



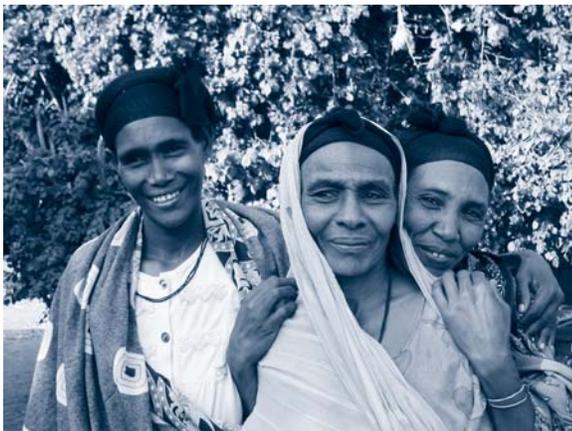
At a glance

Building Community Partnerships for Safer Motherhood: Home Based Life Saving Skills

By Lynn M. Sibley and Sandra T. Buffington

Introduction

Every year, nearly 600,000 women die from complications related to childbearing, mostly in developing countries. Others survive but live on in poor health during what should be their years of greatest productivity and what are their years of maximum family responsibility.



HBLSS Guides (trained traditional birth attendants) in Ethiopia.

Photographer: Nazo Kureshy, 2002

Better access to emergency obstetric care can greatly reduce this tragic loss of life and vitality.¹ To this end, the American College of Nurse-Midwives (ACNM) has expanded its *Life Saving Skills Series* (Box 1) with the development and field-testing of a new program, Home Based Life Saving Skills (HBLSS). HBLSS is a family-focused, community-based program which aims to reduce maternal and neonatal mortality by increasing access to basic lifesaving care within

Box 1. The Life Saving Skills Series

- **Life Saving Skills Manual for Midwives 3rd Ed.**,² an advanced in-service training program for physicians, nurses, and midwives.
- **Healthy Mother and Healthy Newborn Care**,³ a basic in-service training program for nurses, midwives, and other health post staff.
- **Home Based Life Saving Skills—Field-Test Draft**,⁴ a community-based training program for pregnant women, family caregivers, and home birth attendants.

the home and community and by decreasing delays in reaching referral facilities where life-threatening problems can be managed.

The ACNM is field-testing the HBLSS materials, process, and supporting activities in two projects sites, India and Ethiopia, to assess the effectiveness of this innovative strategy.



An HBLSS Guide practicing a role play for the management of a life-threatening obstetric complication.

Photographer: Lynn Sibley, 2002

Inside:

What is HBLSS? 2

Appropriate Settings for HBLSS 4

Using Take Action Cards 7

TBAs and Women in Ethiopia Discuss the Value of Take Action Cards .. 8-9

Implementing HBLSS 10

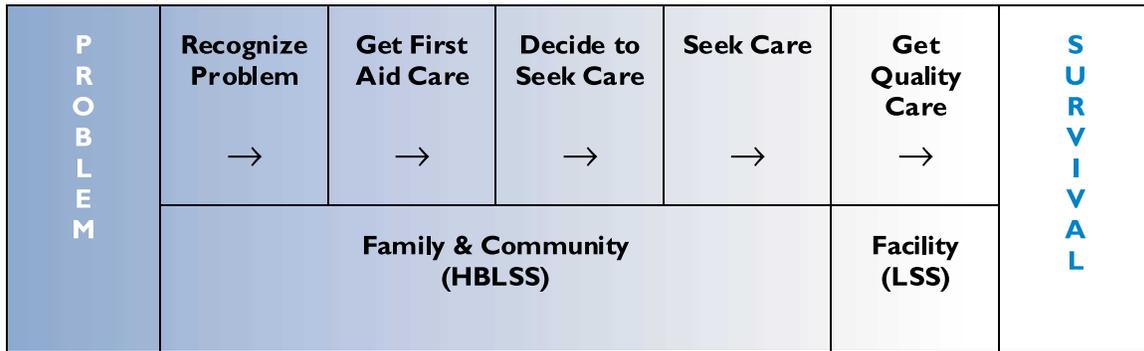
Monitoring and Evaluating HBLSS 12

References 16

What is HBLSS?

Inspired by the WARMI Project, implemented in Bolivia by Save the Children and MotherCare,⁵ HBLSS was conceived as part of the family and community component of the Community Partnership Model, which describes the continuum of lifesaving care required at the various steps of a modified pathway to survival (Fig. 1).

Fig. 1. Modified Pathway to Survival



Source: Based on 1995 MotherCare model.

The Community Partnership Model (Fig. 2) includes strengthening home-based emergency care (HBLSS Training) and facility-based emergency care (Basic and Advanced LSS Training). Critical to the continuum of lifesaving care is the development and/or strengthening of the links between home, community, and referral facilities through community mobilization. Community mobilization is, therefore, a central component of the model through which community awareness, as well as access to resources and networks for referral are further enhanced.^{6,7}

Fig. 2. The Community Partnership Model



The HBLSS component of the Community Partnership Model attempts to address directly those factors which most often lead to inappropriate action, delayed action, or no action and ultimately the death of the mother,⁸ namely:

- A large proportion of births take place at home with unskilled attendants, including relatives, friends, TBAs, or with no one.
- Unskilled providers are ill-equipped to respond to complications.
- Maternal and newborn complications and deaths occur most often at birth or within the first 24 hours of birth and are unpredictable.
- Problem recognition and referral decision-making are complex.
- Social, economic, and geographic barriers to emergency care exist.
- Care at referral facilities is often inadequate.

HBLSS builds skills at the home level, while at the same time developing the capacity of community structures and organizations (e.g., village health committees, women's groups, local transport owners) to improve referral links and support the HBLSS program with additional community resources. Strengthening referral links may take the form of organizing reliable round-the-clock emergency transportation, establishing revolving emergency care loans, or disseminating information about referral facilities and blood banks. The HBLSS strategy also emphasizes being sensitive to the cultural values of family members and the community concerning pregnancy outcomes. The HBLSS training is greatly supported by various information, education, and communications (IEC) activities, such as disseminating key safe motherhood and HBLSS messages to the community, encouraging pregnant women and



Collecting grain to support HBLSS training.
Photographer: Shramik Bharti, 2001

their family caregivers to attend HBLSS meetings, organizing remuneration for the HBLSS Guides, and helping the Guides monitor and document HBLSS attendance and pregnancy outcomes.

The unique features of HBLSS include the target audience, the focus, and the process. HBLSS training targets a home-birth team consisting of all of those who can be expected to be present at a birth, namely the pregnant woman, her family caregivers, and a birth attendant. The curriculum focuses on the initial management of life-threatening maternal and newborn complications, in other words, first aid care and referral. The training is conducted by an HBLSS-trained community person, called an HBLSS Guide, using a process that is participatory and skills based. The content builds on existing practices and involves learning how to negotiate acceptable and feasible safe practices with members of the home-birth team. The idea behind the training is to develop with the birth-team members both a consensus on and a capacity to take timely appropriate action when needed.



Trainer conducting an HBLSS meeting.
 Photographer: Shramik Bharti, 2001

India

In Maitha Block, Kanpur Dehat, and Uttar Pradesh, the HBLSS field test is being implemented by a private sector partner, Shramik Bharti, in collaboration with PRIME/Intrah and with funds from USAID. The project area is rural and agricultural, with closely settled permanent communities. Most births take place at home attended by family members and/or TBAs, and mortality is high.⁹ The communities are roughly 35 km by good roads from private and public referral facilities capable of round-the-clock comprehensive EmOC.¹⁰

Appropriate Settings for HBLSS

The HBLSS program was designed for settings where home birth with unskilled attendants is the norm and mortality is high. At the very least, the setting should have an enabling environment that includes:

- Community-based organizations willing to collaborate in the interest of safe motherhood and child survival.
- A referral facility capable or potentially capable of emergency obstetric care (EmOC) or settings where EmOC is not and will not be available for some time.
- Collaborating partners who regard HBLSS, both philosophically and practically, as a valuable component of their program.

The HBLSS field test is currently being implemented in two very different settings, northern India and southern Ethiopia (Table 1).

Ethiopia

In Liben Woreda, Borana Zone, Oromiya Region of Ethiopia, the HBLSS field test is being implemented by Save the Children/US and its public sector partner, the Ministry of Health, with USAID funding. The project area is rural, agro-pastoral with semi-permanent and widely scattered communities. As in India, most births here take place at home and mortality is high. Access to comprehensive EmOC is seriously hampered due to great distances, difficult terrain, and both the lack and cost of transport. The only referral facility potentially capable of EmOC has staffing, supplies, and quality of care that are all unreliable.

In this particular setting, HBLSS is being integrated into an existing child survival project to strengthen the maternal and newborn care interventions. When the HBLSS field test began, an impressive community mobilization effort was already underway, implemented by community-based organizations called Health Action Committees and Bridge-to-Health Teams. The Health Action Committees and Bridge-to-Health Teams, in place in each village and orchestrating

Table 1. HBLSS Field-Test Program Contexts

India (Uttar Pradesh, Kanpur Dehat)	Ethiopia (Oromiya Region, Borana Zone)
Field test partners Shramik Bharti, Maitha Block communities Assistance by: <ul style="list-style-type: none"> • ACNM • Intrah 	Field test partners Ministry of Health, Save the Children, Liben Woreda communities Assistance by: <ul style="list-style-type: none"> • ACNM • NGO Networks for Health
Population^a 23,000 (11 villages, 29 hamlets)	Population^d 138,000 (38 pastoral associations)
Estimated mortality^b MMR: 540 per 100,000 live births NMR: 54 per 1,000 live births	Estimated mortality^c MMR: 871 per 100,000 live births NMR: 49 per 1,000 live births
Deliveries^a Skilled attendant (4%) Unskilled attendant (95%) <ul style="list-style-type: none"> • Relatives, friends (54%) • TBAs (39%) • Unattended (2%) • Other/unknown (1%) 	Deliveries^d Skilled attendant (10%) Unskilled attendant (89%) <ul style="list-style-type: none"> • Relatives, friends (27%) • TBAs (54%) • Unattended (8%)
Community mobilization Facilitated by Shramik Bharti: <ul style="list-style-type: none"> • Capacity building of Village Health Committees • Support mechanisms for HBLSS Village Health Guides • IEC • Strengthening links with referral facilities (e.g., transport and emergency loan schemes) 	Community mobilization Facilitated by Save the Children: <ul style="list-style-type: none"> • Capacity building of Health Action Committees and Bridge-to-Health Teams • Support mechanisms for HBLSS TBAs • IEC • Strengthening links with referral facilities (e.g., emergency loan schemes)
Referral facility capable of comprehensive EmOC <ul style="list-style-type: none"> • Yes • 100% of population within 35 kms • No service improvement component 	Referral facility capable of comprehensive EmOC <ul style="list-style-type: none"> • Unreliable • 40% of population within 10 kms • Service improvement component (LSS training for hospital staff)

^a Sibley, L., Upadhyay, J., Caleb-Varkey, L., Paul, V.K., Bhatla, N., Prasad, R., Saroha, E., Prasad, S., Hemple, A., Mishra, A., Mishra, K., Ghosh, S., Koshal, S., Singh, A., Singh, M., Singh, S., Yadav, S., Jha, H. 2000. Morbidity and performance assessment in Maitha Block, Kanpur Dehat, Uttar Pradesh. Unpublished report. PRIME/Program for International Training in Health.

^b International Institute for Population Sciences (IIPS), Mumbai, India and MEASURE DHS+ 2000. National Family Health Survey, 1998-1999. Mumbai, India: IIPS and Calverton, MD: ORC Macro.

^c Central Statistical Authority, Addis Ababa and MEASURE DHS +. 2001. Ethiopia Demographic and Health Survey 2000. Calverton, MD: ORC Macro.

^d Save the Children Ethiopia. 2001. Knowledge, Practice, and Coverage Survey. (Liben District, Borana Zone, Ethiopia). Unpublished document. Washington, DC: Save the Children Ethiopia/WomanWise Project.

child survival interventions since 1999, are now being oriented to HBLSS and will mobilize to help strengthen referral linkages and support the overall HBLSS effort.

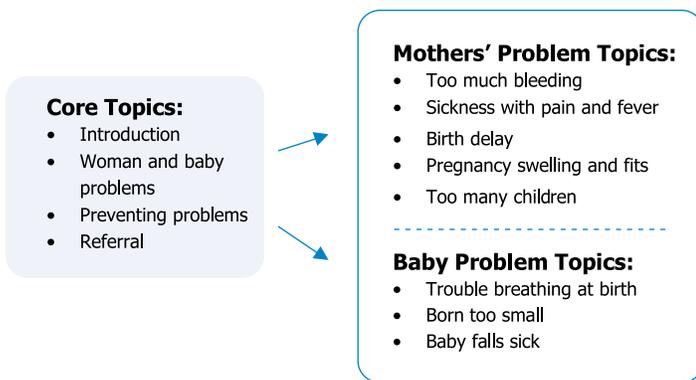
In both of the above scenarios, the hope is that so long as HBLSS and its supporting interventions have had sufficient time to mature and are perceived as meeting a need, then the communities involved will be in a position to sustain the effort when NGO support is gradually withdrawn.

The HBLSS Method

The HBLSS draft training manual has a flexible, modular design covering 12 preventive and lifesaving skills topics.¹¹ This design allows the HBLSS Trainer, the HBLSS Guide, and home-birth teams to select the topics most appropriate for their needs and interests. Four core topics focus on an introduction to HBLSS, recognition and prevention of problems, birth preparedness, and referral. There are also modules covering five maternal 'problem' topics and three newborn 'problem' topics, focusing in each case on recognition, prevention, and management (Fig. 3). In the community, each topic may be presented in the context of a regular meeting, lasting from one to three hours (as is the case in India), or less formally whenever

and wherever pregnant women, their families, and attendants gather (Ethiopia). The critical element is that home-birth teams have an opportunity to actually problem-solve together and practice 'what to look for' and 'what to do.'

Fig. 3. What is Covered in HBLSS Training?



The HBLSS approach embodies adult learning principles and uses a step-by-step process of problem identification, problem solving, negotiation, and practice (Box 2). The HBLSS philosophy emphasizes the respectful consideration of existing knowledge and solutions before attempting to integrate biomedical practices. The goal is to work with participants to develop emergency care behaviors that are not only safe but also acceptable and feasible in the home setting, i.e., behaviors that are more likely to be used when needed. The HBLSS training manual incorporates this step-by-step process into each of the regular community meetings.

A closer look at how the negotiation or discussion step (#4 in Box 2 below), so integral to the HBLSS method, will help illustrate the HBLSS philosophy. The negotiation step draws on the preceding steps (#2 and #3) in order to compare and discuss similarities and differences, advantages and disadvantages, as well as feasibility and acceptability of specific local and biomedical practices used to solve a particular problem. The strategy is to reinforce positive behaviors, to influence negative behaviors by substituting positive alternatives, to encourage additional behaviors selectively, and, most important, to accept that a consensus may not be achieved.

In practice, this means that the HBLSS Trainer or HBLSS Guide must be willing to give up control of the desired outcome, which may be very threatening, even for HBLSS Trainers with a nonclinical background. Fortunately, many emergency care behaviors taught in HBLSS are already part of the local repertoire; getting agreement is a matter of negotiating 'timing' and sharing 'logic,' as in agreeing when to massage the womb and why, or when to put the baby to breast to prevent or manage too much bleeding after birth, and why. HBLSS Guides (TBAs) in

Box 2. Steps in the HBLSS Process

- Step 1:** The Guide reviews the previous meeting with participants.
- Step 2:** The Guide finds out what the participants know about the problem topic for this meeting, e.g., too much bleeding.
- Step 3:** The Guide explains what trained health workers would do vis-à-vis this problem.
- Step 4:** The Guide and participants discuss differences between what participants and a health worker would do and then agree on what is feasible and acceptable in the home setting.
- Step 5:** Participants practice the agreed-upon actions to manage the problem.
- Step 6:** Participants decide how they will know if the actions they have taken have solved the problem.
- Step 7:** Participants discuss what can be done to prevent the problem.

Ethiopia were surprised and very proud to learn that certain local practices, such as giving the mother animal blood to drink or massaging the womb, may help to save a life.

Using Take Action Cards

The HBLSS process incorporates various teaching/learning methods to maximize effective communication and learning among participants who may be unable to read. These include stories, case histories, discussion, problem identification using picture cards,



Adapting an HBLSS illustration for a Take Action Card.
Photographer: Sandra Buffington, 2001



Testing an HBLSS illustration for a Take Action Card.
Photographer: Nazo Kureshy, 2002

demonstration/return demonstration, role-play practice, and coaching using skills checklists called Take Action Cards. There is one Take Action Card for each topic or problem, and these are combined in a booklet that is used during training and then taken home for reference. The 'problem' is on the front of the card and the 'action to take' is on the back. See sample on following page (Fig. 4).



Master Trainer teaching HBLSS with an illustration.
Photographer: Sandra Buffington, 2001

Fig. 4. Take Action Card



Problem side of card.



Action side of card.

The Take Action Cards are quite powerful. In Ethiopia, the HBLSS Guides (TBAs) use the card booklet as a status symbol, a memory aid, a teaching tool, and a diagnostic reference book, as explained in Box 3 below.

Box 3. TBAs and Women in Ethiopia Discuss the Value of Take Action Cards

Status Symbol: “The other importance of this book is by showing this to the people we convinced the people about the problems and the solutions.” (TBA)

Memory Aid: “We got training about this HBLSS only for 3 days. There are other trainings for which we are trained for more than 8-10 days. We trained repeatedly. But nothing is in our mind like this training that we trained only for 3 days. What we trained about this thing is all in our mind. Why? Because we are seeing the pictures... We see the pictures and we remember what we forgot.” (TBA)

“The [Take Action Cards book] is our witness because we see the problems in the book and the solution. It also reminds us what we forget.” (TBA)

Teaching Tool: “Things which we used to see as difficult become simple now. Because of this book, we can see. It becomes easy for us to understand and it helps us to help our people and our community.” (TBA)

“What we see is better than what we hear. Because whenever we teach, when we show these pictures to the people, they say ‘Aha! Aha!’” (TBA)

Diagnostic Reference: “Because in the book... when they call me to the house, immediately when I see the woman’s problem, I see that problem in the book... I find that woman’s problem. Then I go to the solution because the solution is there in the book. Then I help her.” (TBA)

Impact on Women and their Community: “Before we have no knowledge, now we come to knowledge. Before, we do not have knowledge and we just sit and we see. We did not help and we did not take to the health facility. Now, we have learned about home-based lifesaving. Now we help by giving fluid, by supporting, and by taking to road to wait for vehicle to take to hospital. This is also help.” (Woman)

“As we learned from this Take Action Card, our community also learned from this Take Action Card. We came from the dark into the light.” (Woman)

Implementing HBLSS

The HBLSS implementation uses a cascade training strategy that relies on very few 'outsiders' (See Table 2). We prepare a core group of HBLSS Master Trainers to train HBLSS Guides who in turn facilitate the HBLSS meetings on a regular basis with new cohorts of pregnant women, family caregivers, and birth attendants (i.e., home-birth teams).

Table 2. The HBLSS Training Cascade

India	Ethiopia
2 ACNM staff	2 ACNM staff
↓	↓
8 Shramik Bharti staff (nonclinical)	4 District Hospital/1 SC staff 17 Health Clinic/Post staff
↓	↓
26 Village Health Guides (nonclinical)	103 TBAs (300 to be trained)
↓	↓
Est. 600 Home-birth ^a teams per year	Est. 6,400 Home-birth ^a teams per year

^a The estimate is based on the population and crude birth rate and assumes that *all* pregnant women will attend the HBLSS meeting (or are taught HBLSS). As such, it reflects *potential* coverage.

The following practices help ensure that the content and process of HBLSS are successfully transferred from the ACNM to the HBLSS Guides:

- Close adherence to the HBLSS training manual
- Sufficient time to role model and to practice the HBLSS process
- Use of the Take Action Cards to practice
- Regular supportive supervision and continuing education



HBLSS Guides (TBAs, standing) with Master Trainers (seated), including Lynn Sibley (ACNM).

Photographer: Nazo Kureshy, 2002

Training of Trainers

We have learned that successfully transferring the HBLSS process from ACNM to HBLSS Trainer to HBLSS Guide requires role-modeling and sufficient time for practice. The first training of trainers (TOT) requires four weeks: one week for role-modeling by consultants, one week of demonstration and practice by trainees, and two weeks of supervised practice teaching.

During the initial four-week TOT, it is possible to cover 6 of the 12 topics in the manual well, meaning those responsible for the training will have to prioritize the topics. In each field-test site the priority topics have been selected based either on documented prevalence of complications or program objectives. The technical content of the problem topics is very basic, so that once the HBLSS process has been mastered, the remaining topics may be added as part of continuing education for the HBLSS Guides. The HBLSS Guides will then be able to facilitate meetings on the full range of HBLSS topics. The decision about which topics to include will then be made by the HBLSS Guide and the home-birth teams.

For the initial TOT, we recommend at least three core topics—Introduction to HBLSS, Woman and Baby Problems, and Referral—plus three problem topics. The content of Preventing Problems, also a core topic, is strategically integrated into each of the problem topics so its inclusion is not as essential. Covering the topics in this sequence allows the trainers to become comfortable with the HBLSS materials, process, and teaching methods. This flexible modular design allows users to focus on special areas of interest, such as preventive care only, maternal care, or newborn care.

Profile of HBLSS Trainers and Guides

HBLSS Trainers have included individuals both with and without a clinical background, and the HBLSS Guides have included literate and illiterate individuals. Each of these characteristics has implications for implementing HBLSS. The advantage of using HBLSS Trainers with a clinical background is the likelihood that they will already have knowledge of the basic HBLSS technical content. But these individuals must still be taught the HBLSS process, and as they practice it they may encounter situations where there are differences between their own clinical or scientific training and local experiential knowledge and practice. In these cases, trainers with a clinical background may have difficulty giving up control of the interaction and actively listening to participants and acknowledging the value of different ways of knowing and doing. For their part, nonclinical HBLSS Trainers may not face the issue of giving up control, but they may experience some initial insecurity, especially if the HBLSS Guides they are training have more experience in the area of childbirth.

HBLSS Guides who are literate are better able to closely follow the step-by-step approach of the HBLSS training manual as they facilitate HBLSS meetings with home-birth teams, and they can also help with documenting HBLSS training. HBLSS Guides who are illiterate have the pictures of the Take Action Cards as a teaching aid but must rely on their memory to follow the steps of the HBLSS process when facilitating meetings. In Ethiopia, where the HBLSS Guides are illiterate TBAs, it appears from recent follow-up focus group discussions that while the TBAs are teaching HBLSS with discussion and demonstration, coupled with the Take Action Card, they do not engage home-birth teams in the steps of negotiation and practice. If these TBAs are not encouraged and helped to follow the HBLSS process and to build competence in first aid response among the home-birth teams, the potential of HBLSS may be diluted. This is especially true if the TBAs who are HBLSS Guides do not attend many births. Role modeling during training and follow-up support after training are also important.



Trainer and TBA discussing external bimanual compression.
Photographer: R.O. Buffington, 2001



TBAs learning to read illustrations.
 Photographer: R.O. Buffington, 2001

Adapting HBLSS Materials to Country-Specific Settings

The text of the prototype HBLSS training manual consists mostly of open-ended questions designed to promote interaction between the HBLSS Trainer or HBLSS Guide and home-birth teams (See Box 2, p.6). In addition, there are the picture-based Take Action Cards. These training materials require adaptation, which normally includes translating the text for non-English speaking HBLSS Trainers and pretesting the pictures. Regarding the translation, which should occur prior to the initial TOT, it is very helpful if those doing the translating have a good knowledge of the local dialect. Pretesting the pictures occurs in conjunction with the TOT. In India, a local artist was present and adapted the materials as each of the community meeting topics was discussed. The adaptations have usually involved making changes to hair, facial features, and clothing. In Ethiopia, once minor adaptations were made during the TOT, focus group discussions were conducted to learn how the HBLSS Trainers and HBLSS Guides (TBAs) have used the Take Action Cards and to solicit suggestions for improvement. Based on feedback from these discussions, the team further refined several of the pictures. The HBLSS training manual also provides several training props which are easily made using local materials and patterns for womb, placenta, and baby.

Further adaptation of the materials occurs as the training unfolds. The HBLSS Trainers incorporate local practices into the HBLSS training manual and the Take Action Cards as they facilitate the meeting on each of the problem topics. That is, as the participants describe their individual experiences, the HBLSS Trainers take notes on these local practices using the participants' own words. Trainers then review these notes during the negotiation step when discussing local and biomedical solutions to the particular problem. Gradually, the HBLSS Trainers increase their own ethnographic knowledge base and may draw upon this when training others. While the HBLSS Guides are already members of the community, their own knowledge base may still be enhanced through this ongoing adaptation process.

Monitoring and Evaluating HBLSS

Documenting the field tests consists primarily of asking the HBLSS Trainers and Guides, as well as the home-birth teams, basic questions about the HBLSS training process and content to see what they have learned. Monitoring and evaluation of HBLSS focus on four variables—performance, case management, community support, and coverage (where possible)—the specific indicators of which are described below.

Performance. The indicator is 'percent satisfactory HBLSS performance'. Measuring this indicator involves pre-/post-training assessment of HBLSS Trainers and HBLSS Guides. The assessment is conducted using observation and HBLSS Skills Checklists. It focuses on demonstrated knowledge of the HBLSS process (for HBLSS Trainers and HBLSS Guides) and on management of the priority topics selected for training. This assessment tells us if learning is taking place and is being transferred as intended.

Case Management. The indicator is 'percent appropriate HBLSS case management.' Measuring this indicator involves a post-training review of case management among women/families who had a complication and a review of referrals by HBLSS Guides at the health post and hospital levels. We have also included a pre-training review of case management where possible (India). The case management review, which is conducted using in-depth interviews and a complication audit tool, documents the initial response, referral decision-making, referral/access barriers, and pregnancy outcomes. It tells us if the HBLSS management steps are being followed when needed, allows us to document pregnancy outcomes and referrals, and provides a basis for supportive supervision if regular case review is instituted. At the health post and hospital levels, a referral logbook allows us to determine the number of referrals completed and their outcome. Although we are tracking pregnancy outcomes, we are not assessing health impact.

Community Support. A set of indicators describes the presence of community systems or activities that support HBLSS. These vary by site and include: percent of communities having a functioning village health committee, percent of communities having functioning emergency

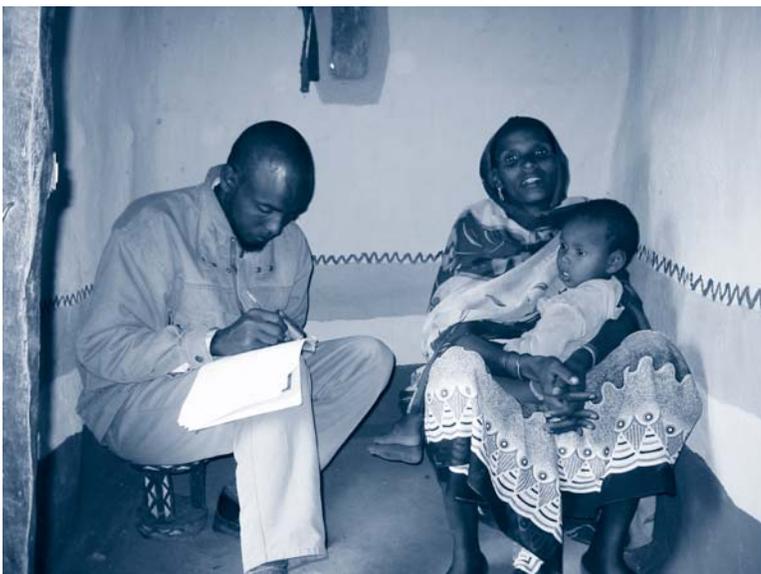
transportation, percent of communities having a functioning emergency care loan scheme, percent of communities actively promoting key HBLSS messages through IEC. Another level of analysis that is valuable is the documentation of how community groups actually function to support HBLSS and the inputs required to adequately build the capacity of these groups.

Coverage. The indicator is 'among all pregnant women, the percent of pregnant women and/or families who attended the HBLSS meetings, over a specified period of time.' In Ethiopia, because the HBLSS Guides are TBAs, we are attempting to assess percent of women attended by HBLSS-trained TBAs among women who delivered (or were estimated to have delivered) over a specified time. This information, along with the data on case management, should give us an idea of potential effectiveness.



Bridge-to-Health Team members discuss their roles in supporting HBLSS during their monthly meeting.

Photographer: Nazo Kureshy, 2002



Save the Children staff member conducting a case management review with a woman who experienced too much bleeding during birth.

Photographer: Nazo Kureshy, 2002

Interim Results

The India HBLSS field test concluded at the end of June 2002, with a PRIME-sponsored external evaluation conducted in January 2003. In Ethiopia, the HBLSS field test concluded in December 2002, with an internal review to be conducted in February 2003. In both sites, the interim results are encouraging. In India, all of the large- and medium-size communities (70 percent of the total) in the project area now have a functioning Village Health Committee, i.e., a group which conducts monthly meetings, identifies and registers pregnant women for ANC, promotes HBLSS meetings, develops mechanisms to sustain HBLSS Guides, and documents pregnancy outcomes. These communities also have active Village Health Guides offering HBLSS, an emergency transportation scheme, and an active revolving emergency care loan scheme (15 families have obtained loans and most have been repaid). In addition, smaller hamlets have access to these schemes and to Village Health Guides who facilitate HBLSS meetings.¹² The 1998 baseline value for all of these indicators was zero.

Between the beginning of June 2001, when HBLSS first was offered in the communities, and June 2002, 538 women had either delivered or experienced a miscarriage or abortion. Fifty-one percent of these women had attended all six HBLSS meetings, and 81 percent had attended at least one meeting. The data on selected preventive care behaviors show substantial gains, including increased use of iron and folic acid, tetanus toxoid (2 doses), birth planning, breast-feeding < 1 hour of birth, and use of a modern family planning method by six weeks postpartum or three weeks post abortion (Table 3).

Table 3. Improvements in Preventive Behaviors after HBLSS Implementation in India

BEHAVIOR	1998 ^a (n = 600)	2002 ^b (n = 538)
Use of iron and folic acid	< 1%	36%
Tetanus toxoid (2 doses)	37%	72%
Birth preparedness	15%	69%
Breast-feeding \leq 1 hr of birth	2%	71%
Use of a modern family planning method \leq 6 wks postpartum	14%	67%
Use of a modern family planning method \leq 3 wks post abortion	22%	59%

^a Sibley, L., et al. 2000. Morbidity and performance assessment in Maitha Block, Kanpur Dehat, Uttar Pradesh. Unpublished report. PRIME/Program for International Training in Health.

^b Personal communication. PRIMEII/Intrah Regional Office and Shramik Bharti, June 2002.

Eight cases of maternal hemorrhage and eight cases of newborn sepsis have been reported, and while none of these women died, five of the newborns did. The 1998 baseline documented 9 maternal and 25 newborn deaths among 534 live births. Today, the number of deaths has decreased to 1 maternal and 16 newborn deaths among 458 live births.¹³

These interim results are very encouraging, but the indicators do not adequately capture what may be the most important result of the Community Partnership Model and HBLSS: the collective and individual empowerment that is taking place. It will be important to define and measure this indicator to fully document the benefits of this project (Box 4).

BOX 4. Field Note

I am just back from a CPSM field trip. Seeing the HBLSS in operation with pregnant women and their birth attendants is close to the most exciting and rewarding field experiences I have had in this decade. I promise you this is on the road to real change. I visited two sites yesterday and am convinced that we are on to something rather wonderful. The women who are taking the course are almost all getting their tetanus toxoid and are also taking iron and folic acid. In discussions they say that they will follow the new ways such as not bathing the baby [at birth] and putting the baby immediately to breast. They said they did the old ways, as they knew no better. The teachers are fantastic and loving their roles. The [Shramik Bharti] facilitators are doing just that (facilitating) and are deeply rewarded by their experiences. The participants say things like, "Taking the course is like being a frog in a well all your life, and when you come out you are surprised at what you find." A mother-in-law was asked if she thought she could do the steps demonstrated to help stop bleeding. She said, "Why not, that is how I learned to make chapattis— by watching how my mother did it."

Source: Personal communication— Wilda Campbell, Director, PRIMEII/Intrah Regional Office, New Delhi, August 29, 2001.

For more information on implementing the project, contact:

American College of Nurse-Midwives
 Department of Global Outreach
 818 Connecticut Ave. N.W., Suite 900
 Washington, D.C. 20006, U.S.A.
 Phone: 202-728-9864
 E-mail: antls@learnlink.emory.edu (Lynn Sibley)
 stbuff@aol.com (Sandy Buffington)

NGO Networks for Health would like to thank the following individuals for their support and contributions: Mary Ellen Stanton, Marge Koblinsky, Lisa Howard-Grabman, Theresa Shaver, and Patricia Caffrey. We also thank Jane Gleeson for her help with the references, Charlotte Storti for editing, and Cecilia Snyder for layout and design.

Notes

¹ Starrs, A. 1998. The Safe Motherhood Action Agenda: Priorities for the Next Decade. Report of the Safe Motherhood Technical Consultation, 18-23 October, 1997, Colombo, Sri Lanka. New York: Family Care International in collaboration with the Inter-Agency Group for Safe Motherhood.

AbouZahr, C. 1998. Maternal mortality overview. In: Murray, C.J.L., Lopez, A.D., eds. Health dimensions of sex and reproduction: the global burden of sexually transmitted diseases, HIV, maternal conditions, perinatal disorders, and congenital anomalies. *Global burden of disease and injury series*. Vol. 3. Geneva: World Health Organization.

World Health Organization. 1994. Mother-baby package: Implementing safe motherhood in countries. WHO/FHE/MSM/94.11 Rev.1. Geneva: World Health Organization.

World Health Organization and United Nations Children's Fund. 1996. Revised 1990 Estimates of Maternal Mortality: A New Approach by WHO and UNICEF. WHO/FRH/MSM/96.11, UNICEF/PLN/96.1. Geneva: World Health Organization.

² Marshall, M.A., Buffington, S.T. 1998. Life saving skills manual for midwives. 3rd ed. Washington, DC: American College of Nurse-Midwives.

³ Beck, D., Buffington, S., McDermott, J., Berney, K. 1998. *Healthy mother and healthy newborn care, a reference for care givers*. Washington, DC: American College of Nurse-Midwives.

⁴ Buffington, S., Sibley, L., Beck, D., Armbruster, D. 1999. Home based life saving skills; field-test draft. Washington, DC: American College of Nurse-Midwives.

⁵ Howard-Grabman, L., Seoane, G., Davenport, C.A. 1993. *The WARMI project: a participatory approach to improve maternal and neonatal health. An implementor's manual*. Arlington, VA: MotherCare/John Snow, Inc.

⁶ Sibley, L., Armbruster, D. 1997. Obstetric first aid in the community: partners in safe motherhood. *Journal of Nurse Midwifery* 42(2): 117-120.

⁷ Sibley, L., Buffington, S.T., Beck, D., Armbruster, D. 2001. Home based life saving skills: promoting safe motherhood through innovative community base interventions. *Journal of Midwifery and Women's Health* 46(4): 258-266.

⁸ Iskander, M.B., Utomo, B., Hull, T., Dharmaputra, N.G., Azwar, Y. 1996. Unraveling the mysteries of maternal death in West Java. Depok, Indonesia: The Center for Health Research.

Li, X.F., Fortney, J.A., Kotelchuck, M., Glover, L.H. 1996. The postpartum period: the key to maternal mortality. *International Journal of Gynecology & Obstetrics* 54(1): 1-10.

International Institute for Population Sciences (IIPS) and MEASURE DHS+. 2000. National Family Health Survey, 1998-1999. Mumbai, India: IIPS and Calverton, MD: ORC Macro.

Save the Children Ethiopia. 2001. Knowledge, Practice, and Coverage Survey. (Liben District, Borana Zone, Ethiopia). Unpublished document. Washington, DC: Save the Children Ethiopia/WomanWise Project.

Save the Children. 2001. State of the world's newborns: a report from Saving Newborn Lives. Washington, DC: Save the Children.

Sibley, L., Sipe, T., Armelagos, J., Barret, K., Finley, E.P., Kamat, V., Loomis, A., Long, P.J., Morreale, S., Quimby, C. 2002. Traditional birth attendant training effectiveness: a meta-analysis. Unpublished technical report. Washington, DC: Academy for Educational Development SARA Project.

Thaddeus, S., Maine, D. 1994. Too far to walk: maternal mortality in context. *Social Science and Medicine* 38(8): 1091-1110.

⁹ Sibley, L., Upadhyay, J., Caleb-Varkey, L., Paul, V.K., Bhatla, N., Prasad, R., Saroha, E., Prasad, S., Hemple, A., Mishra, A., Mishra, K., Ghosh, S., Koshal, S., Singh, A., Singh, M., Singh, S., Yadav, S., Jha, H. 2000. Morbidity and performance assessment in Maitha Block, Kanpur Dehat, Uttar Pradesh. Unpublished report. PRIME/Program for International Training in Health.

¹⁰ Shaw, M. 1998. Referral facility assessment in Maitha Block, Kanpur Dehat, Uttar Pradesh (1998). Unpublished report. PRIME/Program for International Training in Health.

¹¹ Buffington, S., et al. 1999. (see note 4)

¹² Personal communication. PRIME II/Intrah Regional Office and Shramik Bharti, June 2002.

¹³ Ibid.

References

Bang, A.T., Bang, R.A., Sontakke, P.G., and the SEARCH Team. 1994. Management of childhood pneumonia by traditional birth attendants. *Bulletin of the World Health Organization* 72(6): 987-905.

Bang, A.T., Bang, R.A., Baitule, S.B., Reddy, M.H., Deshmukh, M.D. 1999. Effect of home-based neonatal care and management of sepsis on neonatal mortality: field trial in rural India. *Lancet* 354(9194): 1955-1961.

Kumar, R. 1998. Effectiveness of training traditional birth attendants for management of asphyxia neonatorum using resuscitation equipment. *Prenatal and Neonatal Medicine* 3(2): 225-260.

MotherCare, John Snow, Inc. 1995. On the pathway to maternal health: results from Indonesia. *MotherCare Matters* 5(1) (February/March 1995).

Technical Editor: Nazo Kureshy
Editor: Charlotte Storti
Design: Cecilia Snyder
Dissemination Coordinator: Martha Langmuir

NGO Networks for Health (*Networks*) is an innovative five year global health partnership created to meet the burgeoning demand for quality family planning, reproductive health, child survival, and HIV/AIDS information and services around the world. Funded by the United States Agency for International Development (USAID), the project began operations in June 1998. For more information, contact:

NGO Networks for Health
2000 M Street, NW, 5th Floor
Washington, DC 20036 USA
Tel: 202-955-0070
Fax: 202-955-1105
Email: info@ngonetworks.org
www.ngonetworks.org

