

JIMMA, ETHIOPIA

NOVEMBER 2012



*AAGBI International Relations
Committee Travel Grant Report*



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JIMMA UNIVERSITY SPECIALISED HOSPITAL VISITING LECTURER PROGRAMME

BACKGROUND

Ethiopia has a population of over 83 million with a life expectancy at birth of 54 years. In 2010, 38% and 12% of the population had access to improved drinking water and sanitation respectively. Access to healthcare is poor and the physician density is less than 0.5 per 10,000 of the population, whilst the equivalent figure in most of Europe is over 30 physicians for the same population.

Jimma University Specialised Hospital (JUSH) is a 450-bedded university teaching and referral hospital situated 350km to the southwest of Addis Ababa. As the only referral hospital for South Western Ethiopia it provides services for approximately 90,000 patients every year and has a catchment population of approximately 15 million

people. Since 2006 its facilities have included a six-bedded Intensive Care Unit (ICU) that has capacity for three ventilated patients.

In the Department of Anaesthesia there are two medically qualified anaesthetists (Anaesthesiologists) with the remainder of anaesthetic care being provided by other “anaesthetists” with anything from three months to four years (BSc) training. Additionally, there are now five Anaesthetists who have recently returned from Addis Ababa where they underwent further training, completing an MSc in Anaesthesia. Future plans involve training doctors at Jimma University to become Anaesthesiologists over the course of a three-year programme.

Operation Smile has been visiting Ethiopia for several years and

volunteers have recognised a need for further training and delivery of education in the Department of Anaesthesia. Earlier this year, Dr Phil McDonald (Operation Smile Medical Director) liaised with Dr Yemane Ayele (Head of Anaesthesiology, Jimma University) and established a partnership to allow “Visiting Lecturers” from the UK to spend a period of time working at Jimma University as part of a sustainable educational programme. As the first Visiting Lecturer of this kind, I spent a period of six weeks teaching on a voluntary basis in the hospital and University.



KEY AIMS FOR THE VISITING LECTURER PROGRAMME AUGUST – OCTOBER 2012

1. Lifebox Follow-up

Follow-up of oximeters and training delivered in March 2012 by the Operation Smile team



2. WHO Safe Surgical checklist

Introduction and implementation of the WHO Safe Surgical Checklist in theatres at Jimma University Hospital

3. Jimma Pain Guideline

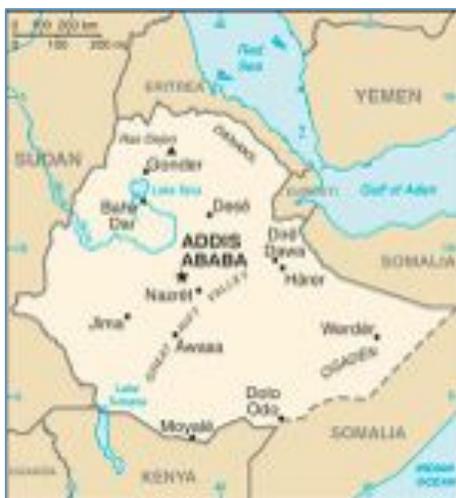
To develop and introduce a guideline for the management of pain at Jimma University

4. Life Support Teaching

To deliver practical and lecture-based resuscitation training to interns, residents and nursing staff

5. Postgraduate anaesthesia syllabus

To develop a postgraduate syllabus for doctors training in Anaesthesia at Jimma University Specialised Hospital



“NOW, THANKS TO YOU WE ARE USING THIS PULSE OXIMETER AND SAFETY CHECKLIST IN OUR HOSPITAL TO SAVE LIFE AND HAVE SAFE SURGERY...”

During my first few days at JUSH I established key objectives in conjunction with the Head of Anaesthesia (left). Over the next six weeks I worked with nursing, theatre and medical staff towards achieving these aims.

LIFEBOX FOLLOW-UP

During an Operation Smile mission to Jimma University Hospital in March 2012, the Lifebox oximetry training programme was delivered to 13 anaesthetists from nine hospitals in south-western Ethiopia and 15 oximeters were subsequently donated by Lifebox. The aim of this follow-up was to assess the efficacy of the pulse oximeter donation programme. Each anaesthetist who had received the initial Lifebox training was followed up by telephone and underwent a semi-structured interview in order to

establish the efficacy of the training and sustainability of the equipment donation. Results of the survey showed that all anaesthetists were able to accurately answer knowledge questions designed to assess their understanding of the initial training. In 100% cases, the pulse oximeters that had been donated were functioning and in regular use. It was evident that the education and training delivered by the Operation Smile/Lifebox collaboration had been successful. In addition, the pulse oximeters donated were effective in the environment for which they were intended and were being used appropriately. This follow-up also highlighted the need for further training and donations in southwestern Ethiopia.



WHO SAFE SURGICAL CHECKLIST

This was introduced to the main JUSH theatres at over a six-week period through a combination of presentations and practical training involving over 50 staff both in and out of theatre. Despite initial resistance to its use, it was adopted into routine practice in the three main theatres during daytime hours after a six-week period. A degree of ownership was encouraged by personalising the checklist for Jimma University Hospital. The use of inter-theatre competitions and *YouTube* videos made in Addis Ababa in Amharic (the predominant local language) helped engage theatre staff in its implementation.

POSTGRADUATE ANAESTHESIA SYLLABUS

Over the course of my time in Jimma. I also worked on developing a postgraduate teaching syllabus for doctors wishing to train in Anaesthesia. This involved co-ordinating with existing Anaesthetic staff and the University in compiling a syllabus for a three-year training programme in Anaesthesia.

JIMMA UNIVERSITY HOSPITAL PAIN GUIDELINE

A recent MSc study revealed that pain has historically been poorly managed at JUSH. Specific guidelines for pain management were designed for JUSH and introduced to all surgical wards, ICU and to the nursing staff, interns and residents running these areas. This was preceded by a number of teaching sessions involving over 150 staff on issues surrounding pain management and its importance.

This teaching received mixed feedback reflecting the need for further training and education in pain management. The guideline will require follow-up training and updates for staff that have already been trained by successive visiting lecturers.

“...IT IS ACCEPTABLE FOR PATIENTS TO HURT IN OUR CULTURE...”

There are currently many barriers to analgesia prescribing which include the culture that it is acceptable for patients to experience pain. This possibly stems from lack of undergraduate teaching regarding pain management. Despite the guideline having been specifically designed for Jimma employing available medications, there is still resistance to prescribing. Finally, even when the correct analgesics are prescribed, they are often not affordable to patients.

“...IT IS SOMETHING THAT IS IGNORED IN OUR HOSPITAL THAT WOULD HELP OUR FUTURE PRACTICE POSITIVELY...”



LIFE SUPPORT & SIMULATION TRAINING

During the six-week period I conducted training in the recognition of the sick patient and life support training to healthcare professionals including nursing staff, interns and residents. Laerdal kindly donated a manikin for life support training which was shipped to Ethiopia. This was also useful for simulation training with anaesthetic staff and will be a fantastic resource for future Visiting lecturers. Practical training of this kind was relatively new to most of those that I taught but the feedback received was overwhelmingly positive and assessments revealed a positive impact on knowledge following teaching sessions.



JIMMA REFLECTIONS & FUTURE DIRECTIONS

The six weeks that I spent in Jimma also involved some Obstetric anaesthesia and a study prompted by ICU mortality rates in excess of 50% into ICU outcomes over a 12-month period, with a view to improving morbidity and patient survival. In these two areas in addition to those previously mentioned there are a number of issues still to be identified and addressed. In this respect it is fantastic to report that the next Visiting Lecturer is soon to start at Jimma and continue working on some of the areas that have been highlighted.

It has been tremendously exciting to have been involved in this sustainable and mutually beneficial educational project. Through this new partnership, other UK anaesthetists will be in have the opportunity to continue to improve patient care in Ethiopia.



This project would not have been possible without the help of Dr Phil McDonald who consistently provided the necessary support, enthusiasm and advice to allow me to bring his vision for providing anaesthesia-based education at Jimma University to fruition. In addition the commitment of the Operation Smile and Lifebox teams has been invaluable and it has been a privilege to benefit from their combined wealth of experience.

Finally, thank you to the AAGBI for their valuable assistance with funding for the project.



ZOE SMITH

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