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Uganda

**Improved Maternal and Neonatal Care Through Upgrading
Nurse-Midwives Skills and Services**

A

FINAL REPORT

**THE MOTHERCARE PROJECT
CONTRACT NO. AID/DPE-5966-Z-00-8083-00**

**IMPROVED MATERNAL AND NEONATAL CARE
THROUGH UPGRADING NURSE-MIDWIFE SKILLS AND SERVICES**

**AMERICAN COLLEGE OF NURSE MIDWIVES SUBCONTRACT
UGANDA LIFE SAVING SKILLS PROGRAMME
KAMPALA, UGANDA**

JULY 1, 1991 - SEPTEMBER 1, 1993

RESIDENT ADVISOR: SANDRA TEBBEN BUFFINGTON

TRAINING COORDINATOR: ANNE MARY OTTO

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DEDICATION

This report is dedicated to Jesca Mary Nzogi nee' Nagendi-Koire who passed away on 20 June 1993. Jesca was a born again Christian right from her youth and therefore lived a life of humility and spent most of her time praising the Lord. She qualified as a Midwifery Tutor and was one of the first six midwives selected from Jinja Hospital to be trainers in the Life Saving Skills Programme.

Jesca was a devoted trainer and despite periodic illness, she would never leave the labor ward until 9:00 PM during LSS training even when urged by fellow trainers and co-ordinator to go home and rest. She worked tirelessly until she was confined to her bed just two weeks before the Lord took her to be with Him.

The Life Saving Skills Resident Advisor and the Co-ordinator, fellow trainers, the midwives whose skills she helped update, midwifery students and the entire staff of Jinja and Nsambya Hospitals will forever remember Jesca for her cheerfulness and tireless efforts to uplift the standard of midwifery in Uganda.

May the Almighty God, rest her soul in **ETERNAL PEACE!**

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• Tools available at ULSSP/Kampala, ACNM/Washington DC and MotherCare/Washington DC.	

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D. Bibliography Supportive Documents

- D-1. Advisory committee reports # 1-5
 - D-2. Financial reports for local funds
 - D-3. Life Saving Skills Manual for Midwives by M. Marshall, S. Buffington
 - D-4. National Policy Guidelines for FP and Maternal Health Service Delivery
 - D-5. Conference for Supervisors of LSS Midwives Report
 - D-6. Quarterly reports # 1-6
 - D-7. Report of Baseline Assessment by A. Otto
 - D-8. Report on Fact Finding Visit to the North and Northwest by A. Otto
 - D-9. Selection Committee Minutes
 - D-10. Cash Requirements for Local Funds
 - D-11. TOT Number 1 Report June 1992
 - D-12. TOT Number 2 Report June 1993
 - D-13. Midwifery Tutors Workshop, April 1993
 - D-14. Continuing Education for LSS Trainers, June 1993
 - D-15. Kayunga Hospital Followup, July 1993
 - D-16. Gulu Hospital, March 1993
 - D-17. Otto's Trip Report to Canada (ICM)/USA (TAG)
Otto's Paper for ICM
 - D-18. Partograph Training at Midwifery Schools
 - D-19. Reports for:
 - Jinja Training Site, Training 1-9
 - Nsambya Training Site, Training 1-12.
 - D-20. Partograph Training Participants LSS Districts and Midwifery School Training Sites.
- Documents available at USAID/Kampala, ULSSP/Kampala, ACNM/Washington DC and MotherCare/Washington, DC.

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Advisory committee reports # 1-5

Financial reports for local funds

Life Saving Skills Manual for Midwives by M. Marshall, S. Buffington

National Policy Guidelines for FP and Maternal Health Service Delivery Orientation

Conference for Supervisors of LSS Midwives

Quarterly reports # 1-6

Report of Baseline Assessment by A. Otto

Report on Fact Finding Visit to the North and Northwest by A. Otto

Selection Committee Minutes

Training reports

LIST OF ABBREVIATIONS

ACNM	American College of Nurse Midwives
ACP	AIDS Control Programme
ADMS	Assistant Director of Medical Services
AG	Acting
AIDS	Acquired Immunodeficiency Syndrome
ANC	Antenatal Clinic
BSc	Bachelor of Science
CDD	Control of Diarrhoeal Disease
CE	Continuing Education
CTT	Core Training Team
DHS	Demographic Health Survey
DHV	District Health Visitor
DMO	District Medical Officer
EFHS	Expanded Family Health Services Project
EM	Enrolled Midwife
FP	Family Planning
HIV	Human Immunodeficiency Virus
IEC	Information, Education & Communication
JSI	John Snow, Incorporated
LM	Lactation Management
LSS	Life Saving Skills
MC	MotherCare
MCH	Maternal Child Health
MOH	Ministry of Health
NGO	Nongovernmental Organization
PNC	Postnatal Clinic
RM	Registered Midwife
SEATS	Family Planning Service Expansion and Technical Support
STD	Sexually Transmitted Disease
TBA	Traditional Birth Attendant
TOT	Training of Trainers
ULSSP	Uganda Life Saving Skills Programme
UMNC	Uganda Midwives and Nurses Council
UPMA	Uganda Private Midwives Association
USAID	United States Agency for International Development
USD	United States Dollar
USH	Uganda Shilling

ACKNOWLEDGMENTS & BUDGET

TOTAL IN-COUNTRY BUDGET: USD 305,397
(Revised 3/93 = USD 274,584)
plus
LOCAL FUNDS (EFHS) SHILLINGS (equivalent USD 116,715)

KEY PERSONNEL:

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CONSULTANT OBSTETRICS & GYNECOLOGY, LIFE SAVING SKILLS TRAINER

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LIFE SAVING SKILLS TRAINING TEAM COORDINATOR

ALICE EBITU, JINJA HOSPITAL IN CHARGE ANTENATAL CLINICS,
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LIFE SAVING SKILLS TRAINERS AT NSAMBYA & JINJA

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3. MotherCare/John Snow, Incorporated

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I. PROJECT SYNOPSIS

OBJECTIVES

- 1. Determine the needs, knowledge base, skills and level of Maternal Child Health (MCH) care provided by midwives at selected district and urban health and referral centers through a baseline assessment.**
- 2. Increase awareness among national leaders of creative solutions to problems in the delivery of maternal and neonatal health care in Uganda, highlighting the project's function in the redefinition and expansion of the role of midwives in maternal and newborn health care.**
- 3. Upgrade the knowledge, skills, and provide support and supervision for 80 midwives including midwifery tutors and clinical instructors from the public and private sector in Life Saving Skills (LSS) including risk assessment and problem solving. This will be achieved by establishing a core of 16 trainers, developing midwifery training modules for in-service and preservice education and updating MCH protocols for midwifery performance.**

OUTCOMES/OUTPUTS

- 1. An assessment tool was used to evaluate both knowledge and performance by interview and observation of 105 midwives prior to identifying continuing education needs (attachment 1). The key to this assessment tool is clinical observation. Refer to Bibliography supportive documents, Report of Baseline Assessment.**

A similar form (attachment 2) is used during support & supervision follow up visits in order to evaluate change in midwives performance. Any need for revision of training or materials are based upon this information.

- 2. An advisory committee formed during this project will continue to function as the advisory body to the MOH for LSS activities. Orientation conferences for 50 supervisors of LSS midwives and partograph training for 530 staff in hospital maternity units, including all of the hospitals in the LSS Districts, provides support for the LSS midwives in their new role of advanced midwifery practice. LSS District Hospitals are using partographs for monitoring labour, early management of prolonged labor cases and increasing awareness in routine midwifery care.**

- 3. Uganda specific revisions were made in the LSS Manual for Midwives; antenatal risk assessment form (attachment 3), partograph (attachment 4) and reference logbook (attachment 5). Updated protocols for midwives are included in the Midwives Handbook and Guide to Practice (attachment 6). The Handbook distributed through the Registrar of Uganda Midwives and Nurses Council (UMNC), creates a legal basis of support for the midwives expanded role, provides information for in-service and preservice training of midwives, and offers a theoretical midwifery update for all Uganda.**

4. **LSS Trainers (16) competently provide on-the-job LSS training for midwives. This on-the-job training decreases the cost of training and may ensure that training can continue with minimum financial input. Also, since the LSS Trainers continue to function in their clinical capacities, they remain clinically skilled. The Trainers need minimal clinical support.**

5. **LSS training has been provided to 160 midwives, doubling the goal of the project. The midwives trained equally represent public and private sector. Twenty midwifery tutors from the 14 midwifery schools (100%) in Uganda were trained. This continuing education for tutors is a necessary component for subsequent complete institutionalization of LSS into preservice midwifery curriculum.**

The LSS Midwives improved in knowledge and clinical skills as documented in the training reports (appendices). The LSS Training Team assess and arrange for midwives needing additional clinical experience until they can perform **100% of the steps in a Life Saving Skill**. Upon completion of the training, all LSS Midwives demonstrated a minimum of **60% competency of the indicator skills (attachment 7)**. Performance below **60%** is improved by the midwife taking additional time for practice at the training site. Preliminary evaluation post training for a sample (20) LSS midwives is recorded in attachment 7.

6. **LSS selected topics are integrated in the preservice midwifery curriculum including antenatal risk assessment, monitoring labor progress using the partograph, active management of third stage and newborn resuscitation.**

7. **Negotiations with United States Agency for International Development (USAID) in Kampala and Ministry of Health are favorable for continuing LSS training following the completion of the MotherCare I Project. A budget plan for LSS training (attachment 8) plus a budget for developing a new training site (attachment 9) has been submitted to USAID and MOH.**

II. BACKGROUND

A. Project Selection, Location and Setting

The maternal mortality ratio in Uganda is among the highest in the region. Recent studies in Uganda have indicated maternal mortality rates of 300-500/100,000 live births. The majority of women who die are young. Some studies have indicated that up to 50% of maternal deaths occur in women 14-25 years of age. Leading causes of death are hemorrhage (antepartum and postpartum), ruptured uterus, puerperal sepsis, abortion complications and eclampsia. Women with no education and of lower socio-economic status have been found to be at a higher risk of maternal death than those who have had some form of education or higher socio-economic status.

According to the Demographic Health Survey (DHS) 1989 findings, 86% receive antenatal care during pregnancy, 55% receive at least one tetanus toxoid and 38% are delivered by a doctor or trained midwife. However, only limited data are available on utilization, content or quality of pregnancy care received. Findings of currently married women's knowledge and use of family planning include, 77% recognize modern family planning methods, 21% have ever used a method and 5% are currently using a method.

In 1971, Uganda had one of the most developed health care systems in Africa, both in professional training capability and in the health care infrastructure. However, during 1972-1986, a general deterioration of the country's fiscal and health infrastructure led to a shortage of personnel, medical supplies and equipment. Health facilities are in need of major rehabilitation. National figures indicate that 27% of the population live within 5 km of a health unit and 43% live more than 10 km.

The current estimate for nurses in the country is 1/2250 population, with forty percent of the total nursing staff trained in midwifery. Many of these midwives have been in the field 10-20 years without an opportunity for additional update and training. Very little data are available on the type of MCH cases seen by the midwife in the rural clinics, and no evaluation of their ability to diagnose, treat or refer clients to the closest hospital. Most hospitals lack resources of personnel and equipment to manage MCH referrals.

The Uganda Nurses and Midwives Registrar recognized the problem of no continuing education for midwives as detrimental in providing maternal and neonatal care thus impacting on maternal and neonatal morbidity and mortality. In early 1989, assistance was requested to develop continuing education programs to meet the needs of Ugandan midwives in order to reduce maternal mortality. The MotherCare Project and the Ministry of Health, Republic of Uganda agreed to provide a continuing education training programme (ULSSP) with technical assistance being provided by the American College of Nurse Midwives.

The ULSSP baseline assessment identified that midwives are isolated in rural areas with little access to continuing education. They also have few opportunities to exchange information with colleagues as a means of updating their midwifery knowledge and skills. The Midwives Handbook and Guide to Practice, last revised in 1967, lacked up to date maternal and neonatal management for the midwife. The midwives additionally needed an update in organizational and clinical knowledge and skills. They lacked records, equipment and supplies vital in the management of maternal and neonatal clients.

An ULSSP staff office was set up in close proximity to the training sites at Jinja and Nsambya allowing frequent supervision and access to the identified districts for training midwives. These districts of Luwero, Mukono, Kamuli and Kalangala can be reached using project transport. The LSS Trainers can only make use of public transport for follow up support visits to LSS midwives located along major roads. Refer to Appendices, Product Attachments for a map of Uganda identifying project activities.

B. Relationship of ULSSP to Other Activities In Country

Uganda Midwives and Nurses Council (UMNC), the registrar and the revision committee's collaborative revision of the Midwives Handbook and Guide to Practice provides all midwives in Uganda a theoretical update in maternal and neonatal care and expands their scope of practice with appropriate legal sanction.

BSc Nursing Project, technical support by Case Western Reserve established an early and supportive relationship sharing similar goals of improving maternal and neonatal services. Resident advisors and staff collaborated during both projects' development and implementation. The outcome resulted in (1) LSS is included in the BSc Nursing curriculum, (2) LSS trained faculty and staff of university clinical sites, and (3) a collaborative supervision mechanism to support and follow up LSS midwives is loosely in place.

Uganda Private Midwives Association (UPMA), technical assistance from the American College of Nurse Midwives/SEATS/JSI for a family planning project provide essential rural midwife experiences and needs as UPMA representatives are involved in meetings and activities of LSS. This close relationship is made even easier as UPMA and ULSSP share the same office building.

Ministry of Health Core Training Team (CTT), technical support from INTRAH/FP provided training development support and Training of Trainers (TOT) for LSS staff. CTT participated in the TOT for LSS Trainers. ULSSP provided input and participated in meetings and workshops at the CTT request.

Control of Diarrhoeal Diseases (CDD) with technical support by PRITECH participated in an advisory capacity through meetings and workshops. ULSSP rehydration materials reflected the CDD recommendations.

Lactation Management (LM), technical support by Wellstart and UNICEF and research support from MotherCare collaborated to update training materials for both preservice and the continuing education curriculum, major revision of the Midwives Handbook and Guide to Practice, and the baby friendly hospital effort.

Health Education Unit, Ministry of Health incorporates LSS motivational messages through their district level information system.

Tutor Training College at Makerere University collaborative effort supports and advises both didactic and clinical training for preservice and continuing education for midwifery tutors.

Midwifery Preservice Education collaboration involves (1) LSS training for all midwifery tutors and clinical instructors, (2) development of lesson plans for teaching selected LSS topics and (3) upgrading the midwifery staffs at the midwifery training hospitals in monitoring labor progress using the partograph, antenatal risk assessment and later in additional life saving skills.

TBA and Safe Motherhood Programs focused on districts not identified by the MOH for ULSSP. Thus because of the geographical separation, collaboration was possible only through workshops and meetings.

C. Organizations Participating In Project:

AIDS Control Programme (ACP), BSc Nursing Programme-Makerere University, Busoga Diocese, Case Western Reserve University, Control of Diarrhoeal Diseases Programme, Essential Drug Programme, Lactation Management Team, Ministry of Health, Nsambya Hospital, Jinja Hospital, School of Medicine & Tutor Training College-Makerere University, Uganda Midwives and Nurses Council, Uganda Private Midwives Association and United States Agency for International Development.

III. OBJECTIVES BY TOPIC

A. Effecting Behaviors

1. Increase awareness among national leaders to provide support for midwifery service providers in their expanded role as LSS midwives.
2. Upgrade midwives and midwifery tutors knowledge and skills.

B. Improving Services

1. Determine needs, knowledge base and skills level of MCH care provided by midwives at selected district, urban and referral centers through a baseline assessment.
2. Revise protocols for midwives.
3. Revise LSS Manual for Midwives to reflect country specific needs for continuing education and preservice education.
4. Identify and train a core of midwives to conduct LSS training and evaluation activities.

C. Enhancing Policy Dialogue

1. Increase awareness of national leaders of MCH problems in the delivery of maternal and neonatal health care, (a) Central level guidance, discussions & directives, (b) advisory policy committee, (c) district training selection committee, (d) hospital and health center orientations, (e) midwifery leaders orientation and training.
2. Review and revise, as indicated MCH protocols for midwifery performance related to maternal and neonatal life saving skills and risk assessment, (a) revised Midwives Handbook and Guide to Practice approved and distributed through the UMNC Registrar to all midwives in Uganda.

IV. ACTIVITIES

Training

Twenty-six training courses have been conducted from 19 September 1992 -31 August 1993, training a total of 160 midwives and 20 midwifery tutors. The midwives equally represent private and public sector in Luwero, Kalangala, Kamuli and Mukono districts. The midwives are diverse in age, training, job and language. Some of the midwives do not speak English, however due to the clinical nature of the training and the willingness of the staff to translate, they are updated.

The goal of the training is to assist the midwife revise her midwifery skills and develop proficiency in Life Saving Skills. The 14 day training includes demonstrations and return demonstration in both the classroom and clinical areas. A room close to the labor ward is used for classroom activities. Specific topic areas are discussed using case studies and review questions in the Life Saving Skills Manual for Midwives. This competency based program places great importance on skill performance.

Each midwife trainee performed, under the auspices of a LSS Trainer, an average of five replications of each of the 10 main Life Saving Skills. The trainee was not graduated until all steps of the skill could be competently performed. A flexible time table allowed for as much clinical experience as was necessary. A call schedule provides for around the clock experiences. It should be noted that each of the LSS Trainers and their Consultant Obstetricians held a regular hospital job in addition to their work as a LSS Trainer. The products developed for this project included time tables, protocols, checklists and trainers guide. Locally made equipment and training management forms can be found in the appendices.

Evaluation of the training consists of written pre and post tests, clinical pre and post observation and a mid-training and final written evaluation by each midwife. The results of these evaluations are included with each training report found in the Bibliography of supportive documents.

ACTIVITIES/PRODUCTS TABLE BY TOPICS, see attachment 15.

MAP OF UGANDA BY ACTIVITIES, see attachment 14.

V. ACCOMPLISHMENTS

A. Effecting Behaviors

COMMUNITY ORIENTATION: The LSS midwife clients provided a community level orientation describing, LSS midwife training of skills acquired, development of transport system and conditions for referrals in order to increase utilization of services and client acceptance for referrals.

CONDUCT SYSTEMATIC PROBLEM SOLVING CLIENT EVALUATION: The LSS midwife provides improved organized services during pregnancy and labor using the problem solving routine including history taking, physical examination, identifying the problems, taking necessary actions, client education and written documentation.

PROVIDE POSTNATAL APPOINTMENTS: Reduction of "at risk" pregnancies by providing postnatal appointments and family planning services.

USING WRITTEN PROTOCOLS: LSS midwives use written guidelines from the Midwives Handbook, for management of maternal and neonatal care.

STABILIZING CLIENTS CONDITION & DOCUMENTING REFERRALS: LSS midwives stabilize clients condition in emergencies prior to referral transfer providing written documentation of findings and management.

B. Improving Services

CONDUCTED BASELINE ASSESSMENT: In order to find out what and how services need to be improved, the ULSSP staff assessed maternal and neonatal services by conducting a baseline survey of 105 midwives, performing site evaluation at 3 training sites, 14 midwifery schools and 100 maternity sites, observing midwives and doctors at seven hospital maternity units and interviewing central, district, health center and community level policy makers regarding the role of the midwife in maternal and neonatal care.

UPGRADED TRAINING & MATERNITY STAFF: Providing clinical training using the LSS Manual for Midwives and written protocols for 17 LSS Trainers, 160 midwives and 20 midwifery tutors; 530 maternity staff received partograph training and 50 supervisors of LSS midwives received LSS orientation.

SUPPLEMENTED DEFICIENCIES IN EQUIPMENT, INSTRUMENTS, SUPPLIES: Improved maternal and neonatal services included provision of clean maternity care, protection for midwives and prevention of cross infection through recycling gloves and other necessary delivery items, essential instruments, equipment and supplies were stocked and secured.

DEVELOPED PROTOCOLS, CURRICULUM, AND FORMS: LSS curriculum revised especially reflecting Uganda specific antenatal and partograph forms, updated protocols in the form of Midwives Handbook and Guide to Practice printed and made available to all midwives in Uganda, antenatal and partograph forms provided to all institutions in 4 pilot districts.

DEVELOPED MECHANISM TO FACILITATE COMMUNITY REFERRAL SYSTEM: Referral forms and community transport systems were discussed and developed.

C. Enhancing Policy Dialogue

CENTRAL LEVEL: Assistant Director of Medical Services in Maternal Child Health and Family Planning (ADMS/MCH-FP) is the chairperson of the advisory committee directing and appointing public and private sector representatives from central levels, NGOs, midwifery services and education including midwifery, obstetrics and tutor training to guide the project through all phases of development, implementation, evaluation and institutionalization. This committee supported the UMNC review and update of the Midwives Handbook and Guide to Practice assisting the revision committee appointed by the Registrar.

The office of the ADMS/MCH-FP developed a directive advising central and district offices of LSS midwives training, skills and needs for support including changes in responsibility and access to supplies and equipment.

The advisory committee will continue to meet twice a year providing guidance for the Ministry of Health's Uganda Life Saving Skills Programme including update for midwifery leaders, LSS orientation for new donors or projects and ensuring annual continuing education for LSS Trainers. A training plan and budget were developed for July 1993 - June 1994. Refer to attachment 8.

A symposium to provide update and orientation for potential and current donors and projects on Life Saving Skills is being conducted by the advisory committee with assistance provided by the LSS Trainers.

DISTRICT LEVEL: The advisory committee identified four pilot project districts for ULSSP and chose a district selection committee including District Medical Officer (DMO), District Health Visitor (DHV), Private Midwives, Mission and NGO's. 160 clinically active midwives identified by the district selection committee have completed LSS training.

LSS orientation meeting for 20 supervisors of LSS midwives was conducted. LSS orientation and training was offered to midwifery leaders, tutors and clinical instructors from ALL 14 midwifery schools.

HEALTH CENTER LEVEL: Medical Assistants and health center staff were oriented to the new skills for LSS midwives.

COMMUNITY LEVEL: Village chairmen were oriented by the LSS midwife regarding her training including development of transport system and reasons for midwife referrals. LSS midwives oriented women's groups with emphasis on family planning, pregnancy, neonatal and postnatal care. The Midwives Handbook provides topics for these discussions.

D. Management of Training Project:

Advisory committee, office and management systems in place. Samples of the following forms are found in the appendices.

Finances: transport voucher, full board, lodging, allowances and general receipts.

Equipment: site inventory forms, equipment vouchers, LSS supplies for training.

Monitoring Training: training checklist, clinical competency scores, documentation of trainees activities, documentation of LSS activities by trainers, midweek and final evaluation forms.

Follow up and support: reference logbook, follow up and support visit form, incident reporting form.

VI. LESSONS LEARNED

A. Effecting Behaviors

The need was identified during the first LSS training that the midwives needed assistance **motivating and informing the community people**. During LSS training, general discussions included problem solving and suggesting that LSS Midwives, once they return to their place of work, meet with the village chairperson to discuss LSS, new skills, referrals, community transportation system and client compliance with women and men in the community. Information, Education and Communication (IEC) is important, however care should be taken to ensure that it is actually a **community orientation** and not just a public health provider orientation.

Problem Solving improved maternal and neonatal services in addition to identification and management of obstetric complications.

Postnatal Appointments/Family Planning motivation was a spin off of client education. LSS supported the MOH/FP programs by providing appointments for all mothers to return for 6 week examination, encouraging exclusive breastfeeding for 6 months, beginning within one hour after delivery and providing family planning information.

Written Protocols in the form of the Midwives Handbook and Guide to Practice were revised and made available. How to use these written protocols in providing maternal and neonatal care was included during training.

Written Referrals were taught and practiced by the LSS midwives so that the referral centers understood why a referral was made, what had been done and who actually made the referral.

B. Improving Services

LSS Trained staff at training sites provides for a quality training programme. The midwives working in the antenatal, labor and delivery units of the hospital identified as a **LSS training site** are trained in LSS before training midwives from the periphery. The LSS hospital midwives are **LSS role models** for other midwives coming for training. The LSS hospital midwives are **LSS role models** for preservice students. The hospital is a high quality referral center for LSS trained midwives.

Pregnancy and labor problems are identified and managed using written protocols. Mothers lives are saved when midwives identify the cause of hemorrhage in pregnancy and manage the problem in a timely manner as described in the protocols. Mothers lives are saved when midwives initiate **LIFE SAVING** treatment prior to referral.

Midwives competently perform skills, following a 14 day clinical training, which save mother and/or baby, such as active management of third stage, bimanual compression or infant resuscitation.

The baseline assessment found that clinical midwives were **deficient in medical equipment, records and supplies**. The advisory committee developed a kit of essential equipment, records and supplies necessary for a LSS midwife to provide Life Saving Skills. The LSS Kit (attachment 16) was provided to midwives upon successful completion of LSS training. The training sites were also found to be without or have non-functioning essential equipment and/or supplies necessary to teach Life Saving Skills. The project assisted each training site update their medical equipment and rehabilitate their work areas such as providing security for equipment, minor repairs of equipment and furniture, provision of adequate light in the delivery room, and privacy curtains.

Referral system is difficult, there is so much more than just writing protocols and teaching the midwives to use them. A referral system implies an infrastructure including source of money, available transportation, provision of appropriate client education, client/family compliance and a prepared referral site to be able to accept and manage referrals.

C. Enhancing Policy Dialogue

It is essential to establish a respected and close working relationship with the MOH and work through each phase of a project together so that the **"project" is the MOH Programme IF** institutionalization is desired. A project must be able to fit its time frame into the MOH plan, sometimes quantity is not as important as quality.

D. Improving Project Management

If the goal of a project is to institutionalize, a functioning management system is necessary to support and conduct training. This includes **planning, appropriate personnel for the job description, communication, finances, logistics, transport, supplies and equipment**. It is important for a project to provide **management personnel in the field** so that the technical personnel may provide the expertise for which they are hired. For example, an experienced midwifery educator should not be expected to spend her "expertise" managing an office, setting up workshops, purchasing equipment and reviewing financial accounts.

VII. RECOMMENDATIONS

"Life Saving Skills is required for all midwives in Uganda. The Ministry of Health is committed to address this need by making accessible in-service and preservice LSS training available." This direct quote of Dr. E. F. Katumba Senior Medical Officer, MCH/FP, MOH representing the ADMS, MCH/FP at the fifth advisory committee meeting 7 April, 1993 provides the direction for the following recommendations.

1. Expand to more districts through the development of additional training sites. The same criteria for choosing these training sites must be used. Distances are great and transportation is poor. To ensure that midwives can attend training and that the LSS trainers can reach the LSS midwives for follow up, training sites must be accessible for the districts it serves.
2. Develop a community approach assisting LSS midwife educate, motivate and solve problems leading to maternal mortality. The TBA, traditional healers and other recognized leaders must be involved in improving mother and baby's health, identifying pregnant women, recognizing danger signs of pregnancy and labor and supporting the LSS midwife when referrals are necessary.
3. Provide a funding site to continue this institutionalized programme, assisting in the reduction of maternal and infant morbidity and mortality.
4. Provide annual continuing education for LSS Trainers and LSS Midwifery Tutors to assist them to remain clinically up to date in their skills and knowledge.
5. Develop a computer system, through the Midwives and Nurses Council Registrar's office, to track all midwives in Uganda in order to provide annual continuing education for practicing and registered midwives.
6. Explore with the Registrar, a progressive system, to allow midwives to build on what they can do and continue to expand their skills; such as performing a vacuum extraction, conducting laboratory tests for detecting anemia, malaria and STDs.
7. Assist the Registrar review and update the Midwives Handbook and Guide to Practice annually.
8. Expand the LSS topics and lesson plans for preservice education.
9. Integrate LSS in the Makerere University Medical School curriculum.
10. Future training projects should review the midwives support systems, such as essential drug supply and supervision to ensure that the midwife may perform in her expanded role.

VIII. APPENDICES