

PN-ACE 075

**ASSESSMENT OF PROVINCIAL TRAINING
SITES FOR UPGRADING OF MIDWIFERY
SKILLS AND IMPLEMENTATION PLAN
OF MCH INTERVENTIONS IN THE PILOT
COMMUNITY PROJECT**

RACHA Program, Cambodia

May 13-June 5, 1998

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TABLE OF CONTENTS

ACRONYMS

EXECUTIVE SUMMARY 1

PURPOSE OF VISIT 1

BACKGROUND 1

A Midwifery Training Issues 1

B Existing Refresher Training 2

C Existing Constraints 2

D Pilot Community Project in Pursat 3

RESULTS AND CONCLUSIONS 4

A Midwifery Training Plan 4

B Training Sites and Implementation Plan 5

C Pilot Community Program-Koh Chum Commune, Pursat Province 9

RECOMMENDATIONS/NEXT STEPS 10

A Midwifery Training Plan 10

B Community Pilot Program-Koh Chum Commune, Pursat Province 11

APPENDIXES

Appendix A Trip Activities

Appendix B Summary of Training Site Information

Appendix C Questionnaire and Reports from Individual Sites

Appendix D Proposed Plan for Midwifery Skill Upgrading

ACRONYMS

| | |
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| ACNM | American College of Nurse Midwives |
| ANC | Ante-natal Care |
| AVSC | AVSC International |
| BASICS | Basic Support for Institutionalizing Child Survival |
| BS | Birth Spacing |
| CMA | Cambodian Midwives Association |
| HBA | Home Birth Attendant |
| HC | Health Center |
| JICA | Japan International Cooperation Agency |
| MCH | Maternal and Child Health |
| LSSC | Life Saving Skills Course |
| MOH | Ministry of Health |
| MW | Midwife |
| NGO | Non-Government Organization |
| NMCHC | National Maternal Child Health Center (P P) |
| NPH | National Pediatric Hospital |
| PHC | Primary Health Care |
| PN | Post Natal |
| PP | Post Partum |
| RACHA | Reproductive and Child Health Alliance |
| RTC | Regional Training Center |
| SEATS | Family Planning Service Expansion and Technical Support |
| TBA | Traditional Birth Attendant |
| TDY | Temporary Duty Assignment |
| TOT | Training of Trainers |
| UN | United Nations |
| USAID | United States Agency for International Development |

EXECUTIVE SUMMARY

This trip report serves to document the three-week TDY of Judith Moore, BASICS technical officer to the RACHA project, Cambodia, from May 13 to June 5, 1998. The consultant worked with the RACHA reproductive health advisor in assessing various potential provincial training sites that might be suitable for the upgrading of midwifery skills for staff from RACHA's focus provinces. Twelve sites (both inside and outside of RACHA's focus provinces) were visited and information was collected from them. Discussions with provincial MCH directors, Regional Training Center (RTC) staff, and staff from NGOs and other USAID agencies took place to provide additional background information.

Three sites were selected as the best potential training facilities and listed in order of preference. Referral hospitals within RACHA's provinces were selected for support, and staff from these facilities are the initial target group for training. A training plan was drafted with recommended next steps for implementation.

The consultant also worked with the provincial planning and management advisor and his team on the obstetric and neonatal interventions for the community pilot project in Pursat Province. A plan for implementation of these activities and preparatory work was drawn up.

PURPOSE OF VISIT

- Visit and assess potential provincial training sites to be used to upgrade midwifery skills, and draft a training plan.
- Provide technical advice on obstetric and neonatal topics that could be implemented in the pilot community project in Koh Chum Commune, Pursat Province.
- Draft an implementation plan for these interventions.

BACKGROUND

A Midwifery Training Issues

Following the end of the Pol Pot regime in Cambodia, there was an urgent need for trained health workers in all disciplines. With all previous training institutions destroyed and few tutors remaining, large numbers of students were rushed through health training curriculae that had not been fully developed and they received little training on practical skills. This has resulted in many health staff employed within the ministry with low skill levels and little professional self-confidence. While health training curriculae are currently being reformed and improved, staff who were trained before these reforms were implemented urgently need their skills upgraded,

particularly clinical skills and practice. Many midwives qualified with little or no delivery experience and were/are understandably not confident or proficient about conducting deliveries or dealing with complications that occur. A common reason given by both MOH staff and women themselves for not wishing to deliver their babies in government health facilities was the lack of practical experience and skills of (and therefore lack of confidence in) the staff. Little or no postpartum care is given and so vital opportunities are missed for health education on areas affecting maternal and neonatal health, such as breastfeeding, immunizations, infection prevention, birth spacing, etc.

B Existing Refresher Training

JICA (Japan International Cooperation Agency) is holding midwifery refresher training at the NMCHC 3 times a year for 16 midwives. Each training course is one month long and covers antenatal, delivery, and postnatal skills. There is a great need for similar courses at the provincial level.

The CMA (Cambodian Midwives Association) has also organized two day continuing education training sessions on specific topics and is pilot testing these in RACHA's focus provinces. However, these sessions are currently theoretical and deal with one topic at a time, while the majority of the training needs outlined in this report are clinical and focus on practical skill development and quality of service issues (while obviously recognizing the need for adequate theory to support these practical skills).

More training in clinical skills appears to be the most requested activity from all sectors—midwives themselves, national and provincial MOH staff, NGOs, and aid agencies, and women in the communities.

C Existing Constraints

Two major factors which appear to affect the number of deliveries taking place within MOH facilities and influencing the number of deliveries which midwives are able to perform (and therefore increase their experience level) relate to cost.

The first factor greatly influences referral practices when women experience serious problems during their pregnancy or labor. While some hospitals/HC have cost recovery schemes and these charges are clearly displayed in the facility, women are frequently expected to also pay the doctor and/or midwife who treats them. These costs vary, may be excessive, and are not widely advertised, so that families bringing women in to these facilities often have no idea of what they will be asked to pay. This was the single most mentioned factor (in the women's focus group discussions held in Kampot and Pursat provinces, see J. Moore Trip Rep. Jan 5-Feb 10, 1998) for not taking women in critical condition to a referral hospital for treatment (along with poor quality of care). Costs within private practices are probably better advertised, but out of the reach of many women.

In the site visits, Takeo Hospital stood out as having a very active maternity unit with a relatively large caseload and a high percentage of Caesarian sections, reflecting the fact that they were treating many serious referral problems. The reason given for the high utilization rate was that costs for procedures were fixed and no 'under the table' payments were demanded (The Swiss Red Cross supports this hospital and does supplement staff salaries)

The second factor is related. Since individual doctors and midwives charge for delivery services, they are reluctant to let student midwives or less experienced midwives actually perform the delivery. There is no history of qualified and experienced midwives supervising those less experienced, as is the normal training practice in western countries, since this apparently can be seen as taking revenue away and increasing competition for those experienced midwives. However, TBAs are usually trained in this mentored way.

Both these factors will need to be addressed if RACHA undertakes any kind of practical midwifery training and ongoing support to referral hospitals.

D Pilot Community Project in Pursat

In 1997, Pursat provincial and district health officials prepared a plan of action for strengthening MCH in the province. Although much of this plan focused on how to improve public sector health services and management, the planners realised that little would change unless communities became involved in addressing health issues at the household level. They identified Koh Chum Commune as an area in Pursat that they would use as a pilot area to develop community partnerships. The commune was chosen because it was thought to represent many of the conditions and problems characteristic of other communes in the province.

A working group was assigned by the MCH director and completed meetings with commune and village chiefs and TBAs, and facilitated women's focus group discussions. Using the information from these meetings, four villages were jointly selected in which to begin activities. Village members decided to form committees to represent the village and serve as the liaison group to work with the provincial team. Following the formation of the village committees, further discussions on major MCH issues took place and the need for a household survey was agreed on to gain more information. The survey has been carried out in the four villages and the results are being analyzed.

One major problem identified was the lack of trained providers available to give assistance with complications in pregnancy or labor, and the difficulty in accessing health facilities during these emergencies. Other problems identified included a lack of birth spacing, ANC and immunization services, avoiding giving colostrum during the first few days after delivery, misunderstanding of a woman's fertile period, poor understanding of nutritional issues and the inability to judge the seriousness of severe diseases in children, and recognition of obstetric emergencies, along with more general water and sanitation and economic issues.

With no health center within the commune, there will be a need for health workers, preferably midwives, to provide services by doing deliveries at home or supporting TBAs, and addressing many of the health education issues. They will be key players in the development and strengthening of links between the community and the referral hospitals and health centers. These midwives will also need additional training and should be included within the plans for overall midwifery upgrading training and continued supervision of practice. At the same time, the improvement of standards within the referral hospitals is essential in maintaining the quality of the services that will have been taught on the upgrading training. Each section of the MOH system cannot function in isolation, and the MCH services structure needs specific support at each level.

RESULTS AND CONCLUSIONS

A Midwifery Training Plan

The midwife occupies a key position, within both public and private sectors, in providing services to women and their children. However to utilize this role fully, midwives must have a solid foundation of clinical skills and knowledge. Without basic skills, the midwife has no credibility with the population she serves and her role cannot be expanded further. Providing isolated training courses will not be enough to raise skill levels. Sufficient numbers of midwives must be trained in order to change current practices and they must receive continuing support in their place of work to practice new skills and to maintain adequate standards of care.

The assessment team, therefore, came to the conclusion that identification of a main training site (or sites) with adequate numbers of deliveries and surgical back up would be the start of a training process that would aim to—

- provide basic life saving skills training for selected midwives working in the focus provinces
- build a cadre of trainers able to continue this training
- allow midwives working in key positions both within referral hospitals and in the community with little practical experience to gain more experience
- support improved midwifery practice at selected facility and community sites in the focus provinces

The trainees would come initially from the main provincial referral hospitals in RACHA's focus provinces, beginning with one or two hospitals. These hospitals would need some upgrading and resource support and as the midwives return from training, as well as additional supervision to support the practice of improved midwifery skills.

In addition, as RACHA's community activities expand and as the selected midwives in these referral hospitals are trained, other midwives working in key positions in the community would be selected for this training and if lacking in delivery experience, would receive extra time at the main training site, before and after the LSS course, to gain more practice. The linkage between these communities and the referral hospitals is essential to efforts to reduce maternal and child mortality.

B Training Sites and Implementation Plan

Sites Visited

Field visits were made to three of the 4 RACHA focus provinces: Siem Reap, Pursat, and Kampong Speu. Visits were also made to facilities in Takeo, Banteay Meanchey, Battambang, Kampong Chhnang, Kampong Cham, and Kampong Speu provinces. The main focus was on referral hospitals with surgical capacity that might be suitable as training centers and where extra practice in delivery skills might be gained. However, health centers where deliveries were regularly taking place were also visited. In addition, discussions took place with provincial MCH directors, Regional Training Centers, and various NGOs to gain local information and advice on the best approaches and greatest needs. (See Appendix A.)

A standard list of questions was used to record information from each facility and focused on level of activities, surgical capacity, ability to deal with complicated problems, staffing levels and patterns, resources, and existing training issues. (See Appendixes B and C.)

Selection Criteria

Criteria used to make the selection of preferred sites was based on the regular number of deliveries the facility has, the existing conditions and standards in the maternity unit, the surgical capacity, the staffing capability, and the role that the facility might play within the existing and proposed RACHA program.

Discussions took place with the RACHA technical team to agree on the following proposed outline. (See Appendix D.)

Pre-training Preparations

The main training site(s) selected will need to be prepared—trainers selected, adequate equipment and supplies available, student accommodations, etc. ACNM may require a planning visit to do this, and support from RACHA staff will also be needed.

Standards of clinical practice/clinical protocols need to be written. ACNM may have drafts of these to be used as part of the course, however, they will need to be adapted and in line with the

new clinical management protocols currently being revised by the technical working group at the NMCHC

Contractual agreements with the main training site(s) and the provincial referral hospitals need to be negotiated and drafted and must address the charges issues. Charges for services **must** be fixed and adhered to and posted clearly in the hospital so that patients and their families know what they will be charged

For staff who have been through the LSS training course, an agreed satisfactory standard needs to be set for them to 'qualify' or show that they have gained the competencies required from the training. These standards should form the basis for the standards of practice to be maintained at the provincial hospitals where the trained staff return to work. In addition, supervision systems must be an integral part of the training process

The provincial referral hospitals will need some upgrading, supplies, etc , prior to the commencement of training activities

Additional staff will be needed to follow up and coordinate all the training activities and to support the referral hospitals

Staffing Proposal

- 1 One local hire employee to act as the reproductive health coordinator and counterpart to J Carlson (JC), based in PP
- 2 One local hire employee (preferably a midwife) to act as the reproductive health training team leader to coordinate the training activities and support to the provincial referral hospitals, based in PP

(See community pilot details below)

- 3 One local hire midwife to act as the reproductive health community team leader to work on the MCH activities in the community pilot project and assist with support to Pursat referral hospital, based at provincial level

In addition two separate three-month periods of external short-term technical assistance are needed to counterpart positions 2 and 3

Proposed Training Plan

A) Site choice

The best choices for the primary training sites, because of the number of deliveries and the level of services seen, were Battambang and Takeo referral hospitals. There is a RTC in Battambang which uses this hospital for its students' practical experience. Further discussions will be needed to see if they are interested in becoming a training site and what terms and conditions will be necessary to facilitate that arrangement. The third choice using the same criteria, but which was more closely connected with current RACHA activities, is Siem Reap Referral Hospital.

B) Initial phase of training

The proposed initial phase of the training strategy, following the selection and agreement with the MOH of main training facilities, would be to contract with the ACNM to hold an initial Life Saving Skills Course. Staff from Battambang Hospital, midwifery faculty from Battambang RTC, and if possible, two midwives from the national level would be the trainees on this first course.

If ACNM were available to do a second LSS course, at the second training site, Takeo, then more staff could be trained as well. This will depend on ACNM's schedule and availability. (See Appendix D, Proposed Training Plan.)

C) Second phase of training

After the initial LSS course(s), a period of at least one month would be allocated for practice of the skills learnt before ACNM returned to hold a trainers-of-trainers (TOT) course. If a second LSS had been held, a second TOT would also need to follow. When these two groups of trainers had completed the TOT courses, selected members (or all of them sharing sections of an LSS course) would be mentored through a full LSS course by the ACNM organizers. At this point we think it unlikely that ACNM could mentor two full LSS courses for these two groups of trainers, so some compromise would need to be reached to allow all of the trainers some opportunity for supervised teaching practice.

Staff from Pursat and/or Siem Reap hospitals would be sent to Battambang to attend this first mentored LSS course.

An initial LSS course would be held at Takeo using trainers from the two TOT courses outlined above.

D) Third phase of training

Using the two training sites of Battambang and Takeo, midwives from Pursat and Siem Reap would undertake the LSS courses taught by the two groups of trainers

The order in which staff attend and who initially attends is to be decided after discussion with the appropriate parties, but should focus only on midwives who are currently active on the maternity units or in community posts. They will be asked to remain at post for a reasonable length of time following the course to ensure continuity. It may not be possible or desirable to attempt to train all midwives from the focus provinces, but a critical mass needs to be built up—perhaps 10-12 midwives from each place. These midwives should be sufficiently experienced with normal deliveries to be able to complete the two to three week LSS course and return to their posts able to practise the new skills. It would be expected to complete the training of these midwives fairly rapidly (see Appendix D)

E) Fourth phase of training

A second group of midwives would then be selected for the LSS course. The target group for this fourth phase would include midwives from the other two provinces

If some of these midwives were lacking in general delivery experience, they should spend up to a two-month period at the main training site gaining additional delivery skills. In this case, the LSS course would take place in the middle of the two-month secondment to allow increased experience of normal deliveries first, and then time spent practicing the skills learnt on the LSS course. (The reason for careful selection is based on the fact that there are large numbers of midwives in each province, some of whom are not currently involved in midwifery practice, and the feasibility and necessity of training all staff is questionable.) At this point it is unclear whether these staff would be trained at the main sites only or at the provincial referral hospital, although the final aim would be to use the referral hospitals in RACHA's provinces. It is also possible that trainers from the main training site could conduct LSS courses at the provincial hospitals

F) Follow up after training

Supervision at the referral hospitals will be essential following the midwifery training. This will require ensuring that the agreed standards of practice are maintained and that other management and organizational issues are addressed according to the contractual agreement

Close links with other MCH facilities and the community projects will need to be developed and strengthened, since they are all interdependent. This should involve all those who are working on the community initiatives. Supervision of the trained midwives in the community will also need to be organized—the exact mechanism for this is not yet clear

Sustainability Issues

Three points need consideration

- 1) In the longer term, as existing midwives upgrade their skills and the new national training program produces more skilled midwives, the need for extensive refresher-type training will decrease
- 2) It would be hoped that with the increased skill levels of staff, the upgrading of the referral hospitals, and the fixing of charges for procedures, more women would choose to deliver in these MOH hospitals. The potential for true cost recovery would then be more realistic
- 3) Other aid agencies and NGOs during these preliminary discussions have expressed interest in this training scheme and possibly becoming partners. There seemed to be a substantial demand for this type of training as agencies in all provinces currently face similar problems with poor levels of midwifery skills

C Pilot Community Program-Koh Chum Commune, Pursat Province

Preliminary meetings and information gathering have taken place and health interventions identified which the community felt to be priorities. Obstetric and neonatal emergencies were high on this list, and an approach was needed that would both raise awareness among several target groups and provide practical assistance.

Initially, it was planned to invite the ACNM to also assist with the start-up of this activity because they have recently begun a three-year research project in India designed to address obstetric emergencies in the community setting. However it appears (and the consultant will discuss further with ACNM in Washington D C) that although the data collection instruments have been developed, the training curriculum and materials may not have been drafted yet. If this is the case, and since this project is at a stage when activities need to begin, it seems to be more expeditious to have external STTA for a period of three months to draft the necessary curriculum and materials and work with a local counterpart to start the implementation.

The health input would begin with activities aimed at four target groups in the four selected villages

- A) A public awareness campaign to educate the general population on the major factors associated with maternal and child mortality
- B) A similar awareness raising, but with more specific training on how to identify serious problems, for all women with children, and women over 18 years of age and their selected birth attendants. These birth attendants may be TBAs or relatives or anybody selected by the women

- C) Selected practical skill training for non-health-trained birth attendants. This would focus on a few commonly seen selected problems for mother or baby and advice on immediate actions to take and when to refer to a health facility
- D) A similar training to C, but for health workers who are living in the community and provide services to pregnant women and children, but who may not have had any training in obstetrics

The above activities would start discussions about practicalities such as transportation of a woman to the nearest health facility. The provincial team would then support some joint solutions to the more important problems. This method would ensure that the community becomes more aware of what constitutes serious obstetric/neonatal problems and is fully involved in feasible solutions.

It is also essential to involve in this entire process the community midwives who will continue to be the trainers and act as the first-line health providers. They will continue to act as the liaison between the external provincial team, the referral hospital, and the communities themselves. These midwives should be in the groups selected to attend the LSS and/or additional practice time at the main training site, as outlined in the third phase of the training plan (see above).

RECOMMENDATIONS/NEXT STEPS

A Midwifery Training Plan

- 1 Further information needed from first and second choice training sites, i.e., Battambang and Takeo on—
 - MSF, Swiss Red Cross involvement, or other NGO support
 - current method of reimbursement for deliveries
 - interest in becoming a training site and sustainability of this, what time periods are involved
 - contractual issues—management and organizational
 - training stipends/salaries/incentives
 - relationship, impact on RTC and the sharing of delivery experience with RTC midwifery students
 - issues of bringing in midwives from other provinces for training
 - accommodation possibilities **Provincial team staff/BK/JC**
- 2 Draft agreements for principal training sites **Provincial team staff/JC**
- 3 Contact ACNM and plan dates for initial LSS course(s) and TOT course(s), more information needed from ACNM on the number of trainers needed to conduct an LSS course, etc **JC/JM**

- 4 Start recruitment of three local counterparts one as counterpart for JC, one for overall coordination of reproductive health training plan, and one (who should be a midwife) to work on the reproductive health community initiative
JC/CH
- 5 Within RACHA technical staff, discuss issues related to contractual arrangements with provincial referral hospital(s) (Siem Reap and Pursat) that will be selected for upgrading activities and training site activities, prepare draft contract
Provincial team staff/JC
- 6 Discuss with the selected provincial referral hospital(s) their willingness to become training sites and the details of contractual arrangement, any renovations and supply ordering to be started ASAP, before the first midwives have completed LSS training
Provincial team staff/JC
- B Community Pilot Program-Koh Chum Commune, Pursat Province**
- 7 Contact ACNM to find out if training curriculum and materials for the community First Aid Initiative are available, if yes, ask ACNM to send them to JC, if not, continue arrangements to field STTA to prepare these materials
JM/JC
- 8 RACHA technical team to agree on initial topics to be covered during any clinical/practical skills training at community level
RACHA technical team/JM/BK
- 9 SOW for STTA consultant (three months) to include commencement of community health interventions in pilot commune, liaison with and support to Pursat Provincial Hospital
CH/JC
- 10 STTA to draft curriculae and training materials for the following groups and purposes
- a) public awareness campaign for all adults in target villages about maternal mortality
 - b) danger signs and situations needing referral and medical assistance for pregnant, labouring and postpartum women and babies—for any woman with a child or over the age of 18 years and their chosen birth attendants
 - c) clinical training for specific situations for chosen (non health professional) birth attendants
 - d) clinical training for specific situations for health professionals living and providing maternity services in that area

RACHA technical and community team to review and adapt the above before commencement of implementation

- 11 SOW for STTA (three months) for coordination of midwifery training activities and liaison with provincial referral hospitals **JC/CH**

APPENDIXES

APPENDIX A

Trip Activities

Trip Activities

Itinerary, May 14 - June 5, 1998

- May 14 P P Briefing by J Carlson Preparation of standardized questionnaire for information from potential training sites
- May 15 Field visit to Takeo Referral Hospital, Takeo Province
Discussion with Hospital Director and Maternity Unit staff
Tour of Maternity Unit and blood bank Return to P P Complete preparations for next field trip
- May 18 A M Visit Chong Kheas - 'Floating H/C' on Tonle Sap supported by CARITAS Tour H/C and talk with staff
P M Visit Siem Reap Referral Hospital Met with Hospital Director, Chief of OB/GYN and Head of Maternity/CMA Branch Chief Tour Maternity Unit
- May 19 Visit Sutnikum referral hospital - met with MSF representative
Visit Sang Veil H/C and talk with M/W Return to Siem Reap
Met with CARITAS representative Return to P P
- May 20 - May 21 Revise questionnaire Write up field visits Discussions with RACHA Provincial team re training sites Met with ST consultant here for maternal mortality assessment (Part of Pathway study)
- May 22 Depart P P to visit Kampong Cham Visited Regional Training Center Met with Ass Director and Master Trainer and AUSAID training consultant Visited referral hospital maternity unit Met with Chief of Ob/Gyn and Head of Maternity and Hospital Director Returned to P P
- May 24 Depart P P for Pursat
- May 25 Meeting with MCH Provincial Director, Hospital Director and Head of Maternity Unit Tour of Maternity Unit
Meeting with ADRA team Meeting with MSF Co-Ordinator
Meeting with CARRERE provincial representative
- May 26 Depart Pursat for Battambang Met with Director of Regional Training Center Met with Hospital Director and Head of Maternity Unit/CMA Branch rep and visited maternity unit Met with MSI rep Departed Battambang for Sisophon Met with CARRERE provincial rep Met with Midwifery Advisor for HealthNet

| | |
|--------|--|
| May 27 | Visited Mongol Borei Referral Hospital and met with Director of Clinical Services and Acting Head of Maternity Unit Tour of Maternity Unit Departed for Bakan Visited Bakan referral hospital (supported by MSF) Left Bakan for Pursat |
| May 28 | Met with Provincial MCH Director to discuss community pilot program Departed Pursat for Krakor Met Krakor referral hospital director and toured Maternity Unit Departed Krakor for Oudong Met with Hospital Director and staff, community staff and technical advisor from AUSAID Toured hospital and maternity unit Left Oudong for P P |
| May 29 | P P Met with Dr Long at NMCH center De-brief discussion of field trip with RACHA technical staff |
| June 1 | Met with UNICEF technical staff on community program Discussion with RACHA provincial staff on training strategy and Community pilot project MCH Technical Working Group Meeting at NMCH center |
| June 2 | Report writing |
| June 3 | Report writing De- brief with RACHA technical staff |
| June 4 | Visit to Kampot referral hospital Met with Hospital Director, Chief of Ob/Gyn And Head of Maternity Unit Tour of Maternity Unit Returned to P P De-brief with Dr J Ashley at USAID |
| June 5 | Report writing Discussion with AVSC Reproductive Health Advisor |

APPENDIX B
Site Visit Summary

| | Tot Beds | Mat Beds | Del/Mnth | C/S/Mnth | B/Bank | 24hr stff | Cost N/D | Cost C/S | Pvt Ptc | In-srvc Tr | NGO supp |
|------------|----------|-----------|----------|-------------|--------|-----------|------------|------------|-----------|-------------|--------------|
| Bakan | ?? | 7 | 4-5 | N/A | | | | | | | MSF |
| Battmbng | 475 | 38 | 115 | 9.5 (8.2%) | Y | Y | 10,000 Rhs | 50,000 Rhs | +++ and c | Y | Y - MSF |
| Chng Khs I | 3 | Same 3 be | 8 - 9 | N/A | N | Y | 3,000 Rhs | N/A | N/A | Y | Y - CARITAS |
| Kpmg Chm | 250 | 40 | 52 | 11 (21.2%) | Y | Y | 50,000 Rhs | 120,000 Rh | +++ some | N | N |
| Krakor HC | 40 | 2 | 3 | No | N | N | 10,000 Rhs | N/A | +++ | N | Y - ADRA |
| Kampot | 185 | 28 | 35.5 | 1.7 | Y | Y | 25,000Rhs | 50,000Rh | +++ | N | Y-MEMISA |
| Mngl Bor | 400 | 24 | 19.5 | 3.2 (16.2%) | Y | Y | 5,000 Rhs | 60,000 Rh | +++ | Y | N |
| Ourdong | 66 | 8 | 15-20 | N/A | N | Y | Unofficial | N/A | +++ | Y | Y- AUS RED + |
| Pursat | 202 | 33 | 28.7 | 12 (7.2%) | Y | Y | 5,000 Rhs | 10,000R | +++ | Case review | |
| Siem Reap | 336 | 20 | 35.7 | 2 (5.6%) | Y | Y | 20,000 Rhs | 50,000 Rhs | ++++ | ? N | ? |
| Takeo | 180 | 20 | 68 | 9.6 (14.2%) | Y | Y | \$10 | \$40 | +++ | RTC use for | SWISS RED + |

APPENDIX C

Questionnaire And Reports From Individual Sites

Midwifery Training Site Assessments

Baseline Questions for each facility

- 1 How many deliveries does this facility have on average per month, per year ?
- 2 Do they perform Caesarian sections at this facility ?
- 3 How many on average per month, per year ?
- 4 How much does a C/S cost?
How much does a normal delivery cost?
Other procedures?
- 5 Who performs the C/S ? (more than one doctor?)
- 6 Do they have the equipment/resources to perform hysterectomies if necessary ?
- 7 Who acts as anaesthetist and what anaesthetic is used?
- 8 Do they perform forceps or vacuum deliveries at this facility ?
- 9 Do they see many woman with eclampsia, hemorrhage, twins, breeches ? Are these frequent problems ?
- 10 Are there staff in the delivery ward available 24 hours a day ?
- 11 If not, what happens when a woman with a serious problem comes to the hospital, perhaps in the middle of the night ?
- 12 How many staff do they have ? How many primary midwives, secondary midwives, doctors ?
- 13 How many beds does the hospital have in total ?
How many maternity beds does it have ?
What is the occupancy rate - approximately ?
- 14 Is there a functioning blood bank at this facility ? Who donates the blood ? Do patients pay for each transfusion ? How much do they pay for each unit ? What happens if the family cannot afford to pay ?
- 15 Some assessment of equipment/supplies, either asking or a visual inspection by us of quantities available
e g syringes and needles
Ergometrine/Oxytocin
Cord ties

Sterilizable equipment such as clamps, scissors, speculums, needle holders etc
Disposables - gauze, cotton wool, san pads, sutures
Sterilizers - what type, supply of kerosene or fuel available,
Gloves
Towels/cloths for baby
Resuscitation equipment for baby, mother - type available
Oxygen
Disinfectants - for patient, and for equipment/environment

- 16 Do staff at this facility also have private practices?
- 17 How many doctors?
- 18 How many midwives?
- 19 How many deliveries do they do on average each month privately ?
- 20 Where do they send a woman if there are problems in the private clinic ?
- 21 Do they ever hold training sessions (in this MOH facility we are visiting) for the midwives ?
- 22 Do or have the midwives (from this facility) gone for any external training ?
- 23 What are the topics midwives (and doctors) need further training or assistance with ?
- 24 Is accommodation available for midwives who may come for training?
- 25 What statistics are available ? Summary of last quarters main delivery data
- 26 Any other relevant information?

Midwifery Training Site Assessments

Battambang Referral Hospital May 27, 1998

Met with - Dr Mel Yuong - Provincial Health Director

Dr Yem Han - Vice Director of the Hospital

Ms Ma Seta - Head of Maternity and CMA Branch Chief

- 1 Approximately 110 deliveries per month (Jan '98 127, Feb '98 103)
- 2 Yes, perform C/S
- 3 On average, 10 per month
- 4 C/S costs 50,000 Rhls
N/D costs 10,000 Rhls - this includes ventouse and other procedures
- 5 4 doctors and 4 medical assistants can perform C/S and one midwife (trained in Vietnam)
- 6 Yes, can perform hysterectomies if necessary
- 7 3 nurse/anaesthetists They can give general, local and regional anaesthesia
- 8 They do perform forceps deliveries but more frequently do vacuum extraction
- 9 Most frequent problems seen are toxemia, PET, severe anemia and ?? placenta praevia (?APH) Twins, breech and other abnormal presentations are not very common
- 10 Yes, staff available 24 hours a day 1 midwife and 1 doctor are on call for the obstetric unit for each 24 hours
- 11 See above
- 12 Total staff at the hospital 470 This includes 32 doctors and 40 M/A's For gynaecology, there are 3 doctors, 2 medical assistants For maternity, there are 2 doctors, 6 medical assistants and 20 secondary midwives
- 13 Total no of beds in hospital is 475 and 38 maternity beds
- 14 There is a functioning blood bank, but it is not easy to get donations They ask for blood from relatives and go out on public drives No direct payment is asked for 50% of the blood is unuseable due to HIV, hepatitis, and syphilis

15 Well equipped and clean Functioning sterilizer MSF gives supplies on an ad hoc basis Seemed to be well stocked, gloves washed and reused Vacuum extractor and suction and oxygen available Operating room is next door to delivery room Postnatal patients had a toilet and shower No garbage or dirt in rooms

16, 17, 18, 19 Yes, staff have private practices and there are three large private clinics in town Not certain but may do 3-5 deliveries per month in each of these clinics M/W's do home deliveries - perhaps 1 or 2 every 2 months The staff thought that there were generally fewer deliveries this year because of the increased uptake of birth spacing services

20 Send the woman to the referral hospital if there are problems in the private clinics

21 MSF have been working in the hospital and held training sessions They trained the chiefs of the dpts, Dr's and then these people trained the nurses and midwives

22 Midwives have gone for training on STD's along with some H/C M/W's They have also gone for training on birth spacing MSF also brought M/W's with little practical experience in from the districts to gain additional experience 10 had been trained since 1996 Between 1992-1994 MSF had trained all M/W's (?in hospital) on essential skills - infant resuscitation, normal deliveries, vacuum extraction, use of oxytocin and other topics Students from the RTC come for clinical training Student M/W's do come for delivery experience but may qualify with less than 10 deliveries The RTC is now trying to get each student to have at least 20 deliveries by the time they qualify

23 Staff said they needed more training but were not very specific on topics Newborn resuscitation was the only thing mentioned, along with more training for new staff

24 For outside staff coming for training, there was no accommodation available apart from the duty room where staff stayed when they were on call Otherwise people stayed with relatives in the town

26

25 Delivery Statistics

January 1998

| | | |
|------------------------|---|-----|
| Total No of deliveries | - | 127 |
| C/S | - | 10 |
| Breech | - | 4 |

February 1998

| | | |
|------------------------|---|-----|
| Total No of deliveries | - | 103 |
| C/S | - | 8 |
| Breech | - | 4 |

March 1998

| | | |
|------------------------|---|-----|
| Total No of deliveries | - | 112 |
| C/S | - | 11 |
| Breech | - | 7 |

April 1998

| | | |
|------------------------|---|-----|
| Total No of deliveries | - | 119 |
| C/S | - | 9 |
| Breech | - | 7 |

| | |
|--------------------------|------------|
| Average Monthly Delivery | 115 |
| Average Monthly C/S | 9.5 (8.2%) |

Chong Kheas Health Center - Midwifery Training Site Assessments

Floating HC on the Tonle Sap supported by CARITAS

They run a general HC and perform around 8-9 deliveries month Primigravidas stay for 7 days following delivery and multigravidas stay 3 days They are busier during the rainy season when there is more water because people stay in the village - in the dry season they leave to go to more remote areas to fish Therefore there are more deliveries and consultations in general in the HC during the rainy season They serve approximately a population of 5,000, half of whom are Vietnamese, who usually use their own TBA's for deliveries They work with 5 local TBA's They have on average one referral per month from these TBA's

HC is staffed by 3 midwives, 2 secondary nurses and 1 primary nurse There is no Dr or MA They provide EPI, birth spacing, H Ed and antenatal care outreach by boat During the rainy season (Aug - Jan) they have around 400-600 consultations in total per month, 200-300/month in the dry season They receive medicines - the MPA from the MOH CARITAS supports them with more supplies as needed They use Siem Reap referral hospital as necessary They charge 3,000 Rhls for a delivery The very poor do not pay (around 10-20%) and some give food as payment

For ANC and immunizations there is no fee

First time consultations cost 200 Rhls and a health card costs 300 Rhls

Birth spacing methods - a single injection of Depo Provera costs 1000 Rhls, a 3 months supply of oral contraceptives also costs 1000 Rhls, 4 condoms cost 100 Rhls etc

Minor surgery and dressings cost 1000 Rhls and patients who are admitted for an in patient stay are charged 3000 Rhls

50% of these charges go towards staff salaries and 50% go towards clinic costs CARITAS also pays for the transportation of patients to SR hospital who are too poor to pay these costs Referrals recently were due to edema, placenta praevia antepartum bleeding and bleeding due to abortions Patients who are seeking an induced abortion usually go to private clinics in SR Staff thought that the increased availability of family planning services had helped to reduce the demand for abortions

Most common complications seen were, edema/high blood pressure/convulsions/eclampsia, hemorrhage and twins Not much mention of obstructed labor or malpresentations

No private practice done by these midwives They knew that many staff from SR had private practices They thought that Dr Saravonn perhaps had as many as 35 deliveries per month

One midwife had been to the JICA training and one had attended the RACHA SIS workshop on anemia Some had attended the UNFPA training on birth spacing

The areas the staff wanted more training on were improvement of their delivery skills, dealing with the complications of abortion and birth spacing. The midwife who had attended the JICA training said she had learned more about ANC and safe delivery and how to care for mother and baby after delivery. They did not train other midwives in this HC but they did train the TBA's.

Midwifery Training Site Assessments

Kampot Provincial Referral Hospital June 4, 1998

Met with - Director of Hospital and Deputy Provincial Health Director, Dr Touch Sokha
Deputy Hospital Director, Dr Yim Sambat
Doctor in charge of Maternity (but not an Ob/Gyn), Dr Seng Sun Ty
Head of Maternity, Ms Ung Chea

- 1 Has 40 deliveries per month
- 2 Yes perform C/S, about 5 per month
- 3 See above
- 4 C/S costs 50,000 Rhls
N/Dcosts 25,000 Rhls
Other procedures 30-35,000 Rhls for vacuum ext, manual removal of placenta, etc
- 5 Only 1 doctor can do C/S's Usually assisted by 2 surgical aides, one from the maternity unit and one from the surgical team They need another surgeon who can perform C/S If the one doctor is away, they have to send the woman to Takeo hospital - 1 5 hours by road
- 6 The surgeon mentioned above can do (?sub total) hysterectomies
- 7 3 nurse anaesthetists - 1 trained in P P others trained by that nurse on site in Kampot
No local or regional anaesthetic used, only GA
- 8 No forceps deliveries performed Vacuum ext used but only by 1 Dr and 2 MA's (1 e no midwife trained to use ventouse)
- 9 Most frequent problems seen - APH including placenta praevia, transverse lie or breech presentation with problems with the aftercoming head, toxæmia/eclampsia Most cases seen were referrals due to serious complications Most women preferred to go to TBA's or the private sector for deliveries
- 10 See above re C/S and vacuum availability There is a team of staff on duty on a 24 hr shift - 4 M/W's and 1 Dr or MA
- 11 See above
- 12 In total 204 staff 13 Dr 's, 73 nurses (33 primary) On maternity unit, 20 M/W's, 1 Dr and 2 MA's

- 13 Total no of beds - 185
 No of maternity beds - 28
 Occupancy rate - 36 % (58 pts here today)
- 14 Yes, there is a functioning blood bank It has 2 staff who live near to the hospital, so it can be accessed at all times Has low numbers of units - difficult to get blood donated, because public afraid They have to get most donations from relatives They do not charge directly for blood Some blood is unuseable after screening
- 15 Equipment and supplies were described by staff as adequate and looked OK on a very cursory assessment Some equipment in delivery room dirty but room had been renovated by MSF and Memisa had repaired/renovated 2 toilets for patients use They had also provided new water tanks throughout the hospital Water was available in the tap
- 16, 17, 18 Yes, staff all have private practices and there are some private clinics in the town
- 19 Initially no info on no of deliveries in the private sector, one retired MA from the hospital runs a clinic in town (his wife is a M/W in the MCH office) and he performs C/S's in that clinic Midwife suggested that some M/W's will do about 10 deliveries per month in women's homes
- 20 If they have problems in a private practice, they send the woman to Kampot or Takeo
- 21 No in-service training reported
- 22 External training - some people sent for birth spacing training, and RACHA has trained some in surgical contraception
- 23 Further topics requested for training include improving delivery skills and A/N and P/N care
- 24 ?? accommodation available
- 26 NGO support - International Red Cross supported surgical unit with training and supplies
 MSF supported medical and pediatric units Both agencies left around 1993
 Memisa has lent some support - see above under 15

25 Delivery Statistics

February '98

Total deliveries 32
 C/S 3

March '98

Total deliveries 29
 C/S 2

April '98

Total deliveries 40
C/S 1

May '98

Total deliveries 41
C/S 1

Average monthly deliveries 35.5
Average monthly C/S 1.75

Midwifery Training Site Assessments

Kampong Cham Referral Hospital

- 1 Does 50 - 60 deliveries per month For 1997, they averaged 52 deliveries per month
- 2 Yes, C/Sections performed at this hospital
- 3 On average C/Section rate was about 21% - around 11 C/sections per month
- 4 Costs -

| | |
|--|----------------|
| C/Section costs | - 120,000 Rhls |
| Normal delivery | - 50,000 Rhls |
| Other surgical procedures, such as a D&C | - 30,000 Rhls |
- 5 There are 3 Ob/Gyn doctors and 1 medical assistant The 3 doctors can perform C/S and certain other general surgeons can also them There is always 1 Ob/Gyn on call
- 6 Hysterectomies can be performed
- 7 There are trained nurse/anaesthetists Variety of anaesthetics can be given, though GA's usually used for C/Sections
- 8 No forceps deliveries done but vacuum extractions are performed
- 9 Obstetric problems seen Obstructed labor, bleeding (often associated with abortions, many of which are induced) Almost every month they have some twin deliveries
- 10 Staff are available 24 hrs a day - there are 4 teams of staff who each do a 24 hour shift
- 11 Emergencies can be dealt with at night, see answer above to 10
- 12 No 's of staff
4 Ob/Gyn staff - 3 Dr's and 1 MA
29 midwives
- 13 Hospital has 250 beds in total
Maternity unit has 40 beds
Usually 30 - 40 % occupancy rate
- 14 Yes, there is a functioning blood bank at the hospital Mainly relatives have to donate blood although they do drives sometimes If patients cannot afford or cannot get relatives to donate blood, the matter has to be settled by the Hospital Director Rarely, they can purchase a unit of blood, which would cost 70,000 Rhls

15 Equipment - difficult to assess Some drugs, IV fluids and instruments They had a vacuum extractor, some gynae equipment

16 Many staff have private practices

17,18&19 All the Ob/Gyn Dr's and MA had private practices The chief of maternity said he did 15-20 deliveries per month in his private clinic Another Dr did 20 The more popular practices were based on reputation of the provider, obviously the more popular providers did the most deliveries Some midwives also had practices and did deliveries in homes - they charged \$40-50 and drugs may cost extra They did post natal visits for up to 5 days pp Smaller practices (and some varied in what was provided for the fee - i e meals, showers, laundry services drugs etc) also charged \$40-50

20 If they encounter problems, they send the woman to KC referral hospital

21 No, they did not seem to have had formal training within the hospital AusAid had provided a vacuum extractor and the Ob/Gyn Dr 's had trained staff how to use it Some midwives from district hospitals had come to the referral hospital for periods of 3-6 months to upgrade their skills but this came about because of requests from those midwives/districts This practise had not continued since 1995

22 The midwives had not attended any training themselves externally but had gone to the RTC to give training to students there

23 Topics considered to be important for more training included, birth spacing, risk factors for pregnant women, danger signs during pregnancy, infant resuscitation

24 No accommodation available for trainees

26 Staff complained of inadequate quantities of medicines and other supplies

25 Delivery Statistics

Average of 52 deliveries/month

Average of 11 C/S/month (21.2%)

Midwifery Training Site Assessments

Krakor Special H/C May 28, 1998

Met with - Mr Uk Borith - Dep Director of the Hospital
Dr Ung Norin - Hospital Director
Ms Yin Daroeum -Head of Maternity Unit

- 1 Has about 3 deliveries per month Local women prefer home births
- 2 No C/S - refer to Pursat referral hospital
- 3 N/A
- 4 C/S not done
ND 10,000 Rhls - nothing extra charged for
- 5 N/A
- 6 N/A
- 7 N/A
- 8 No forceps deliveries done, but they do vacuum extraction
- 9 Most frequent problems seen - toxemia, placenta praevia, APH Not many malpresentations seen
- 10 ???
- 11 They have an ambulance and can refer emergencies in this
- 12 Total - 31 technical staff 1 Dr , 3 MA's, 2 M/W's (1 secondary, 1 primary), 1 dentist, 1 lab tech 25 nurses (3 primary)
- 13 Total beds - 40, 2 maternity beds
Occupancy rate - 10-17 beds full at any time (20 beds for TB pts)
- 14 No functioning blood bank
- 15 Well equipped and reasonably clean in delivery room Post natal beds - usual condition Supported by Canadian Government and the Japanese Embassy originally and now by ADRA

16, 17,18,19 Yes, private practices exist No details on Dr's practices 5-10 home deliveries per month done by both M/W's A retired M/W also has quite an active local practice and has always lived in the area Charge 3,000 - 10,000 Rhs for a home delivery, sometimes charge extra for vitamin or antibiotic injections postpartum - 2,000 - 3,000 per injection Sometimes, poorer women give food The M/W also give care and advice on breastfeeding, bathing and cleaning the baby and care of the cord and check mothers B/P

20 If there are problems, they do refer to the hospital

21 Not much in-service training - there is a daily discussion with the Hospital Director about problems ?? ADRA's input

22 Only training has been 2-3 attendances for birth spacing - ? where or taught by whom

23 Further training requested on midwifery skills, pregnancy risks, delivery problems and newborn care

24 No accommodation for trainees

25 No delivery book data 2 maternity beds Head of unit said they did 3 deliveries/month

26 Water pumped from a well to a storage tank - no problems with supply No town electricity supply Used to have a generator but have run out of fuel for the last 2-3 months They have toilets/showers for the women

Midwifery Training Site Assessments

Mongol Borei Referral Hospital May 27, 1998

Met with - Dr Uer Kim Hab - Ass Director for Clinical Services
Ms Eap Chhaya - Acting Head of Maternity

1 35 - 40 deliveries every month

2, 3 Yes, perform C/S 5 - 6 per month

4 C/S costs 60,000 Rhls

N/D costs 5,000 Rhls

Free services to the very poor who cannot afford to pay

5 2 Dr 's in maternity and 3 other surgeons can perform C/S's

6 Yes, they can perform hysterectomies if needed

7 1 Dr, 1 MA (trained by ICRC) and 3 nurse/anaesthetists (2 trained in PP, 1 trained in the hospital) Can give local and general anaesthesia Always give general for C/S

8 Some forceps deliveries are done More commonly vacuum extractions used

9 Most common complications seen - toxemia, haemorrhage (APH and PPH), placenta praevia Also see twins, breech, transverse lie etc They see many problems because they are mostly referrals

10,11 Yes, staff available 24 hrs 3 teams cover the shifts One of these teams does not have someone who can perform a C/S, but they have radios and can call someone

12 In total, they have 18 Dr's, 2 dentists, 2 pharmacists, 14 MA, 59 secondary nurses, 35 secondary midwives, 6 primary nurses, 10 primary midwives In the maternity dpt they have 3 Dr's, 1 MA and 16 M/W's

13 In total, hospital has 400 beds and 24 maternity beds There is a 30-40% occupancy rate It depends very much on the season - busier in the rainy season, when there are outbreaks of dengue and other infectious diseases Also, smaller problems are now dealt with in private practices but the serious problems are referred to this hospital

14 There is a functioning blood bank They have to find donors, but will still provide blood if necessary if patient cannot provide a donor They do public blood drives and always ask for blood donation from relatives before elective surgery

They screen all blood, some is unuseable Sometimes they run out of blood They have had

problems with promising donors they or their families would receive free blood if they donated some and then had need at another time, but because they sometimes run out and cannot always guarantee a constant supply, this damaged their credibility with potential donors

15 ???

16, 17, 18, 19 Yes, staff have private practices - some quite large clinics, doing 15 deliveries/month Some M/W go and work at these clinics These clinics charge 250,000 Rhts for a normal delivery A M/W doing a home delivery may charge 800 - 1,500 Baht (100 Baht = 10,000 Rhts) They will also do postnatal visits and give daily or twice daily injections of vitamins and antibiotics They give antibiotics to all women who have delivered at home and women usually request the injections They may visit for up to a week post partum The M/W's report doing whatever the woman requests at a home delivery to satisfy the client In the private clinics they do the same things as in the hospital

20 Complications in the private sector get sent to Mongol Borei hospital

21 There is weekly in-service training of the M/W's by the Dr 's and MA's on Fridays This was started by ICRC and Norwegian Red Cross also conducted some training There is some TBA training (3 days) conducted at Provincial health center in Sisophon This was started in 1994 and TBA's from each commune attend There is some MPA training being done by NMCH staff and also some sessions on use of the partogram and delivery skills This is not a regular training There was also a workshop on community education and there has been some NGO training (Support for the hospital has come from ICRC, 1990-1995, ARC 1995-1997 and Norwegian Red Cross 1997)

The Provincial Health Dpt did send M/W's to this hospital to increase their practical delivery experience This was started in 1994 They tried to ensure each midwife had 15 deliveries and this took 5-6 months They did not provide food or accommodation and this caused problems for the students The training was stopped 18 months ago ? because of the lack of support

22 Requested training on regular pre and post partum care of mother and baby, ante natal activities, maternal risk factors and referral mechanisms

23 No accommodation provided See details above, qu 21

24 They have also sent M/W's who volunteered to work at the commune level, since last year Three M/W's volunteered to go and have been there for one year ? the H/C were nearer their homes and they had more home deliveries by working at this level

25 Delivery Statistics

November 1997

| | | |
|------------------------|---|----|
| Total no of deliveries | - | 22 |
| C/S | - | 6 |

December 1997

| | | |
|------------------------|---|----|
| Total no of deliveries | - | 24 |
| C/S | - | 1 |

January 1998

| | | |
|------------------------|---|----|
| Total No of deliveries | - | 10 |
| C/S | - | 6 |

February 1998

| | | |
|------------------------|---|---|
| Total No of deliveries | - | 7 |
| C/S | - | 1 |

March 1998

| | | |
|------------------------|---|----|
| Total no of deliveries | - | 22 |
| C/S | - | 3 |

April 1998

| | | |
|------------------------|---|----|
| Total no of deliveries | - | 19 |
| C/S | - | 2 |

| | | |
|----------------------------|---|-------------|
| Average monthly deliveries | - | 19.5 |
| C/S | - | 3.2 (16.2%) |

Midwifery Training Site Assessments

Oudong Referral Hospital 28 May 1998

Met with - Dr Soth Vuthy - Director of Oudong District Health Services
 Mr Taing Sophal - Asst Director of the O D Hospital
 Mr Kim Sapheap - Ass Director of Oudong Hospital
 Ms Fran Murphy - Technical Advisor, Australian Red Cross

1 Has 15 - 20 deliveries per month

2 No C/S performed

3 N/A

4 C/S - N/A

ND - unofficial - depends on staff who are on duty It depends on how much the woman can afford - if she has a market stall they may charge \$70 They would like to start cost recovery

5 N/A

6 N/A

7 N/A

8 No forceps deliveries done, only vacuum extraction

9 Problems most frequently seen - toxaemia, PET, transverse lie, anemia, infection Twins are rare Think some women are having beri-beri because they are weak after delivery and cannot stand and have skin problems and get better when given Vit B (Physical symptoms described don't sound like beri beri)

10 Staff are available 24hrs

11 See above

12 Total staff - 70 - 15 M/A's, 5 Dr 's, 4 M/W's (2 primary and 2 secondary) The maternity unit has 1 MA, 1 Dr and 4 M/W's

13 Has a total of 66 beds with 8 maternity beds

Occupancy rate of about 50% - has reduced dramatically due to some private practices being set up in town

14 No functioning blood bank

- 15 Excellent delivery room, well equipped and clean Prep room had sterilizers, etc
- 16 Yes, staff do have private practices
- 17 The Dr 's don't do deliveries privately
- 18, 19 Most M/W's do home deliveries They have about 3-4 deliveries per month and charge 80,000 - 200,000 Rhts
- 20 Refer to hospital if there is a problem PP is one hour away by road
- 21 Hold weekly training sessions every Wednesday in the hospital The M/W do the training sessions themselves ODA/DFID held a TOT course for 10 participants, so these trainees now hold the Wednesday sessions M/W's will be coming in for midwifery refresher training from the H/C - but these will be theory only 2 courses are planned and similar courses for TBA's also planned
- 22 2 M/W's from each H/C have gone for the Repro Health Training held by MOH and World Vision - mostly birth spacing, STD's etc, but no hospital M/W's went
- 23 Request more training on practical skills
- 24 They could arrange accommodation for up to 15 students
- 26 They have an infection control committee made up of hospital staff All the grounds were very clean They built an incinerator for \$200, fueled by rice husks which burns all the hospital waste, including plastic and wet waste Does not melt glass Concrete covered pit is used for all syringes and sharps Water is not a problem
There are 7 H/C locally and one more will be built 3 of these H/C do 3-4 deliveries per month and the others do about 1 delivery per month Most women want home deliveries - some will choose a M/W and others (usually living further away) will use a TBA

25 Delivery Statistics

February 1998

| | | |
|------------------------|---|----|
| Total no of deliveries | - | 11 |
| SVD | - | 8 |
| Vacuum ext | - | 1 |
| Referred to PP | - | 5 |

Midwifery Training Site Assessments

Pursat Referral Hospital May 25,1998

Met with - Ms Pa Lam - Director of MCH
Dr Hong - Hospital Director
Ms Ma Lam - Head of Maternity

- 1 Approximately 25 deliveries per month (last quarter records show an average of 28 7/month)
- 2 Yes, perform C/S's here
- 3 5 C/S per month (Last quarter records show 12/month)
- 4 C/S costs 10,000 Rhls
N/D costs 5,000 Rhls
Vacuum and other procedures cost 5,000 Rhls
This system was started one year ago and is not a full cost recovery system Before this, pts were charged a flat rate of 2,500 Rhls for every procedure
- 5 3 Dr 's and 2 surgical aides can perform C/S's
- 6 They can perform hysterectomies if necessary Charge 10,000 Rhls at the moment - could be charged between 120,000 - 150,000 Rhls
- 7 They have 4 nurse/anaesthetists Local and general anaesthetic used, usually general for C/S
- 8 No forceps deliveries performed Vacuum extractions common
Ultrasound is available
- 9 Most common complications seen are, toxæmia, placenta prævia, ectopic pregnancy, hæmorrhage They had 4 sets of twins born this month
- 10,11 Staff are available 24 hrs a day There are 2 teams, one medical and one surgical There is always someone who can perform a C/S
- 12 Total staff - 45 secondary M/W's, 42 nurses and 8 doctors On maternity, 9 M/W's (3 per shift)
- 13 Total beds - 202 with 33 maternity beds Have about a 60% occupancy rate
- 14 There is a blood bank but it is not functioning well They have no resources It used to be supported by ICRC Relatives have to donate blood No mention of blood drives They said they had few units available at any one time

15 Delivery room clean and functioning - a little cramped for space Had running water
Supplies looked adequate Had a vacuum extractor but the pump was not working properly -
problems with fixing or replacing this Equipment/materials sterilized in operating suite
Post natal rooms dirty Latrine outside for women, no showers available

16 Yes, staff have private practices

17 Dr's do about 5 deliveries a month maximum in private practice

18 M/W's do few deliveries - reluctant to discuss

19 See above

20 Send to Pursat if problems occur in private practice They can return to the private clinic
afterwards for care when the referral problem has been solved if they choose

21 In hospital training - there are case reviews with staff every Monday morning Some birth
spacing training was provided through the MCH provincial office
M/W's from Bakan, supported by CARE were sent in to the referral hospital for practical
experience - 1 M/W every 2 weeks, for 2 weeks The trainees received \$3 per day and the
hospital M/W's who were training them \$1 day Each M/W had about 7 deliveries during this 2
week period

22 No-one had been sent for external training

23 Further training on delivery complications and abnormal presentations were requested Also
more resources were needed

24 No accommodation for external students available but staff could stay in the duty room when
on call

26 Seemed to be poor toilet and shower facilities for patients

Delivery Statistics

February 1998

| | |
|-------------------------|----|
| Total no of deliveries | 26 |
| SVD | 24 |
| Ventouse ext | 1 |
| C/S | 2 |
| ??Oxytocin (?induction) | 2 |
| SB | 2 |

March 1998

| | |
|------------------------|----|
| Total no of deliveries | 27 |
| SVD | 25 |
| Ventouse ext | 6 |
| C/S | 2 |
| Oxytocin | 2 |
| SB | 1 |
| AB (?abruption) | 4 |
| BW below 2500gms | 7 |

April 1998

| | |
|------------------------|----|
| Total no of deliveries | 33 |
| SVD | 24 |
| Ventouse ext | 1 |
| C/S | 2 |
| Toxaemia | 4 |
| Eclampsia | 1 |
| SB | 4 |

| | |
|-------------------------|------------------|
| Average for the quarter | 28 7/month |
| C/S | 12/month (7 17%) |

Midwifery Training Site Assessments

Sang Veil Health Center - Sotnikum District May 17, 1998

Met with Ingrid Van de Vel from MSF and Long Savi, HC Midwife

Carere rebuilt this HC in August 1997 and it has been supported by MSF since this time

Midwife is a secondary midwife who trained in the late 1960's at the Regional Training Center in Battambang

She does 5-6 home deliveries every month and 3-5 deliveries in the HC every month on average. She usually chooses to deliver primagravidas in the HC and multigravidas > 4, or others depending on seriousness of previous obstetric/medical problems. These might include, women from poor backgrounds, those with a history of edema or hemorrhage during a previous delivery. If a woman has had a previous C/Section she refers them to Sotnikum Hospital. She also delivered in the HC women who chose to deliver there and had a small room where they could stay for 2 or 3 days post partum.

She mentioned common problems such as placenta praevia (possibly APH - difficulty over definitions here), twins, transverse lie. She did not think hypertension was a common problem.

3,000 Rhts was the charge for a normal delivery in the HC. For home deliveries she said it depended on what the woman could afford. Some gave food and payments could then range up to 40,000-50,000 Rhts. These charges included medicines. She gave vitamin injections for 3 days postpartum and visited the home every day for those first three postpartum days. She will also make a home visit if the family call her because of a problem.

She carried Ergometrine amps and Buscopan inj with her and a drug called Heptamil - ? use - described as a 'tonic'.

She had just attended the JICA course in PP. She had received one of their midwifery kits. She described learning more about risk factors, timely referral, antepartum and postpartum care, including aspects related to breastfeeding and had gained better delivery skills.

She had worked in a previous post training TBA's and at this HC held monthly meetings with the local TBA's to get reports of births from them. The TBA's also called her out for problems and if she was not available to go, she would advise them to send the woman to Sotnikum hospital. Village Health Committees have been formed in some districts and they provide feedback to the HC on their performance. This Committee meets monthly.

This midwife also provided birth spacing services and antenatal care. She had seen 61 clients for birth spacing last month and 49 women for antenatal care. She also saw gynae patients.

SIEM REAP - Midwifery Training Site Assessments

Siem Reap Referral Hospital - 18 5 98

Met with Dr Chhay Tek - Hospital Director
Dr It Saravonn - Chief of Obstetrics and Gynaecology
Ms Keo Sovanna - Head of Midwifery and Branch Chief of the CMA

- 1 Has about 40 deliveries per month
- 2 Of these, about 10 are complicated cases with about 2-3 Caesarian sections, 2-3 vacuum extractions and a forceps delivery about every other month
- 3 See statistics listed for last quarter at the end of this paper
- 4 SVD costs 20,000 Rhls
OPD or consultation costs 3,000 Rhls
C/Section costs 50,000 Rhls
Forceps, vacuum, induction etc costs 30,000 Rhls
Any laboratory tests will cost 2,000 Rhls for a whatever is necessary (i.e. this amount covers more than one test)
An ultra sound costs 5,000 Rhls
If certain drugs are not available in the hospital then patients will have to buy these outside and these represent additional costs
- 5 There are three surgeons available on any one 24 hour shift. There are 4 surgeons in total who can perform C/S
- 6 Yes, they can perform hysterectomies when necessary
- 7 There are 3 nurse/anaesthetists. They can give GA and regional anaesthesia. Mostly use spinal blocks for C/Sections
- 8 Yes, perform Ventouse deliveries and forceps deliveries
- 9 Common problems encountered - eclampsia/PET, placenta praevia, (?APH)
- 10 Yes, staff on duty in the hospital over a 24 hour period - 1 team of 3-5 medical physicians, 3 surgeons and 3 midwives (Total of 8 secondary midwives allocated to the midwifery unit)
- 11 N/A - see answer above

12 Total staff - 23 doctors in the hospital
15 medical assistants
40 midwives (many working on other areas besides Maternity)

Total no of beds - 336
No of maternity beds - 20

Around 60 % bed occupancy

13 There is a functioning blood bank Relatives are asked to donate This happens particularly with elective surgery where often the operation will not be done unless blood has been donated first There is no direct payment system for units of blood They do blood drives to collect from the public but 30% is unusable due to Hepatitis, Syphilis, HIV etc

Out of 81 units tested recently, 1 was HIV positive, 15 positive for Hepatitis B, 5 positive for Hepatitis C and 11 for Syphilis

If the family cannot afford to pay, they will still receive the blood without charge if it is an emergency

14 On visual inspection stocks and supplies difficult to estimate Forceps, vacuum extractor, instruments and sterilizers seen General hygiene of the unit was poor Only latrine seen was full of cleaning equipment and dirty Nothing seen in the way of handwashing facilities, bathrooms/latrines for women etc

15 16 17 & 18 Yes, hospital staff have private practices Difficult to assess how many staff have practices and how many deliveries they do Head of Obstetrics and Gynae we were told has a very large private practice

Many private practices in SR and quite a few deliveries take place in the private sector Charges are around \$60 for a normal delivery and pp stay Midwives delivering women in their own homes received around 50,000 Rhts for the delivery

19 When problems occurred, women were referred to SR hospital

20 Every year the midwifery unit staff change and new midwives are brought in The Head of Obstetrics holds an orientation or briefing for these new midwives

21 Some midwives from the unit have gone for external training, such as for immunizations etc

22 Major problems faced - see answers to question no 9

23 Topics mentioned for further training, improved delivery skills, care before, during and after delivery

24 No accommodation available for midwives to stay if they came for training

25 Statistics - see last quarters figures below

February 1998

| | |
|------------------------|----|
| Total no of deliveries | 29 |
| Ventouse ext | 1 |
| C/Section | 1 |
| Breech | 2 |
| Placenta praevia | 3 |
| Stillbirths | 4 |
| BW below 2500gms | 6 |

March 1998

| | |
|------------------------|----|
| Total no of deliveries | 44 |
| Twins | 2 |
| Ventouse ext | 1 |
| C/Sections | 3 |
| Forceps | 1 |
| Breech | 1 |
| Transverse lie | 1 |
| Stillbirths | 4 |
| BW below 2500gms | 10 |

April 1998

| | |
|------------------------|----|
| Total no of deliveries | 34 |
| Ventouse ext | 3 |
| C/Section | 1 |
| Shoulder dystocia | 1 |
| Breech | 1 |
| Stillbirths | 4 |

Midwifery Training Site Assessments Facility Questions

Takeo Provincial Hospital, Takeo Province May 15, 1998

- 1 On average 3 deliveries per day From delivery room register 60 - 70 deliveries per month on average
- 2 Yes, Caesarian sections are performed at this hospital
- 3 9 - 10 C/S performed each month
- 4 They have 3 categories of surgical charges -
T1 \$40 - Any major operation, which includes C/S and hysterectomy
T2 \$30 - Lesser surgical procedures (they gave the example of an episiotomy but this was then a little unclear in following discussions)
T3 \$15 - Minor procedures such as suturing a laceration

Costs for a normal vaginal delivery was \$10 but for a primigravida may be more in case episiotomy/suturing was needed May have to pay \$30

No extras were charged for and no charges were made for a blood transfusion if given

- 5 4 surgeons at the hospital, all of whom could perform a C/S if necessary 1 medical assistant specifically trained in obstetrics who usually performs the C/S and gynae surgery
- 6 Yes, they have the equipment/resources to also perform hysterectomies
- 7 2 nurse anaesthetists who were trained by a French agency (ISAR) GA 's given with Halothane, Ketamine etc Spinals also used
- 8 No forceps deliveries performed, but Ventouse (vacuum) extraction used
- 9 Common problems seen included (not in any order of priority) uterine rupture, placenta praevia, hydatidiform mole, eclampsia and PET, puerperal infection, PPH often following induced abortions performed at home or in the village
- 10 Yes, there are staff available 24 hours
- 11 See above
- 12 157 staff in total 12 midwives, 2 of which are primary 3 medical assistants trained in gynae /ob

13 Yes there is a functioning blood bank They have blood drives when the supply is low and people donate without payment They get blood donated from schools, community, police, wats etc They usually get 15-20 units on a drive People will donate because they know that they (or their family) will not be charged at the hospital if they need a transfusion The blood is screened for Hepatitis B and C, syphilis and HIV Out of 800 lab tests done in the hospital (not blood screening) 4 tests were positive for HIV Of the donated blood screened, 0 5% were HIV positive, and the same incidence for syphilis, 15-20% were positive for Hepatitis B, and 5-10% were positive for Hepatitis C

14 Visual inspections by the visiting team - gloves, drugs, instruments etc Seemed adequate on a brief look Need more details if this hospital is used as a training site

15 Yes, most staff at this hospital also had private practices

16 Of the 20 doctors in the hospital, almost all had private practices, however, most of them did not do deliveries

17 Most of the midwives also had private practices

18 Average numbers per month difficult to find out - 1 midwife (assistant director of midwives) said she did 2-3 deliveries per month

19 If there were problems in a private clinic, the woman was referred to this hospital

20 Yes some training sessions have been held 5 years ago, there was some midwifery training done by a Canadian midwife Some trainers from Regional Training School have been holding weekly training sessions for general nurses on primary health care

21 Some midwives have attended training on birth spacing training in PP Some have been to the JICA training (2 midwives) and also some midwives went from a health center

22 See problems outlined above in answers to question no 9

23 Not much identified - help on deliveries of breeches

24 Last quarters delivery statistics as follows

April 1998

| | |
|------------------------|----|
| Total no of deliveries | 67 |
| SVD | 37 |
| Twins | 2 |
| C/Sections | 15 |
| Vacuum ext | 7 |
| Breech | 4 |

| | |
|-----------|---|
| Premature | 6 |
| Eclampsia | 2 |

March 1998

| | |
|------------------------|----|
| Total no of deliveries | 76 |
| SVD | 50 |
| Twins | 3 |
| C/Section | 5 |
| Vacuum ext | 7 |
| Breech | 3 |
| Premature | 5 |
| Eclampsia | 8 |

February 1998

| | |
|----------------------------|-------------|
| Total no of deliveries | 62 |
| SVD | 43 |
| C/Section | 9 |
| Vacuum ext | 5 |
| Breech | 1 |
| Face presentation | 1 |
| Stillbirths | 4 |
| BW at or below 2500 gms | 17 |
| Average monthly deliveries | 68 |
| Average monthly C/S | 9.6 (14.2%) |

26 Other general info

Water supply OK

Generator for electricity over at Provincial offices and a spare generator was at the hospital
Steam autoclave available for sterilization in operating theatres

No of maternity beds - 20 but overcrowded and more like 40 patients Women stay 3 days following a normal delivery and 5 days if a primigravida

Same problem with overcrowding on the general side - 180 beds but often has over 200 in-patients

Swiss Red Cross have been supporting the hospital for the last 12 years, supplementing salaries and covering recurrent costs No 'under the table' charging allowed Staff have been fired for doing this

APPENDIX D

Proposed Plan for Midwifery Skill Upgrade

Upgrading of Midwifery Skills Proposed Training Plan

First choices for main training sites - Battambang and Takeo referral hospital
Second choice Siem Reap referral hospital

Pre Training Preparation

- a) Further discussions needed with these two sites and national level MCH staff regarding feasibility 4 weeks
- b) Discussions with provincial staff over contractual agreements at both the principal training sites and the provincial referral hospitals which will be involved 4 weeks
- c) Preparation of principal training sites and provincial referral hospitals (with or without ACNM visit) 4-6 weeks

Initial Phase

- Initial LSS course conducted by ACNM for 8 students (principally from Battambang hospital, RTC +/- staff from NMCHC) 2-3 weeks
- Second LSS course conducted at Takeo hospital for 4 students (participants to be discussed) 2-3 weeks
- Practice period (dependant on ACNM's availability) 4 weeks

Second Phase

- Initial TOT course conducted by ACNM for 8 staff from initial LSS course 1 week
- Second TOT course conducted by ACNM, for Takeo participants, IF second LSS course was held at Takeo 1 week
- First LSS course conducted by these trainers with ACNM support for 8 students (*Group 1) from Pursat and/or Siem Reap maternity units at Battambang hospital 2-3 weeks
- First LSS course takes place at Takeo using staff trained on one of the two initial TOT courses 2-3 weeks

Third Phase

At the two main training sites, selected M/W's from Pursat and Siem Reap provinces (*Group 1, *Group 2) attend LSS courses. These could be from the referral hospital but will also be from community/HC level. For the Group 2 M/W's courses will be the LSS course in the middle of a 1-2 month practical assignment designed to increase normal delivery and LSS experience. On a ratio of 1 M/W to 15 deliveries Battambang can probably take 8 students, Takeo 4. Aim to complete another 3 LSS courses at each site within 6 months - 24 students will complete the course at Battambang and 12 at Takeo. Courses will run for -

9 weeks total at each site

??Also allow 'practice period' after each course for delivery experience and skill practice

6-9 weeks total at each site

Fourth Phase

Selected M/W's from Kampot and Stung Treng provinces could then be included on the LSS courses. The same plan used in the third phase regarding clinical practice for the Group 1 and 2 midwives will be used.

LSS courses plus additional time spent for normal practice (*Group 2)

Each assignment - 4-8 weeks

Probably can conduct 4 courses in 1 year at each site - therefore training 32 students per year at Battambang and 16 at Takeo

Long term objective would be to use the focus provinces referral hospitals as training sites but this would depend on delivery numbers and other factors. Plans for this phase are beyond the scope of this plan.

Follow up

Follow up would have to be continuous and supervised by the Reproductive Health Advisor and the Reproductive Health Training Team Leader. A system would have to be designed to give the community and H/C midwives similar support to that given to the referral hospital midwives.

***Group 1 Midwives**

Midwives who have sufficient experience of normal deliveries and antenatal and postnatal examinations and do not require extra practice. They could complete the LSS course in the 2-3 week period and return to their normal place of work to practice the skills learnt.

***Group 2 Midwives**

These midwives have little or poor normal delivery experience. They need a much longer period of supervised normal practice before undertaking the LSS course. The LSS course would take place within a 1-2 month training program at Battambang hospital and later on, at the other provincial referral hospitals, as the numbers of deliveries permits.