Hand therapy report on BSSH/BFIRST sponsored education trip to Nepal

15-29th March 2025

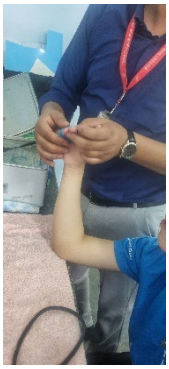
Our team consists of:

- Dr Sarah Tucker (consultant plastic surgeon and project lead)
- Dr David Izadi (consultant plastic surgeon)
- Dr Conrad Harrison (plastic surgery registrar
- Anychia Ramracheya (senior hand therapist (occupational therapist))
- Yanni Tse (senior hand therapist (physiotherapist))

Our trip to Nepal covered 3 main areas: Pokara, Kathmanudu and Kirtipur.

The first 5 days were spent in the charming city of Pokhara. Nestled in the heart of Nepal, Pokhara is a picturesque city known for its stunning natural beauty, serene atmosphere and resilient community. Surrounded by the majestic Annapurna Mountain range and dotted with tranquil lakes, Pokhara offers a perfect blend of adventure and peace. However, with a deeper look we see the vast effects of leprosy and burns within the communities and how filling gaps in the local hand therapy services may aid in decreasing these effects.

We spent most of our first week at Green Pastures Hospital, which serves around 11,000 patients and is the biggest leprosy and rehabilitation hospital in Nepal's Western regions. We were taken on a tour of the hospital grounds by plastic surgeon, Dr Suraj Maharajan, who works tirelessly to provide the best care for his patients and keeps a good relationship with the on-site occupational therapist.



There are established occupational therapy neuro and paeds treatment areas, a Safe Farming Field, and a cooking simulating area. We spent time with the local occupational therapist (Sudip). Being the only occupational therapist on site, Sudip has stretched himself across all fields of OT, with assistants carrying out some routine therapy sessions, leaving him with little time to spend on complex hand therapy cases. Having said that, Green Pastures has a well-set designated hand therapy room with a donated splinting pan, and plaster of paris/other consumables, however there are limited splinting supplies. We saw patients with finger amputations, nerve repairs, nerve injuries, flexor tendon repairs, and repetitive strain injuries. We were able to provide training on protocols for flexor tendon and extensor tendon injuries, scar management, treating the stiff hand, and nerve assessment and treatment. I was lucky to join in on a focus group for a project introducing locking liner prosthesis for leprosy patients. This gave me the opportunity to work closely with the OT, PTs and P&O's and provide feedback in to how this specific prosthesis may be ideal for patients at Green Pastures, from an OT's point of view.

We dedicated an afternoon of teaching at Gandaki Western Regional Hospital. We presented an intro to hand therapy and the importance of the relationship between the therapist and the referring surgeons. The surgeons delivered lectures on orthoplastic reconstruction and clinical research. The hand therapists then spent some time with the physiotherapists in their department. There is one static physio and 2 interns who will spend about 6 months at Gandaki before rotating out. There are no supplies for splinting, and so patients are usually referred for movement and exercise after being immobilized in post op dressings or being fitted with POP casts. They see a whopping 40 + patients per day, with a vast array of conditions. There was a definite consensus to share hand therapy protocols and patient information exercise leaflets with the team, to provide more efficient hand therapy.

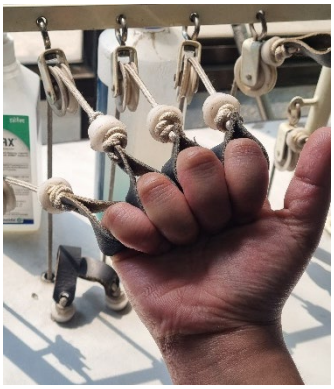
The second leg of our trip was split between hospitals and rehab centres in Kathmandu and Kirtipur.

Kathmandu, the vibrant capital of Nepal, is a captivating blend of ancient history and modern life. It offers a rich cultural experience with its UNESCO World Heritage Sites, including temples, stupas, and palaces that reflect Nepal's deep spiritual heritage. In this bustling and energetic city, we had the opportunity to visit and work with therapists and surgeons at the National Trauma centre and the Paanik Hand Clinic.

The Paanik Hand Clinic was established by Dr Shilu Shrestha (the chief consultant orthopaedic surgeon) and is run by physiotherapist Sanju Kumar, who has a passion for hand therapy. He is flanked by 3 well trained physios and one incredible assistant. Each of our hand therapists spent a day at the hand clinic assisting with assessing and treating complex hand conditions such as stiffness, tendon repairs, brachial plexus injuries, nerve injuries, and providing education on splinting techniques, sharing tips and therapy protocols. This hand clinic is considered a private service and so patients do pay a higher fee than at the National Trauma centre, however this means that there are more supplies available for effective treatment.

We spent a full day of teaching at the National Trauma Centre. The focus of these presentations was on hand surgery and therapy, orthoplastics and research. The hand therapy agenda was directed towards the post-operative care of flexor and extensor tendon injuries, managing fractures, and preventing and treating the stiff hand. We pitched our presentations to surgeons, therapists and students and aimed to show the importance of good communication between the therapist and the referring doctors.

The rehab team at the National Trauma Centre consists of 9 generalist physiotherapists. There are minimal supplies for hand therapy, and so treatment is aimed at mobilization and modalities (such as ultrasound and heat). We were able to provide valuable practical teachings with the therapists on mobilizing the stiff hand, the use of buddy taping for movement, scar management, and correct positioning or safe immobilization. Some of the conditions we saw included distal radius fractures, proximal phalanx fractures, elbow fractures, post k-wire removals, and brachial plexus injuries. We were also able to leave behind a small stack of thermoplastic and velcro for cases where splinting was needed, especially in the ward. We were able to join in on an educational ward round with the surgeons, which put into perspective the need for early intervention!



Finally, we spent the last few days of our trip at Kirtipur Hospital/Nepal Cleft and Burn Centre. Kirtipur is a historic town located on the outskirts of Kathmandu. Known for its rich cultural heritage, Kirtipur is one of the oldest settlements in the Kathmandu Valley. With its hilly landscape, ancient temples, and traditional Newar architecture, the town offers a glimpse into Nepal's past.

Here we provided more teaching and promoted the importance of a good referral system between the surgeon and the therapist. The therapy team consists of skilled physiotherapists and a well-established hand therapy treatment room, complete with 3 treatment areas, splinting supplies and appropriate hand rehab equipment. We were able to join in and assess and treat patients with severe burns, camptodactyly, syndactyly, tendon repairs, nerve repairs, degloving injuries and chronic stiffness, and made use of handy thermoplastic scar management tools. There is a great opportunity for the surgeons and therapists to have better referring systems as the surgeons can bring in patients directly to the rooms and request for therapy. They also have helpful WhatsApp pathways. What is missing however is appropriate written referrals including surgery details and dates, complications, follow ups and specific requests or possible outcomes. We saw how this can be tricky when therapists are treating as there are no post-op notes or limited information on the condition. We also found that the therapists make use of an immobilization or delayed mobilization protocols. This led us to provide extensive one on one training with the therapists and surgeons on extensor and flexor tendon protocols and the benefits of early mobilization. We also found that there is a need for training on fabrication of custom-made pressure garments for burns patients and offered training on this in a future visit, to which the therapists have responded keenly to!

Conclusion

As a therapist, my first visit to Nepal was filled with enriching experiences. Between challenges we seldom see in the UK such as limited resources, load sharing (electricity outages), complicated conditions, limited referral systems and documentation, and language barriers, it was humbling to see how the Nepalese teams strive to make the most of what they have.

We hope to visit Nepal again in 2026 to provide hands-on workshops involving basic splinting principles, nerve assessment and treatment, tendon and fracture healing and rehab, fabrication of pressure garments, and how to refer to hand therapy with maximum potential. The therapists treating hand conditions in Nepal are predominantly physiotherapists, with a mere 20 odd OT's scattered across the country. This results in most of the rehab geared towards a PT outlook with treatment focused on joint mobilization and soft tissue manipulation. We have established a WhatsApp group with some of the therapists we worked with over the past two weeks in hope to keep a working relationship and to create a safe place to share ideas and reach out for assistance on complicated cases. Over the next year we intend on creating patient journeys from surgery through hand therapy and give evidence on why detailed referrals and early mobilization may provide better outcomes for the patients and our healthcare systems. We also hope to start a collection of splinting material to build up resources to send through to the hand therapy units who need it. We are optimistic that this trip has set the groundwork for building relationships between the therapists and surgeons and have confidence that the hand therapy departments will gain more skill and confidence, ultimately one day not needing us any longer. Thank you, BFIRST and BSSH for allowing us this opportunity to share our skills with the people of Nepal and we hope to continue this initiative further.