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EmOC PROJECT

TBA_s TRAINING ACTIVITIES
Lessons Learned

MOHP/UNICEF
2001

EmOC PRPJECT

TBA'S TRAINING ACTIVITIES

I. INTRODUCTION

During 1990 – 1994, UNICEF's efforts were limited to TBA's training project, as a major intervention to **contribute to the national goal of eliminating neonatal tetanus and reducing maternal and neonatal mortality in Upper Egypt**. The rationale behind focusing on Upper Egypt was based on the results of MOHP/UNICEF national survey (1986). The survey confirmed that the risk of death from neonatal tetanus for a birth in Upper Egypt was 4.7 times greater than for a birth in Lower Egypt. The survey also indicated that the strategy to reduce neonatal tetanus was to continue the immunization of child-bearing-aged women against tetanus, and to increase the use of hygienic birth practices of TBA's. UNICEF's project focused on seven governorates in Upper Egypt, namely; Aswan, Qena, Sohag, Assuit, Minia, Beni Suef, and Fayoum.

The project's interventions were directed towards providing a basic training course for TBA's, for a period of 10 days, followed by refresher courses every six months. The training aimed at increasing the use of hygienic delivery practices among TBAs, and ensuring referral of women to antenatal care, and referral of difficult deliveries to health services. The specific objectives geared towards:-

- **Upgrading** knowledge and skills of TBAs both in specific areas of midwifery and broader areas of MCH activities, including TT vaccination, antenatal and postnatal care, child spacing and maternal and child nutrition.
- **Promoting** and broadening the role of local TBAs to cover a wider range of responsibilities and activities, including childhood immunization, ORT, ARI, and community health education.
- **Establishing** a strong and closer working relationship between health personnel and TBAs, in an effort to integrate the latter into the mainstream of health services, thereby ensuring referral of difficult deliveries, improving recording and reporting of vital statistics, and facilitating supervision on TBAs after training.

At the end of the basic training course, every TBA received a midwifery kit which included necessary equipment and supply for hygienic delivery at home. Also TBAs received certificates of attendance.

Several assessment activities were carried out during the implementation phases. The following were some of the major outcomes of the assessment activities:-

- Mothers and children were seen more frequently and earlier than before. There was a definite down trend in major problems such as puerperal sepsis, neonatal tetanus and mismanaged obstetric cases.
- There was an increase in preventive activities, which ensured better immunization coverage of both mothers and children.
- The strong links formed between the TBAs and health services personnel had facilitated the use of health services by TBAs, families, and individuals in the community.
- The supervision system on TBAs performance was weak due to the rapid turn over of trained supervisors.
- Lack and inconsistency of recording of referral cases by TBAs to the health services.
- Obstetricians stated that TBAs referred cases to their private clinics, but no records existed to substantiate this, which created problems in identifying referral cases by TBAs.
- TBAs need to be more aware of high-risk pregnancies, danger signs of pregnancy and delivery, the right time of case referral, and the hazards of oxytocin injection.
- Lack of public awareness on the importance of receiving antenatal care and hazards of delay in seeking health care during problems.

The assessment activities also revealed that the practical obstetrical skills of PHC staff were weak, due to lack of management skills in handling referred complications by TBAs.

II. JUSTIFICATION FOR TBAs' RE-TRAINING

A) The National Maternal Mortality Study

In 1992/93, MOHP/USAID conducted a national maternal mortality study. The study revealed that the National Maternal Mortality Rate (MMR) was estimated as 174/100,000 LB. The rate varied according to the region as follows:

- Lower Egypt —————> 132/100,000 LB
- Upper Egypt —————> 217/100,000 LB

Within Upper Egypt, the Governorate of Assuit has the highest rate (544), followed by Qena (386), and Sohag (307).

The study showed that, according to medical review, 92% of maternal deaths were considered to have had avoidable factors. Two major factors emerged from the study:

- **Delay in seeking medical care;** by women or their families (patient factor). The delay was responsible for 42% of all maternal deaths.
- **Sub-standard care;** on the part of medical professionals, contributed to 47% of all maternal deaths.

The Traditional Birth Attendants (TBAs) contributed to 12% of maternal deaths. Since a large percentage of Egyptian women still use TBAs (59.3%, according to EDHS, 1993), the study suggested that the TBAs training project conducted by MOHP/UNICEF was relatively successful in teaching TBAs to refer women with complications promptly. The study also highlighted the following recommendations:

- 1- The training curricula should be reviewed to include specific and relevant information related to complications during pregnancy and delivery.
- 2- Emphasis, in future TBAs training, should be placed on prompt referral.
- 3- Considering that the majority of deliveries are assisted by TBAs, training should be continued and strengthened.

B) **The New Initiative: EmOC**

To contribute to the national efforts of reducing maternal mortality and morbidity, MOHP, UNICEF and USAID are currently supporting a pilot initiative. The objective geared towards **ensuring availability and utilization of adequate Emergency Obstetric Care (EmOC) services, to prevent maternal deaths resulting from direct obstetric complications.** During 1997 and early 2000, EmOC initiative was implemented in (18) districts of three governorates in Upper Egypt, namely, Minia, Assuit, and Sohag. A total of (55) EmOC facilities were selected for upgrading and strengthening obstetrical skills of staff to ensure quality management and referral of complications during pregnancy and delivery.

The selection of EmOC facilities was based on WHO recommendations regarding the number and level of functions: **for every 500,000 population, there should be ONE facility providing comprehensive care and FOUR facilities providing basic care.** Among the selected facilities there are 18 comprehensive (district hospitals), and 37 basic (rural health centers or hospitals) EmOC facilities.

C) **The Influential Role Of TBAs**

TBAs still play an important role in women's lives in rural and urban low-income communities in Egypt. Almost 60% of deliveries take place in the hospital or are attended by health staff, while the burden of providing maternal and newborn care continues to be shouldered by village TBAs.

It is important to stress that the TBA performs other critical cultural functions as well, which extends beyond the formal medical system. Thus, a TBA is an "insider", an integral part of the community in which she operates on a shared system of beliefs.

Despite the critical role of TBAs and their wider acceptance by the local communities, their skills and knowledge remain limited to identification of danger signs in pregnancy and delivery. Also, there still is a failure to make timely referral of complicated cases to the health services. From the above mentioned reasons, it seems vital to retrain TBAs and articulate them with the health care system, in an effort to increase utilization of the existing health services by the community.

The current policy of MOHP is not to train any new TBAs but to provide refresher courses to those who were trained before under the supervision of MOHP.

III. RETRAINING OF TBAs

A) Overall Objective:

The overall objective was to strengthen linkage between TBAs and the selected EmOC facilities in the three governorates of Upper Egypt, in an effort to:

- Increase utilization rate of the selected EmOC facilities.
- Ensure timely referral complications during pregnancy and delivery.

B) Specific Objectives:

1. **To identify** previously trained TBAs in the (18) selected EmOC facilities in Upper Egypt, namely, Minia, Assuit and Sohag.
2. **To develop** standard set of criteria for selection of active TBAs, in order to ensure quality of performance and effective linkage with health services.
3. **To identify** gaps in knowledge and practices of the selected TBAs.
4. **To design** course content for training of TBAs, based on the identified gaps.
5. **To develop** referral system and monitoring tools to measure TBAs performance after training.

IV. PREPARATORY ACTIVITIES:

- a- A standardized set of criteria was developed by local health team. The developed criteria were used in identifying active TBAs among those who were previously trained. The selected criteria facilitated better selection and ensured effective training and learning process. The following were the developed criteria:

- Age: _____ → (40 - 65 years)
- Reputation: _____ → (good and influential)
- Source of income: _____ → (working for money)
- Work Status: _____ → (not working in health services)
- Prerequisites: _____ → (previously trained)
- Average number Of deliveries per month: _____ → (3 - 5 deliveries)

- b- A sheet was developed to identify previously trained TBAs in the selected 18 districts for EmOC initiative. The developed sheet included personal data; name, age, address/village, date of last training and work status of TBAs.

*** See the developed sheet in Annex No. (1)**

- The district health team analyzed the obtained data from the sheet using the developed criteria. The analysis identified the active TBAs, and excluded those who do not practice midwifery due to sickness, age problem or death. This exercise led to better planning and costing of training activities.
- The results of the analysis were also used in developing a map for each district, and identifying the selected TBAs by locations in relation to EmOC facilities and appropriate training site.

*** See examples of the developed district maps in Annex No. (2)**

- The analysis revealed that out of the 2,092 previously trained TBAs in the selected districts, a number of 1,448 were selected as target for retraining. The following table shows distribution of the selected TBAs by governorate:

Governorate	No. of selected Districts for EmOC	No. of previously trained TBAs	No. of identified active TBAs	%
Minia	6	900	780	86.7
Assuit	6	666	330	45.5
Sohag	6	526	338	64.3
Total	18	2,092	1,448	69.2

*** See distribution of identified TBAs by Districts of governorates in Annex No. (3)**

- The above table indicated that the number of active TBAs who are still practicing midwifery is declining.

- c- A directory for TBAs was developed for follow-up. It includes: personal photo, personal data, and other data to be filled by supervisors after training. The directory sheet was developed to trace TBAs' performance after training and to ensure reference to the health staff for license process.

*** See example of TBAs' personal directory in Annex No. (4)**

- d- A series of focus group discussions (FGDs) were conducted with TBAs, to identify false rumours pertaining to complications of pregnancy, delivery and postpartum. The outcome was used to educate TBAs during training on corrected messages, to avoid negative impact on women's health.

*** See examples of false rumours in Annex No. (5)**

- e- Three assessment surveys were implemented in the selected governorates, through a developed questionnaire. The surveys aimed at identifying gaps in knowledge and skills of the previously trained TBAs. The results of the assessment surveys revealed the gaps in information related to danger signs of pregnancy and delivery, and preferable referral spots by TBAs in case of facing problems. The results were used for developing a training guide for TBAs. The following were the major findings of the assessment surveys:

- **Age of TBAs:**
The majority of the interviewed TBAs (35%) were among the age group of 60-70 years, followed by 50-60 years (32%). This proves that the community places more trust in elderly TBAs to assist in delivery.
- **TBAs source of income:**
88.7% of the interviewed TBAs responded that they are depending on midwifery practices as a primary source of income. This indicated that the majority of TBAs consider their practices to be their sole source of income. Thus, they seek to maintain the community's trust and good reputation.
- **Community demand for TBAs services:**
The survey showed that 70.8% of TBAs handling an average of 60-70 deliveries per year. This figure is considered high compared to the annual number of deliveries attended by rural health staff.
- **Knowledge about importance of ante-natal care:**
The interviewed TBAs responded that the importance of antenatal care means receiving TT vaccination (31.1%), followed by lab investigation and TT vaccination (19.8%), and (14.1%) for TT vaccination and receiving medication. This indicated that TBAs retained adhoc information on antenatal services.
- **Knowledge about danger signs during pregnancy:**
The interviewed TBAs indicated that the danger signs during pregnancy are as follows: Edema and vomiting (41.1%), Edema (3.6%), fever (7.5%), drowsiness (6.6%), headache (5.7%), pressure and heaviness (4.7%), bleeding (2.8%) and no fetal movement (1.9%). This showed that the TBAs are not sufficiently aware of the danger signs of pregnancy and seriousness of emergency signs that need referral.
- **Decision makers for referral:**
69.8% of the interviewed TBAs responded that they take the decision for referral of women during complications of pregnancy. This indicated that TBAs play an influential role in convincing families to seek medical help.
- **The role of TBAs in health education:**
The interviewed TBAs responded that they give health education for women during pregnancy, their responses were as follows: 69.8% for TT vaccination, 57.5% for nutrition, 54.7% for danger signs, and 35.8% for breastfeeding. This indicated that TBAs could play an important role in health education for women during pregnancy, provided that TBAs receive the correct information related to different messages.

- **Complications during and after delivery:**
 48.8% of the interviewed TBAs recognized abnormal fetal presentation as complication during delivery, followed by 20.8% irregular contraction, 19.1% antepartum hemorrhage, 17.4% delivery of the cord before the baby, 10.4% postpartum hemorrhage and 7.8% prolonged labour and early rupture of membrane.
- **Referral spots in case of complications:**
 The interviewed TBAs responded that district hospital is the primary referral spot (80.0%) followed by private physicians (26.0%). This indicated that TBAs do perceive the seriousness of the complications and appropriate referral spots.
- **Barriers of referral to the health services:**
 The interview indicated that the decision of husbands and mothers-in-law is the main barrier for referral of women during complications, representing 29.6%.
- **Knowledge about Eclampsia:**
 45.3% of the interviewed TBAs responded that they have faced a case of eclampsia. The identified signs reported by TBAs were as follows: Edema (legs) 43.5%, persistent headache 32.2%, disturbance of vision 23.5%, hypertension 1.7%, and convulsion 3.5%. The majority of the interviewed TBAs 44.3% reported that they refer cases to district hospital, followed by 7.8% to the private physicians. 52.0% of TBAs reported that the nutrition education they give to women is limited to giving advice to avoid salts and fats.
- **Knowledge about prolonged/obstructed labour:**
 The following were the responses of TBAs regarding signs of prolonged/obstructed labour; 74.8% cervix is not fully dilated, 45.3% early rupture of membrane, 60.0% head is not engaged, and 1.7% weak contractions. 79.1% reported that they refer the case to the district hospital, followed by referral to the private physicians 18.3%.
- **Knowledge about Hemorrhage:**
 97.4% of the responses indicated that TBA refer cases with hemorrhage to the district hospital.
- **Knowledge about Abortion:**
 100% of the TBAs responses indicated that they never perform abortion, and 97.0% refer the case to the hospital.

- **Knowledge about postpartum care:**
98.0% of the responses indicated that TBAs visit women after delivery with an average of three times. Their responses related to purpose of the visits were; to observe amount of bleeding 86.9%, to advice on nutrition 73.0%, to assist women in breastfeeding, and to check the umbilical cord 40.0%.
 - **Knowledge about postpartum sepsis:**
TBAs responses related to signs of postpartum sepsis were as follows: 92.2% fever, 80.0% abnormal smell/foul odour of vaginal discharge. The majority of TBAs responses 74.4% showed that the unclear place of delivery is the main cause of sepsis. 93.9% responded that there is a need to ensure clean delivery place to avoid sepsis, while 81.7% emphasized the importance of using mackintosh during delivery and 86.0% indicated the importance of washing hands using the brush.
- f- Local health staff representing the three governorates developed TBAs training guide. The guide aims at ensuring early referral of complications and increasing utilization rate of the selected EmOC facilities. The specific objectives of the guide are to:
- **Refresh** TBAs knowledge on danger signs of complications of pregnancy and delivery.
 - **Ensure** early referral of complications to the appropriate spots.
 - **Strengthen** TBAs role in educating community members on danger signs of pregnancy and delivery.
- The content of the guide was based on the identified gaps of the assessment surveys. The guide consists of six chapters;

Chapter (1): Health Care during pregnancy

- Services provided at the antenatal clinic
- Nutrition during pregnancy
- TT vaccination schedule
- Danger signs during pregnancy

Chapter (2): Complications during pregnancy

- Abortion
- Ectopic pregnancy
- Antepartum hemorrhage
- Pre-eclampsia
- Malpresentation of fetus
- Early rupture of membrane

Chapter (3): Complications during delivery

- Danger signs during delivery
- Obstructed/prolonged labour

Chapter (4): Complications after delivery

- Eclampsia
- Postpartum hemorrhage
- Postpartum sepsis

Chapter (5): Postpartum Care

- Neonatal care
- Postpartum care

Chapter (6): Female Genital Mutilation (FGM)

- Rumours about FGM
- Complications of FGM

- The training guide included sessions on prerequisite knowledge related to infection control, breastfeeding, and family planning.
- The guide is developed in a simple language and methodology of teaching, using simple models and illustrations. The developed guide was field tested by local counterparts to check relevancy of content, time allocated for teaching each chapter and methodology of training.
- **It is worth mentioning that the developed guide was subject for assessment by MOHP/USAID. As a result, it was decided to use the developed training guide nationwide.**

V. IMPLEMENTATION OF ACTIVITIES:

a) The training cycle:

The TBAs training cycle included 10 TBAs. The duration of the cycle was five days, with a total of 25 hours.

b) Locations for training:

Comprehensive and Basic EmOC facilities were selected to be the locations for TBAs training. This is to ensure good relationship between TBAs and health staff of the selected facilities.

c) Trainers:

Physicians and nurses of EmOC facilities were chosen to train TBAs. Senior obstetricians at comprehensive level were also involved in the training. The selected trainers received a two-day orientation session on methodology and training content. Senior nurses and midwives who were engaged as supervisors in the previous training activities at the governorate and district levels were also involved in these training cycles. This is to ensure high quality of training as they share their valuable experiences with TBAs. They can also replace trainers in case of turnover.

d) Training Methods:

Since TBAs are illiterate, there was no place for the printed word during training. The spoken word, demonstration, discussion and feedback, and a case study were the only methods used. One day is devoted to observe antenatal activities in the facility, as part of training.

e) Recording of TBAs' performance:

A logbook was given to the TBA after training to record her activities, either with the help of a family member or health staff. Health staff at EmOC facilities prepares a monthly sheet, highlighting name of TBAs, activities by type, referred cases, and referral spots.

f) Monitoring of TBAs' performance:

A registry book was developed so as to be used by health staff to record referred cases by TBAs, including condition, time, and care given. Monthly meetings were organized to meet trained TBAs at EmOC facilities. Health staff gives feedback and comments on performance of monthly activities by TBAs.

g) Training Cost/Cycle:

A total of LE 1,050 was allocated for the implementation of one cycle. The cost breakdown is as follows:

Transportation fee for TBAs

LE5/day/TBA x 5 days/ cycle x 10 TBAs = LE 250

Trainers

LE 20/ session x 5 sessions/day x 5days = LE 500

Break

LE 3/day/TBA x 5 days/ cycle x 10 TBAs= LE 150

Organizer/Supervisor

LE 30/ day x 1 supervisor x 5 days/ cycle = LE 150

Total Cost = LE 1,050

Say = US \$ 272

h) TBAs Incentive:

Each TBA received a sum of LE 25 for transportation to attend the training. At the end of the training, TBAs receive special identification cards that allow them to enter the facility with the referred cases, without being stopped by guards at the gate or being charged an admission fee.

VI. ANALYSIS OF TBAs' PERFORMANCE

A. Identified Number of TBAs

Governorates	No. of selected EmOC facilities	No. of previously Trained TBAs (1990-1994)	No. of TBAs still practicing midwifery	%
Minia	6	900	780	86.7
Assuit	6	666	330	49.5
Sohag	6	526	338	64.3
Total	18	2,092	1,448	69.2%

- The figure presented in the table reveal that the screening process of both previously trained and still practicing TBAs was an essential step for better planning and cost estimation.
- The decrease in the total percentage of practicing TBAs (69.2%) is due to TBAs' old age, with what it entails of health problems or death.
- The above table poses a question to the government of how to substitute the shortage of trained TBAs, and whether more nurses should be trained on midwifery instead.
- Another critical concern arises here regarding the control over the practicing new and untrained TBAs, and whether it is reasonable to include them in training, especially after MOHP's clear policy to limit the training activities to those who have already previously received basic training under MOHP's supervision.

B. Number of Trained TBAs During 2000

Governorates	No. of selected EMOs districts	No. of identified TBAs (1990-1994)	No. of trained TBAs (2000)	%
Minia	6	780	420	53.8
Assuit	6	330	288	87.3
Sohag	6	338	251	74.3
Total	18	1,448	959	66.2%

- Despite the reflected relatively low implementation of TBAs training (66.2%), the training's high quality, and professionalism of trainers, justify the delay.
- During the same year (2000), the trainers were focusing on the development of a national guide for TBAs' training.
- It is expected that during 2001 the training activities will go faster to cover the identified number of TBAs.

C. Coverage of Deliveries by the Trained TBAs

Governorates	No. of selected EmOC Districts	Total births of the selected EmOC districts	Total No. of deliveries by trained TBAs	Coverage of deliveries %
Minia	6	71,042	16,448	23.2
Assuit	6	43,548	18,657	42.8
Sohag	6	51,239	8,631	16.8
Total	18	165,829	43,736	26.4 %

- Coverage of deliveries recorded by TBAs represented 26.4% of the total births in the selected EmOC districts. This confirms the continuing influential role of TBAs in deliveries. It also shows that in future the recording of deliveries by TBAs will improve the birth registration.
- The variation in coverage of deliveries amongst the selected governorates could be explained by the different starting date of training activities at the district level.

D. Average Number of Deliveries by Trained TBA Per Month

Governorate	Total No. of trained TBAs (2000)	Total No. of deliveries by trained TBAs	Average No. of Deliveries/TBA/month
Minia	420	16,448	3.3 deliveries/TBA/month
Assuit	288	18,657	5.4 deliveries/TBA/month
Sohag	251	8,631	2.9 deliveries/TBA/month
Total	959	43,736	3.8 deliveries/TBA/month

- The above table shows that the average number of deliveries attended by TBAs per month ranges between (2.9 to 5.4). It is expected that improving the recording of TBAs' activities will increase this average, to include referred cases to the tertiary levels and university hospitals, which was not considered before.

E. Number and Types of Deliveries By TBAs

Governorate	Total No. of trained TBAs (2000)	Total No. of deliveries by trained TBAs	Normal		Complications	
			No.	%	No.	%
Minia	420	16,448	14,178	86.2	2,270	13.8
Assuit	288	18,657	17,052	91.4	1,605	8.6
Sohag	251	8,631	7,881	91.3	750	8.7
Total	959	43,736	39,111	89.4	4,625	10.6

- The above table shows that the dominant role of TBAs is still in assisting women during normal delivery which represented 89.4%, while the recorded referred complications represented 10.6%.
- In future, linking TBAs with EmOC facilities and improving their relationship with health staff will have positive impact in tracing complications and increasing the utilization of EmOC services.
- From the above figure of referred complications by TBAs, we can say that TBAs, if properly convinced they can be the best advocates for EmOC services in their communities.
- Minia governorate scored highest in the percentage of referred complications by TBAs 13.8% followed by Sohag and Assuit.

F. Percentage of Referred Complications in Relation to The Expected Number of Complications of Deliveries by TBAs

Governorate	Total No. of deliveries by trained TBAs	Expected No. of complications (15% of total deliveries by TBAs)	No. of referred complications by TBAs	% of referred cases
Minia	16,448	2,467	2,270	92.0
Assuit	18,657	2,798	1,605	57.4
Sohag	8,631	1,295	750	57.9
Total	33,736	6,560	4,625	70.5%

- This table indicates that TBAs' training objectives were positively achieved.
- It is evident that TBAs successfully identified and referred complications. TBAs referred 70.5% of the expected number of complications in relation to the total deliveries performed by them.
- In future, it is expected that these achievements could be maintained by improvement of recording and building more trust with health personnel in EmOC facilities.

G. Coverage of Referred Cases by TBAs in Relation to The Expected Number of Complications of Total Births of The Selected Districts

Governorate	Total No. of births of selected EmOC districts	Expected No. of complications (15%)	No. of referred complications by TBAs	Coverage by trained TBAs
Minia	71,042	10,656	2,270	21.3
Assuit	43,548	6,532	1,605	24.6
Sohag	51,239	7,686	750	9.8
Total	165,829	24,874	4,625	18.6%

- This table demonstrates that the overall contribution of TBAs in referral of complications represents 18.6% of the total expected number of complications in relation to total births in the selected districts.
- Remarkable achievements were observed in reaching the overall objectives of EmOC initiative by tracing complications and timely referral to the appropriate referral spots.
- In future, it is expected that TBAs can achieve the fully-anticipated contribution in promoting community awareness to recognize and refer danger signs. This in turn will increase utilization of EmOC facilities.

I. Referral Spots of Complications of TBAs

Governorate	No. of referred complications by TBAs	Comprehensive EmOC facilities		Basic EmOC facilities		Private obstetricians	
		No.	%	No.	%	No.	%
Minia	2,270	1,125	49.6	380	16.7	765	33.7
Assuit	1,605	825	51.4	234	14.6	546	34.0
Sohag	750	444	59.2	42	5.6	264	35.2
Total	4,625	2,394	51.8	656	14.2	1,575	34.1

- The above indicators show that TBAs were able to recognize danger signs and select the appropriate referral level. This also reflects level of comprehension and retention of the training content.
- In table (H) the majority of serious complications referred by TBAs represents (95.4%), and the referral spots of complications by TBAs were mainly to comprehensive EmOC facilities and private obstetricians (85.9%). This implies that TBAs were able to realize the appropriate referral spot by type of identified complication.
- The percent of referred cases to private obstetricians indicates good relationship with senior staff beyond the formal government levels.

J. Percentage of Deliveries by TBAs in Relation to Total Activities

Governorate	No. of trained TBAs	Total No. of activities by trained TBAs	Deliveries		MCH activities	
			No.	%	No.	%
Minia	420	38,848	16,448	42.3	22,400	57.1
Assuit	288	23,713	18,657	78.7	5,056	27.1
Sohag	251	16,094	8,631	53.6	7,463	46.6
Total	959	78,655	43,736	55.6	34,919	44.4

- The above table reflects TBAs total activities in the year 2000 during which 78,655 cases were handled, of which 55.6% were normal deliveries and referred complications, and 44.4% were MCH activities (family planning, antenatal care, and TT Vaccination).
- This proves that TBAs can play additional supportive, non-paid role in promoting other MCH services. It also, reflects that TBAs realize the importance of MCH activities for their clients, and their potential role regarding these activities.

K. Types of Referred MCH Activities by TBAs

Governorate	Total No. of trained TBAs (2000)	Total No. of referred MCH activities by TBAs	Types of referred activities		
			Family planning	Antenatal care	TT Vaccination
Minia	420	22,400	5,353 (23.9%)	8,583 (38.3%)	8,464 (37.8%)
Assuit	288	5,056	1,610 (31.8%)	1,844 (36.5%)	1,602 (31.7%)
Sohag	251	7,463	2,462 (33.0%)	2,682 (35.9%)	2,319 (31.1%)
Total	959	34,919	9,425 (27.0%)	13,109 (37.5%)	12,385 (35.5%)

- Although family planning is considered against TBAs business. This table shows that 27 % of referral cases for MCH activities were for family planning.
- Antenatal care and TT vaccination represented 73.0% of referred cases for MCH activities, which indicates that TBAs' role is crucial in improving antenatal and TT vaccination coverage.
- TBAs should be better utilized to promote TT vaccination among their communities, through providing correct information related to the rumors regarding TT vaccination for their clients. TBAs also can play a supportive role during implementation of TT campaigns.

VII LESSONS LEARNED

A) Identified TBAs

- 1- The current policy of MOHP is not to train any new TBAs, but to provide refresher courses to those who have previously received basic training courses under the supervision of MOHP. *This poses a critical question of how to control malpractice of the new and untrained TBAs.*
- 2- The process of identification of TBAs for training, ensured better selection of active and still practicing TBAs. *This lead to having sound planning and cost estimate of training activities.*
- 3- The training activities targeted the currently functioning TBAs. *This resulted in their active participation, and their readiness to absorb the training content, in addition to their commitment to attendance.*
- 4- All of the identified TBAs are depending on midwifery as a primary source of income. *This ensured better targeting of TBAs who seek to maintain community's trust and good reputation.*

B) The Training Guide

- 5- The training guide was developed on the basis of specific objectives related to the rôle of TBAs in identifying danger signs and timely referral of complications. *This led to sharpening the focus on training and the expected tasks of TBAs after training.*
- 6- The local health team in the three governorates developed the training guide. *This ensured full utilization of capacity and experiences of local counterparts, and maintained standard quality of training in the three localities.*
- 7- The developed training guide was user-friendly, simple, and appropriate for TBAs training, and it ensured continuous interaction and dialogue between TBAs and trainers. *This highly facilitated reaching the training target and objectives.*

C) **Training Location**

8- The EmOC facilities (comprehensive and basic) were selected as training sites for TBAs. **This was the best choice** due to the following:

- The number and types of referred complications by TBAs to the EmOC facilities proved that TBAs were able to recognize and trust the services provided by these facilities.
- TBAs were accompanied the referred cases to EmOC facilities. This proved the established good relationship between TBAs and EmOC staff.

9- The training locations were limited to EmOC facilities. **This caused trouble for some TBAs who live far from the Basic EmOC facilities.**

D) **Duration of Training**

10- The training cycle was conducted in five days. **TBAs showed commitment in attendance due to the short period involved, and at the same time they were able to undertake their main profession of delivery.**

E) **Trainers**

11- Trainers were chosen from EmOC staff; senior obstetricians from comprehensive facilities, and physicians and nurses from Basic facilities, in addition to nursing supervisors at the governorate level. **Most trainers were previously engaged in the initial UNICEF TBAs training. The wide range of experiences amongst trainers furnished a wealth of technical and diversified training capabilities.**

12- Most trainers participated in the development of the training guide. **This led to their full comprehension of the training content and methodologies.**

F) **ID Cards**

- 13- After training, each TBA is provided with an ID card, with her personal photograph, that allows her to enter the facility (hospital) “free of charge”, to accompany her referred cases. **The ID card proved to provide TBAs with the feeling of self-esteem, more recognition by the community, and a special social status.**

G) **Recording of TBAs Activities**

- 14- TBAs had been provided with a notebook to record their activities (normal deliveries, referred complications, and MCH). **Health staff and senior obstetricians carried out the recording activities. This facilitated monitoring of TBAs performance and allowed feedback to TBAs by health staff.**
- 15- The registry notebook is designed to record referral spots to EmOC facilities or private clinics. **This caused problems in recording referred cases to the tertiary level or university hospitals.**
- 16- The recording of TBAs performance faced a problem due to negative competition between old midwives and TBAs. **This led to inaccuracy of recording in some locations.**

H) **Cost of Training**

- 17- The cost of training cycle of 10 TBAs was LE 1,050 (US\$ 272). **The cost is quite trifle for the great benefit received, mainly in helping to save the lives of mothers and newborns.** The analysis of TBAs performance during the year 2000 indicated that 26.4% of all deliveries in the selected locations have been undertaken at home by TBAs. **This clearly emphasizes the importance of well-trained TBAs.**

VIII CONCLUSION

- A) It is evident that TBAs' training is developing positively towards achieving its main objectives, and the following proves that:
- The increased number of reported deliveries by TBAs indicates positive relationship between TBAs and health staff.
 - The referred number of complications by TBAs shows the effectiveness of the training activities.
 - The performance of TBAs after training covered wider range of responsibilities than deliveries. This proves that they can play a vital role in the promotion of antenatal care, TT vaccination and family planning.
- B) Obstetricians stated that the referred complications by TBAs are now being referred earlier, which is an encouraging sign that TBAs have become more aware of danger of signs and recognize the appropriate referred spots. It is expected that in future TBAs will contribute effectively in tracing the complications and reaching the expected target.
- C) TBAs referred cases to private obstetricians, which indicates the established positive relationship between TBAs and senior obstetricians.
- D) The recording activities of TBAs were missing the recording of referred complications to the tertiary level or university hospitals.
- E) It was evident that trainers were able to train TBAs properly according to the designed guide. Such capacity building should be used for future training in other locations.
- F) Training proved to be cost effective (US\$ 272/cycle for 10 TBAs) in relation to the benefits expected from TBAs in referral of complications and saving women lives.

IX RECOMMENDATIONS

- 1- Undertake continuous refresher courses, every 6 months, for the already trained TBAs. The course outline should be based on the results of TBAs performance emphasizing malpractice by trained TBAs.
- 2- Attention should be given to record all referral spots (tertiary and university hospitals).
- 3- Encourage government to issue official license for TBAs, thus linking them officially to the health system.
- 4- Utilize the trained TBAs to promote antenatal care, increase TT vaccination coverage and promote breastfeeding.
- 5- Attention should be given to train nurses on delivery and management of complications.