

BSSH Overseas Committee Supported Educational Trip to Sierra Leone
March 26th – 30th 2019

This trip was part of the BSSH Overseas Committee goal of improving the quality of hand trauma management in Sierra Leone. The aim of the trip was to deliver hand trauma management training to as many health care workers as possible. BSSH has had a presence in Sierra Leone since 2010, supporting Resurge Africa's ambitious goal of creating the country's first reconstructive surgical service. Early years have focused on Holy Spirit Hospital, Makeni. We are close to the end of phase 1 of the project of upskilling the hospital staff ready to receive 2 Sierra Leonean Doctors who are due to complete reconstructive surgical training in Ghana in 2019/2020.

It was felt timely to deliver hand trauma training to the country's Medical Officers, Surgical Residents, House Officers and Surgical Advanced Community Health Officers to help improve the initial management of hand injuries and create a referral network for the more complex cases (see appendix 1 for staffing terminology).

Discussion of cases and a Practical Session



Logistical support for training was provided by Dickya and Sheena Labicane who have been providing on-the-ground support on behalf of Resurge Africa. Training was delivered in parallel with primary burns care management training delivered by Interburns. Their faculty consisted of Stuart Watson, Consultant Plastic Surgeon, Glasgow and Opoku Ampomah, Specialist Reconstructive Surgeon, Ghana.

A standard one day training programme was developed based on the BSSH supported training to Surgical Trainees and Orthopaedic Clinical Officers in Malawi (see below). The schedule consisted of 4 individual days of training to different audiences in Masanga Hospital, the training base for the SACHO's, Holy Spirit Hospital, Makeni, planned site for the country's first Reconstructive Surgical Unit and 2 days to different audiences at Connaught Hospital, Freetown, the base for the Medical School and Surgical Residency Programme.

Abdulai Jalloh



Faculty consisted of Steve Hodgson, Consultant Orthopaedic Surgeon, Jonathan Jones, Consultant Orthopaedic Surgeon, Pascale Smith, Hand Therapist nominated by British Association of Hand Therapists and Abdulai Jalloh, local surgeon due to complete reconstructive surgical training in Ghana and return to Sierra Leone in late 2019. Programme consisted of didactic lectures as follows:-

- Hand anatomy
- Hand injury assessment
- Hand and wrist fracture management
- Hand therapy principles
- Tendon injuries
- Hand infections

There were then practical sessions on digital nerve block, splinting, hand incisions, radiological interpretation and tendon repair.

Digital nerve block practical



- Day 1 (14 delegates) was delivered to a mixture of Medical Officers and SACHO's at Masanga Hospital.
- Day 2 (32 delegates) to Medical Officers, SACHO's and Nurses in Makeni.
- Day 3 (26 delegates) to a mixture of Nurses and Therapists in Freetown.
- Day 4 (26 delegates) to Surgical Residents, Medical Officers, Interns and Medical Students.

Each day started with a pre-course test consisting of true/false questions on hand trauma management with a further test performed at the end of the day. The vast majority of delegates achieved improved scores. Course evaluation was very positive with an overall rating of 4.3/5 (see appendix 2). Written comments were collected and will help inform further training both in Sierra Leone and for other overseas projects.

Freetown Group



Whilst in Freetown we also had the opportunity to meet one evening with senior staff from the Medical School and Ministry of Health, including the directors of the Surgical Residency Training Programme and Medical School. This has helped us develop further plans which include continuing to support development of the reconstructive surgical service including mentorship of Dr Jalloh, a commitment to deliver further hand surgery training within Sierra Leone on an annual basis and exploring more formal links for BSSH to support surgical training across the 16 countries in the West African College of Surgery.

Overall it was great pleasure to deliver the training. The delegates demonstrated a huge appetite for learning and reasonable pre-existing anatomical knowledge. There was excellent organisational support by the Resurge Africa Team. There were some challenges regarding venue, logistics and delegate timekeeping. These were overcome by the faculty demonstrating great flexibility, positivity and patience.

As with all trips of this type we identified areas for improvement transferable to other projects. These were based on comprehensive delegate feedback and faculty reflection.

1. Provision of pre-course material particularly on subjects such as hand anatomy would be very well received. The format would depend upon logistics and would require the support of local hosts.
2. Provision of presentations with USB sticks felt to be most useful to delegates in LMIC's.
3. Therapy involvement is a key component to any hand surgery education. Determining the number of local therapists in advance by local hosts to be encouraged. If sufficient numbers consider running a parallel course.
4. A short pre and post course test is invaluable to demonstrate the effectiveness of the training. A BSSH resource of validated questions suitable to be tailored to individual courses would be helpful.
5. Local organisational capacity with clear commitment of the success of the course is vital. Local host responsibilities include delegate invitations, identification and instructions, venue organisation and pre and post course liaison with BSSH faculty.

In conclusion this was a successful trip building on existing BSSH supported work in Sierra Leone. It has helped raise the profile of hand surgery for nearly 100 health workers including many of the country's future surgeon's. It has opened up further opportunities for BSSH work in West Africa. Its success was built on using educational materials and training experience based on previous BSSH overseas work. We would like to thank Rotary Club of Bolton le Moors who have helped support this initiative

Steve Hodgson April 2019

Appendices

Appendix 1

Medical Officer = medically qualified doctor providing all medical care, including basic surgery in District Hospitals.

Resident = Doctors on the country's newly established Surgical Residency Programme providing 3 years of training in the generality of surgery before travelling to Ghana or Nigeria to complete a further 3 years of speciality training. On passing the West African Surgical Exam these doctors will return to the country as accredited specialists.

Interns = Country's equivalent of Foundation Doctors who do four 6 months placements on obtaining a medical degree.

Surgical Advanced Community Health Officers = Country's equivalent of Physician's Associates who train for 3 years on a Graduate Programme as Community Health Officers and then complete 2 years of surgical training, on qualification working in District Hospitals performing surgery such as appendicectomy, hernia repair and caesarean section. Core curriculum includes management of open fractures and tendon repairs.

Appendix 2 – Course Evaluation

5 = Excellent	4 = Very good	3 = Good	2 = Fair	1 = Poor
Functional anatomy		J. Jones	4.0	
Assessment of the injured hand		J. Jones	4.2	
Management of hand & wrist fractures		S Hodgson	4.0	
Hand Therapy Principles		P. Smith	4.1	
Tendon repair		A. Jalloh	3.9	
Hand infections		S. Hodgson	4.2	
Digital block practical			4.0	
Splinting practical			4.3	
Hand incision practical			3.7	
Radiology theoretical			3.7	
Case discussions			4.2	
Overall rating			4.3	