**OUTLINE OF THE MTOT**

The MTOT Karachi followed the same outline structure as in Islamabad, as the evaluation from Islamabad showed there were no major issues with the structure. Amendments were only made to some of the content for a number of the sessions, based on feedback and the lead facilitators own observations. Amendments to making the langue simpler in the manuals, was also undertaken prior to starting the MTOT in Karachi.

Week 1 This week concentrated on introduction to adult learning approaches, the adult learning cycle and to facilitation skills. The intention was to give a good foundation and grounding in the skills to be applied during the remainder of the program, to show how they can be used in developing midwifery competencies.

Week 2 Concentrated on the basic midwifery competencies required for working in the community. Setting up community visits and placements also formed part of the learning in this week.

Week 3 Focused on application of adult learning methodologies to the teaching and learning of complex midwifery skills. In particular, the content focused on the skills required for the recognition and management of obstetric and neonatal complications and emergencies.

*It is the combination of community skills, (working with communities to reduce the 3 Delays that result in maternal and neonatal death), coupled with the application of skilled midwifery care for recognizing, stabilizing and referring women and newborn when compactions/ emergencies occur, that are needed for saving lives of mothers and babies in Pakistan*.

Week 4 Focused on applying adult learning approaches to the assessing of midwifery competencies. This week, by it’s experiential nature, also allowed self and peer assessments, as well as structured assessments of participants by facilitators. The final day was used for structured evaluation of the program by participants and co-facilitators, as well as individual feedback to participants on their midwifery skills assessment.

# Training Team

Ms Della Sherratt, Senior International Midwifery Advisor and Trainer, currently working under contract to the International Confederation of Midwives (ICM), led the entire workshop; assisted in the first week and part of week 2 by Ms Imtiaz Kamal, National Midwifery Advisor and Educator and Mrs Laila Khymani, Chief Nurse-Midwife Aga Khan Hospital for Women and Children, who co-led the remaining weeks. Additional assistance during week 1 and pat of week 2 was given by Mrs Clara Pasha, National Nursing and Midwifery Advisor and Educator who had co-facilitated the Islamabad workshop, to ensure some linkages and lessons learnt during the Islamabad workshop could be shared with the Karachi team. Co-facilitators for the full 4 week program were Mrs Mhamooda Midwife Trainer Aga Khan Hyderbad and Miss Farhana, Senior Midwife Trainer Karimabad. Support for Clinical supervision was provide by Dr Shirestha, Resident OBGYN Karimabad and for community assignments by Administrative assistance was provided for the entire workshop by admin staff from Aga Khan Hospital for Women and Children Karimabad. Overall programmatic support was provided by of Dr Mallah, JSI Programme Manager for Sindh, based in Karachi and Dr Shuaib Khan in Ismabad.

The author wishes to express grateful thanks to all for their extremely dedicated and hard work and to all the staff of AKHSP Hospital for Women and Children Karimabad who worked hard to assist the first ToT in any way they could.

Last but not the lease contribution, insight, technical support and future planning to upscale the midwifery tutors training in Pakistan Dr. Abdul Rehman Pirzado, Program Officer MoH-UNFPA, Sindh, Pakistan for his coordination and technical support through out the first Training. He is arranging a training in August at AKMCC Hyderabad for trainers of community midwifery.

# EVALUATION of MTOT

The evaluations (*see section below for further details*), confirmed what the lead facilitators had observed,

1. Translation of English was much appreciated by all participants, especially in the early weeks of the program. As the course progressed, participants were able to work more in English.
2. Participants were initially uncomfortable and unhappy for many reasons, some to do with being away from home, others related to personal issues, (e.g. not been given sufficient time to make arrangements to attend the course) but in most cases, because of the new nature of teaching methodologies being applied and the material on adult learning. Initial problems with hostel accommodation, which contributed to their initial discomfort, were soon rectified. However, the lack of AC or fans and lack of generator was problematic, as participants were unable to spend the time they needed in the evenings doing their home assignments.
3. Participants who were non-resident were at a disadvantage, as the travel to the training site made their days very long. Also they missed the valuable learning and peer support that resulted in the discussion and additional tutorials that continued in the hostel, sometimes well into the night.
4. Week 1 was problematic, especially as the 1-day general strike meant we lost 1 entire day. This loss of the last day was a problem and meant that some of the content having to be held over to the next week – which was not easy to do. However, despite the initial problems of getting the program started, (e.g. the long opening ceremony, the long travel from the venue of the opening ceremony to the actual training center and the late arrival and participants etc.), by the end of week 1, all participants were well-engaged with the program and its’ content.
5. Week 2 was a great success. Participants, most of who had spent little time previously in the community, found the community aspect most enlightening and they enjoyed the time they spent in the community. By the end of the week, all participants verbalized that they could now appreciate what a rich and valuable experience the community could offer for learning. They all aid they were committed to arranging time in the community for their students, event for students on the nurse-midwife program. In addition, participants were able to begin to identify the attitudes, skills and knowledge required in a community midwife to ensure safe and competent practice.
6. As their confidence grew in working in the community, so did their excitement and involvement with the course materials. As did their willingness to disclose anxiety about the proposed community midwife program and their own skills and capacities as teachers of community midwives.
7. Week 3 content was much appreciated by the participants, as it dealt with new technical materials on management of complications.
8. The highlight of week 3 for most of the participants was the home birthing simulation session, which was undertaken in the hostel accommodation – so as to simulate the home environment. Participants were excited about the different birthing positions that can be used and were eager to experiment and practice simulate these positions.
9. Week 4 was also highly valued by participants. However, as the time for their own clinical assessment and the end of the program was in sight, they became a little anxious, however remained very well engaged with the materials and content. Indeed most days the sessions ended late due to participants questions etc.
10. During week 4, the reality of what was ahead of them also began to be a concern expressed by growing numbers of participants. Many became anxious about how they would manage this new community program, although all expressed their willingness to try to apply what they had learnt. One day was spent looking at how to structure the new 18 month program and the group work produced some interesting and innovative ideas. The result of the group work demonstrated that almost all participants had understood the concept of applying competency-based, adult learning approaches, to the new curriculum.
11. Despite their anxieties, all the participants both performed well in the Objective Structured Clinical Examination stations (OSCEs), and found the experience of OSCEs most valuable. As anticipated however, some were unhappy with their performance and their final assessment by the team of assessors.

# CONCLUSIONS

Taken as a whole, the MTOT program in Karachi was highly successful. The minor re-alignment of the course content, along with careful editing of the both facilitators guide and participants manual, especially for weeks 2, 3 and 4, proved invaluable. There was less confusion about the small group activities than in Islamabad. Overall, the products of group work were very good, sometimes of better quality than the workshop in Islamabad, in that they were more community and midwifery focused..

The absence of OBGYNs on the course gave the course a different feel to it and had both advantages and disadvantages. The main advantages being that more midwifery than obstetrics could be included. This was mainly because discussions in group work and plenary were more focused on midwifery and how to teach or develop midwifery competencies than technical clinical issues, as in Islamabad. Participants were also eager to learn new midwifery practices – whereas generally the OBGYNs took some persuading. For example, doctors were not easy to convince that not all women need to have IV lines inserted routinely, or that it was not essential for all babies to be bathed within 6 hours of birth (both appear to be common practices in Pakistan and both were common practices at the clinical sites in Islamabad and Karachi). Karimabad Hospital for Women and Children however does offer reasonably good women and baby -centered care. They did not practice routine enemas and shaving (unlike in Islamabd), many of their practices were based on sound evidence – however, there is still much room for improvement to make it a satisfactory clinical experience for community midwifery program.

From the various assessment and evaluations, all participants appear to have benefited from attending the training course, as to be expected on any workshop, some gained more than others. Those with the most experience found it hard to make changes but their eagerness to try was exemplary. Indeed, on one occasion one of the most experienced and senior participant became so frustrated with herself and her own performance she was reduced to tears. She became a great help and role model to others, especially the younger members. It is not clear that this level of disclosure would have been as high had the group contained OBGYNs .

All participants however need the opportunity to further hone both their clinical skills and use of facilitation and new adult learning technologies. Consequently, as recommended following the Islamabad MTOT a follow up program is advisable as part of the ongoing monitoring and evaluation of the participants on this workshop. Suggestions have been forwarded to PAIMAN how this follow up could be structured.

Some individual participants could, with a little more assistance and by working as part of a team, be used to run the same program for other midwife teachers.

The hostel accommodation was located close by and transport was arranged daily for pick up and return and for their clinical duties. Having the hostel off-site, did not cause any problem and maybe was a help to allow participants to have a change in venue. However, it would have been better for all participants to be resident or live close by. Also, because of the long days, hard work, the heavy reading and the need to do home assignments to be ready for the next day, it is essential that hostel accommodation should be given a high priority to ensure that maximum opportunities are afforded for learning to take place and that it is a comfortable place to work. It is important to ensure that if there is a likelihood of no electricity then alternatives are available and in place. Although the hotel was clean and well furnished, some initial problems did occur the first week, but were soon resolved. In particular, the immense heat in the bedrooms caused problems for many participants, especially the first few nights as they were adjusting to their new surroundings.

Finally, although less than in Islamabad, still, a number of logistical and administrative issues did arise during the course of the MTOT. These however were quickly resolved, thanks to the efforts of Dr Mallah, JSI Programme Manager for Sindh, based in Karachi.

Despite a briefing day in Karachi after the Islamabad workshop, still some minor challenges and issues arose around roles and responsibilities of different members of the facilitation team. It is clear from the two MTOT that the person who is designated as Administrator should not be include as a participant – they become too involved and then do not carry out their duties as a administrator correctly. It is also important that the lead facilitator and at least the main co-leader is free from other responsibilities for the duration of the workshop. This may mean that the lead and co-facilitator should not be from the institution hosting the workshop – clearly there is need for someone from the host institution to be part of the leadership of such workshops – and, it is crucial they undertake the administration role. However, to have the lead or co-leader constantly pulled away on other duties will not lead to a successful workshop; (it may also result in burn-out as the person attempts to do too much). This workshop, by its highly interactive and capacity building nature and that it seeks to build competence and confidence over a four week period, required full time participation and commitment from the leading team members. Guest used to give inputs must also be briefed and be familiar with the techniques, so that they too can become role models for the participants.

In conclusion, it is clear from feedback from participants that all participants found the workshop immensely useful. The only criticism they had, apart from accommodation in week one, was that all facilitators used in such workshops should be fully conversant with and committed to using adult learning techniques in their facilitation, so as to be a good role models for them.

# SPECIFIC ISSUES

* **Issues related to Midwifery Application Component of MTOT**

Many of the issues that arose during the application of adult learning to midwifery are the same as those that arose in Islamabad and were outlined in the previous report. However, because they are so important they will be repeated here.

It is important however to reiterate, that most of the participants initially found the task of up-skilling their midwifery and community practice competencies, whilst at the same time learning new approaches to education, was both daunting and at times difficult.

In addition, the wide range of competencies, experiences and capacities to function in English made it a challenging group to work with. All participants were a pleasure to work with it, as all were most eager to learn. Difficulties arose however when the more able members of the group tried to take on what they perceived as a supportive role for the quitters members or those less able to community in English, but actually had an effect of blocking equal participation. Some of these more vocal participants often tried to influence others, especially on technical issues however some of their views /opinions were out of date and contrary to recent scientific evidence.

It was not always easy to recognize the gaps in technical knowledge in the participants as sometimes, rather than translating what the quieter or non-English speaking participants were saying, the more vocal ones often moved to interpretations or explaining what they thought “*should have been said*”. The time working with participants in the clinical areas was most useful for clarifying many technical issues.

The structuring of this part of the course, building as it does on week 1 content, was thought to be most useful.

* **Issues around clinical practice**

Despite the attempts to go on community placements with the participants, it was not possible to work with each participant in the community. The clinical intra-partum rotation experience was organized to take place over a weekend (participants been allocated over Friday night to Sunday and included morning, afternoon and evening shifts). This made it slightly easier to work with each participant, but still it was not possible to observe the practices of all participants.

Although PIMS had identified clinical supervisors to work with participants, the main issue was that many of the practices in the clinical area were themselves outdated and not in line with recent scientific evidence. Therefore, they were not always in line with classroom sessions but more importantly were often not always appropriate for practitioners that will work primarily in the community.

**RECOMMENDATION:** *When arranging future programs it will be import to ensure that clinical sites are as well prepared as the training facilities; this should include discussions with clinical staff to agree/revise standards of care and protocols that the participants will be obliged to follow*. *It is essential that standards and protocols are based on best available evidence and support women and baby-centered care as well as the midwifery philosophy/model.*

The focus should be as much as possible to gain competency in the skills required for community practice; for intra-partum care this means being able to conduct a birth with as few interventions as possible. Also, to ensure that skills that will be crucial in the community for saving lives of mothers and babies, e.g. correct application of active management of the third stage and episiotomies (which in the community would only be undertaken for fetal distress in the second stage of labour) will be prioritized and participants will be permitted hands-on practice.

It is equally important to resolve *before the training program*, any protocols that cannot be changed to be in line with current evidence – for example the issue of bathing newborns soon after birth. Where practices or alternatives - such as carefully cleaning off blood on newborns after birth, rather than a full bath, can not be resolved, these should be included in the classroom sessions to explain both the evidence and the reasons why this is not possible in the local situation.

**RECOMMENDATION:** *A full clinical audit be conducted in facilities to be used during training session prior to MTOT commencing*.

This will allow opportunity to highlight such issues prior to commencing the course, so that content can be adjusted accordingly or, in-serve training given to the clinical areas prior to commencing the MTOT. Hands on practice in the clinical area and congruence between theory, classroom simulations and real practice is vital to adult learning and therefore, this component needs to be as well organized as technical classroom sessions.

* **Issues around Community Experience**

The community experience was well received and rated highly by all participants and was well organized much to the hard work and dedication of AK staff. It was clear than many had participants had little previous experience of work in the community, except for the nurse tutors who worked in schools of Public Health.

Participants valued highly the staged way in which the community visits were organized, in particular they enjoyed the community mapping on day 3. Some participants had previous knowledge of undertaking a community mapping exercise, but it ha always been to a very structured format that often missed many of the socio-cultural aspects. Participants enjoyed the freedom of being able to express their findings as they wished; indeed many of the maps produced were very illuminating and very creative.

In particular, it was most obvious from their comments and de-briefings that, the participants perceptions of the community, their attitudes towards the community, and to the knowledge that community members have and their potential for improving the health status of women and babies, were completely changed during the first week.

It was also obvious from comments and report back, that participant who initially expressed reserve, were amongst the most anxious to go back and provide care, during weeks 3 and 4.

Participants were also able by the end of the program to recognize the value of building up trust and confidence with the community. Many participants commented that by the 4th week, women in the community who they had seen in week 2 and 3, began to disclose personal information and concerns that they had not been able to discuss with other health workers in the community.

The activity of taking participants on short courses into the community however does raise some important dilemmas and ethical issues that have to be addressed – in the case of the 2 communities used for the MTOT. Raising expectations by the community and then not being able to carry out activities and offering services can be counterproductive and community members may begin to feel resentful if they feel they are being used, but not seeing any gains for themselves. These issues were discussed during week 3 with the participants. In week 4 a specific activity was developed whereby the participants went back to their communities to deal with this issue. One of the activities they had to do during their time in the community in week 4 was, using participatory evaluation methods introduced during week 2, to work with the community to identify their perceptions of the major issues facing the community for safe motherhood. Further, they were asked to explore with the community how the community felt these should be/ could be addressed. Participants were then asked to inform the community that whilst they personally would not be able to follow up on these, they would report their findings to the local RHC and to AK for them to follow up.

The participatory evaluation exercise in week 4 showed that communities were also appreciative of the participants taking an interest and going to their community to provide antenatal and postnatal care, and to offer health education sessions and help them with their problems. One of two teams were able to assist their communities develop realistic action plans for an issue that was concerning them – usually lack of a female health worker in their area). Although one are the problems was lack of information and education on pregnancy and they community decided that they would design posters and have announcements of times and venues of sessions made at the local masjid.

*This issue just underlines the importance of utilizing training centers that have community sites attached and in which they are already activities and offering some services.*

**RECOMMENDATIONS:** *All training sites used for Training trains of community midwives must have good links with the community and the community assignments must be carried out in collaboration with local staff. The staff must be committed to follow up any issues identified by the participants during their assignments.*

* **Evaluation of MTOT and capacities of the participants**

During the life of the course, as explained in the report of the first MTOT, a number of feedback loops and systems were used to evaluate how the participants were feeling as the course was progressing, and to resolve any issues as they arose. The Steering group each day was particularly useful and well valued by participants and co-facilitators.

During week 2, when the participants were in the community all day, it was decided not to hold a Steering Group meeting, but rather to ask the participants to arrange their own meeting without facilitators and co-facilitators. They were asked to discuss a number of issues, such as what the group were finding most useful and what they would like to change about the facilitators style ways of working etc. Additionally, they were asked to identify and discuss any issues or problems for themselves that they have faced during the community visits, in particular any logistic and / or administrative issues. They were requested to be as specific as possible and to propose realistic, practical solutions. The Home team then reported back on the conclusions of the participants meeting, as well as provided write notes for the facilitators outlining their solutions to problems faced. All participants and the facilitators rated this activity equally well equally.

In addition to the ongoing evaluation a number of structured evaluation activities took place during week 4, including a post-tests self evaluation of midwifery skills and of adult learning methodologies, as well as a structured assessment of their clinical skills.

In terms of summative evaluation of the course participants were asked to record their highs and lows over the during of the course using their reflective journals. They were asked to use a prepared form showing increases in happiness and sadness depicted as number of smiley or sad faces (1 being a little and 3 being most). They could record a neutral state.

Specifically they were asked to plot

* Their high and low point for each week
* What they were feeling on the first day of each week
* Feelings on first and last day
* Any significant events or causes they could identify for their feelings

They then shared this with the group. An average profile was made from all individuals maps and participants agreed that it reflected the major feelings of the group (included as annex 2).

* **Assessment of clinical (Midwifery) knowledge and skills**

A pre -test of midwifery knowledge was administered during week 2, and repeated again as a post-test in week 4. Scores in week 4 showed an increase in clinical knowledge in most participants with one of the weaker participants increasing their initial score by 6 points.

A self-assessment tool, using the core midwifery competencies as identified by ICM was administered at the beginning of week 3 and then again during week 4. Self-assessment scores used a competency rating based on Benner’s work from Novice to Expert.

**Competency levels used**:

1 - Equal to that expected of a novice, have no knowledge of this or just beginning to develop skills

2 - Basic competency almost met, has knowledge pf what and how to do, but need much more practice or, practice is outdated

3 - Competent, has practiced this in the past, but not yet confident, or does not work in a smooth efficient manner

4 - Competent and confident - and able to teach others.

T**he same competency rating was used for the OSCEs.**

In the majority of cases competency scores increased from week 3 to 4. In a few participants, the scores in week 4 were lower than in week 3. It is more likely that the week 4 score were a more realistic assessment as participants became for confident they found it easier to acknowledged their own deficiencies and learning needs. Some scored themselves however an certain items in week 4 than in week 3. They explained the changed were due to the fact that during week 3 the sessions and experiences help them realize how a certain skills or procedures should be undertaken correct – this was especially the case for the management of post part hemorrhage and for immediate management of eclampsia.

**Observation and assessment of skills using Objective Structured Clinical Examination stations (OSCEs)**

These followed the basic organization of OSCEs as practiced in most medical schools and some nursing and midwifery schools.

**4 stations were established as follows**

Station 1 - simulation practice birthing,

Station 2 – simulation practice neonatal resuscitation using Ambu bag

Station 3 – partograph (static station)

Station 4 – antenatal assessment – on live client.

All stations had 2 assessors per room with 2 identical stations operating simultaneously with a divider so as to allow each participant to practice undisturbed - except station 3 - the partograph station which was a static OSCE. Here the participants were asked to i) transfer information onto a partograph, and ii) to draw some simple conclusion from these recordings. This station tested their comprehension of using partographs, ability to make recording correctly and tested simple analytical skills.

All other stations used a agreed checklist -adapted from the ones used by participants during clinical practice, and were based on the WHO SEARO standards of midwifery practice (as the most up to date evidence-based midwifery standards available in country at the time).

When all participants had rotated around all stations the assessors sat together to complete a competency profile sheet, agree the overall competency level, and make some recommendations for feedback to individual participants.

A few participants, those for who partograph were completely new, obtained low scores in the partograph station – these have been advised to take some remedial action on their return to their place of work.

One or two participants had low scores for the newborn resuscitation – these too have been advised and it has been recommended that they be included in the next emergency obstetric care (EMOC) course. One participant turned up late for this station and so was unable to complete the task in time. There was no reason for late arrival other than her mismanagement of herself.

In the birthing stations most participants were able to follow the steps outline in the Midwifery standard and checklist.

Most participants scored well in the antenatal station, although one of two had problems due to administrative issues in the clinic, for example one participant was asked to do an examination of a postnatal women, which took her initially by surprise, as she was expecting an antenatal client. .

After all stations had been completed, the assessors sat, as a team, to compile and agreed the overall competency scoring. Both overall and the levels attained for each station were made available to each participant during a one-to-one interview.

**Notes prepared specifically for MoH-UNFPA by Della R Sherratt, Senior International Midwifery Adviser and Trainer, ICM, and lead facilitator to MTOT, Karachi.**