake of Vitamin A during post-partum period.

Knowledge about obstetric complications and danger signs: Overall, 47.0 percent woman was found aware of at least 2 danger signs of pregnancy, 64 percent of 2 danger signs of delivery and 58.0 percent of 2 danger signs of postnatal period. The most pronounced danger sign during pregnancy was convulsion/eclampsia (40.0%), followed by excessive vaginal bleeding (37.0%), and swelling of feet/pre-eclampsia (26.0%). Reported danger signs during delivery are- excessive vaginal bleeding (39.0%), convulsion/eclampsia (33%), and retained

placenta together with rupture of cord (32.0%). The most common danger sign during postnatal period reported was retained placenta (43.0%), followed by excessive vaginal bleeding (36.0%) and convulsion/eclampsia as well as tetanus (33.0%). Relatives are predominant source of knowledge about danger signs, followed by government and NGO service providers.

The most commonly reported dangers signs of newborn known to the respondents were-diarrhea (45%), fever with cold and cough (44%), difficulty in breathing with fever (39.0%), and jaundice (24%). The primary source of this knowledge is relatives, followed by government, and NGO service providers. Regarding availability of EmOC service, most commonly pronounced places were district hospital (66.0%), Upazila Health Complex (44.0%), private clinic (37.0%) and private hospital (27.0%).

Breastfeeding: As high as 99.0 percent respondent offered breastfeeding to their babies. However, 85 percent started breastfeeding within one hour of delivery. One-fifth of the women have given liquid to the newborn before starting the breastfeeding. About half of the women provided exclusive breastfeeding to their babies for 6 months or more.

Family Planning and desired family size: Overall, 54.3 percent of the women used family planning methods before their last pregnancy. One-fifth (20.6%) of them continued to use the FP method till 10 to 12 months, however, average time-span of using FP method before last pregnancy was 22.2 months. The main reason to stop the use of FP method is to become pregnant. Reportedly, 29.7 percent respondents became pregnant while they were using FP methods. However, average time taken to become pregnant after stopping FP method is 3.4 months. Overall, 48.8 percent woman started to use FP method after last delivery, where a considerable proportion of them (48.3%) did so within 1 to 3 months after last delivery. About one-fourth (24.5%) of women used 'pill' after their last pregnancy period. The most widely used post partum contraceptive was pill (24.5%). Currently, a half (49.8%) of the respondents is using FP method and pill is the most (26.7%) popular FP methods of all. Among the non-users, a very large proportion (91.4%) of the respondents intends to use family planning method in future. Overall, 72.6 percent of the respondents discussed with husbands about number of children they want and majority (80.2%) of them desired to have 2 children, whatever the sex is.

Awareness about HIV/AIDS: By and large, about 67.9 percent respondent has heard about HIV/AIDS. The most common source of knowledge about HIV/AIDS is television (56.5%), followed by relatives (36.4%), newspaper/magazine (15.8%), government service provider (11.3%) and friends (10.9%). More than half of the respondents know that sexual intercourse is the most common mode of transmission of HIV/AIDS, followed by needles or blades (44.1%), and blood transfusions (38.3%). Simultaneously, 76.3 percent of respondents believe that, abstaining from unsafe sex is the best way to avoid HIV/AIDS. The other notable best preventive measures known to them are using condoms during sexual intercourse (41.0%), safe blood transfusion (39.5%), avoiding sharing razor/blade (18.2%), limit sex to one partner/stay faithful one sex partner (17.1%), and avoiding sharing needles for injections (15.7%). Less than half (39.4%) of the respondents have consulted with their husband regarding ways to avoid HIV/AIDS.

Community involvement in heath activities: Three-fourths of the women reported that they heard about community activities on maternal and neonatal healthcare in their locality, however, their participation is fairly low (28%). According to 47 percent of them the existing functional community system on MNH is managed by the government. Although 64 percent women report that, some systems exist in their locality to identify pregnant women and provide healthcare services to them, nonetheless, availability of funds/financial support to poor women seeking treatment for obstetric complications and existence of blood donor club is not known to almost all of them. A 55 percent of the respondents have seen the messages on MNH in the preceding three months, and 84 percent of them have started to execute the messages in their real life situation. Major (84.0%) source of MNH related information is interpersonal communication (friends, neighbours and relatives). More than 50 percent women mentioned receipt of information recently on immunization of children and women against deadly diseases, through the community support programme and other sources. Hardly a few (2.3%) received advice on birth preparedness plan.

Women's right in decision making: More than three-fifths (68.0%) of the women reported that they prepare birth plan on the basis of mutual understanding between husband and wife. Moreover, around 73.0 percent of them reported that they have discussed with their husbands regarding the number of children they want to have, and among those discussed, more than 90 percent reports that, husbands have agreed on the same.

Constraint indicators: Lack of awareness as well as not having clear perception/knowledge about normal health/ essential needs of a pregnant woman during pregnancy, delivery and after delivery is the main constraint of seeking MNH care. Besides, economic dependency, scarcity of transport and distance related issues play a negative role toward receipt of MNH care. In some instances religious and social norms/misconceptions also act as constraint in seeking MNH services.