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FINAL DRAFT REPORT

EVALUATION STUDY OF "LIFE SAVING SKILLS" TRAINING FOR COMMUNITY MIDWIVES IN CENTRAL- AND EAST JAVA, INDONESIA

ASTRID SULISTOMO

JAKARTA, 1999

Cooperation Between:
The Department of Community Medicine,
School of Medicine - University of Indonesia
Directorate of Family Health, Ministry of Health
UNICEF - Indonesia

THE STUDY TEAM

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Team members	:	Ambar Roestam Sutimah Herqutanto Endang Utami Tyas
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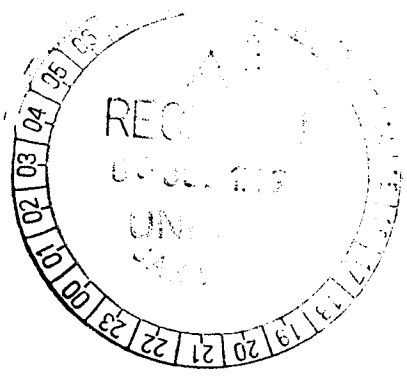

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The Study Team

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REVIATION LIST:

AN	:	Association of South East Asia Nations
NC	:	Basic emergency Obstetric-Neonatal Care
NC	:	Comprehensive Emergency Obstetric Neonatal Care
	:	Ikatan Bidan Indonesia (Indonesian Midwife Association)
	:	Ikatan Dokter Anak Indonesia (Indonesian Paediatrician Association)
	:	Intra musculus
	:	Infant Mortality Ratio
	:	Intra Uterine Device
	:	Intravenous
	:	Life Saving Skills
H	:	Maternal- & Child Health
R	:	Maternal Mortality Ratio
H	:	Ministry of Health
	:	Midwife
	:	Not applicable
N	:	National Clinical Training Network
	:	Not Reported
)	:	National Resource Center
)	:	Overhead Projector
ITA	:	Five year Development Plan
GI	:	Persatuan Obstetri Ginekologi Indonesia (Indonesian Obstetric- Gynaecologist Association)
)	:	Provincial Training Center
R	:	Reporting and Recording
	:	Standard Deviation
\	:	Traditional Birth Attendant
W	:	Village Midwife
R	:	Terms of reference
T	:	Training of Trainer's

EXECUTIVE SUMMARY

HASIL EVALUASI PELATIHAN KEGAWAT-DARURATAN OBSTETRI NEONATAL (LSS) BAGI BIDAN DI DESA DI PROPINSI JAWA TENGAH DAN JAWA TIMUR 1998

PENDAHULUAN

ngka Kematian Ibu masih sangat tinggi di Indonesia, bahkan merupakan yang tertinggi diantara :gara ASEAN, sehingga menjadi masalah yang mendapat perhatian serius dari pemerintah donesia. Meskipun angka kematian bayi berhasil diturunkan lebih cepat, namun proporsi angka :matian neonatal masih tetap tinggi, yang berhubungan erat dengan kondisi pada saat kehamilan ın kelahiran. Oleh karena itu usaha-usaha untuk meningkatkan program kesehatan ibu dan anak enjadi prioritas utama dari Departemen Kesehatan dan institusi lain yang terkait.

:jak 1980/1990 telah dibuat kebijakan untuk menempatkan Bidan di setiap desa di Indonesia, bagai salah satu usaha untuk mempercepat penurunan angka kematian ibu. Diperkirakan, bahwa ıda akhir 1999, 54.120 bidan akan ditempatkan di desa-desa diseluruh Indonesia. Pengalaman di :rbagai negara membuktikan, bahwa peranan seorang bidan tidak dapat digantikan oleh seorang ıkun bayi. Sampai saat ini belum ada negara yang berhasil menurunkan angka kematian ibu cara bermakna dengan mengandalkan dukun sebagai tenaga pertolongan persalinan di tingkat ling bawah. Namun karena kebutuhan yang demikian meningkat akan tenaga bidan di desa, ndidikan yang didapatkan oleh mereka masih dianggap belum memadai untuk memenuhi butuhan pelayanan yamg diharapkan. Oleh karena itu sejak 1994 mulai dilakukan pelatihan :gawat Daruratan Obstetri dan Neonatal (LSS= Life Saving Skills) bagi bidan di desa. Sebagian latihan tersebut di danai oleh UNICEF, terutama di propinsi Jawa Barat, Jawa Tengah, Jawa mur, Sulawesi Selatan dan Nusa Tenggara Barat

da tahun 1995 telah dilakukan evaluasi tahap pertama, yang menghasilkan beberapa comendasi untuk perbaikan. Evaluasi ini merupakan evaluasi kedua yang dilakukan di propinsi wa Tengah dan Jawa Timur.

TUJUAN:

aluasi ini ingin melengkapi evaluasi pertama dengan tujuan umum adalah mengidentifikasi dan nganalisa hasil dari pelatihan LSS yang didanai oleh UNICEF terhadap kinerja Bidan Di Desa, ain mengkaji pelatihan LSS.
juan khususnya adalah:

Mengidentifikasi masalah dalam pengelolaan pelatihan

Mengevaluasi para pelatih LSS dalam kemampuan melatih dan dalam melakukan perencanaan, pelaksanaan dan mengevaluasi pelatihan.

3. Mengkaji bahan pelatihan
4. Mengkaji pengetahuan dan ketrampilan BDD dalam beberapa topik pelatihan LSS.
5. Mengkaji faktor-faktor lain yang dapat mendukung kinerja bidan di desa.
6. Memberikan rekomendasi yang spesifik.

III. METODOLOGI:

Studi evaluasi ini menggunakan disain kros-seksional, dengan menggunakan pembanding bidan di desa yang belum dilatih. Pendekatan dilakukan secara kuantitatif dan kualitataif. Pelaksanaan dilakukan dalam 2 tahap, dimana tahap pertama mengevaluasi proses pelatihan dan tahap kedua mengevaluasi pengetahuan, ketrampilan dan kinerja para peserta. Waktu pengumpulan data adalah bulan November - Desember 1998.

Populasi penelitian adalah Bidan Di Desa yang telah mendapat pelatihan LSS dengan dana UNICEF di propinsi Jawa Tengah dan Jawa Timur. Menurut informasi dari Dinas Kesehatan tingkat I di Jawa Tengah telah dilatih 200 BDD yang tersebar di 10 Kabupaten dan di Jawa Timur 796 Bidan di Desa yang tersebar di 21 kabupaten.

Pemilihan sampel dilakukan secara proporsional, dengan memilih 2 Kabupaten di Jawa Tengah dan 4 Kabupaten di Jawa Timur secara random. Di setiap Kabupaten para pengelola program dan pelatih di RS kabupaten menjadi responden dan sekitar 50% dari BDD yang telah mendapat pelatihan LSS di masing-masing Kabupaten dipilih secara random untuk menjadi sampel.

Tabel I. Matriks sampel penelitian:

Sampel	Jumlah	Kategori
FASE I:		
Tingkat Propinsi:	2 propinsi (Jateng & Jatim)	
Pengelola	Semua	Staf Kesehatan
Tingkat Kabupaten:	Jateng: 2 Kab, Jatim 4 Kab	
Pengelola	Semua	Staf Kesehatan
Pelatih	Semua	DSOG, DSA, Bidan dll.
FASE II:		
Bidan Di Desa	Jateng: 24 - Jatim: 96	- Dilatih LSS dana UNICEF
	Jateng: 24 - Jatim: 96	- Belum dilatih LSS
	Jateng: 6 - Jatim: 24	- Dilatih LSS dana UNICEF
	Jateng: 6 - Jatim: 24	- Belum dilatih LSS

Kabupaten yang terpilih secara random adalah Pekalongan dan Banjarnegara di Jawa Tengah serta Nagetan, Ponorogo, Blitar dan Lamongan di Jawa Timur.

Pengumpulan data dilakukan dengan melakukan wawancara, pengisian daftar pertanyaan, diskusi kelompok dan pengamatan. Wawancara mendalam dilakukan dengan para pengelola program pelatihan LSS yang di danai oleh UNICEF, dengan menggunakan daftar pertanyaan yang telah

disiapkan. Wawancara ini bertujuan untuk mendapatkan informasi mengenai kebijakan dan standard pelatihan LSS, persiapan pelatihan, seleksi dan persiapan tempat pelatihan, seleksi dan persiapan pelatih, bahan pelatihan yang digunakan, seleksi peserta pelatihan dan dana.
Selain itu juga dilakukan wawancara dengan Bidan Di Desa untuk menilai pengetahuan mereka dan studi kasus. Daftar isian dibagikan kepada para pelatih dan Bidan di desa, untuk mendapatkan informasi mengenai karakteristik dan pengalaman. Diskusi kelompok dilakukan dengan para pelatih untuk mendapatkan informasi mengenai pelaksanaan pelatihan dan pengamatan dilakukan terhadap fasilitas Rumah Sakit, fasilitas Bidan Di Desa beserta perlengkapannya dan pencatatan mengenai pelayanan yang ada. Dalam rencana penelitian juga akan dilakukan pengamatan langsung terhadap pelatihan, namun karena pada saat pelaksanaan penelitian, semua pelatihan LSS yang di danai UNICEF sudah selesai dilaksanakan, maka pengamatan tidak dapat dilakukan.
Hasil pengumpulan data pada Bidan Di Desa, dikelompokkkan menurut sudah atau belumnya mengikuti pelatihan LSS untuk dapat dilakukan analisa perbandingan.

IV. HASIL DAN PEMBAHASAN:

A. Pengelolaan Pelatihan:

Institusi yang bertanggung jawab untuk mengelola pelatihan di tingkat propinsi maupun kabupaten adalah Dinas Kesehatan. Organisasi di tingkat propinsi melibatkan beberapa institusi lain yang terkait, meskipun tidak ada SK resmi, sedangkan di tingkat kabupaten ada SK penunjukkan. Koordinasi antar institusi terkait dilakukan dalam rapat-rapat perencanaan, sedangkan koordinasi secara vertikal dilakukan dengan surat menyurat dan pertemuan di propinsi. Departemen Kesehatan telah menyiapkan materi pelatihan berupa 10 modul pelatihan LSS dan membuat TOR mengenai pelaksanaan pelatihan dan panduan administratifnya. Di kedua propinsi rapat-rapat perencanaan setiap kali akan diadakan pelatihan, yang melibatkan Kanwil Kesehatan, IDAI, POGI atau perwakilan dari Jaringan Nasional Pelatihan Klinik. IBI dikedua propinsi tidak dilibatkan. Dalam rapat-rapat perencanaan dibahas TOR pelatihan, kriteria pelatih, tempat pelatihan dan kriteria peserta pelatih. TOR ini kemudian didistribusikan ke Kabupaten yang akan menyelenggarakan pelatihan. Di tingkat kabupaten, unsur yang terlibat selain Dinas Kesehatan adalah Rumah Sakit Kabupaten dan IBI.

Tujuan pelatihan LSS menurut TOR adalah: "meningkatkan pengetahuan dan ketrampilan peserta dalam pertolongan pertama kasus kegawat daruratan obstetri neonatal". Kriteria pelatih hanyalah, bahwa mereka adalah dokter ahli kebidanan, dokter spesialis anak dan bidan senior di Rumah Sakit Kabupaten. Sedangkan kriteria peserta pelatihan adalah Bidan di Desa yang mempunyai kasus kematian atau mempunyai banyak kasus, diutamakan berstatus pegawai negeri dan telah bekerja paling sedikit 2 tahun. Namun kriteria tersebut boleh di modifikasi oleh masing-masing kabupaten. Lama pelatihan yang ditetapkan adalah 12 hari, yaitu 3 hari pelajaran teoridan 9 hari untuk praktek. Jumlah pesreta per pelatihan, pada waktu tahun 1995 adalah 20 per angkatan, namun sejak 1996/1997 dianjurkan untuk membagi peserta menjadi 5 kelompok agar kemungkinan mendapat kasu menjadi lebih besar.Bahan pelatihan adalah 10 modul LSS dan di Jawa Timur sejak tahun 1996 telah ditambahkan beberapa materi lain.

Salah satu persiapan penting dalam penyelenggaraan suatu pelatihan ketrampilan klinis, adalah persiapan para pelatihnya. Ada beberapa tahap yang harus dilalui seorang ***provider klinis*** untuk menjadi seorang ***pelatih klinis***, yaitu harus mahir dalam ketrampilan klinis yang telah di standardisasi dan kemudian mengikuti suatu pelatihan pelatih untuk belajar ketrampilan untuk dapat mentransfer ketrampilannya secara efektif. Calon pelatih LSS di Jawa Tengah dan Jawa Timur, yang terdiri dari seorang dokter ahli kebidanan dan dokter spesialis anak per kabupaten, hanya dipersiapkan dengan mengundang mereka untuk mengikuti pertemuan sehari di propinsi, dimana dibahas mengenai materi pelatihan. Hanya ini yang dapat dilakukan, karena keterbatasan dana. Dinas Kesehatan Jawa Timur pada tahun 1996/1997 mencoba melakukan peningkatan persiapan pelatih, dengan mengadakan suatu Lokakarya bagi 4 orang per kabupaten, yang bertujuan untuk meningkatkan kerja sama dan koordinasi diantara tim pelatih, mendapatkan kesepakatan mengenai metoda pelatihan yang digunakan dan meningkatkan ketrampilan melatih. Pada lokakarya tersebut diperkenalkan mengenai Pelatihan Berdasarkan Kompetensi, Cara Belajar Orang Dewasa dan metoda pelatihan interaktif, namun masih belum merupakan suatu pelatihan pelatih. Persiapan fasilitas pelatihan tidak dilakukan, karena dianggap semua Rumah Sakit Kabupaten mempunyai fasilitas dan perlengkapan yang kurang lebih sama.
Untuk para peserta pelatihan tidak disiapkan sertifikat. Evaluasi dilakukan dengan mengadakan rapat evaluasi dan mempelajari laporan pelaksanaan pelatihan.

B. Pelatih LSS:

Tim pelatih di masing-masing Rumah Sakit Kabupaten , paling sedikit terdiri dari 1 dokter ahli kebidanan, 1 dokter spesialis anak dan 1 bidan senior, dengan masa kerja minimal 2 tahun. Profil para pelatih dapat dilihat pada tabel 2 berikut ini.

Tabel 2.: Profil pelatih LSS di Jawa Tengah dan Jawa Timur

		Jawa Tengah	Jawa Timur	TOTAL
	KARAKTERISTIK PELATIH:			
1.	Profesi: - Dokter ahli kebidanan	4	2	6
	- Dokter Spesialis Anak	3	2	5
	- Bidan	8	5	13
2.	Masa kerja: - Dokter spesialis	2 - 11 thn	9 - 16 thn	2 - 16 thn
	- Bidan	2 - 31 thn	8 - 30 thn	2 - 31 thn
3.	Tugas utama: - Administratif	2	1	3
	- Provider	7	14	21
4.	Praktek pribadi: - Ya	8	12	20
	- Tidak	1	3	4

		Jawa Tengah	Jawa Timur	TOTAL
	PERSIAPAN SEBAGAI PELATIH:			
5.	Persiapan yang diikuti: - TOT (pertemuan)	4	8	12
	- Mempelajari bahan	9	10	19
	- Rapat persiapan	5	9	14
6.	TOT yang pernah diikuti:			
	- LSS: pertemuan 1 hari	2	4	6
	Pertemuan 3 hari	2	4	6
	- DJJ (14 hari)	2	-	2
	- Konseling KB	1	-	1
	- Instruktur Klinis (14 hari)	1	1	2
	- Instruktur PONED/PONEK	-	1	1
	- Pemberian ASI & rawat gabung (6 hari)	-	1	1
7.	Merasa persiapan sebagai pelatih kurang:	3	3	6
8.	Persiapan yang dibutuhkan: - Standardisasi	4	2	6
	- TOT	2	4	6
	PENGALAMAN MELATIH			
9.	Pelatih LSS sejak	2 - 4 thn	<1 - 4 thn	<1 - 4 thn
10	Pelatih topik lain:	4	5	9
11.	Topik lain : - DJJ	2	3	5
	- Sekolah Perawat	3	4	7
	- AKDR/Norplant	1	3	4
	- PONED/PONEK	2	3	5
	DUKUNGAN SEBAGAI PELATIH:			
12.	Mendapat SK:	8	6	14
13.	Dukungan teman sejawat	6	5	11
14.	Mendapat honor: - setiap pelatihan	7	13	20
	- tidak tentu	2	2	4
15.	Imbalan Non-materi:	4	2	6
16.	Mengalami kesulitan membagi waktu	4	8	12

Dari tabel diatas dapat dilihat, bahwa hanya 50% dari pelatih yang menghadiri TOT di propinsi, beberapa pelatih hanya mempelajari sendiri bahan pelatihan dan/atau menghadiri rapat pesriapan di kabupaten. Namun beberapa pelatih pernah mendapatkan pelatihan untuk menjadi pelatih untuk pelatihan lain, berarti pelatih-pelatih tersebut sudah ada yang berpengalaman dalam memberikan pelatihan klinis, meskipun perlu dikaji kembali bagaimana pelatihan untuk pelatih dilakukan.
Hanya 6 pelatih yang merasa belum mendapat persiapan yang cukup untuk melatih LSS dan pada umumnya mereka adalah yang menyadari bahwa perlu ada proses standarisasi terlebih dahulu mengenai ketrampilan klinis yang akan diajarkan. Sebagian besar merasa bahwa mereka adalah pelatih yang sudah cukup kompeten.
Persiapan yang diharapkan adalah standardisasi ketrampilan, bukan untuk pelatih saja tetapi untuk semua staf klinik yang terlibat dalam pelayanan obstetri-neonatal, selain metoda pelatihan yang efektif.

. **Fasilitas Pelatihan:**

asilitas pelatihan di semua Kabupaten adalah Rumah Sakit Kabupaten, yang di ke 6 kabupaten emua memiliki dokter spesialis kebidanan maupun anak. Populasi yang harus dilayani di ke 6 abupaten besarnya pada umumnya sama, yaitu berkisar antara 800.000 sampai 1.100.000 enduduk demikian pula fasilitas dan perlengkapan yang dimiliki kurang lebih sama, namun jumlah asus obstetri-neonatalnya sangat bervariasi dan pada umumnya tidak cukup untuk memenuhi ebutuhan akan kasus pada waktu pelatihan.

abel 3. Distribusi kisaran jumlah tempat tidur di bagian kebidanan dan jumlah kasus di 6 RS Kabupaten:

No.	Variabel	Kisaran
1.	Jml. TT di Bag. Kebidanan	13 - 38
2	Perslinan per bulan: - normal - Vakum Extraksi - Forseps - Seksio Caesaria TOTAL	 12 - 40 0 - 4 0 - 4 4 - 26 17 - 70
3.	Kasus rujukan Obst-Neonatal/bln	16 - 54
4.	Komplikasi maternal per bulan.: - Perdarahan Antepartum - Perdarahan Postpartum - Partus lama - Sepsis - Pre-/eklampsia - Abortus Inkomplete	 0 - 16 0 - 8 0 - 20 0 - 1 1 - 5 9 - 27
5.	Komplikasi Neonatal per bulan: - Sepsis - Asfiksia - BBLR - Trauma kelahiran	 0 - 6 0 - 97 0 - 33 0 - 1
6.	Kematian ibu/tahun	0 - 2
7.	Kematian neonatal/tahun	32 - 55

emua Rumah Sakit memiliki fasilitas untuk melakukan operasi seksio dan transfusi darah dan ada umumnya tidak ada kasus obstetri neonatal yang perlu dirujuk ke tempat lain, kecuali satu umah Sakit yang pernah merujuk pasiennya karena dokter spesialis kebidanannya tidak berada di empat (cuti atau tugas keluar kota).

Fasilitas dan perlengkapan pelatihan yang dimiliki pada umumnya hanya ruangan kelas dan OHP. Tidak ada yang memiliki model anatomi sendiri, biasanya harus meminjam dari SPK terdekat. Biasanya Rumah Sakit tidak ada fasilitas akomodasi bagi peserta pelatihan, hal mana lebih menyulitkan bagi peserta untuk mendapatkan kasus, khususnya pada malam hari.

D. Materi Pelatihan:

Materi pelatihan yang digunakan terutama adalah 10 modul LSS. Semua peserta pelatihan mendapatkan kopi dari modul-modul tersebut pada awal pelatihan. Pada umumnya para pelatih berpendapat bahwa10 modul untuk pelatihan 2 minggu adalah terlalu banyak dan ada ketrampilan klinis yang tidak sesuai untuk dilakukan bidan di desa di fasilitas pelayanannya. Dilain pihak ada materi yang dianggap penting belum tercakup dalam modul tersebut.
Sejak tahun 1996 tersedia juga buku pegangan bagi para pelatih LSS di Jawa Timur, yang diadaptasi dari buku yang dikembangkan oleh tim dari RS Harapan Kita, namun tidak semua pelatih menerima buku tersebut. Selain itu, pada tahun itu juga, Dinas Kesehatan propinsi Jawa Timur, bekerja sama dengan RS Dr. Soetomo dan RS Dr. Saiful Anwar dan UNICEF telah mengembangkan Panduan Prosedur Standar untuk PONED bagi peserta latih.

E. Pelatihan:

Pada pelaksanaan pelatihan, tidak hanya "pelatih" yang terlibat, tetapi semua staf pelayanan, khususnya bidan yang bekerja di ruang bersalin dan ruang perawatan bayi di fasilitas pelatihan bertindak sebagai instruktur klinis, meskipun mereka belum dilakukan standarisasi dan sering tidak mengetahui isi dari 10 modul LSS. Lama pelatihan pada umumnya mengikuti standar, yaitu 12 hari, namun karena kekurangan kasus, waktu praktek bisa diperpanjang. Pada hari pertama pelatihan dilakukan pretes untuk mengetahui tingkat pengetahuan peserta. Hasil pretes ini hanya digunakan sebagai data awal dari peserta untuk dibandingkan dengan hasil postes yang dilakukan pada hari terakhir pelatihan. Metoda pengajaran yang digunakan pada umumnya hanya ceramah, diskusi dan praktek pada klien. Praktek pada model hanya digunakan bagi 40.4% peserta. Variasi penggunaan metoda pelatihan sangat penting untuk meningkatkan efektifitas suatu pelatihan. Pemilihan peserta pelatihan mengikuti kriteria yang telah ditatapkan oleh propinsi dan ditambahkan dengan beberapa kriteria lain, antara lain "tidak sedang hamil" dan "tidak sedang menyusui". Pada tahun 1995 jumlah peserta pelatihan untuk satu pelatihan adalah 20, sejak 1996 ke 20 peserta dibagi dalam 5 angkatan, sehingga hanya 4 peserta pelatihan yang dilatih pada satu saat. Hal ini memudahkan untuk mendapatkan kasus, namun untuk pengajaran teori, menurut pelatihnya kurang menguntungkan. Kasus yang bisa didapatkan oleh seorang peserta pada umumnya masih sangat kurang, hal mana dapat dilihat dari laporan yang dilaporkan oleh beberapa kabupaten. Usaha yang telah dilakukan untuk memenuhi kebutuhan akan kasus, adalah dengan melakukan beberapa prosedur klinis tanpa indikasi yang jelas, seperti plasenta manual dan episiotomi, atau menambah hari praktek atau meminta para peserta membawa kasus dari desa mereka ke Rumah Sakit, untuk ditangani oleh bidannya sendiri dibawah pengawasan, sesudah pelatihan selesai.

Table 4. Jumlah kasus/peserta pada waktu pelatihan menurut laporan dari 3 Kabupaten

KASUS		Jumlah kasus/peserta		
		Pekalongan	Banjarnegara	Blitar
1.	Pemeriksaan kehamilan	TD	TD	5.5
2.	Anemia kehamilan	1.0	TD	TD
3.	PengelolaanPreeklamsia	0.8	TD	TD
4.	Persalinan normal	1.2	1.4	1.9
5.	Episiotomi	0.6	TD	1.0
6.	Penjahitan robekan jalan lahir	1.0	TD	1.0
7.	Perdarahan postpartum	0.7	TD	0.1
8.	Plasenta manual	TD	0.2	0.2
9.	Persalinan sungsang	TD	TD	0.3
10.	Resusitasi Ibu	0.0	TD	0.0
11.	Penanganan infeksi	1.0	TD	TD
12.	Intus cairan intravena	1.0	TD	1.5
13.	Vacuum ekstraksi	TD	0.4	0.5
14.	Perawatan Bayi Baru Lahir (pencegahan hypothermia)	1.7	TD	TD
15.	Resusitasi bayi baru lahir	1.7	TD	2.9
16.	Currettase	TD	0.9	TD

TD= Tidak dilaporkan

* *laporan dari 3 kabupaten lain, tidak menyebutkan jumlah kasus.peserta.*

Evaluasi pelatihan dilakukan dengan melakukan postest dan menilai ketrampilan klinis dengan menggunakan ceklis. Seluruh hasil postes menunjukkan bahwa terdapat peningkatan pengetahuan yang bermakna, namun belum semua mencapai nilai 80%. Postes dilakukan pada hari terakhir pelatihan, sehingga tidak ada waktu untuk memberikan perhatian khusus pada peserta yang nilainya masih kurang. Hasil dari penilaian ketrampilan sulit dinilai, karena tidak semua peserta mendapat kesempatan untuk dinilai ketrampilannya pada kasus dan bila tidak menguasai ketrampilan tertentu, tidak ada sangsi. Tindak lanjut dari pelatihan ini, antara lain dilakukan oleh pelatih dengan melihat kasus yang dirujuk oleh peserta pasca pelatihan dan juga pada waktu melakukan audit maternal perinatal bila ada.

F. Responden Bidan Di Desa:

Pada pelaksanaan evaluasi ini 50% dari bidan yang telah dilatih LSS dan jumlah yang sama bidan yang belum dilatih LSS di pilih dari masing-masing Kabupaten secara acak.
Jumlah responden dari masing-masing kabupaten menjadi:
Pekalongan 9 bidan LSS dan 10 bidan non-LSS, Banjarnegara 10 bidan LSS dan 9 bidan non-LSS, Magetan 18 bidan LSS dan 20 bidan non-LSS, Ponorogo 22 bidan LSS dan 22 bidan non-LSS, Blitar 10 bidan LSS dan 11 bidan non-LSS, Lamongan 36 bidan LSS dan 36 bidan nond LSS.
Karakteriistik para responden, umur rata-rata para bidan -LSS adalah 26,40 thn, pada umumnya lebih tua dari umur rata-rata bidan non- LSS (23,96 thn). Sebagian besar responden (77.93%)

sudah menikah dan 93,43% dari mereka bertempat tinggal di desa dimana mereka ditempatkan. Masa kerja para bidan -LSS pada umumnya lebih lama, yaitu 60,58% dari mereka mempunyai masa kerja lebih dari 5 tahun, sedangkan bidan non-LSS, seagian besar (46,79%) mempunyai masa kerja antara 3 - 5 tahun. Diantara responden, hanya sekitar 55.40% yang mendapat fasilitas Polindes (tidak ada perbedaan antara yang telah dilatih LSS dan belum dilatih.).

Sebelum ditempatkan di desa, pada umumnya mereka harus mengikiuti suatu masa orientasi, yang dilakukan di Dinas Kesehatan tingkat II, RS Kabupaten dan Puskesmas. Masa orientasi berkisar antara 1 - 3 bulan. Belum ada program terstruktur untuk masa orientasi ini.
Sesudah ditempatkan di desa ada beberapa pelatihan yang pernah diikuti, tetapi pelatihan yang bersifat klinis dan untuk bidang obstetri -perinatal, hanyalah LSS dan/atau program latihan DJJ (Diklat Jarak Jauh) yang berlangsung selama 10 bulan. Diantara responden 20 orang telah mengikuti program DJJ, 3 diantaranya mengikuti juga pelatihan LSS.

Pada umumnya para responden aktif mengikuti kegiatan di desanya, 80,26% mengikuti pertemuan-pertemuan di desa, 96,24% mengikuti kegiatan-kegiatan didesa dan 84,51% bekerja sama dengan dukun bayi.

Tempat rujukan utama untuk para responden adalah Rumah Sakit Kabupaten, sedangkan rujukan yang diterima dari dukun bayi, lebih banyak diterima oleh bidan yang telah mengikuti pelatihan LSS, yaitu sebesar 75% diantara mereka, sedangkan yang belum mengikuti pelatihan LSS 63,3% yang pernah menerima rujukan dari dukun bayi. Kasus yang paling banyak dirujuk oleh dukun bayi adalah kasus partus lama. Kasus lain yang dirujuk oleh dukun, menurut urutan terbanyak adalah retentio Placenta, perdarahan, kehamilan risiko tinggi dan pasca aborsi. Kasus-kasus tersebut yang seharusnya pengelolaannya atau pertolongan pertamanya perlu dikuasai oleh bidan di desa. Supervisi yang diterima responden kurang lebih sama, dengan tujuan terbanyak adalah supervisi administratif dan hanya 50% dari supervisi yang diterima bertujuan untuk melihat pelayanan medis.
Dari catatan kunjungan 3 bulan terakhir dapat dilihat, bahwa secara konsisten jumlah kunjungan kasus pada bidan-LSS lebih banyak dari kasus bidan non-LSS (lihat tabel 5.) dibawah ini:

Table 5. Jumlah kunjungan kasus 3 bulan terakhir mnurut kategori responden:

No.	KASUS	Bidan - LSS		Bidan non - LSS		TOTAL	
		mean	%	mean	%	mean	%
1.	Kunjungan ibu hamil baru	40.53	6.85	37.79	7.76	39.15	7.26
2.	Kunjungan ibu hamil lama	68.02	11.49	59.66	12.24	63.80	11.83
3.	Persalinan	38.11	6.44	36.39	7.46	37.24	6.91
4.	Kunjungan postpartum	52.56	8.88	42.64	8.75	47.55	8.82
5.	Klien KB	93.86	15.85	77.41	15.89	85.56	15.87
6.	Bayi sehat	86.87	14.67	66.92	13.74	76.81	14.25
7.	Pasien umum	212.03	35.82	166.42	34.16	189.00	35.06
	TOTAL	591.98	100.00	487.23	100.00	539.11	100.00

Hal ini bisa disebabkan karena masa kerja bidan-LSS rata-rata lebih lama atau karena banyaknya kasus juga merupakan salah satu kriteria pemilihan peserta pelatihan LSS atau pelatihan LSS menyebabkan mereka lebih percaya diri/lebih terampil. Hal ini perlu dikaji lebih lanjut.
Jumlah kasus komplikasi obstetri-neonatal yang ditangani dalam 3 bulan terakhir, juga menunjukkan secara konsisten, bahwa bidan - LSS menangani lebih banyak, meskipun perbedaannya sangat kecil, seperti pada tabel 6.:

Table 6.: Jumlah kasus komplikasi obstetri-neonatal 3 bulan terakhir menurut kategori responden

No.	KASUS	Bidan -LSS		Bidan non - LSS		TOTAL	
		mean	%	mean	%	mean	%
1.	Perdarahan Post-/antepartum	3.06	20.35	2.89	19.82	2.98	20.18
2.	Pre-/eklampsia	3.10	20.61	2.98	20.44	2.99	20.24
3.	Infeksi	2.89	19.22	2.85	19.55	2.87	19.43
4.	Partus lama	2.94	19.55	2.87	19.68	2.91	19.70
5.	lain-lain	3.05	20.27	2.99	20.51	3.02	20.45
	TOTAL	15.04	100.00	14.58	100.00	14.77	100.00

Pengkajian catatan medis untuk pemeriksaan kehamilan, menunjukkan, bahwa hanya 12,2% responden, mengisi status dengan lengkap (10.6% pada bidan LSS dan 13,8% pada bidan non-LSS) bahkan tidak ada yang mengisi dengan lengkap catatan medis untuk persalinan. Padahal pengisian catatan medis dengan baik dan lengkap, dapat sangat membantu untuk mengkaji ulang penanganan setiap ksus dan juga dapat merupakan barang bukti bagi bidan, bahwa ia telah melakukan sesuai prosedur standar, bila terjadi kasus kematian atau komplikasi lainnya.
Hal ini perlu mendapat perhatian pada waktu memberikan pelatihan.

Penggunaan partograph hanya dilakukan oleh sekitar 50% dari responden, dimana lebih banyak bidan LSS yang menggunakan dari pada yang non-LSS (37,50% dengan 25, 69%) dan pengisian yang benar juga lebih banyak dilakukan oleh bidan LSS (25%) dibandingkan bidan non-LSS (14,68%). Menurut beberapa pelatih di RS Kabupaten, sesudah pelatihan para peserta merujuk kasus dengan lebih tepat waktu dan dengan melampirkan partograph yang pada umumnya sudah diisi dengan baik.

Dari penilaian pengetahuan dan studi kasus terhadap beberapa topik dari pelatihan LSS, yang dilakukan dengan wawancara kepada masing-masing responden, didapatkan hasil sebagai berikut:

Table 7. Distribusi hasil tes pengetahuan dan studi kasus menurut kategori responden:

Jawaban benar	Bidan-LSS		Bidan non- LSS		Total	
	n	%	n	%	n	%
- 80 - 100%	18	17.3	2	1.8	20	9.4
- 60 - <80%	55	52.9	51	46.8	106	49.8
- < 60%	31	29.8	56	51.4	87	40.8
TOTAL	104	100.0	109	100.0	213	100.0

Lebih banyak bidan-LSS yang mendapat nilai > 80%, meskipun dibawah 20%. Hal ini menunjukkan bahwa meskipun mendapat nilai lebih tinggi, namun hasil dari pelatihan LSS belum optimal. Seharusnya lebih banyak yang mendapat nilai tinggi.
Bila dibandingkan hasilnya antara responden di Jawa Tengah dan Jawa Timur, tidak terdapat perbedaan yang bermakna, demikian pula antara masing-masing kabupaten.

G. Pengamatan Fasilitas Pelayanan:

Dari 213 responden, 47 responden berhsil dikunjungi ke tempat pelayanannya di desa, 21 diantaranya yang telah mendapat pelatihan LSS dan 26 belum mendapat pelatihan LSS.
Lokasi dari beberapa fasilitas pelayanan tersebut, sangat terpencil, seperti di daerah pegunungan di daerah Pekalongan, dan tidak dapat dilalui oleh kendaraan bermotor. Perjalanan ke tampat-tempat tersebut kurang lebih 2 jam dari RS Kabupaten.

Tidak semua bidan memiliki fasilitas Polindes, mereka hanya memiliki satu ruangan kecil untuk tempat praktek, sehingga tidak mungkin memberikan pelayanan pertolongan persalinan di tempatnya. Namun cukup banyak yang memiliki fasilitas cukup baik sebagai Polindes yang disediakan oleh Kepala Desanya. Perlengkapan yang dimiliki pada umumnya sama. Namun perlu ada standar obat-obatan dan cairan, selain standar peralatan dan perlengkapan yang harus dimiliki oleh setiap bidan di desa, karena ada aturan yang berbeda.
Di Jawa Timur semua bidan di desa memiliki status untuk pemeriksaan kehamilan dan pertolongan persalinan, serta kartu score risiko kehamilan, sedangkan bidan di Jawa Tengah pada umumnya tidak memiliki.

Pengamatan pencatatan kunjungan dan kasus yang ditangani selama Januari - November 1988, tidak menunjukkan hal yang banyak berbeda dari pencatatan pada 3 bulan terakhir yang dilakukan terhadap seluruh responden (213 orang). Yang menarik adalah, bahwa ada beberapa kasus komplikasi yang lebih tinggi pada bidan non-LSS, seperti robekan jalan lahir, BBLR dan apgar score rendah. Sedangkan rujukan ke RS untuk beberapa kasus lebih banyak dilakukan oleh bidan-LSS. Hal ini perlu dikaji lebih lanjut.

H. Temuan-temuan lain:

Temuan-temuan lain yang dapat mendukung/menghambat peningkatan ketrampilan bidan di desa antara lain adalah:

1. Masa orientasi sebelum ditempatkan di desa harus dilakukan oleh semua bidan di desa. Hal ini dapat dimanfaatkan untuk dikembangkan menjadi program magang yang lebih terstruktur.
2. Di salah satu kabupaten, semua bidan tidak diizinkan menyimpan Oksitocin di fasilitas pelayanannya. Hal mana berbeda dengan kabupaten lainnya.
3. Satu Rumah Sakit Kabupaten, mempunyai kesepakatan untuk mengganti semua obat-obatan dan cairan yang telah diberikan oleh BDD kepada pasiennya, sebelum dirujuk. Sebab hal ini yang kadang-kadang merupakan hambatan dalam sistem rujukan.
4. Di beberapa kabupaten, bidan di desa secara bergantian diharuskan dinas malam di RS Kabupaten, paling sedikit satu kali sebulan.
5. Di Jawa Timur, Dinas Kesehatan bekerja sama dengan instansi terkait telah mengembangkan beberapa alat bantu bagi bidan di desa, antara lain catatan medis bagi ibu hamil dan bersalin (Kartu Ibu), Partograph yang dibaliknya tercetak formulir rujukan dan kartu score risiko kehamilan Poedji Rochjati)

V. KESIMPILAN DAN REKOMENDASI:

1. Mengidentifikasi masalah dalam pengelolaan pelatihan:

Pengelola program pelatihan LSS di tingkat propinsi adalah Dinas Kesehatan tk. I, yang berkoordinasi dengan institusi lain yang terkait, yaitu Kanwil Kesehatan dan organisasi profesi POGI dan IDAI. Tidak ada SK mengenai organisasi tersebut dimana peranan masing-masing institusi dijelaskan secara tertulis. IBI tidak dilibatkan di tingkat propinsi, meskipun anggauta IBI yang merupakan sasaran dari program pelatihan ini. IBI dapat memberikan masukan mengenai anggauta mereka yang sudah menjadi pelatih (terlatih) dan dapat dilibatkan dalam melakukan evaluasi atau tindak lanjut pasca-pelatihan. Organisasi profesi lain, dilibatkan dalam persiapan pelatih hanya sebagai pembicara dan moderator diskusi. Mereka belum dilibatkan penuh dalam penyelenggaraan pelatihan pelatih, maupun pengembangan paket pelatihan.
Selain 10 modul pelatihan LSS, tidak ada paket pelatihan standar. Seharusnya ditingkat nasional disiapkan suatu paket pelatihan standar yang terdiri dari Buku Acuan, Buku Panduan bagi Pelatih, Buku Panduan Peserta, Model Anatomi dan alat-alat bantu audiovisual. Dalam pelaksanaan pelatihan LSS bagi Bidan di Desa, tidak ada proses standarisasi bagi pelatih, maupun pemberi pelayanan di fasilitas pelatihan dan pelatihan pelatih. Persiapan yang dilakukan bagi pelatih, berupa orientasi satu hari di tingkat propinsi, dan sejak tahun 1996/1997 diselenggarakan Lokakarya 2 - 3 hari, dimana diperkenalkan metoda pelatihan berdasarkan kompetensi, cara belajar orang dewasa, dsb. Perlu dikembangkan alat-alat evaluasi yang dapat mengukur secara objektif pencapaian

tujuan dari pelatihan LSS.

2. Mengevaluasi para pelatih LSS dalam kemampuan melatih dan dalam melakukan perencanaan, pelaksanaan dan mengevaluasi pelatihan.

Kriteria pelatih bagi pelatihan LSS adalah, dokter spesialis kebidanan, dokter spesialis anak dan bidan senior yang bekerja di RS Kabupaten. Kemampuan untuk mentransfer pengetahuan dan ketrampilan klinis tidak menjadi kriteria. Persiapan yang dilakukan bagi pelatih adalah orientasi sehari dan di Jawa Timur sejak tahun 1996/1997 berupa Lokakarya 2 - 3 hari, belum dilakukan pelatihan pelatih. Hal ini terutama disebabkan tidak tersedianya dana untuk melakukan pelatihan pelatih. Penelitian ini menunjukkan. Bahwa hanya 50% pelatih yang melakukan pelatihan LSS, yang menghadiri pertemuan di tingkat propinsi, sehingga persiapan mereka hanyalah dengan mempelajari bahan pelatihan dan menghadiri rapat persiapan di tingkat kabupaten. Selain pelatihan pelatih, persiapan yang perlu dilakukan adalah standarisasi dalam ketrampilan klinis yang dilatihkan bagi semua pemberi pelayanan di fasilitas pelatihan. Hal ini belum dilakukan, padahal praktek pada kasus yang dilakukan peserta latih, tidak selalu dibawah pengawasan pelatih, tetapi sering dibawah pengawasan staf lain yang sedang bertugas. Kurang lebih 25% pelatih telah mengikuti pelatihan sebagai pelatih untuk topik lain, katrampilan melatih yang mereka dapatkan disini, dapat merupakan pengalaman berharga bagi pelaksanaan pelatihan LSS.

3. Mengkaji bahan pelatihan

Bahan pelatihan utama adalah 10 modul LSS yang dikembangkan oleh Departemen Kesehatan. Di propinsi Jawa timur, sejak 1998 juga digunakan buku panduan bagi pelatih dan prosedur standar untuk kasus-kasus kagawat-daruratan obstetri-neonatal bagi para perserta. Semua pelatih maupun peserta berpendapat, bahwa untuk suatu pelatihan yang berlangsung selama kurang lebih 2 minggu, materi 10 modul itu terlalu banyak, bahkan ada beberapa modul yang menurut mereka tidak sesuai untuk dilakukan di fasilitas pelayanan bidan di desa, seperti forceps dan extraksi vakum.

4. Mengkaji pengetahuan dan ketrampilan BDD dalam beberapa topik pelatihan LSS.

Penelitian ini telah mengkaji pengetahuan dan melakukan *"verbal skills test"* untuk beberapa topik dalam LSS, serta menilai kompetensi peserta latih dalam mengisi partograph. Hasil pengkajian ini menunjukkan. Bahwa responden yang telah mengikuti pelatihan LSS mendapatkan nilai rata-rata yang lebih tinggi, bahkan cukup banyak diantara mereka mendapatkan nilai lebih dari 80%. Pelatihan lain, yang kurang lebih mempunyai tujuan yang sama adalah pelatihan DJJ, namun karena hanya sedikit responden yang mengikuti pelatihan ini, yaitu 3 dari responden pesert aLSS dan 17 diantara responden non-LSS, maka tidak dapat dilakukan analisa lebioh lanjut. Tidak dapat ditemukan perbedaan antara hasil pengkajian antara responden Jawa Tengah dan Jawa Timur. Dari pengamatan catatan medis didapat, bahwa responden LSS, secara konsisten menunjukkan bahwa mereka menangani kasus obstetri lebih banyak. Namun beberapa kasus komplikasi lebih banyak terdapat pada responden non-LSS, hal ini memerlukan pengkajian lebih lanjut mengenai

latar-belakangnya.
Peserntase yang lebih tinggi untuk penggunaan partograph, juga ditemukan pada responden LSS dibandingkan responden non-LSS, demikian pul untuk persentase partograph yang benar.

5. Mengkaji faktor-faktor lain yang dapat mendukung kinerja bidan di desa.

Di kedua propinsi ada kebijakan bahwa setiap bidan di desa baru, harus mengikuti suatu program orientasi atau magang di Dinas Kesehatan Kabupaten, RS Kabupaten dan Puskesmas, sebelum mereka ditempatkan di desa. Tujuan orientasi ini terutama adalah untuk memperkenalkan program KIA kepada mereka, dan prosedur di Rumah Sakit dan Puskesmas. Lama program orientasi ini bervariasi antara 1 bulan sampai 3 bulan. Program magang di RS kabupaten tidak terstruktur dan tidak ada tujuan yang khusus dari pemagangan ini.
Para pengelola program pelatihan LSS dan para pelatih di fasiulitas pelatihan tidak mempunyai pandangan /pendapat yang sama mengenai ketrampilan klinis utama yang harus dikuasai oleh bidan di desa, hal ini berdampak pada pelatihan LSS, ketrampilan klinis mana yang diutamakan untuk diajarkan. Hal ini juga berdampak pada pelayanan yang diberikan oleh bidan di desa, misalnya dengan dilarangnya bidan menyimpan "Oxytocin" di fasilitas pelayanan mereka.
Di beberapa kabupaten IBI mengevaluasi ketrampilan bidan terlebih dahulu, sebelum memberikan izin praktek, hal mana dapat memotivasi para bidan untuk meningkatkan ketrampilannya.
Tidak semua fasilitas pelayanan para bidan di desa, memenuhi syarat minimal untuk memberikan pelayanan pertolongan persalinan, karena tidak didukung oleh instansi di desa.
Pemberian sertifikat pada akhir pelatihan LSS belum dilakukan, sehingga tidak ada motivasi untuk para peserta latih untuk berlatih pada kasus pasca pelatihan.

6. Memberikan rekomendasi yang spesifik:

1. Untuk meningkatkan efektifitas pelatihan, Jaringan Nasional Pelatihan Klinik untuk Kesehatan Reproduksi, perlu dilibatkan pada semua tingkat . JNPK dapat dimintakan untuk menyiapkan bahan pelatihan dan pelatih yang memenuhi tujuan pelatihan.

2. Perlu ada kesepakatan diantara pengelola program mengenai ketrampilan LSS yang perlu dikuasai oleh bidan di desa, prosedur standardnya, serta standar perlengkapan dan obat-obatan.

3. Untuk memonitor kemajaun persalinan, hal yang terpenting adalah untuk mengetahui kapan perlu melakukan tindakan. Sehingga pelatihan penggunaan partograph perlu difokuskan pada tujuan tersebut. Mungkin bisa dilakukan pengkajian kembali pada partograph yang sekarang digunakan untuk di simplifikasi.

4. Perencanaaan suatu program pelatihan bagi provider kesehatan, perlu memasukkan pendanaan untuk persiapan pelatih. Berupa pelatihan bagi para pelatih.

5. Program orientasi atau magang sebelum bidan di desa ditempatkan di desanya, perlu di

buat struktur yang lebih jelas dan dikembangkan menjadi suatu program satndar. Waktu yang sangat berharga ini dapat dimanfaatkan untuk meningkatkan pengetahuan dan ketrampilan yang dibutuhkan oleh seorang bidan di desa.

6. Peserta pelatihan klinis, sebaiknya diberikan sertifikat kompetensi, karena hal ini akan memotivasi peserta untuk mencapai kompetensi yang diinginkan.

7. Perlu dibuat kebijakan, paling tidak di tingkat kabupaten mengenai obat-obatan atau cairan yang telah diberikan pada pasien, sebelum dirujuk ke Rumah Sakit untuk mendukung sistem rujukan.

8. Perlu dilakukan studi lanjutan untuk mengevaluasi hasil pelatihan DJJ, dan juga latar belakang dari kasus-kasus komplikasi yang dilayani oleh bidan di desa.

9. Para kepala desa perlu ditingkatkan motivasinya untuk ikut mendukung dan menyiapkan polindes yang memenuhi standar minimal.

CHAPTER I.

INTRODUCTION

I.1. Background:

Maternal Mortality Ratio is still very high in Indonesia and has become one of the main concern of the government of Indonesia. At 450/100.000 live births in 1986 and decreasing to only 390/100.000 live births in 1995, it is still the highest among ASEAN countries. While the Infant Mortality Rate has been decreasing more rapidly, the neonatal death remained proportionally high and neonatal death is very strong related to conditions during pregnancies and birth. A substansial amount of effort and resources in programs aiming to reduce maternal mortality and achieve Safe Motherhood have been invested by the government through the Department of Health and other related institutions.

The policy to distribute midwives in every village in Indonesia since 1989/1990, is one of the major efforts implemented by the Department of Health to precipitate the decrease of Maternal Mortality Ratio. It is estimated that at the end of 1999, 54.120 midwives will be distributed throughout Indonesia. Midwives are considered very strategic front line workers of the health services system for providing health services to mothers and babies including family planning services.

A key ingredient of Safe Motherhood is ensuring that a qualified health professional is present during labor and delivery - the highest risk period for maternal mortality. In the villages where facility based birthing is not feasible, the best approach is to ensure that a qualified midwife is present at all deliveries. There is strong evidence in many countries that the services performed by a trained midwife can not be fulfilled by a Traditional Birth Attendant (TBA), who is called "dukun bayi" in Indonesia .
Thus far no country has been able to achieve a substansial reduction in maternal mortality by relying on TBAs as the primary maternal health worker at the community level.

However, distributing midwives through all the villages in Indonesia, is not enough to solve the problem. Several assessments showed that those village midwives, who only had one year formal widwifery education, were not ready to provide all the services that were expected of them. Considering the big numbers of new midwives that had been distributed in a short period, the technical support that has to be provided by the Public Health Centers or District Hospitals were insufficient.

Besides that, other problems in the community itself have been recognized, which

causes delay in getting medical help for a woman with maternal complications. Therefore, in 1996 Indonesia has launched the ***Mother-Friendly Movement*** *(Gerakan Sayang Ibu)*, a multisectoral program under the leadership of the Ministry of the Role of Women, which is comprised of two key components - establishing ***Mother -Friendly Communities*** and establishing ***Mother-Friendly Health Care Facilities***. This Mother-Friendly Movement aims to ensure that all women have full access to basic and emergency care and that eventually all birth are attended by a qualified health professional.

To improve the skills of the midwives in managing maternal and neonatal emergencies "Life Saving Skills" training has been implemented since 1994 in many provinces in Indonesia, most of them conducted by the Ministry of Health, supported by various funding agencies. At first, material used for this training were adapted from the 10 modules of "Life Saving Skills for Midwives" by Margaret A. Marshall and Sandra T. Buffington from the *American College of Nurse Midwives*. These 10 modules have been translated and adapted for the use in Indonesia by the Directorate of Family Health, Ministry of Health.

The 10 modules are:

1. Introduction to Maternal Mortality
2. Antenatal Care: Risk assessment and therapy
3. Monitoring Labor progress
4. Episiotomies and Repair of Lacerations
5. Prevention and Management of Bleeding
6. Resuscitation
7. Prevention and Management of Infection
8. Hydration and Rehydration
9. Vacuum Extraction
10. Newborncare

It has been recognized that for a training course to be successful, trainers have to be well prepared, appropriate materials have to be used and good managerial skills in conducting training have to be implemented. Therefore this evaluation has looked at the whole training process, besides at the outcome of the training itself.

In 1995 the first evaluation study has been conducted in 4 provinces, Central Java, East Java, South Sulawesi and West Nusa Tenggara. This study assessed the planning process at provincial and district level and the actual implementation of the training and evaluated the outcome of training, the knowledge and the practical skills gained during the training. Several recommendations on improvement of future LSS training management and implementation was among others the result of this study.

I.2. Objectives of the study

To complete the evaluation of the first study, the general objective of this study is to identify and analyze the effect of UNICEF-supported LSS training toward the performance of the community midwives at work, besides to assess the training process itself.

Specific objectives:

1. Identify problems in the management of the training
2. Evaluate the LSS trainers on training capabilities and problems in planning, implementing and evaluating LSS.
3. Review materials used for the training
4. Assess the knowledge and skill of community midwives in certain LSS topics
5. Assess other factors that can support the performance of community midwife.
6. Provide specific recommendations.

CHAPTER II.

METHODOLOGY

1. Study Design

The study design used, was cross sectional using both quantitative and qualitative approaches. The qualitative data is meant to support the numeric findings.
This study has been conducted in two phases:

Phase I: evaluation of the training process.

Phase II: evaluation of the knowledge, capability to solve case studies and skill of LSS-trained and non-LSS trained village midwives, reviewing data on their performance and other factors that are influencing it.

2. Study sites:

Unicef has supported LSS training in 5 provinces, West Java, Central Java, East Java, South Sulawesi and West Nusa Tenggara, but most of them in Java. At first West- and East Java was proposed as the sites of study, but because at the same time an evaluation of LSS training was conducted in West Java, by the Provincial Ministry of Health. Thisstudy was conducted in East- and Central Java.

3. Population and sample:

According to the information, provided by the Central Java and East Java Provincial Health Offices (Dinas Kesehatan tk.I) the numbers of Village Midwives trained in LSS, funded by UNICEF were:

- Central Java : 200 Village Midwives, distributed in 10 Districts
- East Java : 796 Village Midwives from 21 Districts

Sampling of districts as well as midwives, therefore used proportional random sampling.
From the districts that have conducted LSS training, 4 districts was chosen randomly in East Java and 2 districts in Central Java, to represent other districts.
In these 6 districts the training process was assessed. The population consisted of managers from the provincial and district level and LSS trainers.
From each of the 6 districts selected, Unicef-supported training graduates was listed and samples were chosen randomly (96 from East Java and 24 from Central Java). The source of data was the District Health Office. As a control, the same numbers (96 and 24) of village midwives, who never participated in any LSS training, was selected randomly from the same districts. A subsample of those midwives (24 from East Java

and 6 from Central Java) was followed to their service facility.

Table I.
Matrix of sample of the study:

Sample	Number	Category
PHASE I:		
Provincial level:		
Managers	2 prov.(EJ &CJ) All	Health officers
District level:	EJ:4 & CJ:2 distr.	
Managers	All	Health officers
Trainers	All	Ob/gyns, Paed., MW & others
PHASE II:		
Subdistrict level		
Village midwives	EJ: 96 - CJ: 24 EJ: 96 - CJ: 24 EJ: 24 - CJ: 6 EJ: 24 - CJ: 6	- Only UNICEF LSS- trng - No LSS training - Only UNICEF LSS- trng - No LSS training

The districts that were selected randomly from each province were:

Central Java:
1. Pekalongan
2. Banjarnegara

East Java :
1. Magetan
2. Ponorogo
3. Blitar
4. Lamongan

Because some of the LSS-trained midwives have already moved, the sampling method used was 50% of all LSS trained midwives from each district selected and the same number of non-LSS trained midwives.

4. Data Collection:

PHASE I:

At the provincial level and district level, indepth interviews was conducted with planners and managers who administer the UNICEF-supported LSS training, using a list of questions as guidelines. The indepth interview was aimed to get data on policies and standards regarding LSS training, training preparation, selection and preparation of training sites, selection and preparation of trainers, training materials used, selection of

trainees and fundings available.

Self-administered questionnaires was distributed to LSS-trainers at the district level , to get data on their profiles, preparation of themselves as LSS trainers, experience in LSS training, and their opinion on the training materials, standards and funding.

At the district level, besides indepth interviews to planners and managers at the district level and the self-administered questionnaires to trainers above, group interviews was conducted, to get information in the problems faced, like selection of trainees, case load, training facilities, models, training materials etc. and about the follow-up system of clinical training.

Reports of LSS training was reviewed, to get the sampling-frame for LSS trained midwives as well as other information on the whole training process.
Training observation was planned, but at the time of the evaluation, all LSS trainings in Central Java as well as in East Java for this year has already been conducted, so there was no opportunity to observe training.

In this phase, information on the most important Life saving skills was collected from health managers as well as trainers. These information was used as materials for the assessment of midwives, since it is impossible to assess all topics of the 10 modules.

PHASE II:

At the subdistrict level, self-administered questionnaires, was handed to village midwives to get data on their profiles, their training experiences and their opinion on the LSS training.

A prepared list of questions was used to assess knowledge and case studies was discussed, to get data on their judgement skills, also skills in analyzing and making partographs was assessed. Other prepared checklists was used to review medical records and the equipments of the community midwives.

The data collection was done at the district health office.
A subsample was followed to their villages to observe their facilities and equipment and if possible to observe service delivery at site.

3. Data Analysis:

Data compiled from questionnaires, observation lists and secondary data were processed in Jakarta for coding, editing and data analysis.
Qualitative and quantitative descriptive analysis was used to present the findings.

4. Study team:

The study team consists of senior researchers and research assistants from the Department of Community Medicine, School of Medicine, University of Indonesia Two senior midwives, a clinical instructor and trainer in LSS training participated in the data collection in the 6 districts.

5. Time frame:

October 1, 1998 untill February 28, 1999

Table II. Evaluation Study Schedule:

Activities	Oct	Nov	Dec	Jan	Feb
1. Preparatory Phase	XXX	XX			
2. Implementation Phase:					
First Phase	X	X			
Second phase			XXX		
3. Data Processing		XX	X	XXX	
4. Report Writing (First draft)				X	X
5. Final draft					XXX

CHAPTER III.

RESULTS AND DISCUSSIONS

A. MANAGEMENT OF TRAINING

To improve the quality of clinical training as well as to objectively evaluate participant performance, there is a need to standardize the way clinical training is conducted. In addition, when a clinical course has been correctly designed, it is more likely to meet the needs of the participants. As a consequence, clinical trainers should be provided with pretested training packages which usually consist of:

- A content specific reference manual
- A participant's course handbook which contains the course syllabus, outline and schedule and competency based learning guides
- A trainer's notebook which contains the participant course handbook, competency-based (knowledge and skill) assessment instruments and practical tips for teaching the course.
- Anatomic models and audiovisual and other training aids.

Partly based on the above statement, the evaluation of LSS training was conducted.

1. Provincial Level:

a. Organization:

For the management of LSS training, the Provincial Health Office (Dinas Kesehatan) in both provinces, was the main organizer. Although other related institutions were involved in the preparation, there was no formal appointed organization.
Coordination between related institutions was done through planning meetings, while vertical coordination was done by correspondence and a meeting at the province.
The Ministery of Health has provided the 10 modules for LSS training, guidelines for the implementation of training also administrative guidelines.
The provincial Health Office is responsible for the implementation of LSS trainings to providers, which is conducted at the district level.

b. Planning:

Planning meetings in both provinces where held when the training events are coming up. In the planning meetings other institutions were involved, among them the Provincial Ministry of Health (Kanwil Kesehatan), the branches of Indonesian Paediatrics Association (IDAI) and the Indonesian Obstetric Gynaecologists Association (POGI), represented by the Provincial Training Center (PTC) and in East Java also by the NRC (National Resource Center) which are components of the National Clinical Training Network (NCTN).
The Indonesian Midwife Association (IBI) branch at the provinces were not involved.

In the planning meetings
The Province MOH, was invited to the planning meetings, so that they be informed of all the activities, while the professional organization was asked for technical input.
In the planning meetings, the TOR for LSS training, criteria of trainers, training sites and trainee was discussed, also the financial aspect. This TOR is then distributed to the districts who will be organizing and conducting the training.
The objectives of the training mentioned in the TOR are:

- The main objective of the training is to increase the knowledge and skill of trainees in the management/first aid of emergency obstetric and neonatal cases.

Some specific objectives mentioned in the TOR, were different in Central- and East Java .
There was no special criteria for trainers, only that they were obstetricians, paediatricians and senior midwives at the local district hospital. The criteria for participants, among others were Community midwives who has experienced a mortality case or has many cases, government employees preferred and has already worked about 2 years. These criteria could be modified by each district.

The standard length of LSS training suggested by the province was 12 days; 3 days classical training and 9 days for practice. In 1995 the number of participants were 20 per badge, but since 1996/1997 the province suggested that the training should be conducted for 4 participants/badge to ensure a sufficient number of cases.
The training sites are the local district hospitals.
The training materials used were the 10 modules for LSS training.
In East Java since 1996 other materials have been added.

c. Preparation:
One essential element of preparation for clinical skill training, is the training of trainers. It is recommended that the transition process of a ***service provider*** to become ***clinical trainer*** follows these steps. After the service provider is proficient in providing the ***standardized*** clinical skills needed, the clinician needs to attend a clinical training skills course which focuses on learning the skills necessary to effectively transfer her/his expertise to others. During the course he/she will learn coaching and humanistic training techniques which are based on adult learning principles. In addition the clinician will learn a standardized approach to performing the clinical procedure and how to use competency based skills assessments to evaluate participant performance.

The "TOT" for LSS trainers was held in each province, by inviting 3 people from each district to the province, for a one day meeting. The 3 people were the head of the MCH section at the District Health Office, the obstetrician and the paediatrician from the district hospital. This meeting was mostly informing the district teams on the managerial aspect of implementation of LSS training and also to inform the trainers on the content of the training, by introducing to them the 10 modules. Both provinces realized that those meetings are not sufficient as TOT's, but there was no funding for a better

preparation of the trainers. In 1996/1997 East Java tried to improve the preparation of trainers, by conducting a 2 - 3 days Workshop, for 4 people from each district. The participants of these workshops were the 3 participants as in 1995 added by one midwife (the head of the delivery room) from the district hospital. This workshop among others *introduced* to the trainers "Competency Based Training" , Adult Learning and Interactive Training methods by the NCTN (NRC Surabaya), which was followed by group discussions. The objective of the Workshop was to increase cooperation and coordination among the training team, to get a concensus on the training methods used and to improve the training skills of the trainers.
The complete schedule for the workshop can be seen at the following table.

Tabel 1. Workshop schedule: Training of BEONC team in East Java
Surabaya, 13 - 15 Oktober 1997

TIME	Activity	Speaker
MONDAY, 13 Oct. 97		
07.00 - 08.30	Registration	Prov. MOH
08,30 - 09.30	Opening	
09.30 - 10.00	Break	Prov. MOH
10.00 - 10.45	Policies & strategies in the MCH program in East Java, last year of PELITA VI.	IDAI
10.45 - 12.00	Referal system towards safe delivery	
12.00 - 13.00	Guidance for the implementation of improvement in Neonatal Health and evaluation of Pilot Test	
13.00 - 14.00	Break	
14.00 - 15.30	Guidance for the implementation of improvement in maternal health	POGI
15.30 - 17.00	Management of neonatal asphyxia in primary health care Introduction of the Kangguru method in Hypothermia	IDAI
17.00 - 19.00	Break	
19.00 - 21.00	Operational strategy acceleration of MMR & IMR decrease, threats and opportunities	Prov. MOH
TUESDAY, 14 Oct. 97		
07.30 - 13.00	Competency Based Learning Adult Learning Interactive Training How to conduct a training course Reflection: Teaching Management of Neonatal cases	Tim: NRC, PTC Malang, Dep. Of Obgyn & Dep. Of Paediatri Soetomo Hospital.
13.00 - 14.00	Break	
14.00 - 15.00	Explanation on Group Discussion	NRC
15.00 - 17.00	Group discussion	
17.30 - 19.00	Break	
19.00 - 22.00	Group discussion	

TIME	Activity	Speaker
WEDNESDAY, 15 Oct. 97 08.00 - 11.30 11.30 - 12.30 12.30 - 13.00	 Presentation of group discussions result Conclusion Closing	 Group Prov. MOH

Eventhough there is an improvement in preparing trainers, with the above method, improvement of clinical training skills can not be ensured. The East Java Health office tried to involve trainers from the National Clinical Training Network in the workshops no "real" training of trainers could be conducted. The NCTN trainers were not involved in the whole planning and preparation process of LSS training

The province also prepared guidelines for evaluating the clinical skill of the participants in managing certain cases and the materials for pre- and posttest. But the guidelines did not mention what level of skill increase should be achieved.

No special preparation was done for the training sites. All district hospital should have the same facilities and equipment.

No certificates were prepared for the participants who had participated in the LSS training.

d. Implementation

During the implementation of training courses, the team at the province was not involved. Monitoring by the province was only done in 1995, by direct visits to some districts during training, but since then not enough funding was available.

e. Evaluation:

East Java evaluated the LSS training in periodical meetings and by reviewing the reports from all the districts. Both provinces did not provide a clear outline for the reports that the districts had to made, so each district had a different report format and different report items.Central Java did not evaluate the LSS training formally. Both provinces have prepared a report on the LSS training.
The results of the evaluation generally was that the increase in knowledge after the training was significant, but there are not enough cases for every skill that the participants are supposed to master. Increase in skills are more difficult to measure.

2. District Level:

a. Organization:

For the management of LSS training, the District Health Office (Dinas Kesehatan) in both provinces, was the responsible institution. An organization team at each district was formally appointed. Besides the Health offices, the organizing team involved the director, the obstetrician and paediatrician of the District hospital and IBI.
Coordination between related institutions was mostly done informally, since usually a good relationship already exists, by directly visiting the hospital and also in planning meetings.

b. Planning:

Planning meetings in the 6 districts were not always held formally, since the TOR for the implementation of the trainings were already provided by the MOH. The district Health office is usually responsible for the administrative aspect of the training, while the specialists and midwives at the hospital for the technical aspect, IBI usually lectures materials on professional conduct.
In the planning meetings the time schedule for the training was discussed, to ensure that the trainers were available.
The administrative logistics for training was the responsibility of the District Health office, while responsibility to prepare logistics for the clinical procedures was given to the hospital.

c. Preparation:

Usually only the Obstetrician and Paediatrician participated in the TOT at the province. The senior midwives who are responsible for the delivery room was only invited in East Java in 1996/1997, while the midwife responsible for newborn-care were not included in the TOT.
Several methods was used to recruit the participants, some district health offices have special log books on the activity of Community Midwives, some asked input from IBI or the Puskesmas midwife. Besides the criteria for participants suggested by the province other criteria has been added, like not pregnant or breastfeeding and will work there for at least two more years.
The district health office usually helped the district hospital to complete some of the equipment for training, like borrowing models, OHPamong other, if not available at the hospital.

d. Implementation:

The LSS training conducted was following the TOR that was provided by the province.
Participant for each course was 20, which after 1996 was divided into 4 - 5 badges.
The length of training was 12 days per badge.
The leader of the training team was usually the obstetrician.
The district health office team was usually present during the whole training course to

take care of the administrative aspect of the training.
In Magetan the monitoring of LSS training was also done by IBI

e. *Evaluation:*
Evaluation of the training was done during the regular monthly meeting with all the midwives, evaluation meetings at the district health office and in Banjarnegara also by supervision visits to the midwives in the villages. Each district made a report on the LSS training. In one district, IBI was also involved in the evaluation. There was no standard tool to do the evaluation.

B. LSS TRAINERS:

Trainers from 6 districts were interviewed, who were mostly staff from the local district hospitals. The trainers interviewed were 15 from East Java and 9 from Central Java. The trainer team consisted at least of 1 obstetrician, 1 paediatrician and 1 senior midwife.

The trainers were all specialists or midwives, who mostly work as health service providers, with at least more than 2 years experience. The trainers from East Java have worked longer than the team in Central Java. This fulfill one the criteria for clinical trainers who should be clinical service providers.

Only 50% of the trainers have attend the TOT in the province, some only studied the training materials and attended the planning meetings at the district. But besides TOT for LSS, some trainers have been prepared as trainers for other training courses, like distant learning, clinical instructor, instructor for Basic/comprehensive emergency Obstetric Neonatal Care for doctors and as clinical trainer for contraceptive services by the NCTN . This means that these trainers have already other experiences as clinical trainer. Because most of them are experienced clinical provider and have other experience as trainer, only 6 trainers felt that they were not well prepared as LSS trainers, most of the trainers felt that they are competent as trainers.

Having received training materials from the province, the clinical trainers task is not to develop the course, but to adapt it to the local setting and conduct it using appropriate methods.

Preparation suggested by them, besides Training for Trainers was standardization of the clinical skills in the LSS modules for the trainers as well for all the clinical staff involved in the training. Nine trainers have also experience as trainers in other topics or training courses relevant to obstetric and/or neonatal care.

Another important factor is suppport for the trainers, to increase their motivation and

performance in training the midwives. More than fifty percent (58.3%) of the trainers received an official appointed letter as trainer from their superiors, about 50% also could negotiate with collegues if there are time conflicts. Twenty trainers received a fee (eventhough not much) for every time they conducted a training course, while 4 trainers received it irregularly. Eventhough the training course schedule was planned together by the training team, 50% of the trainers often experienced time conflict with their other duties, because they are mostly the only specialist in the facility.

Table 2.: Trainer profile in Central and East Java :

		Central Java	East Java	TOTAL
	TRAINER CHARACTERISTICS:			
1.	Profession: - Obgyn	4	2	6
	- Paediatrician	3	2	5
	- Midwives	8	5	13
2.	Years graduated: - Specialists	2 - 11 yrs	9 - 16 yrs	2 - 16 yrs
	- Midwives	2 - 31 yrs	8 - 30 yrs	2 - 31 yrs
3.	Main responsibility: - Administrative	2	1	3
	- Service provider	7	14	21
4.	Has Private practice: - Yes	8	12	20
	- No	1	3	4
	PREPARATION AS TRAINER:			
5.	Preparation as LSS trainer: - TOT	4	8	12
	- Study materials	9	10	19
	- Prep. Meetings	5	9	14
6.	TOT courses:			
	- LSS: 1 day meeting	2	4	6
	3 day meeting	2	4	6
	- Distant Learning (14 days)	2	-	2
	- FP Counseling	1	-	1
	- Clinical Instructor (14 days)	1	1	2
	- Instructor for BEONC /CEONC	-	1	1
	- Breastfeeding & rooming in (6 days)	-	1	1
7.	Felt not well prepared as trainer:	3	3	6
8.	Preparation needed: - Standardization	4	2	6
	- TOT	2	4	6
	EXPERIENCE AS TRAINER/INSTRUCTOR			
9.	LSS trainer since	2 - 4 yrs	<1 - 4 yrs	<1 - 4 yrs
10	Trainer for other topics:	4	5	9
11.	Other topics : - Distant Learning	2	3	5
	- Nursing school	3	4	7
	- IUD/Norplant	1	3	4
	- BEONC/CEONC	2	3	5

		Central Java	East Java	TOTAL
	SUPPORT AS TRAINER:			
12.	Official appointment letter as trainer:	8	6	14
13.	Collegues support	6	5	11
14.	Received fee: - every training course	7	13	20
	- irregular	2	2	4
15.	Non-material imbursement:	4	2	6
16.	Experience time conflict	4	8	12

C. TRAINING SITES:

The training sites used for a training course is a very important factor for the effectivity and efficiency of the training. The training sites for the 6 districts were the local district hospitals. All those hospitals had at least one obstetrician and one paediatrician, some more than one. Although those hospitals had to serve about the same size of population (between 800.000 to 1.100.000), there was a big variation in the number of beds at the obstetric department and the number of cases.

The table below presents the range of numbers that the 6 district hospital have for each case in a month, it shows that those hospitals , except 1 or 2 hospitals, had not enough cases for LSS training even for 4 participants in 2 weeks.

Table 3. Distribution of the range of number of beds and cases in 6 district hospitals:

Nr.	Variables	Range
1.	Beds in the obgyn	13 - 38
2	Deliveries per month:	
	- normal	12 - 40
	- Vacuum Extr	0 - 4
	- Forceps	0 - 4
	- Caesarian Section	4 - 26
	TOTAL	17 - 70
3.	Obst-Neonatal Referal cases	16 - 54

Nr.	Variables	Range
4.	Maternal compl.: - Antepartum Haem. - Postpartum Haem. - Prolonged delivery - Sepsis - Pre-/eklampsia - Incompl. abortion	 0 - 16 0 - 8 0 - 20 0 - 1 1 - 5 9 - 27
5.	Neonatal compl.: - Sepsis - Asphyxia - Low Birth Weight - Birth Trauma	 0 - 6 0 - 97 0 - 33 0 - 1
6.	Maternal death/year	0 - 2
7.	Neonatal death/year	32 - 55

The facilities and the obstetric-neonatal health services of those hospitals are about the same. They all have surgery facilities for Caesarian Secton and all have also blood transfusion facilities to manage bleeding. They never had to refer cases to another hospital, except in one hospital, they sometimes had to refer cases, because of the absence of their only Obstetrician (on leave or another duty)

Training aids/equipments that are available at those training sites, are only Overhead projectors. No one had anatomic models; they had to borrow it from the nearest Nursing school, which sometimes they were not able to do.
The hospitals also usually had no accomodation for the participants, except the hospital in Banjarnegara, the training participants had to stay outside the hospital or had to go home every day, so that they sometimes missed cases who arrived in the evening.

D. TRAINING MATERIALS:

The training materials used were the 10 modules. Generally, there was a sufficient number of copies of training materials (10 modules) for all the participants, who all received one copy at the beginnning of the training.
Most trainers thought that 10 modules for one training course is too extensive, the training materials should be divided into several consecutive phases.
Since 1996 a manual for LSS trainers was developed for the trainers in East Java, which was adopted from the manual developed by the team at Harapan Kita Hospital, but not all trainers received this manual. Also in 1996 the Health Office in East Java in cooperation with Dr. Soetomo Hospital - Surabaya, Dr. Saiful Anwar Hospital - Malang,

NRC & PTC and Unicef has developed: Guides for Standard Procedures of Basic Management in Obstetrics and Essential Health Services and Management in Neonatal care, these manuals were also used in LSS training since 1997.

E. TRAINING IMPLEMENTATION:

a. Trainers

During clinical practice, the clinical instructor was not only the "official " training team, but all other providers, especially all other midwives who were working at the obgyn/newborn care department. The other instructors were not standardized on the training materials before.

b. Training Schedule:

The schedule for the training course usually is planned to follow the 12 days schedule provided by the province, but sometimes, because of the time conflict of trainers, some small rescheduling had to be done.

On the first day of training all training sites did a pretest, to assess the knowledge of the participants. This pretest was used only as a data basis to later assess the increase in knowledge at the posttest, not as guide to assess the specific knowledge that each individual participants had to be focused upon.

In some districts the time for practice was prolonged to get more cases for the participants.

c. Training methods:

According to the trainers, the training methods used in all the training courses were: Lectures, discussion, demonstration and practice on clients. Practice on models were only used in 3 of the 6 districts, case studies in 4 and role play in 5 districts.

According to ex-LSS training participants, the training methods were:

- Lectures 98.1%
- Practice on clients 89.4%
- Discussion 69.2%
- Reading assignments 53.8%
- Practice on models 40.4%
- Role play 13.5%

Variety in teaching methods is very important to increase the effectivity of the training. The methods mostly used, according to the participants, were lectures, practice on clients and discussion. Practice on models was available only for 40.4% of the participants, since not all hospitals own a model and sometimes have problems borrowing it from the nursing school or not all models available were suitable for the purpose of LSS training. .

Audiovisual aids used by all training sites was OHP and transparancies, some used also flipcharts and/or black-/whiteboard. Some trainers suggested that videorecordings

on some procedure or at least slides could help to demonstrate some skills if there ar no cases available.

d. Training participants:
The selection of the participants followed the guidelines from the province, but additional selection criterias were used also, like "not pregnant" and "not breastfeeding" at the time of training. In 1995, 20 participants were selected for one training course, but since 1996 the 20 participants are divided into 5 consequent badges, so that only 4 participants were trained in one badge. For the clinical skill training this number seems ideal, but for the classical training, some trainers complained that the size was to small, so that no interactive participation could be created, also they had to repeat the theoretical aspect too often.

e. Cases:
In some of the reports, the number of cases available during a training course was available. From these reports it can be seen that at least in 3 districts, the number of cases were very insufficient (see table 3). To increase the number of practice in certain skills in a training course, sometimes a procedure was done without indication like manual placenta removal, episiotomy etc. Other initiatives were to lengthen the training period or to ask the midwives to bring cases from their villages to the hospital, where they are allowed to manage the case under supervision.

Table 4. Number of cases during LSS-training in 3 districts:

CASE		Number of case/participant		
		Pekalongan	Banjarnegara	Blitar
1.	Antenatal care	NR	NR	5.5
2.	Anaemia during pregnancy	1.0	NR	NR
3.	Preeclampsia management	0.8	NR	NR
4.	Normal delivery	1.2	1.4	1.9
5.	Episiotomy	0.6	NR	1.0
6.	Suturing of lacerations	1.0	NR	1.0
7.	Postpartum haemorrhage	0.7	NR	0.1
8.	Manual placenta	NR	0.2	0.2
9.	Breech delivery	NR	NR	0.3
10.	Adult resuscitation	0.0	NR	0.0
11.	Management of infection	1.0	NR	NR
12.	Intravenous fluid drip	1.0	NR	1.5
13.	Vacuum extraction	NR	0.4	0.5
14.	Newborn care (prevention of hypothermia)	1.7	NR	NR
15.	Resuscitation of newborn baby	1.7	NR	2.9
16.	Currettage	NR	0.9	NR

NR= Not reported
* *The reports from the 3 other disrict did not mentioned number of cases/participant*

e. Evaluation:
Compared to the pretest, all the posttests showed that there was a significant increase in knowledge. The posttests was conducted on the last day of training, so there was only time to give general feedback to the participants on the results and had no time to give indepth feedback individually for each participant.

The trainers were using a standard checklist, provided by the province to evaluate the competency of each participant in each clinical skill at the end of training. No clinical skills assessment was done at the beginnning of training, so that "increase" in skills which is the main objective of the training could not be measured. The trainers found the tools very helpful, but there is no sanction if a participant has not acquired a certain skill or did not have the opportunity to practice on a client.

No certificates were awarded to participants either for attendance or for competency, so there is no motivation for them to complete their competencies in skills that are expected of them.
Follow-up to clinical training by trainers are by reviewing the cases that the ex-LSS participants are refering to the hospital or ask the midwife who brings in a patient in labour to manage the case herself under the trainer supervision. Maternal-perinatal audits are also used as follow-up and to provide feedback.

F. COMMUNITY MIDWIVES RESPONDENTS:

From each district selected, 50% of the LSS-trained midwives and the same number of non-LSS trained midwives, were randomly selected.
The number of respondents from each district were:

Central Java:	
Pekalongan	9 LSS trained & 10 non LSS trained community midwives
Banjarnegara	10 LSS trained & 9 non-LSS trained community midwives
East Java:	
Magetan	18 LSS trained & 20 non-LSS trained community midwives
Ponorogo	22 LSS trained & 22 non-LSS trained community midwives
Blitar	10 LSS trained & 11 non-LSS trained community midwives
Lamongan	36 LSS trained & 36 non.LSS trained community midwives

From Pekalongan 10 LSS trained should be chosen, since they have 20 LSS trained midwives, but many have already moved, some were on leave or ill. While in Banjarnegara only 9 from the 10 invited non-LSS trained midwives came to the interview.

1. Community Midwives respondents characteristics:

From table 4. It can be seen that generally the LSS trained midwives are in average 2 years older, mostly married have graduated earlier and worked longer as community midwives compared to the non-LSS trained community midwives. Also following the criterias from the province almost 70% of the LSS trained midwives are government employees. But for both categories more than 93% live in the village where they are posted.

Table 5. Midwife respondents characteristics:

	Variable	LSS		Non-LSS		TOTAL	
		n	%	n	%	N	%
1.	Age: - mean	26,40		23,96			
	- SD	3,54		2,55			
	- N	104		109		213	100.00
2.	Marriage status: - single	19	18.27	26	23.85	45	21.13
	- married	83	79.81	83	76.15	166	77.93
	- widow	2	1.92	0	0	2	0.94
	Total	104	100.00	109	100.00	213	100.00
3.	Live in the posted village: - yes	97	93.27	102	93.58	199	93.43
	- no	7	6.73	7	6.42	14	6.57
	Total	104	100.00	109	100.00	213	100.00
4.	Years since graduation: - 1 - 3 yrs	13	12.50	39	35.78	52	24.41
	- >3 - 5 yrs	18	17.31	51	46.79	69	32.40
	- > 5 yrs	73	70.19	19	17.43	92	43.19
	Total	104	100.00	109	100.00	213	100.00
5.	Working Period: - 1 - 3 yrs	16	15.38	44	40.37	60	28.17
	- >3 - 5 yrs	25	24.04	49	44.95	74	34.74
	- > 5 yrs	63	60.58	16	14.68	79	37.09
	Total	104	100.00	109	100.00	213	100.00
6.	Employee status: - PTT(contract)	32	30.77	91	83.49	123	57.75
	- Government	72	69.23	18	16.51	90	42.25
		104	100.00	109	100.00	213	100.00
7.	Salary: - Rp. 200.000 - Rp. 300.000	95	91.35	106	97.25	203	95.31
	- > Rp. 300.000 - Rp. 400.000	8	7.69	3	2.75	9	4.22
	- > Rp. 400.000 - Rp. 500.000	1	0.96	0	0	1	0.47
		104	100.00	109	100.00	213	100.00
8.	Additional income: - Increased	36	34.62	53	48.62	89	41.78
	- No change	65	62.50	56	51.38	121	56.81
	- Decrease	3	2.88	0	0	3	1.41
		104	100.00	109	100.00	213	100.00

	Variable	LSS		Non-LSS		TOTAL	
		n	%	n	%	N	%
9.	Facility received: - Living place	33	31.73	31	28.44	64	30.05
	- Transportation	78	75	85	77.98	163	76.53
	- MW kit	97	93.27	109	100.00	206	96.72
	- Village delivery hut	57	54.81	61	55.96	118	55.40

The salary range for more than 90% is between Rp. 200.000 - Rp 300.000. Some of the LSS trained midwives have a higher salary, that maybe because they have a longer work period. Additional income increased in the last years more for the non-LSS trained midwives, while most of the LSS trained midwives felt that there are no change in their income.
There is not much difference in the facilities that the midwives received from MOH or from the village. Less than 60% have a village delivery hut (Polindes), where they can provide their services for helping mothers to deliver their babies.

2. Orientation & Training:

Before being posted in the village, about 80% respondents did have an orientation time or internship (see table 5.). This was usually coordinated by the district health office and lasted between 1 - 3 month. The orientation program consisted of program orientation at the district health office, mostly about 2 weeks, followed by internship at the district hospital. The internship time at the hospital varies from district to district also depending on the year, which can be from 2 weeks to 1 - 2 months. After that usually there is an orientation time conducted by the Public Health Center which focuses more on Public Health Center programs and field orientation. The time at the Public Health Center also varies from 2 weeks to 1 month.
In the last years some of the respondents received a formal 2 weeks training conducted by the Training Center from MOH. This training focuses on the tasks that a community midwife should do, including administrative aspects (reports etc.) It is not a clinical skill training.

The length of LSS - training that the respondents attended, were not always the standard 12 days; the mean number of days that the respondents attended were 22.92 days with a Standard Deviation of 18.36. Besides LSS-training, some of the midwives received also other trainings. After reviewing all the training courses that they listed, only the Distant Learning program seems to have similar objectives and also clinical practice. This distant learning program last about 10 months. 20 respondent have followed this program, 3 of them had attended both the Distant Learning Program and the LSS training.

Table 6. Distribution of respondents according to pre- & post-posting training received:

	Training/orientation	LSS	NON-LSS	TOTAL
1.	Before posting:			
	1. Orientation/internship			
	- N	9 0(86.54%)	78 (71.56%)	168(78.87%)
	- mean number of days	46,43	52,78	
	- SD	30,93	111,78	
	2. Training (VMW tasks)	0	22	22
	3. No training	12	6	18
2.	Other training besides LSS after posting:			
	1. Distant Learning	3 (02.9%)	17(15.6%)	20 (09.4%)
	2. No other training	101 (97.1%)	92(84.4%)	193 (90.6%)
	TOTAL	104 (100.0%)	109(100.0%)	213(100.0%)

3. Other activities:

Other activities like participation in village activities (see table 7.), showed that there was not much difference between the LSS trained and non-LSS trained respondents, except in cooperation with the local TBA. Cooperation with the TBA means among other helping deliveries together, visiting mothers and babies whose deliveries have been helped by the TBA. A much higher percentage (93.65%) of LSS- trained respondents have been cooperating with the local TBA, in comparison to 43.66% of the non-LSS trained respondents. It could be that in the villages where the non-LSS respondents are posted no TBA was active, but from point 12 in table 7, it is clear that there is almost no difference between the percentage of LSS and non LSS trained respondents who have no TBA's in their village.

Table 7. Distribution of respondents according to other activities:

	Variables	LSS		NON-LSS		TOTAL	
		n	%	n	%	n	%
10.	Participation in the village:						
	- Meetings with village leaders	80	76.92	91	83.49	171	80.28
	- Village activities	100	96.15	105	96.33	205	96.24
	- Cooperation with TBA	87	83.65	93	85.32	180	84.51
11.	Referal place: - District hospital	90	86.54	86	78.90	176	82.63
	- Puskesmas	3	2.88	5	4.59	8	3.76
	- Other facility	7	6.73	7	6.42	14	6.57
	- Never	4	3.85	11	10.09	15	7.04
12.	TBA's present at the village: - Yes	87	83.65	91	83.49	178	83.57
	- No	17	16.35	18	16.51	35	16.43

	Variables	LSS		NON-LSS		TOTAL	
		n	%	n	%	n	%
13.	Received referal from TBA: - yes	78	75.00	69	63.30	147	69.01
	- no	9	8.65	22	20.19	31	30.99
	- N/A	17	16.35	18	16.51	35	14.56
14.	The cases refered from TBA:						
	- prolonged labor	53	50.96	42	38.53	95	44.60
	- Retentio Placenta	46	44.23	23	21.10	69	32.39
	- Bleeding	9	8.65	18	16.51	27	24.77
	- High Risk Pregnancy	5	4.81	8	7.34	13	6.10
	- Post - Abortion	5	4.81	7	6.42	12	5.63
15.	Have received supervision: - yes	89	85.58	95	87.16	184	86.39
	- no	15	14.42	14	12.84	29	13.61
16.	Supervision objective:						
	- Review R&R	91	87.50	92	84.40	183	85.92
	- Inspect equipment & logistics	59	56.73	68	62.38	127	59.62
	- Review medical services	48	46.15	59	54.13	107	50.23
17.	Supervision to TBA: - yes	85	81.73	86	78.90	171	80.28
	- no	2	1.92	5	4.59	7	3.26
	- N/A	17	16.35	18	16.51	35	14.56

The most frequent referal place for all the respondents are the district hospitals, only about 4 percent are refering their cases to the Puskesmas and 6 percent to other health facilities, like private hospitals or maternity homes.
About 7 percent af all the respondents have never refered their cases. This can be because they had no cases to refer or there are some other reasons. As all the LSS-trainer said, one of the outcome of LSS training are that good relationships are formed between the district hospital and the participants, which made the participants not afraid to refer their cases and also they know how to refer their cases. One other problem that came up during indepth interview with the community midwives was that, if you refer a case to the hospital, usually you have already given medicine or IV fluids. By refering the case to the hospital they loose the medicine/fluids already provided by them, because they could not ask the client for payment/reimbursement, so they tried to delay the referal. One hospital has recognized this problem and cooperated with the midwives by reimbursing all medicines or fluids that they have already given to the client.

As in cooperation with TBA, also more LSS trained respondents have ever received referal from the TBA, although the difference is not so much. The most cases that both categories of respondents received are in the order of prolonged labor, retentio placenta, bleeding, high risk pregnancy and post abortion. This should be also the main skill that the midwives have to be competent in.

To see if supervision may be playing a role in the different performances of the midwives, from the above table you can see that there is almost no difference in the supervision that they received. Most objectives of supervision were review of reports and records. Only 50% of the supervision objective was to review medical services.

4. Performance:

One way of looking at the performance of village midwives, is looking at their reports and records, to see their case load, their ability to manage medical records and by looking at their equipment and facilities.
From table 8 it can bee seen that eventhough the average number of cases do not differ much in LSS-trained and non-LSS trained respondents, but it is consistently higher in LSS trained respondents.This maybe due to the factor that in average the LSS-trained respondents have worked longer, have more experience or because of one of the selection criteria for LSS training participants are Community Midwives with a mortality case or more cases.
It can not be seen if the LSS training itself has played a role in increasing the number of patients, which according to many the LSS-training participants was one of the objective of LSS training e.g to increase your self-confidence in providing services.

Although most of their cases are general patients, the average number of deliveries helped in a month in both categories (38.11 and 36.39) are quite high, compared to the deliveries in the distict hospitals. From indepth interviews, although present in the village some TBA's do not help deliveries any more, they let the village midwives do it and the TBA's are just helping taking care of the baby and cleaning up.

Table 8. Number of cases in the last 3 months:

Nr.	Cases	LSS- trained		Non - LSS		TOTAL	
		mean	%	mean	%	mean	%
1.	New Antenatal patients	40.53	6.85	37.79	7.76	39.15	7.26
2.	Old Antenatal cases	68.02	11.49	59.66	12.24	63.80	11.83
3.	Delivery	38.11	6.44	36.39	7.46	37.24	6.91
4.	Postpartum visit/care	52.56	8.88	42.64	8.75	47.55	8.82
5.	Family Planning clients	93.86	15.85	77.41	15.89	85.56	15.87
6.	Healthy Babies	86.87	14.67	66.92	13.74	76.81	14.25
7.	General patients	212.03	35.82	166.42	34.16	189.00	35.06
	TOTAL	591.98	100.00	487.23	100.00	539.11	100.00

The average number of complication cases in the last 3 months is also consistently a little higher in the LSS trained respondents than in the non-LSS trained respondents. Because of incomplete records, it is not clear how many of them were refered and how

many were managed by themselves. But no maternal-neonatal death were encountered in these last 3 months.

Referal cases from the TBA in the last 3 months, showed no difference between LSS trained and non-LSS trained respondents. Some activities were higher in non-LSS trained, some in LSS trained, although the difference is very small.

Table 9.: Number of Obstetric-neonatal complication cases in the last 3 months:

Nr.	Cases	LSS- trained		Non - LSS		TOTAL	
		mean	%	mean	%	mean	%
1.	Post-/antepartum haemorrhage	3.06	20.35	2.89	19.82	2.98	20.18
2.	Pre-/ecclampsia	3.10	20.61	2.98	20.44	2.99	20.24
3.	Infection	2.89	19.22	2.85	19.55	2.87	19.43
4.	Prolonged delivery	2.94	19.55	2.87	19.68	2.91	19.70
5.	Other	3.05	20.27	2.99	20.51	3.02	20.45
	TOTAL	15.04	100.00	14.58	100.00	14.77	100.00

Table 10 : Distribution of average number of cases or activities with TBA

Nr.	Average activity with TBA in the last 3 months	LSS- trained	Non - LSS	TOTAL
		mean	mean	mean
1.	Referal from TBA (cases))	3.76	3.51	3.63
2.	Together help delivery (cases)	4.33	4.85	4.59
3.	Supervision to TBA (times)	4.52	5.13	4.83
4.	Postpartum visit (times)	4.40	3.67	4.03

Medical records for antenatal care as well as for deliveries are important tools that should be completed for each client. Filling in medical records completely, would help the midwife to identify high risks, pathologic cases and would help the midwife to proof that she has acted acording to the standard procedure.

Review of medical records showed that only 12.2% of all the respondents filled in the ANC record completely, there was no difference between the LSS trained and not trained. The importance of completeness of a medical record should be stressed on at every opportunity

Table 11. Distribution of respondents according to completeness of ANC records

ANC records	LSS		Non-LSS		Total	
	n	%	n	%	n	%
- Complete	11	10.6	15	13.8	26	12.2
- Incomplete	92	88.5	90	86.5	182	85.4
- Not available	01	0.9	04	3.7	05	2.4
Total	104	100	109	100	213	100

Review of delivery records showed that no respondent has filled all the needed information completely.

All the midwives should use partographs for monitoring the labor progress, so they can know when to be alert and when it is the time to take actions. When medical records were reviewed only about 50% of all respondents use partographs for monitoring their clients. No partographs were filled in completely. The main objective using partographas are that the midwive can know, when to be alert and when to have to take action. So the criteria used in reviewing the partographs is, if they fill in the part where the alert- and action lines are.

Table 12. Distribution of respondents according to the use of Partographs

Nr.		LSS- trained		Non - LSS		TOTAL	
		n	%	n	%	n	%
1.	Partograph correct	26	25.00	16	14.68	42	19.72
2.	Partograph wrong	13	12.50	12	11.01	25	11.74
3.	Did not use Partograph	45	43.27	62	56.88	107	50.23
4.	Did not bring records/no case	20	19.23	19	17.43	39	18.31
	TOTAL	104	100.00	109	100.00	213	100.00

Among LSS-trained repondents, 37.5% used partographs, but only 25 % of the LSS respondents made correct Partographs and 12.5% made wrong partographs. While among non-LSS trained respondents 25.69% used partographs, 14.68% made correct partographs and 11.01% made incorrect partographs. Some of the incorrect partographs, showed the same mistake. The consistent mistake was when recordings of cervical dilatation from the latent phase is transferred to the active phase. The cervical dilatation should be plotted on the alert line, but many of the respondents plotted it on the vertical line, where the alert phase begins (at the 8th hour of the latent phase). When asked about it, all answered that they have been taught so. From the figures in table 10, it seems that the LSS trained were more competent in filling in the partographs, also more where using it. Quoting the trainers from one district, who said:

"After LSS training the midwives did not refer cases too late and they also submitted the partographs that they filled in and the partographs were good. Even the more senior midwives are doing more mistakes". These trainer agreed that the result of LSS training at least were better referal and increase in the use of partographs.

5. Opinion of LSS trained respondents on LSS training:

The LSS trained respondents have attended LSS training in various years, between 1995 - 1998:

- 44 respondents have attended LSS training in 1995
- 19 respondents have attended LSS training in 1996
- 22 respondents have attended LSS training in 1997
- 19 respondents have attended LSS training in 1998

Asked about the objective of LSS trainers, most respondents (78.8%) agreed that the objective of LSS training was to increase the clinical skill for emergency maternal and neonatal cases. Other objectives mentioned was, as refreshing of skills gained during midwifery education, to prevent delays in referal, decrease MMR and others.

Less than half (44.2%) of the respondents agreed that the objective of the training has been reached, 25.1% thought that the objective has not been reached and 31.7% thought that only a part of the objective could be reached.

Table 13. Distribution of opinion of ex-LSS Training participants on LSS Training:

Nr.	Variable	n	%
1.	Objective of training:		
	- To increase LSS in Maternal-neonatal cases	82	78.8
	- Refreshing	7	6.7
	- No delays in referal	5	4.8
	- To decrease MMR	3	2.9
	- To increase clinical practice	3	2.9
	- Standardization of procedure	3	2.9
	- Other	1	1.0
2.	Objective reached:		
	- Yes	46	44.2
	- Only a part	33	31.7
	- No	25	25.1

Nr.	Variable	n	%
3.	Benefit/use of the training:		
	- Increase clinical skill	29	27.9
	- Broadens the perspective	25	24.0
	- Increase quaity of service	16	15.4
	- Increase self-confidence	13	12.5
	- Other	21	20.2
4.	Training modules most useful:		
	Module 1	20	19.2
	Module 2	41	39.4
	Module 3	60	57.7
	Module 4	39	37.5
	Module 5	86	82.7
	Module 6	18	17.3
	Module 7	20	19.2
	Module 8	23	22.1
	Module 9	9	8.7
	Module 10	31	29.8
5.	Training modules most unuseful:		
	Module 1	1	1.0
	Module 2	0	0
	Module 3	1	1.0
	Module 4	2	1.9
	Module 5	0	0
	Module 6	15	14.4
	Module 7	6	5.8
	Module 8	2	1.9
	Module 9	82	78.0
	Module 10	0	0
6.	Degree of difficulty of LSS materials:		
	- Easy	14	13.5
	- Just right	74	71.2
	- Difficult	15	14.4
	- No answer	1	0.9

Other benefits of attending LSS training were mostly broadening of the minds, increase of quality services and increase in self-confidence.
Not all modules of the LSS training were useful to them in their daily practice, the 5 most useful modules are modules 5 (prevention and management of bleeding), modul 3 (monitoring labor progress), modul 2 (Antenatal care: Risk assessment and therapy), modul 4 (episiotomys and repair of lacerations) and modul 10 (Newborncare).
While the most unuseful modules were only modul 9 (Vacum Extraction) and 14.4% mentioned modul 6 (Resuscitation). These results could be used as input for improvement of LSS training, by concentrating only on skills used mostly in their practice. The degree of difficulty of the trainng materials, is found to be just right by most of the respondents (71.2%), but 14.4% found the material too difficult.
Ask on their recommendation to improve LSS Training. Most of them (54.8%) answered

to use facilities that has more cases as training sites or (6.7%) to add the length of training . Other recommendation were to conduct refresher trainings, to increase the number of trainer, to use case presentations and to provide certificates.

6. Knowledge - and Verbal Skills Test:

Based on the information collected at the first phase, on the most important skills that the midwives should be competent at, questionnaires were prepared to test the knowledge and their verbal skills.
The questions were divided into the following topics:

a. Infection prevention
b. Antenatal care, high risk pregnancy and it's management
c. Management of Labor, analyzing partographs and filling in partograph

If a respondent could answer all questions correct, she has given 104 right answers.
The results of this test were divided into 3 categories:

1. 80% or more of the right answers were given
2. 60 % to less than 80% of the right answers were given
3. Less than 60% of the right answers were given

Table 14. Distribution of result of knowledge and verbal skills test in LSS- and non-LSS trained respondents:

Right answers	LSS Trained		Not LSS Trained		Total	
	n	%	n	%	n	%
- 80 - 100%	18	17.3	2	1.8	20	9.4
- 60 - <80%	55	52.9	51	46.8	106	49.8
- < 60%	31	29.8	56	51.4	87	40.8
TOTAL	104	100.0	109	100.0	213	100.0

Table 14 shows, that the overall results are that less than 10% of the respondents gave more than 80% of the right answers, about half the respondents gave more than 60% of the right answers and about forty percent gave less than 60% of the right answers. Looking at the difference between LSS- and non-LSS trained respondents, a difference can be recognized. Overall the LSS trained respondents scored better, only 29.8% have given < 60% of the right answers, compared to 51.4% of the non-LSS trained respondents. The Distant Learning program, could be a confounding factor, but since only a very small number (20 from 213 respondents) of the respondent has participated in this program, no further statistical analysis was possible. The only information that could be provided was that the 2 non-LSS trained respondents that got a score of more than 80%, were respondents who participated in the Distant learning program.

Table 15. a. Distribution of result of knowledge and verbal skills test according to the training sites in Central Java .

Right answers	Pekalongan		Banjarnegara		Total	
	LSS	Non-LSS	LSS	Non-LSS	n	%
- 80% - 100%	5	0	2	0	7	18.4
- 60% - <80%	3	1	5	4	13	34.2
- < 60%	1	9	3	5	18	47.4
TOTAL	9	10	10	9	38	100.0

One of the questions in the questionnaire was:
"Immediately after the baby is born, what can you do to prevent postpartum bleeding"?
One of the answers should be: Inject Oxytocin 10 u IM before the placenta is born.
We observed that in Banjarnegara district, no one gave this answer, when prompted by the interviewer, some of them said: "I know oxytocin should be given, but we are not allowed to do so."
After further questions, it was found out that there is a regulation in this district that no midwife is allowed to keep any oxytocin in their facilities.

Although the difference between LSS- and non LSS trained scores seems to be consistent in the two districts, Pekalongan reached a better score than Banjarnegara.

The results from East Java shown in the table below, overall there is not much difference with the result in Central Java. Central Java has a higher percentage of respondents who got a score of ≥ 80%, but a higher percentage also who got a score of < 60% . In Ponorogo no difference between the LSS- and non LSS trained respondents was found, in Magetan only a small difference, while in Blitar and Lamongan the better scores in LSS trained can be seen clearly.

Table 15.b. Distribution of result of knowledge and verbal skills test according to the training sites in East Java .

Right answers	Magetan		Ponorogo		Blitar		Lamongan		Total	
	LSS +	LSS -	LSS +	LSS -	LSS +	LSS -	LSS +	LSS -	n	%
- 80% - 100%	2	0	1	2	3	0	5	0	13	7.4
- 60% - <80%	8	12	17	16	6	5	17	12	93	52.6
- < 60%	8	8	4	4	1	6	13	25	69	40.0
TOTAL	18	20	22	22	10	11	35	37	175	100.0

The following tables are presenting the result of the verbal skills test according to the different topics and the mean correct answers that the respondents gave.

For Infection Prevention: there are 12 correct answers possible
For Antenatal Care: 41 right answers
For Labour & Postpartum management: 48 right answers

Table 16.a. Mean correct answers according to topic in LSS- and non-LSS trained respondents

TOPIC	n	Mean score	SD	t	p
Infection Prevention:					
- LSS trained	104	6.32	2.33	4.57	.000
- Non-LSS	109	4.95	2.03		
Total	213	5.61			
Antenatal care:					
- LSS trained	104	28.62	4.81	3.19	.002
- Non-LSS trained	109	26.48	4.86		
Management of Labor					
- LSS trained	104	32.52	7.69	3.61	.000
- Non-LSS trained	109	28.94	6.83		

Overall there is a very significant difference ($p<0.01$) between LSS trained and non LSS trained respondents in all the 3 topics.

The different results according to the province is presented in the following table:

In Infection prevention, there was a significant difference ($p<0.05$), between LSS- and non LSS trained respondents in Central Java, in East Java the difference was very significant ($p<0.01$).
In Antenatal Care, only in Central Java there was a very significant difference, while in East Java there was no significant difference between LSS- and non LSS trained respondents.
In Management of Labor, in Central Java there was a very significant difference, while in East Java a significant difference was found between LSS- and non-LSS trained respondents.
Overall no difference can be seen between Central Java and East Java.

Table 16.b. Mean correct answers according to topic in LSS- and non-LSS trained respondents and province.

TOPIC	Central Java					East Java				
	n	Mean score	SD	t	p	n	Mean score	SD	t	p
Infection Prevention:										
- LSS trained	19	7.16	2.45	2.21	.035	85	6.13	2.27	4.07	.000
- Non-LSS	19	5.70	1.59			90	4.79	2.08		
Total	38	6.41	2.16			175	5.44	2.27		
Antenatal care:										
- LSS trained	19	30.26	5.97	4.17	.000	85	28.23	4.47	1.44	.151
- Non-LSS trained	19	23.10	4.71			90	27.23	4.59		
Total	38	26.59	6.41			175	27.71	4.55		
Management of Labor										
- LSS trained	19	35.21	7.92	4.60	.000	85	31.92	7.55	1.99	.048
- Non-LSS trained	19	25.35	5.28			90	29.73	6.90		
Total	38	30.15	6.26			175	30.79	7.28		

G. OBSERVATION AT SERVICE FACILITIES:

From the 213 respondents, 47 respondents have been visited in their service facilities. 21 of them were LSS trained and 26 non-LSS trained.
The purpose of the visit was to observe directly the facilities and equipment for Maternal Health services, including Infection Prevention and also to review the medical records from the year 1998 and if possible observe the service delivery of the community midwives at their facilities.

1. Location & transportation facilities:

The location of the service facilities from the district hospital/district health office, varied from only 20 minutes to more than 2 hours by car. Not all facilities could be reached by car.
In the 2 districts in Central Java some of the midwives lived in the mountain area, that has no road that is passable by motor vehicle, the village delivery hut could only be reached by walking uphills, about 15 - 20 minutes. To reach public transportation,which is not available 24 hours, one has to walk at least 30 minutes downhills. If a woman in labor has to be transported to the hospital, she has to be carried down by at least four men. Some of the village delivery huts are located at a very remote area of the village, near the Village Meeting Hall (*Balai Desa)*, where there are no people living nearby. The midwife, especially if unmarried usually are too afraid to live there alone, so she lives at another place.

In East Java, also some service facilities could not be reached by car, especially in the raining season. The roads, which are not asphalted are too slippery to be passed by car. One has to walk, use a motorcycle or Becak to reach the facility.

2. Facilities & equipment:

Some of the villages, do not have a village delivery hut prepared for te midwife. Many midwives use 1 or 2 rooms in their living quarters to provide their services. Because of the limited facilities in their homes, they can not help deliveries there, but only at the clients home. The living conditions are some times very poor, the floors are still earth, with no running water faciities.

Some of the villages have prepared special facilities for the midwife to provide maternal services. These facilities have enough space to care for the mother and baby and are also clean.

The equipment that the midwives have at their facilities are about the same, everyone has at least one complete delivery set, with adequate equipment for suturing, infusion sets and equipment to measure Haemoglobin.
In East Java, the midwives have also enough supplies of record for ANC, delivery and for the babies, partographs, while in Central Java the midwives usually have no such records available, they usually record all their activities in a notebook.

3. Maternal Health services:

The records from 1998 (January - November) were reviewed, to get data on their performance.

The services performed by the Community Midwives are presented in table 17.
Besides normal deliveries, they also had managed some pathologic cases. For the normal deliveries, the midwives own clients as well as those refered by the local TBA, the LSS trained midwives have a higher number of cases. For the pathologic cases no real difference can be seen, because of the small number of cases per midwive. For postpartum hemorrhage, laceration and LBW or low Apgar score babies, it seems that the non-LSS trained midwives have a higher case load. This should be interpreted carefully and anlyzed further, for example why the non-LSS trained midwives have a higher number of cases with laceration, eventhough they could managed it on their own and they also performed more episiotomies.
The LSS-trained midwives seems to have a higher number of cases where they had to remove the placenta manually. These midwives have also a higher number of cases refered, this could mean that these midwives refer their cases earlier, do better referal or feel not confident enough to manage on their own. Further studies should confirm this.

Table 17. Maternal Health services performed by LSS trained and non-LSS trained Community Midwives in January - November 1998

NR.	MATERNAL HEALTH SERVICES	LSS-TRAINED	NON-LSS TRAINED
		MEAN/MW*	MEAN/MW*
1.	Normal Delivery	30.3	26.8
2.	Normal delivery refered by TBA	5.3	1.4
3.	Breech delivery self-managed	0.24	0.25
4.	Breech delivery refered	0.33	0.15
5.	Manual Placenta	0.67	0.42
6.	Manual Placenta refered	0.05	0.04
7.	Preeclampsia/eclampsia refered	0.05	0.04
8.	Postpartum bleeding	0.19	0.23
9.	Postpartum bleeding refered	0.19	0.09
10.	Episiotomy	4.8	4.0
10.	Laceration	0.52	0.69
11.	Laceration refered	0	0
12.	Vacum Extraction/Forceps	0	0
13.	LBW/Low Apgar score	0.38	0.73
14.	LBW/Low Apgar score refered	0.38	0.27

*Mean/midwife/11month (Jan - Nov 1998)

H. OTHER FINDINGS :

Besides questions on training, this study was looking for other factors that could improve the performance of community midwives or are insupportive to midwives performance.

1. In both provinces there is a policy, that every new community midwive has to follow an orientation period at the district level first, before posting at the village. This orientation period consist of orientation of MCH programmes at the district health office for about 2 weeks, followed by internship at the district hospital for 2 weeks to ± 2 months. At this time the orientation period has no specific objectives or program, but it gives the community midwive to adapt to the

situation in the district, to get acquainted with the various programs.

2. In most districts, after the orientation period at the district level, there is also a sort of orientation period at the subdistrict level, which is at the Public Health center. This period is about 2 weeks to 1 months. The objective is to orient the community midwife on the situation, the programmes at the public health center and to collect information on their village where they will be posted.

3. The staff from Central Java province health office, admitted that they have a problem in one district. In that district the midwives are not allowed to keep any oxytocin in their facilities. They plan to ask POGI-Central Java to interfere, and give recommendations to that district to stop that regulation.

4. The district hospital in one district in East Java has an agreement with the community midwives, to reimburse all medicines or fluids that they have already given to a patient that is refered to the hospital.

5. There is no concensus yet, among program managers themselves and also among trainers on the minimal skill that the community midwives have to be competent at, or what the community midwife is not allowed to perform. But all of them agreed that not all skills in the 10 modules are necessary for the community midwives.

6. In some districts, all the community midwives have night-duty at the district hospital, at least once a month.

7. In East Java, The Provincial Health Office (Dinas Kesehatan) has developed or provided, several tools for community midwives, that can help to improve their performance, like medical records for ANC, which is called "Mother's Card" (Kartu Ibu), as well as for delivery, Partographs that on the other side has the referal form and also a scoring card to detect high risk pregnancies (Poedji Rochjati Scoring Card for Cadres and other officials).