

Hands of Change:

Sierra Leone

“When the roots are deep, there is no reason to fear the wind

“African Proverb

Inspiring perseverance and strength in training, empowering a strong foundation in knowledge, skills, and resilience to face challenges.

UK Team Members

Mr David Dickson Consultant Orthopaedic Hand & Wrist Surgeon (Lead)
Mr Zakir Shariff Consultant Plastic & Reconstruction Surgeon
Mr Obi Onyekwelu Consultant Plastic & Hand Surgeon
Miss Kajal Gohil Orthopaedic Registrar
Mr Steve Hodgson Plastic Surgery Surgeon
Mr Andrew Baker Consultant Anaesthetist
Mr Paul Stonelake Consultant Anaesthetist
Pascalie Smith Hand Therapist (Lead)
Kirsty Doswell Hand Therapist
Roberta Brincat Hand Therapist
Becky Chaplin Hand Therapist

Sierra Leone Team Members

Mr Ismaila Kebbie, Lead Physiotherapist, Ministry of Health and Sanitation and Head of Therapies, National Rehabilitation Centre.
President Sierra Leone Physiotherapy Association
Mr Jesse Banhuah, Lead Physiotherapist, Connaught Hospital Freetown.
Mr Abu Amara, Physiotherapist-In-Charge, Tonkolili District College of Health Sciences. Lead physiotherapist, Sierra Leone China Friendship Hospital at Jui. Secretary, Sierra Leone Physiotherapy Association
Mr Balansama Janneh, Lead Physiotherapist, Holy Spirit Hospital, Makeni
Mr Ansu Kanja, Administration Physiotherapy, Tonkolili District College of Health Sciences

“The workshops were superb and very educational”

“Today was very exciting and I learnt different skills in the field of physiotherapy”

“The training was so good I wish it would last longer”

Background

Sierra Leone lies on the coast of West Africa with a population of 7.6 million people. Freetown sits on a coastal peninsula overlooking one of the world's largest natural harbours. Long stretches of beaches lie beneath a colourful mountainous scenery of greenery, new constructions and corrugated sheeted shantytowns. It is a country of low income and poverty. Sixty percent of people live below the poverty line. In its recent history, the country has suffered civil war, Ebola and COVID crisis. This, combined with poverty, has weakened the healthcare system.



Since 2010, The British Society for Surgery of the Hand (BSSH) and ReSurge Africa (NGO) have collaborated to develop the first reconstruction unit in the country, training two local plastic surgeons and a local physiotherapist. Due to civil war and Ebola there has been a shortage of trained doctors and therapists. In 2019, there were only seven qualified physiotherapists for the population. Collaboration with Massanga Dk a Danish NGO, a five-year Physiotherapy BSc and Diploma started. In 2023, 15 BSc Physiotherapy students graduated and 15 Diploma students are due to graduate Dec 2024.

In 2021 a tragic incident occurred in Freetown when a fuel tanker collided with a lorry. The collision led to a massive explosion and fire, resulting in 153 deaths and 304 injuries. The city's medical services were overwhelmed and unable to cope with the major incident. BSSH, BAHT and Resurge Africa have been given the opportunity to support the first purpose built and dedicated plastics reconstruction and burns unit.

Aim of the Visit

The visit comprised of two parallel components: a surgical visit to Makeni and educational support of allied health professionals. Key activities included:

1. A collaborative two-day Hand Therapy Course to student physiotherapists at Tonkolili School of Health Sciences
2. An introduction to splinting with POP delivered to qualified physiotherapists and healthcare professionals currently managing upper limb injuries.
3. Support and codevelopment of the new reconstruction and burns unit through an MDT steering group
4. Improve recognition of physiotherapy visiting a local football initiative supporting children, where we donated training equipment to highlight the role and importance of physiotherapy in sports.

Planning

Pre-visit planning consisted of a UK team WhatsApp group, two team Zoom meetings and email communications. The therapy team met face to face for a course workshop and a practical planning session. All team members received a travel check list produced by Mike Waldram.

Communication with the Sierra Leone therapy leads and UK therapy lead were through WhatsApp and emails prior to the visit.

Visit

We landed at the new airport in the capital Freetown, which was impressive and efficient. Outside, there was a familiar African heat, smell and humidity, with crowds of people offering to carry bags and touting SIM cards. From the airport, we taxied to the local airport Gateway Hotel where we stayed before traveling the next day to Makeni.



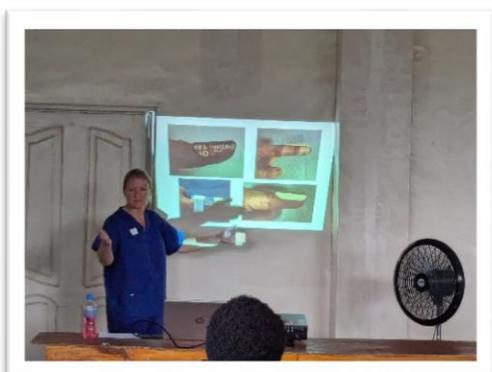
Our education program consisted of teaching at two locations, the government run Connaught Hospital, Freetown, and Tonkolili College of Health Sciences in Masanga. Alongside a surgical visit to Holy Spirit Hospital at Makeni.

Tonkolili District College of Health Sciences, Masanga

The first venue, Tonkolili District College of Health Sciences is three hours east of Freetown at Masanga. The college supports training of Surgical Community Health Officers, nurses and most recently physiotherapists. The Physiotherapy BSc programme started in 2018. It was developed with support from national and international stakeholders. The first graduating 15 cohort in November 2023 and 15 Diploma students in December 2024.



The two-day course was delivered to the 26 physios in their final and second year. College administration was efficient and good main teaching space was available. However, it is worth noting for future trips that there was no air conditioning and limited lighting in the breakout rooms, making teaching uncomfortable.



Connaught Hospital Freetown

The second venue was at Connaught Hospital the principal referral hospital and training hospital of Sierra Leone in Freetown. Rehabilitation equipment and an ultrasound machine were donated to the physiotherapy department.



The one-day introduction to POP splinting was delivered to 18 participants: three therapy staff, nurses from medical wards and two doctors. The teaching room was limited in space for the practical nature of the teaching and there were some delays in provision of catering.



Connaught Hospital Reconstruction and Burns Unit

The new reconstruction and burns unit is hoped to be completed in early 2025. We were invited to collaborate with the unit MDT steering group. As well as nurses, hospital leads and physiotherapy there was also a dietitian and psychosocial nurse. Overview of the phases of development, funding and plans for training were discussed. It was identified that unit members would benefit from an MDT training day to share roles of allied health professionals and foster MDT working. Nurses have recently developed and implemented in-service training, CPD and a role on ward rounds in the hospital which other allied health professionals (AHP) would benefit from.



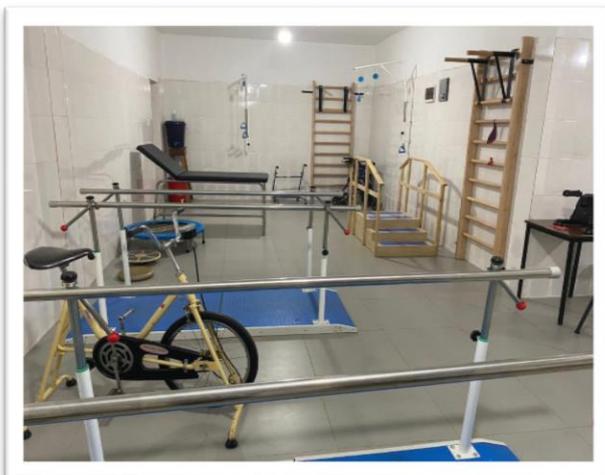
During our visit in 2023 we stayed at St Joseph's School for the Hearing Impaired which has a close relationship with Holy Spirit Hospital in Makeni. We were inspired by the school's textile workshop that produces clothing, bags and souvenirs for tourists. We visited this year with donations of games for the children and hope to continue our support with potential to use the facility as a spoke pressure garment service in the future.



Holy Spirit Hospital, Makeni

The five-day surgical visit was based at The Holy Spirit Hospital (HSH) in Makeni. The hospital was established by Dr Patrick Turay. Despite many challenges it has continued to develop and expand with the help of the Italian Diocese and sheer determination. The Holy Spirit Hospital has seventy beds, an Outpatients Department, Radiology, Pharmacy and two operating theatres. The physiotherapy department was destroyed by a fire in 2018 and now a new development with physiotherapy, pathology labs and additional ward space for surgical visits has been built.

The hospital physiotherapist Bala completed his training in India in 2020 with the support of Resurge Africa. Since his return he has single-handedly managed a busy clinic and multiple overseas surgical visits from Italy and Spain. This was his first BSSH surgical visit and we hoped to provide clinical support and training. Unfortunately, the presence of a visiting Italian therapy team meant that Bala was not available.



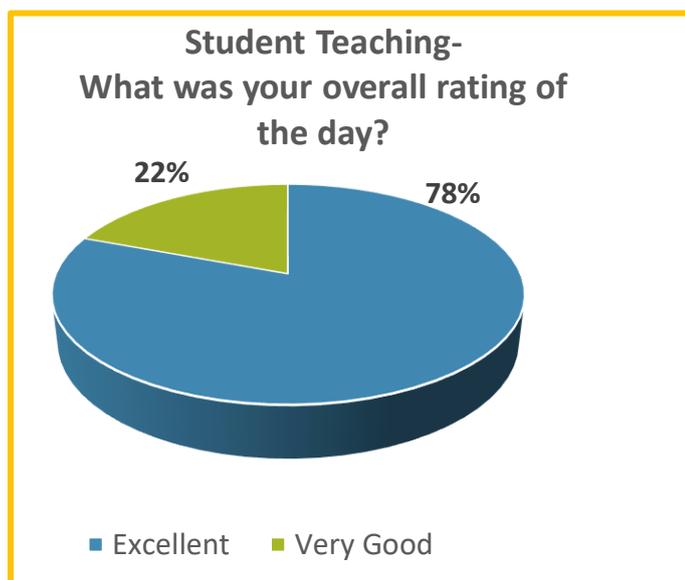
Evaluation

The short two-day student course was an introduction to specialist upper limb therapy. It continues to encourage education and empowered local therapy staff and students to provide a future cascade of learning and knowledge. The engagement and additional facilitation of a local lecturer Abu was invaluable. He is well-positioned to take ownership of the course, ensuring its continuity and sustainability.

It was clear that all the students were eager to learn and happy to improve their clinical skills in assessment and intervention. This was excellent to see and embrace, as future projects can help the Sierra Leone team to expand and improve their knowledge and skills whilst also developing a good mentoring relationship between the UK and the Sierra Leone teams.

Previous catering issues were overcome with participant financial support to cover lunch expenses. Physical teaching facilities with poor lighting and no air conditioning challenged the UK team. Local administrative support and assistance helped to overcome this, but future visits must ensure that these issues are taken into consideration.

Students showed a genuine keenness to learn. A pre and post course quiz showed improvement in an average score of three marks, demonstrating improved knowledge. Future expansion of specific conditions may be a beneficial change to the course content in the future.

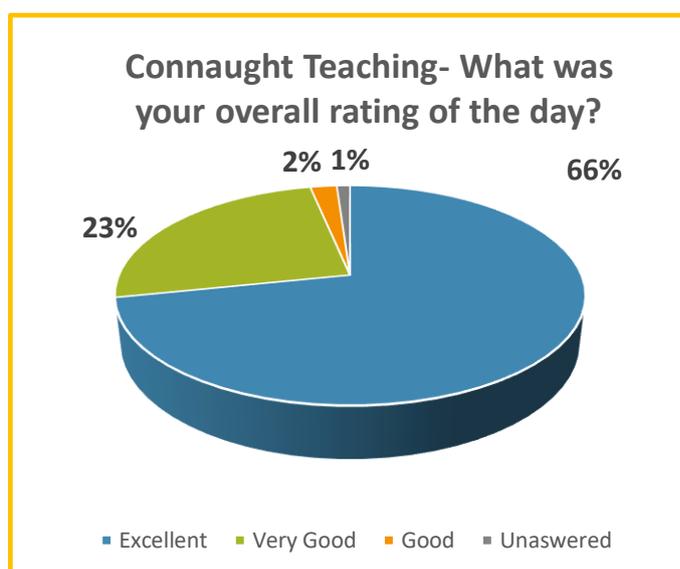


Course evaluation was incredibly positive about the delivery and content of the course. All participants felt they had benefited from attending. Overall, 78% of attendees rated the course "Excellent".

Similarly at Connaught, the one-day physiotherapy POP splinting day participants showed enthusiasm and positive engagement. Gained skills and knowledge were again reflected in the improvement of knowledge by a 14% improvement of marks in the pre and post course quiz. 89% of Participants rated the overall course as excellent or very good.

Feedback highlighted possible focus of upper limb conditions and splinting more specifically as a course for therapists.

For both training programmes all teaching presentations, worksheets and a course workbook were presented to the local clinical and therapy leads on a USB for future use, access, and reference.



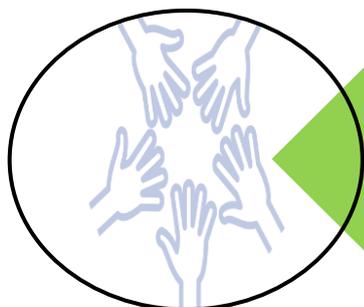
Moving Forward

Overall the visit was very beneficial and successful. Future surgical visits at Holy Spirit hospital will need to address some of the challenges encountered including timing of post-surgical therapy, improved communication and limited time available with the local therapist to ensure effective collaboration. Since our return, arrangements have been made to provide therapy training for Bala through Mercy Ships, giving a clinical placement to further develop knowledge and hands-on skills.

Continued support of the Physiotherapy BSc/ Diploma Cohort provides the opportunity to develop knowledge about upper limb conditions and management from the therapist's perspective.

By building on Abu's expertise and familiarity with local context, he can confidently deliver the course content, adapt it to the needs of the participants and provide ongoing support. This transition would allow the visiting team to step back. Empowering Abu to lead ensures that the program remains impactful and culturally relevant while fostering long-term independence and growth.

A continued collaboration and codevelopment with Connaught Hospital Reconstruction and Burns Unit and qualified physiotherapists. Identifying areas of specialised training, gaps in skills, equipment and resources. Support clinical implementation through mentoring, providing an advisory role for development of standards or treatment protocols, resource sharing and capacity building.



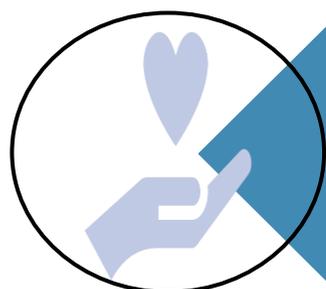
MENTORING

- Sharing resources, skills, knowledge and experiences
- Organise joint symposium / educational sessions to discuss complex cases



EDUCATION

- To provide an ongoing collaborative upper limb module at the college for physiotherapists as part of the final year educational programme.
- Ongoing workshops for physiotherapy students, therapy assistants and physiotherapists
- Ensure hand therapy training is sustainable by including and maintaining course content to meet needs of local patients.



CLINICAL

- To develop collaborative clinical guidelines/protocols for nationwide upper limb conditions and injuries
- To encourage MDT working
- To support putting knowledge into practice and develop hands-on experience
- To support development of initiatives to support local in-service training, CPD and engaging in ward rounds

I am very grateful to IFSHT, BSSH, BAHT and ReSurge Africa for making this training programme possible. Thanks also to all the team members involved for their ongoing fundraising, hard work, support, knowledge, and teamwork. The Horder Centre very generously provided ultrasound machine and dressings.

