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A GUIDE TO PROGRAM PLANNING

**BUILDING QUALITY
INTO A TRAINING AND
CONTINUING EDUCATION
SYSTEM FOR MIDWIVES:
A SYSTEMS APPROACH**

A Guide for Program Planners

**The Training and Continuing Education System is a
cooperative effort between
the Indonesian Ministry of Health,
National Midwifery Association (IBI)
and MotherCare/JSI
with funding from
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MotherCare South Kalimantan staff

Technical content Diana Beck, Maternal Health Advisor, MotherCare/ACNM

Written by Surekha Cohen, Program Manager, MotherCare/Indonesia

With editorial and design input from Lara Zizic, Health Communications Advisor, MotherCare/Indonesia and Endang Achadi, Country Director, MotherCare/Indonesia

Cover Participatory learning is important to the competency-based training approach Using role plays allows bidan (midwives) to practice conducting postpartum visits to mothers in the community, so they can teach this to bidan di desa (village midwives)

Back Cover Traditional sasirangan textile from South Kalimantan, Indonesia

Photo credits Cover photograph by Sandra Tebben Buffington Other photos by Penelope Caldwell

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MotherCare



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Departemen Kesehatan

BACKGROUND

The Government of Indonesia is working intensively towards reducing maternal mortality in Indonesia. One strategy has been to bring health services closer to the community by placing *bidan di desa* (village midwives) in every village, especially those villages that are more remote. In 1993, the Ministry of Health (MOH) began deploying the first of 60,000 *bidan di desa* trained through a "crash" program. The strategy was to train as many service providers as possible, as quickly as possible, so the maternal mortality situation would receive immediate attention. Experience in the field shows that these *bidan di desa*, due to their limited experience and relative youth, need additional support in the form of further training and continuing education. The MOH has begun to address this need through Life Saving Skills (LSS) training for *bidan di desa*.

MotherCare has been working with the MOH in South Kalimantan province since 1995 to develop an integrated LSS Training and Continuing Education System that meets local needs and is expected to serve as a model for other provinces in Indonesia. With the support of the MOH and the American College of Nurse Midwives (ACNM), *Life Saving Skills* training for the management of obstetric emergencies has been adapted to the local situation in South Kalimantan. While the focus is on community level *bidan di desa*, the training also includes *bidan* (the midwives at hospitals and health centers) since they provide critical services at referral sites and also monitor and

support the *bidan di desa*. This ongoing support is provided through the Continuing Education component of the training system, managed by the National Midwife Association (IBI). After they have completed the LSS training, *bidan* and *bidan di desa* are monitored through a Peer Review process and regular Continuing Education is provided based on the Peer Review findings. Two training centers have been established in South Kalimantan with five trainers at each site. As of September 1997, 102 *bidan* and 80 *bidan di desa* have been trained, with Peer Review and Continuing Education being put in place by IBI as the *bidan* and *bidan di desa* complete the training. The LSS Training and Continuing Education System has also been integrated with other aspects of the MOH Safe Motherhood program, such as the strengthening of MCH Program Management and Maternal and Perinatal Audit (MPA), in order to maximize the competence of the *bidan* and *bidan di desa* and consequently, the quality of the maternal health services they provide.

Who are the village midwives(*bidan di desa*) of South Kalimantan ?*

They are a cadre of government employees (38% are permanent civil servants while 62% are on contract) assigned to live in the village they serve (87%). Most of them (73%) are 25 years old and their training began after junior high school with three years of nursing education and one year of midwifery (72%).

A majority average less than one delivery a month (54%)

* Based on data from three MotherCare funded districts in South Kalimantan 1997

A “SYSTEMS APPROACH” TO TRAINING FOR BIDAN AND BIDAN DI DESA

Based on experience in South Kalimantan and other developing countries, it is critical to the success of a program that a “Systems Approach” to training be taken (see page 12) A “systems approach” implies not only the systematic development of a quality training program including preparation, training and followup, but also the development of a number of interlinking systems that support each other to produce an overall Training and Continuing Education System While this process requires a more intensive investment of human resources and time during the setup phase as well as for ongoing monitoring and support it results in a stronger training system with better prepared people to meet program goals Each step of the system as elaborated below should be followed to establish and maintain an appropriate and effective training system These steps can be grouped in phases as follows (A) building consensus at the national level on program needs and goals, (B) assessment⁶ of local needs and setting up training centers, (C) integration of in-service training with peer review/continuing education, and (D) program monitoring/evaluation

A Building Consensus at the National Level

Step 1. Policy Level Planning

Prior to developing a training program, consensus must be reached at the national level that MCH services can be strengthened by improving provider skills and goals for the program must be developed In addition, agreements must be made between all involved on funding as well as roles and responsibilities These preliminary steps are critical for the establishment of a sustainable program

MCH Situation in South Kalimantan*

- ▶ MMR is estimated at 543/100,000 live births
- ▶ Neonatal/perinatal mortality rate is 21.5/1000 births
- ▶ Traditional birth attendants (TBAs) attend the largest proportion of births (44.2%)
- ▶ Most mothers deliver at home (87.4%)
- ▶ Few deliveries are by bidan (16.6%) or bidan di desa (7.6%)

Sources: Central Bureau of Statistics
Sisterhood Survey 1996 and MotherCare
Community Based Survey 1996

B Assessment of Local Needs and Setting Up Training Centers

Step 2 Training Needs Assessment

Once there is consensus to conduct LSS training, as in any program a needs assessment is important to refine perceived needs and better target interventions that are undertaken. The Training Needs Assessment (TNA) should include a profile of community needs and the demands placed on the providers (bidan and bidan di desa). This is complemented by a profile of provider skills, knowledge, equipment on hand, referral patterns, and a description of the provider's practice. In addition, information is collected to identify potential training sites. Important criteria include sufficient numbers of patients and limited competition with other students so each training participant can be assured the clinical experiences needed during the length of the training course to achieve competency. To assure availability of adequate clinical experiences for participants, the hospital must have available at least 15 births per participant trained during that month (see box below). In addition, potential training sites should be assessed to determine clinical protocols being used and modifications needed, adequate staffing



Demonstration of infection prevention techniques an important part of training for bidan and bidan di desa

to cover trainers when teaching, staff interest in participating in a training program, equipment available, documentation systems being used, and facilities to accommodate students on site. From these findings decisions can be made on which facilities can serve as training sites, how many trainers are needed, how many participants per class, equipment needed, what the course length should be and the exact content of the training

Calculating hospital capacity for trainees

$$\frac{\text{hospital monthly delivery rate}}{15} = \text{number of participants that can be trained in a month}$$

Comparison of Training Content for Bidan and Bidan di Desa

	Bidan (Midwives)	Bidan di Desa (Village Midwives)
LSS Training	Episiotomy / Repair of Lacerations Hydration and Rehydration Prevention / Management of Sepsis	
	Prevention / Treatment of Hemorrhage Infant Resuscitation	
LSS and Healthy Mother Healthy Newborn	Infection Prevention Antenatal Risk Assessment / Care Labor / Delivery Management (Including Partograph)	
Healthy Mother Healthy Newborn		Postpartum Care (By 6 hours 3 days 2 weeks 6 weeks) Breastfeeding Counseling Family Planning Counseling Community Integration Bidan di Desa Register IEC

In South Kalimantan, the TNA highlighted the need to tailor the LSS training content for the different needs of bidan and bidan di desa. Bidan were found to need reinforcement in the handling of obstetrical emergencies (the full 10 *Life Saving Skills* modules) and had the clinical volume to maintain these skills once trained. However, because bidan di desa had limited clinical volume, averaging about one delivery per month, the training content for bidan di desa was modified to reinforce their knowledge in normal aspects of antenatal, labor and delivery, and postpartum care, as well as some aspects of LSS. Bidan di desa also showed the need for support on how to better

integrate into the communities they service. Focus was given to this as well as counseling skills through the development of a second manual entitled *Healthy Mother Healthy Newborn* (see table)

The TNA findings in South Kalimantan were used to select one provincial level hospital and one district-level hospital with sufficient numbers of deliveries to serve as training sites. The findings also helped to determine that based on the training content needed and the number of deliveries available, the training would require 11 days per cycle with a class size of eight at the provincial hospital and four at the district-level hospital.

Step 3 Site Preparation

Upon completion of analysis of the TNA data and decisions about the structure of the training system, the site preparation can be done. This activity requires one week at each training site. It provides an opportunity to review the results of the TNA, to ensure everyone at the facility understands the training program, and to finalize agreements about clinical protocols and procedures for use of the partograph (a labor management tool) and infection prevention. Trainers may be selected during this week or later when the training center is being established. However discussions must take place during the Site Preparation to ensure that administrators and potential trainers understand the time commitment required and release trainers from some of their previous responsibilities.

The Site Preparation also includes an equipment and supplies inventory, a review of hospital records, decisions about logistics, and discussions about the training center administrative structure. Including all key departments during this process orients them to the program and facilitates the establishment and running of the center.

A key component of the Site Preparation is a “Mini LSS” training (see Step 8 for details) for all the staff in the antenatal, labor and delivery, and postpartum wards of the hospital to ensure that the facility as a unit is using the same skills and techniques that will be taught to the LSS trainees. One potential major weakness of a training program is the staff at the training facility practicing differently from what training participants are taught. Through the ‘mini-LSS’ training consistency can be assured between the learning environments in the classroom and the hospital wards, and potential conflict between trainers and other hospital staff can be averted.

*When participants **LEARN** and **SEE** the same thing being practiced by the staff in the training facility as is taught in the classroom, they learn better.*

Step 4: Establishing a Training Facility

The process of establishing a training center can take from 1 to 3 months. This time is critical to allow implementation of clinical procedures, protocols, and documentation procedures agreed upon during the site preparation. In addition, the selection of the trainers can be

finalized, needed supplies and equipment ordered, systems to select and organize participants established, the training center administrative structure and procedures finalized, and the physical space (for classroom, on-call sleeping area, etc.) prepared. The final selection of the trainers is critical to the success of the training, therefore, clear criteria must be used. The two most important criteria are that (1) trainers must be clinically active (five to ten clinical experiences per week) and (2) the training team should be composed of a balance of staff from the antenatal, labor and delivery, and postpartum wards. Trainers should also have good communication skills, and ideally trainers should be the peers of the trainees, i.e., bidan should train bidan and bidan di desa.

People learn

*80% of what they **hear, see and do,***

40% of what they hear and see,

20% of what they just hear

*The participatory approach is critical to **EFFECTIVE***

absorption and the participants' ability to apply what they have learned

Step 5 Training of Trainers (Clinical)

The Training of Trainers (TOT) for the clinical portion takes approximately two weeks and uses the same methods as trainers are expected to model when they themselves conduct training for bidan and bidan di desa. The TOT uses competency-based training, participatory learning methods, and adult learning principles. The transfer of this training approach is equally important to ensuring the quality of the training team and success of the training as the review of clinical content.

Competency-based training focuses on learning by doing and emphasizes the most essential steps required to do a skill well. These steps are listed in a *skills checklist* which can then be used as a teaching and evaluation tool. The checklist is an easy way for trainers and participants to determine when a participant has reached competency. I.e., the participant can perform each step of a skill at 100%. Equally critical to learning is the inclusion of sufficient clinical practice. Thus, competency-based training must be flexible to allow each trainee access to as many clinical experiences as needed to become competent. There is no fixed number of experiences required per trainee, but the training and call schedules must be flexible. This allows each participant, depending on her starting point and rate at which she learns, as much practice as she needs.

Clinically active, competent and confident trainers are critical to a successful training program

In addition to a TOT, trainers must remain clinically active to maintain their *competence* and *confidence*. Confidence in this case implies that not only are they able to do a skill, but are also confident to teach it. This is usually accomplished by giving the trainers a 2-3 month 'internship' period after the clinical TOT to allow them time to practice what they have learned and gain confidence. In the South Kalimantan program, due to time constraints this internship period was not possible. As a

result, trainers expressed great concern about having to conduct training immediately and required extra support beyond the first class. Since the success of the training depends largely on the trainers, it is critical to give them support and sufficient time to absorb and integrate any new skills they have received.

If trainers are expected to train on different clinical content for different levels of providers, they should receive separate clinical TOTs for each curriculum. In South Kalimantan for example, the trainers were given separate TOTs for the LSS training of *bidan* and the modified LSS training for *bidan di desa*.



Step 6 Training of Trainers (Training Skills)

Active clinicians make ideal trainers

A clinician can be taught to be a good trainer, but it is much harder to train a teacher to be a good clinician

The TOT for training skills should be conducted after the internship period for trainers, once they are feeling confident in their clinical skills. This second training usually requires 1 week at the facility (or 3 weeks if training Master Trainers) and focuses on teaching approaches, with time given for practice and to provide extensive feedback. During this TOT, responsibilities for administrative and teaching tasks are also divided among the trainers. Trainers teach topics based on their area of

expertise (antenatal, labor and delivery, or postpartum). Schedules are arranged so that two trainers per day teach while the remainder can continue with their clinical responsibilities. This puts less strain on the facility and is also important to maintaining the trainers' clinical acuity.

Step 7. Training of Bidan and Bidan di Desa

Once the trainers and the facility are ready, training can begin, with the training site staff (bidan) as the first group. Training all the bidan at the hospital strengthens the training site as a model facility and enables all the bidan on staff to be competent clinical instructors. The training schedule should be designed to be flexible to take advantage of clinical opportunities that may arise. Participants remain on call 24 hours a day for the same reason. The training course in South Kalimantan was two weeks long with a one week break for trainers between each cycle to allow time for routine clinical and administrative duties, evaluation of the training, and preparation for the next class. Trainers are given support through intensive monitoring of the first class and then sporadic monitoring and meetings every three months.



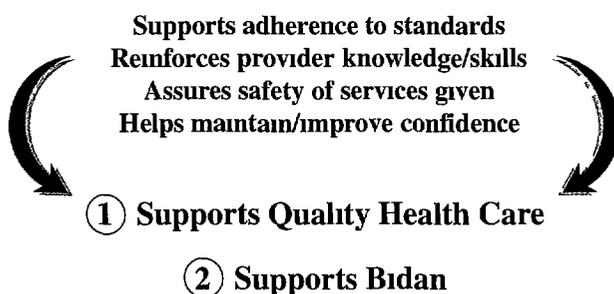
During the training needs assessment infant resuscitation techniques were found to need updating. To the left a bidan trainer demonstrates use of fingers for chest compression when doing infant resuscitation. Above a trainee practices infant resuscitation on a model while observers monitor using the skills checklist.

Step 8: “Mini LSS”

As important as having consistency within the training facility is to the quality of training, it is equally critical to the quality of care to have consistency at all levels of service provision. The standardization of protocols, documentation methods (e.g. partograph), and knowledge in critical areas provided to *bidan* and *bidan di desa* through the LSS training with that of **providers at all referral sites** is a critical step. Therefore, a two to three-day “Mini LSS” workshop should be conducted for all providers not participating in the LSS training and who may receive referrals from *bidan* or *bidan di desa*. This orients them to the Training and Continuing Education System, develops their support for the program, and ensures use of similar protocols and documentation.

In South Kalimantan, workshops were held with doctors and *bidan* from the district hospitals and from all the community health centers in the three project districts. These providers were given an overview of the LSS training with special emphasis on infant resuscitation, infection prevention, use of the partograph, and postpartum hemorrhage (added subsequently due to the importance of hemorrhage as a maternal health complication). The training was conducted by the LSS trainers with support from ObGyn consultants.

Why have a Peer Review/ Continuing Education System?



C. Integration of In-Service Training with Peer Review/ Continuing Education

Since training providers without any followup has been shown repeatedly to have limited effect, the training for *bidan* and *bidan di desa* must be supported by an ongoing system for monitoring and continuing support. This integrated Training and Continuing Education System follows LSS training with a two-part process of *Peer Review* and *Continuing Education*. In South Kalimantan, the LSS training structure was developed by the provincial MOH. To reduce the burden on the MOH system, the system for Peer Review and Continuing Education was developed and is managed by Ikatan Bidan Indonesia (IBI), the national midwife professional organization. This model of government-NGO partnership takes advantage of the fact that most government midwives in Indonesia are IBI members and maximizes support to the *bidan* and *bidan di desa*.

Step 9. Peer Review

In the Peer Review system, all LSS-trained *bidan* serve as peer reviewers, visiting each other as well as *bidan di desa* twice a year. The Peer Review visits comprise a review of the provider’s clinical practice and documentation compared with the standards and protocols taught in the LSS training. Additional support and information is given to the *bidan/bidan di desa* as needed. The visit is guided by a Peer Review Visit Form as well as the peer review process taught during a 5-day workshop, which in South Kalimantan was conducted by the national level IBI.

team using the IBI Peer Review Manual. Peer Review is currently underway in the three project districts for all bidan and bidan di desa who have been trained. Information from the visit is also used to determine broader continuing education needs. The Peer Review Visit Form is summarized in a Recap Form for Bidan, and then compiled in a Recap Form at a regional level. In South Kalimantan, IBI at the district level uses the recap form to see how well skills are being integrated and whether documentation like the partograph is being used. The information gathered at this level is discussed during district-level Peer Review Meetings every six months to identify areas of decreased knowledge and skills. The information is then used to strengthen the LSS training program and to establish priorities for Continuing Education. The Peer Review meetings in South Kalimantan are attended by the district-level IBI leaders, the MOH Maternal Child Health Coordinator at the district level, the LSS trainers, and all peer reviewers to ensure that information is collected from and disseminated to all parts of the system.

Step 10• Continuing Education

The Continuing Education process is based on information from the Peer Review system and supports LSS areas of focus. Continuing Educators (five per district) selected from among the bidan trained in LSS and Peer Review, are trained in a 5-day workshop by the IBI National Continuing Education Training Team. They then become responsible for taking information from the Peer Review meetings and developing Continuing Education sessions addressing gaps in knowledge and skills. In South

Kalimantan, this continuing education is offered at IBI Chapter meetings every three months. Since IBI membership includes both LSS-trained and untrained bidan and bidan di desa this is an opportunity to share knowledge about LSS to a wider audience. The continuing educators also attend district-level Maternal and Perinatal Audit (MPA) meetings organized by the MOH where cases of maternal and neonatal mortality are discussed and incorporate this information in developing Continuing Education materials.

This integrated training, peer review and continuing education system, supports adherence to standards, reinforces provider knowledge and skills, assures the safety of services given and helps to maintain and improve the competence of providers. Through such linkages in training and ongoing support systems, the quality of maternal health care can be assured. The sustainability of such intensive ongoing support depends on funding, which can be addressed through the establishment of a **Fundraising** system. In South Kalimantan, teams of five IBI members from each project district, selected from among the bidan trained in LSS, also received fundraising training from the IBI National Fundraising team approximately 6-9 months prior to the start of Peer Review activities. The fundraising team in each district first develops a plan which is approved by the provincial level. The district then receives startup funds to generate additional revenues. The monies raised are used for transport costs for Peer Review and Continuing Education meetings, and for meeting supplies.

In South Kalimantan, it was found that the maintenance of this integrated training and continuing education system requires a full-time technical and administrative Training Coordinator.

D. Program Monitoring/Evaluation

Though not specific to the Training and Continuing Education System, program evaluation is also a critical component of this process. Using a variety of monitoring tools including hospital delivery registers, bidan di desa registers, data on maternal and perinatal mortality from the MPA, peer review recap forms, etc., information is gathered which helps to determine what has worked and

what has not worked. The program can be modified accordingly at all levels including the training itself, protocols, documentation systems, and the monitoring systems.

LINKAGES

The linkages within the Training and Continuing Education System are strengthened by linkages with other MOH maternal health program activities and quality assurance systems, which in Indonesia includes a Maternal and Perinatal Audit (MPA) activity and an intervention to strengthen MCH Program Management. Information obtained from the MPA is used (like the information from Peer Review) to highlight gaps in *bidan*/*bidan di desa* knowledge and skills, to modify the LSS training or to design continuing education. The training system in turn gives support to the LSS-trained *bidan* and *bidan di desa* presenting cases at the MPA. The trainers meet with these *bidan*/*bidan di desa* to review the case and provide additional training and support as needed either at their work site or at the LSS Training Center. The trainers also provide support to IBI Peer Review and Continuing Education processes by serving as clinical consultants to answer questions, help to identify Continuing Education priorities and assist if needed with preparing CE sessions. The Peer Review/Continuing Education system in turn gives feedback to the trainers on the results of LSS training and supports the improvement of services to the community by *bidan* and *bidan di desa*. Informing LSS trainers of changes in MCH Program Management and changes in policy based on MPA findings ensures consistency between what is taught and the systems in place in the community. This communication between the higher level hospitals (through the LSS trainers) and the district-level MOH and IBI, as well as the movement of the LSS trainers to the districts in connection with the MPA, can reduce barriers between the higher level

hospitals and the district hospital, community health center, *bidan di desa*, and eventually the community.

PROTOCOL DEVELOPMENT

A fundamental aspect of improving the quality of services provided by *bidan* and *bidan di desa* is the establishment of clear clinical protocols. For the Training and Continuing Education System to function efficiently, protocols must be established at the institutional level. These clinical protocols are agreed upon during the Site Preparation and TOT. It is also important to subsequently agree upon these standardized protocols, if they do not already exist, at the provincial and national levels. MotherCare has not yet become involved with this process at the provincial and national levels in Indonesia, but given the magnitude of the task it may take up to a year to establish protocols at the provincial level and two to four years at the national level. At the national level, the approval process needs to be clarified from the start. Then a technical working group should be formed to review all previous protocols, as well as national and international standards. Guidelines can then be established for overall protocol development including the scope, the levels (community, health center, hospital), the targeted providers, and the format to be used. The process also needs to be agreed upon, so that once protocols are written and published there is a system for implementation, monitoring, and regular review.

*Reducing barriers between
higher level hospital
and
district hospital, puskesmas and
bidan di desa*

BENEFITS OF THE MOTHECARE/ACNM APPROACH TO TRAINING

By following this “Systems Approach” to training, an in-service training and continuing education system can be designed that is focused on provider and community needs and reflects agreed upon clinical protocols. While the steps for establishing the system are quite intensive (especially steps 2 to 6) and require adequate time between each step, this preparatory process ensures that the institutions and personnel are ready to participate and that the trainers are well prepared and at maximum effectiveness.

The design of the training itself also gives participants sufficient time, experience and feedback to become competent in all the skills included in the training. The peer review and continuing education structure supports what has been taught, strengthening the system through feedback of information on continuing education needs and contributing to the overall sustainability of the system. Finally, the entire Training and Continuing Education System relies on the intergovernment-NGO collaboration of the MOH with IBI, maximizing the support to bidan and bidan di desa and thus the quality of services to mothers and newborns.



Trainers help a mother and baby get off to a good start with postpartum breastfeeding counseling

MotherCare is a global project funded by USAID to address maternal and neonatal health problems. In Indonesia, MotherCare is working with the Ministry of Health in three districts of South Kalimantan province (Banjar, Barito Kuala and Hulu Sungai Selatan) to support and enhance the ongoing Safe Motherhood program with the development of a model approach that encourages linkages between program components. With these initiatives we expect to see an improvement in the health of mothers and newborns, and an eventual reduction in maternal and neonatal mortality. In addition to the development of a Training and Continuing Education System, the MotherCare approach includes components such as print media and radio campaigns in the community on anemia and safe motherhood, counseling and communication training for health care workers, audits of cases of maternal and perinatal mortality, implementation of monitoring systems in health facilities and capacity building for the National Midwifery Association (IBI). The MotherCare Indonesia Project is currently in its third year of activity and is scheduled to continue until September 1998.
