Healthy Fertility Study: Integrating Family Planning within a Community-Based Maternal and Neonatal Health Program in Rural Bangladesh


**Evolution of MNH Packages in Sylhet: Projahnmo in Bangladesh**
- Designed a community-based maternal and newborn care intervention program and evaluated the effectiveness of the package using a cluster randomized design
- A home care package, which involved community health worker (CHW) antenatal and postnatal home visits and management of the sick newborn, reduced NMR by 34% (Baqui et al., Lancet, 2003)

**Integration Model Being Tested**
The Healthy Fertility Study is taking the intervention model from the Projahnmo project that delivers a package of maternal and newborn health interventions through home visits and community meetings conducted by CHWs as a base. The Study then seeks to integrate communication about family planning (FP) including the lactational amenorrhea method, (LAM) and supply of contraceptives, into this system, to promote acceptance and use of FP methods in the postpartum (PP) period.

**Healthy Fertility Study in Bangladesh: Context**
- Selected Family Planning Indicators, Bangladesh and Sylhet, BDHS 2007

**Study Sites**
- Sylhet district
- Zakiganj and Kanaghat sub-district
- Intervention area (four unions): Manikpur, Kajalshar, Jilingbari and Dakshin Banigram
- Comparison area (four unions): Sultanganj, Khola, Purba Digipara and Paschim Digipara

**HFS in Bangladesh: Study Site, Design, Data**
- Two sub-districts of Sylhet district: Zakiganj and Kanaghat
- Quasi-experimental with four control unions (MNH only) and four intervention unions (FP/MNH)
- Study cohort: 2,247 pregnant women enrolled from four intervention unions (FP/MNH)

**Community Health Workers**
- Young woman with grade 10 education from the local community
- Training received:
  - MNH: 21 days
  - HTSP, PPFPP and LAM: 3 days
  - FP: 4½ days
- Injectables: 1½ days theoretical and practical in field

**CHW Counseling Topics and Timing**
- FP integrated with MNH Program
- Additional

**Results**
- Duration of Exclusive Breastfeeding by Study Arm
- Contraceptive Use at 12 Months Postpartum among Women with a Surviving Infant, by Study Arm

**Study Objectives**
- To develop and test an integrated FP/MNH service delivery approach
- To assess the strengths and limitations of integrating FP with an ongoing, community-based MNH care program
- To assess the impact of the intervention package on pregnancy spacing and newborn care
- To assess the impact of the intervention package on contraceptive knowledge and practices, including the LAM during the extended postpartum period

**Study Timeline**
- Jan ’08: Explored another four unions
- Jan ’09: Assessed completed
- Feb ’08: Explored another four unions
- Mar ’08: Explored another four unions
- Apr ’08: Explored another four unions
- May ’08: Explored another four unions
- June ’08: Explored another four unions
- Jul ’08: Explored another four unions
- Aug ’08: Explored another four unions
- Sep ’08: Explored another four unions
- Oct ’08: Explored another four unions
- Nov ’08: Explored another four unions
- Dec ’08: Explored another four unions
- Jan ’09: Start community household distribution of pills and condoms
- Feb ’09: Start community household dispensing of follow-up doses of injectables
- Mar ’09: Start community household distribution of LAM
- Apr ’09: Start community household dispensing of follow-up doses of injectables
- May ’09: Start community household distribution of LAM
- Jun ’09: Start community household dispensing of follow-up doses of injectables
- Jul ’09: Start community household distribution of LAM
- Aug ’09: Start community household dispensing of follow-up doses of injectables
- Sep ’09: Start community household distribution of LAM
- Oct ’09: Start community household dispensing of follow-up doses of injectables
- Nov ’09: Start community household distribution of LAM
- Dec ’09: Start community household dispensing of follow-up doses of injectables
- Jan ’10: Endline survey completed
- Feb ’10: Endline survey completed
- Mar ’10: Endline survey completed
- Apr ’10: Endline survey completed
- May ’10: Endline survey completed
- Jun ’10: Endline survey completed
- Jul ’10: Endline survey completed
- Aug ’10: Endline survey completed
- Sep ’10: Endline survey completed
- Oct ’10: Endline survey completed
- Nov ’10: Endline survey completed
- Dec ’10: Endline survey completed
- Jan ’11: Endline survey completed
- Feb ’11: Endline survey completed
- Mar ’11: Endline survey completed
- Apr ’11: Endline survey completed
- May ’11: Endline survey completed
- Jun ’11: Endline survey completed
- Jul ’11: Endline survey completed
- Aug ’11: Endline survey completed
- Sep ’11: Endline survey completed
- Oct ’11: Endline survey completed
- Nov ’11: Endline survey completed
- Dec ’11: Endline survey completed
- Jan ’12: Endline survey completed
- Feb ’12: Endline survey completed
- Mar ’12: Endline survey completed
- Apr ’12: Endline survey completed
- May ’12: Endline survey completed
- Jun ’12: Endline survey completed
- Jul ’12: Endline survey completed
- Aug ’12: Endline survey completed
- Sep ’12: Endline survey completed
- Oct ’12: Endline survey completed
- Nov ’12: Endline survey completed
- Dec ’12: Endline survey completed
- Jan ’13: Endline survey completed
- Feb ’13: Endline survey completed
- Mar ’13: Endline survey completed
- Apr ’13: Endline survey completed
- May ’13: Endline survey completed
- Jun ’13: Endline survey completed
- Jul ’13: Endline survey completed
- Aug ’13: Endline survey completed
- Sep ’13: Endline survey completed
- Oct ’13: Endline survey completed
- Nov ’13: Endline survey completed
- Dec ’13: Endline survey completed

**Intervention Components and Delivery Strategy**
- Promotion of MNH interventions in both areas
- FP interventions in intervention areas only
- Counseling on return to fertility, healthy timing and spacing of pregnancy (HTSP), LAM, exclusive breastfeeding (EBF) and use of contraceptives
- Community-based distribution of pills and condoms and referrals to facility for other methods

**Delivery Strategies**
- Antenatal and postnatal home visits by CHWs
- Community mobilization and advocacy by community mobilizers

**Contraceptive Use at 12 Months Postpartum among Women with a Surviving Infant, by Study Arm**

- Newborn care, EBF
- Antenatal care
- Breastfeeding (EBF)
- FP: 4½ days
- Injectable: 1½ days theoretical and practical in field

**Delivery Care of Index Pregnancy, by Study Arm**
- Home delivery
- Medical staff
- Traditional Birth Assistant

**Effect of Integration on MNH Care: Selected Newborn Care Practices, by Study Arm**
- Drying and wrapping of newborn within 10 minutes of delivery
- Initiation of breastfeeding within 30 minutes

**Lessons Learned**
- The HFS demonstrates that:
  - Integrating FP within a community-based MNH program is feasible
  - The model is effective for increasing modern method use
  - There was not notable negative effect on the delivery of MNH services
  - The promotion of LAM had a positive effect on the duration of exclusive breastfeeding

**Study Successes to Date**
- Demonstrated integrated FP/MNH community-based model
- Demonstrated increased use of contraception during first 12 months of postpartum period—the highest risk for mother and newborn
- Drew attention to PPFPP and influenced government and NGO programs in Bangladesh, e.g. Mayer Hasil and MahMol