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ORIGINAL ARTICLE

Helping Mothers Survive Bleeding after Birth Training

Join project between University of Gezira, Jhpiego- affiliated with Johns Hopkins University, Sudanese American Medical Association (SAMA), Sudanese Obstetrical and Gynaecological Society.

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Abstract:

The post partum haemorrhage (PPH) Project of Sudan should consider facilitation of implementation of a more comprehensive and innovative program to address prevention, identification and management of PPH with the goal of improving the quality of care and health outcomes related to PPH.

The Master Trainer Course was held at the University of Gezira (U of G) followed by Champion courses and Clinical Mentor orientation sessions in 5 hospitals (4 rural and 1 urban). There are additional 5 hospitals in Gezira state where providers have yet to receive the Champions course. The additional courses are planned in March and April of 2016.

23 Master Trainers were mentored in help mother survive (HMS). The PPH Project Director based at UofG and additional 2 more trainers were introduced to the principles of HMS training and the low dose high frequency (LDHF) approach was adopted.

155 providers participated in a bleeding after birth (BAB) Champions Course. 106 of the participants were village midwives who received selected updates around child birth to address gaps identified during the opening role play. Updates included being patient during second stage of labour, no pulling of fetus, delivering babies to mothers' abdomen/skin to skin, drying the baby immediately, changing the wet cloth and covering the baby with dry cloth while on mothers' abdomen, not to hold babies upside down, not to separate babies from mothers after cutting the cord. No cord milking, evacuation of birth canal in the name of "cleaning" it, no routine episiotomy or pulling

the placenta without counter pressure and few others.

34 providers from 5 hospitals (4 rural and 1 urban) were oriented as clinical mentors. They will conduct peer mentorship at respective hospitals as well as the downward type of mentorship to midwives at health centers and village midwives from respective community neighborhood.

Key words: Postpartum Haemorrhage, University of Gezira, Maternal mortality

Introduction:

Maternal mortality, as a largely avoidable cause of death, is an important focus of international development efforts, and a target for The United Nations Sustainable Development Goals (SDGs) ⁽¹⁾.

Postpartum hemorrhage (PPH) is an obstetrical emergency that can follow vaginal or cesarean delivery. It is a major cause of maternal morbidity, and one of the top three causes of maternal mortality in both high and low per capita income countries ⁽²⁾. Furthermore, hemorrhage is the leading cause of admission to the intensive care unit and the most preventable cause of maternal mortality.

The highest rates of PPH are in Africa (27.5%), and the lowest in Oceania (7.2%), with an overall rate globally of 10.8%. ⁽³⁾ The rate in both Europe and North America was around 13%. ⁽²⁾ The rate is higher for multiple pregnancies (32.4% compared with 10.6% for singletons), and for first-time mothers (12.9% compared with 10.0% for women in subsequent pregnancies). ⁽³⁾ The overall rate of severe PPH (>1000 ml) was much lower at an overall rate of 2.8%, again with the highest rate in Africa (5.1%). ⁽³⁾

The UofG Initiative for Safe Motherhood and Childhood was introduced to Gezira State Central Sudan in 2005, justified by high maternal mortality, after comprehensive situation analysis. ⁽⁴⁾

Recent review of maternal mortality in Gezira State showed that out of 489 cases of maternal mortality, 113 (23.1 %) were found to have PPH as the causative factor. Uterine atony was found to be the main cause leading to 91/113 cases (80.5 %) of PPH. ⁽⁵⁾

The PPH Project identified the following strategies to decrease maternal death due to hemorrhage: improving maternal health care services, promoting medical and midwifery education and training, aggressive practice of PPH guidelines, early pharmacological intervention and uterotonic agents administration following baby's delivery. With this background, the PPH Project requested

technical assistance from Jhpiego-an international, nonprofit health organization affiliated to with Johns Hopkins University USA. In coordination with the Sudanese American Medical Association, Jhpiego conducted the first HMS – BAB training for Gezira State from February 25 to March 5, 2016. The Master Trainer Course was held at the UofG followed by Champion courses and Clinical Mentor orientation sessions in 5 hospitals (4 rural and 1 urban). There are additional 5 hospitals in Gezira state where providers have yet to receive the Champions course. The additional courses are planned for March and April of 2016.

General Objectives:

Increase the capacity of service providers in preventing, identifying and managing post-partum hemorrhage in Gezira State, Sudan by rolling-out the Helping Mothers Survive, BAB training course which is a Low-Dose, High Frequency (LDHF) training approach that includes practice sessions to 15 health facilities. To achieve these objectives, Sudanese American Medical Association (SAMA) and Jhpiego prepared and mentored 23 HMS Master Trainers in facilitating a BAB Champions Course and Clinical Mentor orientation sessions at the facility level.

Master Trainer Workshop Objectives: To

1. Explain the principles of (HMS) training
2. Provide HMS Champion Training to all participants
3. Orient participants on use of Mama Natalie birth simulator
4. Explain the importance of low dose, high frequency (LDHF) practice at the facility after training.
5. Prepare 20 Master Trainers in facilitating the BAB course and orienting facility based Clinical Mentors (CMs) to provide low dose, high frequency practice (an additional 3 trainers were mentored as Master Trainers than originally planned).
6. Explain the importance of mentoring trainers and develop a schedule to mentor participants.

Learning Objectives:

At the end of the master trainer workshop, trainers shall be able to:

1. Discuss the principles of HMS training;
2. Demonstrate the standard, active management of third stage of labor, care and decision making for retained placenta and severe hemorrhage due to atony;
3. Describe the importance of LDHF at the facility after training.
4. Develop to a level of **HMS Master Trainer** after being mentored by an existing HMS Master Trainer;
5. Effectively use the HMS BAB Action Plan, Provider's Guide, and Flipbook;
6. Demonstrate appropriate facilitation techniques for HMS;
7. Facilitate assessment of learners using the simulator to assess skills;
8. Explain the use of the LDHF session plans for facility practice.
9. Orient Clinical Mentors (CM) to their roles at the facility including data recording, promoting a culture of 'practice' with simulators and report writing.

Methodology:

Jhpiego supported the PPH Project through technical assistance for the HMS BAB roll-out. Four experienced trainers facilitated the HMS BAB Master Trainer course at the University of Gezira for 23 HMS Master Trainer candidates. These candidates were then mentored in facilitating a BAB Champions course and Clinical Mentor session in five health facilities. The Jhpiego Facilitators were:

- **Gaudiosa Tibajuka:** Jhpiego Training Expert/ Senior Technical Manager MCSP Tanzania
- **Scholastica Chibehe:** Jhpiego Training Expert/Midwifery Advisor, MCSP Tanzania
- **Scovia. N. Mbalinda:** Jhpiego Training Expert/ Reproductive, Maternal and Child Health Technical Advisor, Consultant.
- **Kevin K Kabarwani :** Jhpiego Training Expert/ Maternal and Child Health Technical Advisor, Consultant

The Jhpiego facilitators attended a one-day PPH scientific conference to understand the context of the PPH project and to prepare for the Master Trainer Course and subsequent mentored trainings. The Master Trainer course consisted of:

- Part 1: BAB Champions Course
- Part 2: HMS Facilitation Orientation
- Part 3: Mentored trainings

The Jhpiego Master Trainers mentored each of the 23 Master Trainers in facilitating their first HMS BAB Champions Course and Clinical Mentor orientation session. Mentorship is an essential component to a HMS Master Trainer course as it is an opportunity for new trainers to receive feedback on their facilitation skills, ensure quality to the facility-based training approach, and boost their confidence before continuing to roll out Champions' courses throughout the state.

Materials used for training included: the Mama Natalie and Neo Natalie simulators, HMS BAB Flip Books, Action Plans, Providers Guides, and normal delivery kits.

Achievement:

Preparation phase: A 4-hour facilitator preparation and planning meeting was held on March 25th between 4 Jhpiego Facilitators and the PPH Project Administrator at UofG. Based on the standard checklist, the Administrator was oriented to the training materials and prepared the necessary materials. The team coordinated training activities, assigned roles, procured additional items like name tags, printed required documents, revised some logistics and set up 4 skills practice stations.

Gezira State Community: The Ministry of Health (MOH), UofG, and PPH Project area health authorities were introduced to HMS-BAB and LDHF training methodology throughout the training period of which they expressed commitment to support its implementation in 10 Project health facilities. The community remained responsive and supportive throughout the training period.

23 Master Trainers were mentored in HMS. The PPH Project Director based at UofG and additional 2 more trainers were introduced to the principles of HMS training and the LDHF approach and were able to describe its importance. The trainers demonstrated the standard:

- Active management of third stage of labor, care and decision making for retained placenta, and management of severe hemorrhage due to atony.
- Effective use of the HMS-BAB Action Plan, Provider's Guide, Flipbook, Simulators with checklists, facilitation and assessment techniques for HMS.
- Explaining the use of the LDHF session plans for facility practice and demonstrated promotion of a culture of 'practice' with simulators.
- Orienting Clinical Mentors (CM) to their roles at the facility including data recording use and reporting.

The 23 Master Trainers were set to complete Mod CAL training.

155 providers participated in a BAB Champions Course. 106 of the participants were village midwives who received selected updates around child birth to address gaps identified during the opening role play. Updates included being patient during second stage of labour, no pulling of fetus, delivering babies to mother's abdomen/skin to skin, drying the baby immediately, change the wet cloth and cover the baby with dry cloth while on mothers' abdomen, not to hold babies upside down, not to separate babies from mothers after cutting the cord. No cord milking, evacuation of birth canal in the name of "cleaning" it, no routine episiotomy or pulling the placenta without counter pressure and few others. 34 providers from 5 hospitals (4 rural & 1 urban) were oriented as clinical mentors. They will conduct peer mentorship at respective hospitals as well as the downward type of mentorship to midwives at health centers and village midwives from respective community neighborhood.

Due to language barrier they were awarded certificate of attendance instead of being certified as champions.

The HMS-BAB training was part of PPH-Project Annual Scientific Workshop for the collaboration between SAMA and Sudanese OBGYN Association (OGSS). This provided Jhpiego trainers and participants with background information around MNH health in Gezira State.

Discussion and Recommendation:

Gezira community was appreciative and recognized performance of all individuals who contributed to make the event successful; all of them were illustrated in colorful pictures most of them found in the drop box.

Maternal Mortality Rate (MMR) and PPH status in Sudan calls for strengthening national guidelines and standards for prevention, detection and management of PPH; putting emphasis to functional referral systems, building capacity of community and facility based service providers, use of simulation training in pre-service and in-service training programs, monitoring and evaluation of use of uterotonics after birth.

Learning and teaching processes involved in the application of HMS-BAB in Sudan need to be re-examined for efficient and effective performance

A remarkable reduction in maternal mortality ratio can be achieved by controlling PPH. An integrated approach at all levels of healthcare delivery system, active management of labour and efficient emergency obstetric care will help in controlling PPH.

PPH project should facilitate adherence to HMS training standards including trainer-to-participant ratio, use of effective facilitation and co-facilitation skills in both classroom and in clinical settings, where flexibility and innovations are required, plan accordingly.

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