The Sustainable Volunteering Project

SVP Policy Report 2014:5

Emergency Obstetric Skills Training in the Sustainable Volunteering Project: A Case Study

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The SVP project is funded by the Health Partnership Scheme which is managed by The Tropical
Health & Education Trust (THET) on behalf of the Department for International Development
(DFID). Any views represented in this report are those of the author.

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Introduction

One of the core objectives of the Sustainable Volunteering Project, since its inception included capacity-building in emergency obstetric skills. Partners within the Ugandan Maternal Hub and beyond have discussed issues concerning the curriculum and mode of delivery of this form of continuing professional development over the past two years.

Serious and valid concerns have been expressed about international partners coming into Ugandan facilities and delivering a wide variety of courses and approaches generating at best duplication and, at times, confusion and contradiction. A firmer stance has been taken in Mulago National Referral Hospital over the past year requiring (quite rightly) that foreign partners comply with locally designated protocols to avoid this problem.

This short report describes a recent intervention that took place in Kampala but specifically focused on those, often neglected, cadres of staff based in the referral Health Centres. Whilst this report focuses on a specific two-day training intervention, the capacity-building objectives of the SVP are generally more focused on on-the-job mentoring and co-working. This course is designed as an integral part of a wider process.

The report is not designed to advocate any particular curriculum or mode of delivery but rather to describe one approach. We hope it will generate a constructive dialogue and encourage greater partnership working and collaboration in this important area of capacity-building.

‘When I see emergencies now I take it more seriously and focus all my attention on it, irrespective of what else is going on. I have learnt to prioritise and triage’

Course participant

1 Strengthening referral systems is another linked objective of the SVP. This is discussed in more detail in Policy Report 3.

2 The importance of co-presence to the SVP mode of engagement is discussed in Policy Report 1.
The Kampala Emergency Obstetric Training Course, May 2014

The Emergency Obstetric Training Course was arranged by Dr Maia Walsh, with the support of Dr Helen Allot, FRCOG, Consultant Obstetrician, Royal Berkshire NHS Foundation trust and lead in Reading/Kisiizi partnership.

The course is designed to take participants through a structured approach to the management of obstetric and neonatal emergencies. These are areas identified as a priority in Uganda. It was compiled with a knowledge and understanding of working in a challenging and low resource setting. The course has previously been delivered in Kisiizi (three times) and Mbarara. There are plans to deliver the course in Fort Portal in September.

Mobility and transportation continues to affect maternal morbidity and mortality in Uganda. Recent mortality reviews suggest that patients requiring transfer to a higher level health care facility often do not receive necessary stabilisation prior to transfer. This results in an avoidable clinical deterioration and increase in maternal morbidity and mortality. With this in mind, the Emergency Obstetric course aimed to train multi-disciplinary staff from referral Health Centres and the National Referral Hospital.

Course Description

This intensive two-day course was designed to address the main causes of maternal mortality in resource poor settings in a systematic fashion. Early warning signs are emphasised as a means of detecting complications before they become immediately life threatening. The course also teaches communication skills and addresses the need for timely decision-making and stabilisation of the patient prior to timely transfer to appropriate comprehensive facilities. The management of obstetric emergencies including breech and twin delivery and shoulder dystocia is taught in hands-on skill sessions using mannequins and models taken to Uganda by Dr Allott, together with the management of cord prolapse, manual removal and uterine inversion. The use of the partograph as a decision-making tool to address failure to progress in labour is taught via a class exercise.

The course employs a variety of different learning approaches including tutorials, simulated patient management scenarios, practical skill sessions, class exercises, discussions and DVDs. Feedback for each session is collated and there is a pre and post course knowledge assessment in order to monitor learning throughout the course.

The course took place over two days at Mulago Guesthouse Conference Centre. It consisted of tutorials and interactive small group sessions, which included simulated patient management scenarios and practical skill sessions such as breech delivery. This format gives participants the opportunity to learn by doing.

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*For discussion of the role of transport in maternal delays see Policy Report 3.*
A total of 30 staff attended the training; 20 midwives from three Health centre IV facilities (Kisenye, Kasangati and Kabbubu) and 6 interns and 4 medical officers from Mulago Hospital.

Dr Helen Allot led the tutorials supported by a group of facilitators who led the small group teaching sessions in pairs. The facilitators included two SVP volunteers, Drs Maia Walsh and Emma Redshaw. An important development in this latest version of the course was the involvement of 4 Ugandan facilitators. Two doctors and two midwives had recently returned from a 3 –month period of intense training leading to a Diploma in Reproductive Health for Developing Countries at the Liverpool School of Tropical Medicine (sponsored through Commonwealth Professional Fellowships). The placements were arranged through the Liverpool Mulago Partnership.

The two doctors are medical officers from two Health Centre IV facilities whilst the midwives were working on the LMP-sponsored High Dependency Unit in Mulago Hospital.

Key themes of the LSTM Diploma included concepts of sexual and reproductive health, maternal and new born health (MNBH), safe motherhood and strategies to improve MNH and reduce maternal, perinatal and neonatal mortality, including in particular key strategies as Skilled Attendance at Birth and Emergency Obstetric Care.

Having the returning fellows involved as facilitators on the Emergency Obstetric Course was important. Facilitating allowed them to feedback the knowledge gained from the course in the UK, demonstrate new and improved practical skills as well as improve their confidence in teaching in a supported environment, which will help them to deliver teaching and training in their local health setting.

‘Since the course I have developed an interest in joining the quality improvement team on my unit to evaluate what the real problems are and helping to find solutions, that was one of the course units which I enjoyed’

Course participant

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4 Dr Maia Walsh and Dr Emma Redshaw are Post F2 Doctors volunteering with the Ugandan Maternal and Newborn Hub. Dr Walsh is co-funded by the RCOG/SVP.

5 Details of the course can be found on the LSTM website: http://www.lstmed.ac.uk/learning--teaching/lstm-courses/professional-diplomas/drh/
Training the Trainers

Developing the Ugandan clinicians’ teaching skills by having them as facilitators provided an opportunity to build the ‘Train the trainers’ component undertaken in Fort Portal. It is hoped that the Ugandan facilitators will take part again, thus building a cadre of trainers so the course can continue to develop, and in time become more Ugandan led. The new Ugandan facilitators will be paired up with more experienced mentors in Fort Portal. This will enable continued development of their teaching skills and ensure they deliver high quality training. Once the level of management, content and delivery is satisfactory, they can become certified facilitators.

Teaching Style

A meeting was held prior to the Kampala workshop to go through the course schedule and details. Each facilitator was given a Facilitator Guide which described the courses aims and objectives as well as some advice and tips on how to facilitate the breakout sessions, how to deal with any difficult situations as well as health and safety considerations.

A 20-30 minute tutorial was given on each topic followed by a 20 minute small group teaching practical session. Facilitators were encouraged to make sessions inclusive and not to leave any participants out or allow more forthcoming participants to dominate. The facilitator guide includes the following tips (by way of illustration):

‘At the start of each session it is important to share the learning objectives with the group’

‘If someone is being too forthcoming, deliberately look at others when asking a question’.

The facilitator guide goes through each topic, explaining:

- The learning objectives for the session;
- The equipment required and;
- How to set up real life scenarios.

‘It was such an exciting period to be in Liverpool, The course was so informative, rich in content and has greatly changed everything around me’

‘I recommend all health workers to do this course. The issues of maternal death are global and the causes are all preventable, so we need to team up’

Commonwealth Fellow’s feedback on course
The Curriculum

The main areas covered over the two day included:

**ABC**- Basic emergency assessment and management of patient using structured approach – airway, breathing, circulation. Taught through tutorial, practical demonstration and break out groups where participants got a chance to practice.

**Neo Natal Resuscitation**-Tutorial and practical demonstration on assessment and resuscitation of the neonate using the ‘Helping babies breathe’ algorithm endorsed by WHO. This is the preferred main protocol in Ugandan facilities. Small group sessions where participants practiced neonatal resuscitation on mannequins with feedback and teaching from facilitators.

**Observations and Early Warning Scores**-Tutorial about the importance of recording observations and using early warning scores to identify deteriorating patients early and act promptly avoiding delays. Participants then tried worked examples where they calculated the scores and said how they would respond to them for different patients.

**PET and Eclampsia**-Tutorial on the management of PET and eclampsia and the opportunity to practically work through patient management scenarios in small groups.

**Haemorrhage**-Tutorial on the causes and management of haemorrhage in pregnancy and post partum. This was followed by small group sessions on recognising significant blood loss and simulated patient management scenarios for bleeding in pregnancy and post partum.

**Sepsis**-Tutorials on recognition and management of sepsis in the adult and neonate. Neonatal material based on helping baby’s breath algorithm and additionally included cord care and management of hypothermia followed by simulated patient management scenarios.

**Vacuum & breech delivery**-Tutorial and video on techniques in breech and vacuum delivery followed by a practical skills session to practice these techniques.

**Recognition and management of poor progress in labour**-Tutorial on the importance of partographs and how to use them followed by worked examples where participants completed partographs for a variety of patient scenarios.

**Twins Delivery**-Tutorial on safe delivery of twins and common complications.

**Shoulder Dystocia**-Small group practical session demonstrating the management of shoulder dystocia with the opportunity for participants to practice the techniques involved.
Assessment of Learning

The pre and post course knowledge assessment test involved a set of 20 true/false questions. This was given out at the beginning of day one and the end of day two. The 20 questions were the same pre and post. For example:

1. Low blood pressure is an early sign in haemorrhage T/F
2. Intravenous fluid should be given at a rate of 1 litre every 2 hours in hypovolaemic shock T/F
3. Raised respiratory rate is a sensitive measure in shock T/F
4. In septic shock patients should be given fluids at a rate of 1 litre over 20 minutes T/F

The tests results show improvement in all of the attendant’s post course knowledge. The Midwives show the biggest improvement, emphasising the importance of focusing on this area of staff with future training.

Post Course Mentoring

Since the course the two SVP volunteers who acted as facilitators have worked alongside participants in health centres. The volunteers noted improvements in their behaviour and practice. The midwives have shown improvement in their clinical practice and drug knowledge, as well as spotting and managing obstetric emergencies. It seems the practical sessions and simulated patient management scenarios were an important and successful element of the course for all participants. Having multi-disciplinary professionals working together in the course has also improved communication and relationships between staff. When asked if she felt intimidated or uncomfortable working alongside Doctors at the course, a midwife laughed and said ‘no way, I enjoyed it very much’.

Working in Mulago Hospital with an intern 6 who attended, an SVP volunteer noted that observations were being taken with greater care and with closer attention to detail. The interns were also sharing their improved knowledge with other interns on the ward, it was received with interest and enthusiasm and was actively being used in clinical practice. One recommended: “The confidence with the improved knowledge was infectious.”

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<thead>
<tr>
<th>Role</th>
<th>Pre Course</th>
<th>Post Course</th>
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<tbody>
<tr>
<td>Doctors</td>
<td>77.5%</td>
<td>87.5%</td>
</tr>
<tr>
<td>Registered Midwives</td>
<td>58.5%</td>
<td>83.5%</td>
</tr>
<tr>
<td>Enrolled Midwives</td>
<td>62.5%</td>
<td>81.5%</td>
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Figure 1 Pre and Post Test Results

6 An intern is the equivalent of an F1- F2 Junior Doctor in the UK

‘Some staff, they know about these things, others they don’t. I talk to Sister Josephine as she also went on the course, about the mothers who have been sick and what I did for them, it helps me to learn’

Course participant
Budget and Logistics

The training took place at Mulago Guesthouse conference centre. This facility was developed with support from SVP and is hired out at a cost of £30 per day. However, as the training requires separate rooms for the small teaching breakout sessions, a large tent was also hired.

A travel stipend was provided for participants. A larger stipend was given to those travelling from outside of Kampala and accommodation costs for those travelling from a long distance were also covered. Ugandan facilitators were given a daily stipend for their contribution to the course as this was outside of their normal working schedule. Food, drink, equipment and photocopying were also purchased for the two day course. The total costs of delivery of the course was £1295.00.

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<tbody>
<tr>
<td>Equipment (Inc. Tent, photocopying etc)</td>
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<tr>
<td>Travel/ Accommodation/ Stipend</td>
<td>£330.00</td>
</tr>
<tr>
<td>Food/ Drink</td>
<td>£190.00</td>
</tr>
<tr>
<td>Dr Helen Allot’s Flight</td>
<td>£650.00</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>£1295.00</strong></td>
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Suggestions and Feedback

Participants were invited to provide feedback on the course. Overall, the course was experienced to have ran smoothly. Some of the facilitators suggested that the small group sessions could be longer to ensure that everyone has a chance to lead a patient management scenario or practice the practical skill being taught. Some respondents requested follow-up training: ‘I think a course refresher is needed and I know a lot of doctors who would like to go on it.’

‘A few days after the course I had a patient overnight with severe PET, I felt I managed it better than I would have previously, I was confident to manage instead of referring to Mulago’

Course participant
Future

The course represents one intervention to support capacity building in the area of emergency obstetric training. It enhanced the profile of the Ugandan Facilitators and enabled them to develop their skills in teaching within their own Health Centres, filtering their new skills and knowledge through to the midwives and nurses within the Health Centre and increasing local staff knowledge as well improving practice. A ‘Train the Trainer’ course has now been arranged and will take place in Fort Portal in September involving the Ugandan Facilitators who took part in this course.

Contact Details

For further details of the Sustainable Volunteering Project, see: www.LMPcharity.org

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