BSSH Sierra Leone Visit November 2024

Background

The BSSH have been undertaking 1-2 trips to Sierra Leone every one to two years to perform aspects of hand surgery, and where appropriate, other operations suitable for orthopaedic and plastic consultants for over 20 years. These have typically been for between 7-14 days. This was the first visit to Sierra Leone by a BSSH team since 2019. The plan was to evolve the nature of these visits into more of a teaching and training role, particularly to support two ReSurge trained surgeons. However, the planned 2020 visit had to be cancelled due to the covid pandemic. A scoping visit was undertaken by Mike Waldram and Steve Hodgson in 2023 on behalf of the BSSH.

The November 2024 visit was initially planned and led by Mike Waldram who unfortunately had to step down due to health issues. The team was then led by David Dickson who had previously been once in 2019. Mike Waldram and Steve Hodgson continued to give expert guidance and support both in the planning and during the actual visit. This visit, essentially comprised of two parts. Firstly, there was a therapy visit led by Pascalle Smith, who ran a number of teaching and training sessions in aspects of hand therapy with two other therapists. Secondly, the surgical team who undertook assessment and treatment of patients.

Other teams, particularly from Italy, have been making regular trips since 2019. These have covered a wide range of operations including most aspects of orthopaedics. On reviewing the theatre logbook and, in discussion with the staff at Holy Spirit, there has been no hand surgery undertaken since the BSSH visit in 2019.

The Team

BSSH

Mr David Dickson – Consultant Orthopaedic Surgeon, Bradford Royal Infirmary
Mr Zakir Shariff – Consultant Plastic Surgeon, Bradford Royal Infirmary
Mr Obi Onyekwelu – Consultant Plastic Surgeon, Queen Alexandra Hospital, Portsmouth
Miss Kajal Gohil – Registrar in Plastic Surgery, Wessex Deanery
Dr Paul Stonelake – Consultant Anaesthetist, Bradford Royal Infirmary
Dr Andy Baker, Consultant Anaesthetist, Bradford Royal Infirmary

BAHT

Ms Pascalle Smith – Queen Victoria Hospital, East Grinstead
Ms Kirsty Doswell – Queen Victoria Hospital, East Grinstead
Ms Roberta Brincat – MSK Services, Bognor Regis

Itinerary and Leave Arrangements

November 15th – Bradford contingent travelled to Heathrow by car in the afternoon, staying over at the Hilton on site ready for an early morning flight on the 16th.
November 16th – Whole team arrive at Heathrow to fly to Freetown via Brussels. Night spent at hotel near Freetown airport.
November 17th – Travel to Makeni. Settle into the guest house. Tour of the hospital.
November 18th-22nd – Outpatient clinics and operating. Five Days, with first theatre cases starting on the afternoon of the first day.
November 23rd – Travel to Freetown via St Joseph's School for the Hearing Impaired.
November 24th – Day in Freetown, prior to night flight back to Heathrow via Brussels.
November 25th – Arrive in Heathrow and onward travel to respective homes.

The leave for the visit was taken as Professional / Study leave (i.e. Paid leave), in one instance as flexed SPA (i.e. SPA time prior to travel was flexed to cover the DCC that would have been delivered whilst way) or Unpaid leave. Several members lost income as well as incurring costs for this visit.

Time away from work consisted of 6 to 7 working days depending on travel arrangements within the UK.

Predeparture Plans

All members of the team were advised to have vaccination for Yellow Fever and take the certificate with them. It is stated that you may be required to show this prior to entry to Sierra Leone, though I am not aware that anyone has actually had to show this.

Hepatitis A, tetanus and Diptheria needed to be up to date. Whilst vaccination against cholera and rabies were suggested on some websites, nobody had these last two.

Everyone took anti-malarials which consisted of Malarone for all but one. The last person took doxycycline. To help ensure compliance we asked everyone to take the malarone with the evening meal.

Everyone completed an online visa application (confirmation of visa usually within 48 hours). A payment to both enter and leave the airport was required (securipass). Both of these documents needed to be printed as airport officials did not want to view this on the phone. Total cost for these two documents was $130. Links to both of these are:
https://securipass.sl
https:evisa.sl/#/home

We completed 4 online Zoom meetings in order that the team had all met, to ensure we had completed the necessary predeparture plans, as well as what kit we were planning and how

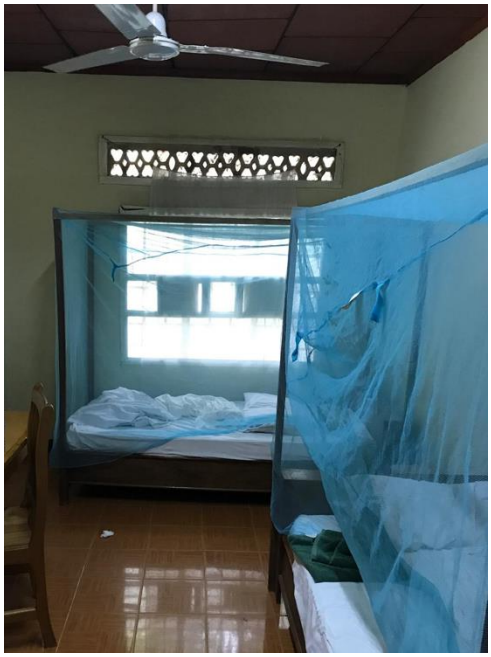
we may need to distribute that within the baggage allowance (two holdall bags weighing 22kg each).

Most people took ~$300 in cash which was converted in Sierra Leone. I took $500 in case of extra expenses.

We obtained donations of sterile drapes, dressings, bandages, ointments and Kenalog from our local hospitals and private hospitals. In particular we would like to thank the Yorkshire Clinic, Bingley and the Priory Clinic in Birmingham. There were a number of individual private donations from friends and staff that wished to put money towards paying for treatment.

Our anaesthetists sourced venflons, syringes, a range of Endotracheal and laryngeal masks as well as IV drugs for general anaesthesia including propofol and rocuronium and local anaesthetic agents for the use of blocks. We took a range of intravenous and oral antibiotics to ensure we had the ability to undertake a wide range of surgical procedures.

Guest House



The guest house has been used for all previous BSSH visits, which is located just a short walk from the hospital. It currently has 7 bedrooms in use. The beds are functional with mosquito nets provided. The nets are in variable states and taking your own is advisable. One of the rooms has air conditioning but the rest work on simple ceiling fixed fans. Showering facilities are available. The are two communal areas. One dining area and one seating area. An excellent cook (Joseph) was provided and we would recommend using him on future visits. We received a bill for the accommodation but most of the food was bought by giving ad hoc sums of cash to Joesph. The guest house certainly hasn't had any renovation work since 2018 and I do not believe it is in frequent use. Food and belongings need to be kept secure, given the rats that were present within the guest house. The grounds are locked and night security was provided for our a protection. There were no cases of food poisoning on this visit.

Clinic

The outpatients ran daily from 8.30 am. In total we saw 78 patients, with the vast majority (56) being seen on the first day. As has happened on previous visits, a wide range of conditions were seen. Patients paid a small (~£2) fee for the consultation which was deemed

by Holy Spirit Hospital to cover their staff costs for the clinic. Further costs such as blood tests and X-rays were sometimes incurred by the patient.

There were a significant number of children attending with hand burn contractures, often with fingers completely stuck into the palm. None of these patients had been able to get treatment elsewhere in Sierra Leone or from other visiting teams and many had lived with these contractures for several years.

The clinic was set up with one consultation desk and two examination areas. Translation services were conducted by nursing staff within the clinic. Hand written notes were made within an A5 sized booklet, specific to each patient. A separate admission booklet with consent was completed for those undergoing surgery. Obtaining informed consent was challenging, particularly when done via a translator. On several occasions the form was signed with a thumb print when patients were not literate.

A significant number of patients arrived with conditions that were beyond what we could treat safely within the facilities, such as chronic draining osteomyelitis in a patient with sickle cell disease. We discussed undertaking an amputation but felt we could not safely manage a sickle cell crisis were one to happen. The patient was redirected to Connaught hospital. The patient was, understandably, distressed and had had to pay the hospital in order to seek our advice. There were also patients that attended with problems that were beyond our skill set such as chronic bilateral SUFE. Whilst we were able to adequately assess and investigate the condition, we could not treat it. We advised them to reattend when the Italian Orthopaedic team planned to visit in the Spring.

The main problem was trying to determine which patients we were and were not going to operate on. To aid decision making we followed the DOC1 approach developed by Mike Waldram. Our first priority was to treat any patients with life or limb threatening conditions as we had on previous visits (e.g. gangrenous foot on a child, large palm sized defect exposing the frontal bone of the forehead). Although we were prepared for these cases on this visit we did not encounter any. We had discussions as an MDT in the evening to aid decision-making and prioritise children with burns to the hand, whom we felt had the most to benefit; were within our skill set, and had been declined by other visiting teams.

Patients then paid a fee, calculated by the hospital, towards the costs of their treatment and care on the ward. We were unaware of this until the Wednesday (day 3) and this accounted for several people not attending for their planned operation. We were told that patients were only charged what they could afford, but we were not informed of the exact fees. As such we finished operating early on the third day.

Finally, we saw a large number of keloid scars. Many of them had had treatment previously, including excision, with the inevitable recurrence. We injected Kenalog into small and / or itchy keloids. Two members of staff had been trained on a previous visit and this provided an opportunity for further such training.

Theatre

There are two theatres within Holy Spirit Hospital. On arrival on Sunday we discussed trying to run both. Although we had two anaesthetists, it was deemed unsafe to run parallel lists. This was due to the size of our team and potentially being overstretched if we used both theatres, particularly as the theatres were not located next to each other. We looked at the instruments and created three trays of instruments which would cover our likely needs. There in house autoclave meant we could quickly turn around trays.

The theatre has an air conditioning unit which blows unfiltered air straight over the operative field. This had to be repaired twice during our visit. Although a c-arm was available in theatre we were concerned about the risks of infection if any implant work to be undertaken.

Patients were assessed by a consultant anaesthetist either whilst still in clinic or on the ward prior to surgery. The WHO checklist was undertaken, although it was not clear whether the theatre staff are used to undertaking this. The checklists were instigated by us and we certainly would not have been challenged if we had commenced operating without doing them. We sourced bottles of Isoflurane at the hospital for which we received an invoice. The mains oxygen supply did not always flow and on several occasions we needed to switch to bottled oxygen.

General anaesthetic was undertaken within the operating room and US guided blocks given to provide good post-op analgesia. The ultrasound machine consisted of a hand held probe (the size of a computer mouse) which, through a Bluetooth connection, gave an image onto a smartphone. This was loaned from the company at no cost for the visit. Further post-op analgesia was provided for free by ourselves using packets of paracetamol and ibuprofen which we took with us. We provided both induction IV antibiotics and post-operative oral antibiotics from the stock we brought with us, without cost to the patient.

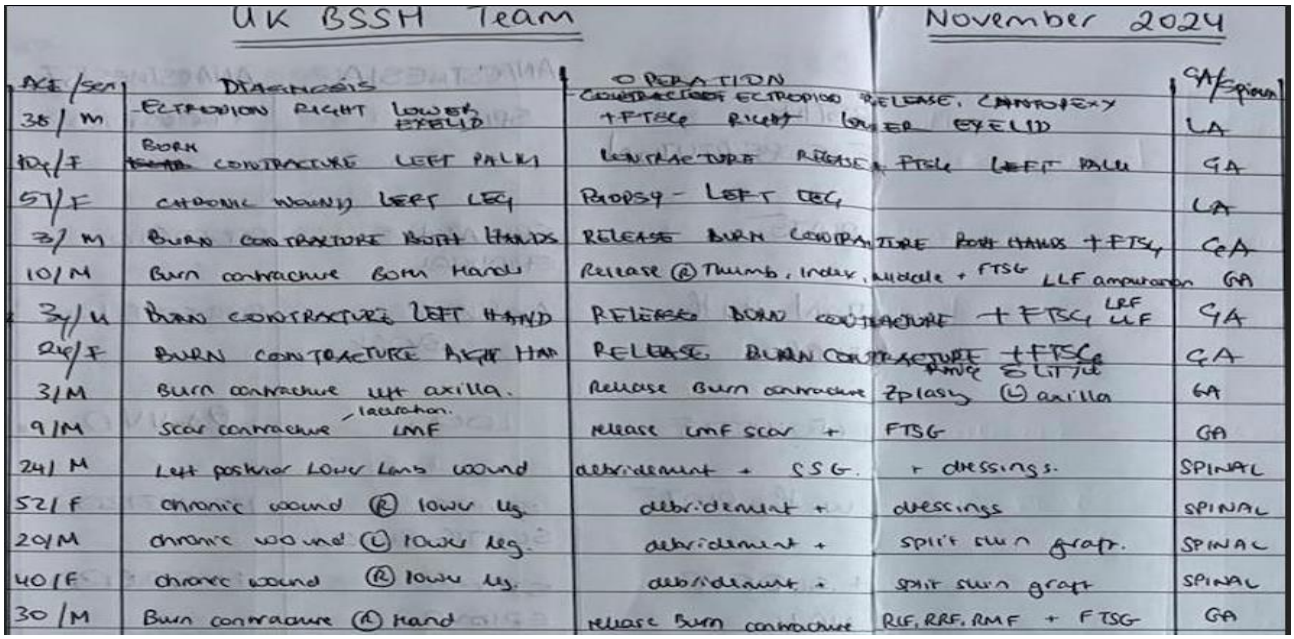
The electricity supply to the hospital is prone to failure. This resulted in the theatre lights going out during the operation on several occasions. The hospital generator does not automatically kick in and invariably a member of the theatre staff had to leave to switch the generator on. This left us operating by mobile phone light for 10-20 minutes on 4 occasions.

The hospital has reusable drapes but many of these are showing signs of wear. The single use drapes, which we took with us, were extremely helpful for maximising sterility of the surgical field.

Foday was, by far, the person who understood the kit, theatre set-up and our requirements the best. He appears to be instrumental in the day to day running of the hospital and was regularly called off to help in physio or outpatients during our cases. On one occasion we found ourselves entirely without any member of the Holy Spirit Hospital staff with us in the middle of a case. The runner had left do something else and then the scrub nurse went for a break. We raised our concerns and this did not occur again.

Operative Cases

We undertook surgery on 14 patients aged between 3 and 57. Six were children and we were fortunate that our anaesthetists were proficient and had come prepared to operate on children as young as 3. Half of the cases were burns / scar contractures of the hands and two of the children had both hands done simultaneously. This was only possible because we had 4 surgeons.



UK BSSH Team — November 2024

AGE/SEX	DIAGNOSIS	OPERATION	GA/Spinal
38/M	ECTROPION RIGHT LOWER EYELID	CONTRACTURE ECTROPION RELEASE, CANTHOPEXY +FTSG RIGHT LOWER EYELID	LA
10y/F	BURN CONTRACTURE LEFT PALM	CONTRACTURE RELEASE + FTSG LEFT PALM	GA
57/F	CHRONIC WOUND LEFT LEG	BIOPSY - LEFT LEG	LA
3/M	BURN CONTRACTURE BOTH HANDS	RELEASE BURN CONTRACTURE BOTH HANDS +FTSG	GA
10/M	Burn contracture Both Hands	Release ® Thumb, Index, Middle + FTSG LLF amputation	GA
3y/M	BURN CONTRACTURE LEFT HAND	RELEASE BURN CONTRACTURE +FTSG LRF LLF	GA
24/F	BURN CONTRACTURE RIGHT HAND	RELEASE BURN CONTRACTURE +FTSG RMF & LITTLE	GA
3/M	Burn contracture left axilla.	Release Burn contracture Zplasty (L) axilla	GA
9/M	Scar contracture / laceration. LMF	release LMF scar + FTSG	GA
24/M	Left posterior lower limb wound	debridement + SSG. + dressings.	SPINAL
52/F	chronic wound ® lower leg.	debridement + dressings	SPINAL
20/M	chronic wound (L) lower leg.	debridement + split skin graft.	SPINAL
40/F	chronic wound ® lower leg.	debridement + split skin graft	SPINAL
30/M	Burn contracture (R) Hand	release Burn contracture RIF, RRF, RMF + FTSG	GA

Post-Operative Care

We liaised with the therapist at Holy Spirit and one of our therapists helped to see some of the patients on the morning of final day as we were about to leave. Although we had a therapy team the timing of post-operative therapy did not align with the needs of the patients and so we set-up a WhatsApp group so we could provide remote support for the team at HSH. This resource has not been used to its full potential and so we are left a little in the dark as to the outcomes/complications that have occurred.

Costs

Flights £11,837.10
Accommodation £1487
Cash (for living expenses) £3600
Immunisations and Malaria Prophylaxis £780
Visas and Securipass $1170 (~£950)
Bus / Car Hire £1131
Drugs Taken £942
Drugs charged for by HSH £227

Reflection

This was an enjoyable and rewarding trip with all members reporting that they would go again. The situation is different since I last visited in 2018 but, as evidenced by our logbook, we did meet an unmet clinical need for hand surgery. There were children with significant hand dysfunction from untreated hand burn contractures, many of which had been in this state for several years. Despite visiting teams from other countries, these were cases that required our skill mix to manage.

I appreciate that there are significant financial constraints on the BSSH which will impact on future trips and the rationale and costings of future trips needs to be considered. Fundamentally, I believe that the BSSH along with ReSurge need to map out what the aims of supporting Sierra Leone are. Are future trips aimed at developing the Burns and Reconstructive centre at Freetown where there may be scope to train and teach surgeons or are trips aimed at providing a surgical service to the people in Sierra Leone which is not currently being met? I understand that there are usually issues over things to be paid for during the visit to Makeni and this visit was no exception. There were many patients that left HSH once they were informed of the bill they would need to pay to cover hospital costs.

It would be helpful if future trips would crossover with therapists attending at the end of the 2 week surgical trip to allow a handover and ensure that good hand therapy / splinting is provided in the early post-operative period. This could be a useful teaching and training opportunity for the therapist currently working at HSH. I accept there may be some safety concerns depending on the make-up of the therapy team visiting.

I believe that trips should continue but they are planned with a team 12-18 months in advance and should last around 2 weeks. This would allow for all participants to plan, find sponsorship and raise money to help cover the costs of trips for the team going and fund the assessment and treatment of all patients. Asking teams to entirely fund their way and expenses will grossly restrict the number of people willing to go. There is a significant workload both prior to going and on the return and depending on their job plans and leave allowance – a financial burden is already taken. What would be helpful is for team members

to make a charitable donation to the BSSH to help cover costs of the trip, which would help the BSSH and allow team members to count that donation in their annual tax return. Logically, the team should consist of enough members that the theatre can be utilised for a three session day (8-8). This is how other visiting teams work. To facilitate this, the use of trained theatre scrub staff and ODP would be beneficial.

This visit demonstrated issue with instruments, particularly with regards to scissors. Other visiting teams have trays of their own kit which they use, often stored in a locked room, between visits. There were no scissors of any description in the theatre store room when we looked around on the Sunday. Thankfully with the support of Mercian and The Yorkshire Clinic we took tenotomy, dissecting and suture cutting scissors with us. We would not have been able to do ANY operating without them. I would recommend that three sets of basic instruments are bought that can either be taken out by visiting teams or kept under lock and key at HSH. This would ensure that any team visiting has enough appropriately sized instruments in order to undertake surgery. Given our experience, there is a risk of arriving and then being hampered by lack of basic instruments.