SRS Global Outreach Program Committee

June 2014 Update

Hossein Mehdian MD FRCS
Global Outreach Committee Chair
Consultant Spinal Surgeon
Centre for Spinal Studies and Surgery
Queens Medical Centre
Nottingham, United Kingdom
Dear SRS member

I am pleased to provide my report as Chairman of the Global Outreach Program and to update the readers of this document as to our activities under my tenure, including a personal ‘site visit’ I undertook to the East African country of Ethiopia.

Background

The Scoliosis Research Society website tells us that the Global Outreach Program (SRS GOP) provides care to pediatric and adult patients in underserved regions of the world with any disorder that affects the shape, alignment, and function of the spine.

The SRS GOP achieves this by fostering the development of regional, self-sufficient spine centers staffed by local physicians capable of providing continuing care to patients with spinal deformities.

Mission Strategy

The GOP mission strategy is facilitated through the development of the SRS GOP Centers described above.

Educational programs provided through these centers will employ practical, didactic and "hands-on" techniques to train local spinal surgeons and medical colleagues to provide non-operative and operative care for patients with spinal pathology.

In keeping with this Mission Statement above, I am pleased to report on our activities and I am of course available to answer questions or to provide any further information to anybody with an interest in the SRS GOP. I can be reached by email on mehdiang spine@hotmail.com.

I do hope you enjoy reading the document!

Hossein Mehdian MD FRCS
SRS Global Outreach Program Chairman, June 2014
Development of a ‘Presentation Pack’ for GOP Surgeons

Over a number of years, the GOP has provided a significant help to a number of countries around the world.

In the 21st Century, we need to keep building on this success by expanding the provision of ‘Current Practice’ as practiced by SRS members.

As such, I have suggested the development, by SRS members, of a ‘Presentation Pack’ available through an online portal to surgeons around the world.

The Presentation Pack will be available free-of-charge and will cover several topics under the themes of:

- **Pre-operative care** eg screening, when to operate
- **Operative Techniques**, ranging from exposing the scoliotic spine to neuromonitoring
- **Post-operative care** including Pain Management & Rehabilitation

The idea is for a brief but comprehensive PowerPoint presentation to be available to educate, and act as reference material, for surgeons at GOP sites.

The idea has been circulated to the committee members for their consideration, and I have already received some positive feedback on this – if you would be interested in preparing a brief PowerPoint presentation to help, please let me know!

New GOP Site Visits

I am pleased to report that four applications for new GOP sites have been received:

1. Dr Dilip Sengupta – Dhaka, Bangladesh
2. Dr Nathan – Calcutta, India
3. Dr Hossein Mehdian – Addis Ababa, Ethiopia
4. Dr Alaa Ahmed – Palestine

The Palestinian site as of this moment awaits a Site Visit by an SRS member.

Reports from Dhaka and Calcutta have been sent in and I would be grateful if the Committee would consider their endorsement.

My personal report on Addis Ababa, Ethiopia is detailed below and overall I felt that it would be an excellent GOP site, with a warm, friendly and safe culture in great need of our expertise. Again I would be grateful for your thoughts and endorsement.
Surgimap – expanding the offering to SRS GOP Sites

Surgimap is, I believe, an enormously useful aid to the spinal surgeon in planning a whole host of spinal deformity procedures – from ‘simple’ idiopathic scoliosis through to corrections of very complex spinal deformities (of which, I can assure you, there are many at GOP sites!).

As such, I firmly believe that the expansion of Surgimap into GOP centers would be of great benefit – both for local surgeons and for the surgical community worldwide. Whilst providing local GOP surgeons with the tools to plan an appropriate surgical plan, the database of cases will also allow for the development of multiple research projects over the years to come.

The role of Surgimap in GOP sites was proposed by Frank Schwab and Addis Ababa, Ethiopia, has been selected for a pilot study under the supervision of Dr Magnum Tsegaye, Consultant Spinal Surgeon.

Image below courtesy of Surgimap website www.surgimapspine.com

Additional Activities

Reports of GOP activities from the Duncan Tree Foundation in Jamaica (www.duncantreefoundation.org) and from the Uganda Charitable Spine Surgery (www.ugandaspinesurgerymission.com) were received and are available to view for those interested. There is no doubt that a great deal of effort and good has come from these two projects, and we are proud to have such active members in the SRS.

Any interested persons can email me for a copy of the report.
Personal Site Visit – Addis Ababa, Ethiopia

Ethiopia is a country located in the horn of East Africa with a population of approximately 90 Million. It is the third most populous country in Africa, though the majority of the population remains in a rural setting – testament to this is the fact that the traffic in Addis Ababa (Ethiopia’s capital city) is far better than in any developed city I have visited!

The national topography of Ethiopia is varied with a good part of the country being highland but also with low-lying valleys, making for a truly diverse environment of plants, animals and of course cultures. Addis Ababa itself is a vibrant capital city with a population of around 5-6 million and located at an altitude of 2,500 meters above sea level.

Healthcare in Ethiopia is provided primarily by Government institutions but there are a number of private hospitals and clinics to complement this.

Spinal Surgery is largely provided by the neurosurgical departments and is available mainly in the capital city Addis Ababa. There is currently no surgical service available in the whole country offering a scoliosis deformity corrective procedure.

I was fully aware of the number of scoliosis and kypho-scoliosis cases. There is a local Non-Governmental Organisation who organises a trip to Ghana for a very limited number of patients for their surgical procedure.

I arrived in Addis Ababa on 5th of May 2014 at 1 am and headed to my hotel. The Next day I met the local surgical team at the Tikur Anbessa (Black Lion) Hospital, which is the main Tertiary University referral hospital, that is under Addis Ababa University.

Dr Milliard Derbew, MD, FRCS, Consultant Paediatric Surgeon and the President-Elect of the College of Surgeons of East & South Africa greeted me.

I had a warm reception and was lead to the morning surgical meeting where I met the Head of the Department of Surgery and all the surgeons from different specialities including General Surgery, Urology, Thoracic & Cardiac surgery and Neurosurgery.

I had time to have coffee with the team where I explained, although they were expecting me, the purpose of my visit i.e. my mission representing the SRS GOP and that I am here to visit different sites to assess the suitability of units/sites and select a site for future scoliosis deformity corrective surgery. I was introduced to the whole team and especially to Dr Mersha Abebe, Consultant Neurosurgeon who will be the local lead contact for the purpose of this mission.

Tikur Anbessa Hospital (Black Lion Hospital) is a very big government university hospital with over 700 beds where treatment is predominantly free and has more or
less all medical and surgical specialities including paediatric surgery with 6-bedded paediatric Intensive care unit. The adult surgical speciality is also supported by a 6-7 bedded Intensive care unit.

At the time of my visit the University hospital Operating Rooms were under renovation but I had a chance to visit the newly refurbished rooms, which will be open for service in the very near future again. It has 7-8 large operating rooms with all the required and standard provisions when it is completed. It is supported with on-site serialisation facility. I have also met the head of the orthopaedic surgical department who showed me around some of their facilities. At the time of my visit the on site CT was out of order but I have been told that hospital has already bought a new CT and MRI as part of a major improvement project.

The whole surgical department also benefits from the different surgical speciality residency programme that is very active and filled with very eager and enthusiastic residents. The neurosurgical department alone has 20 residents from first year up to 4th year.

During my discussion, I have learnt that the magnitude of spinal deformity is beyond belief but due to lack of expertise and dedicated spinal implants as well as all the limitations due to all the other pressing conditions spinal deformity corrective procedure is non-existent.

However, they all have shown their keen interest for this service to be offered to this children and adults for the benefit of patients under the free government university hospital stressing its importance in training the young surgeons.

Next day I met Dr Rick Rods, an American internist, who is the head of the local charity NGO who organises a trip for a small, 15-20, children to travel to Ghana so that they can have their deformity corrective procedure by SRS team lead by Dr Obawachi travelling to Ghana that is in West Africa. Dr Rods gets his patients from a national referral, from people and doctors who are aware of his work. He does the work up including their imaging with CT, 3D CT reconstruction and MRI before sending them to Ghana. I had a very productive discussion with him where I have witnessed off the scale scans of Kypho-scoliotic deformity cases and some post-op images of cases that were performed previously.

My next site to visit was the CURE hospital in Addis Ababa where I went with Dr Rods.

The CURE hospital provides predominantly paediatric orthopaedic procedures for foot and ankle related problems. I have visited their out patient and inpatients facilities.

CURE hospital has reasonable facilities but will have a limitation to support a major corrective spinal deformity surgery in a safe way.
I had also a chance to visit another charity organisation, Mother Teresa home, providing care for a very large number of children from poor back ground with a very mixed pathology.

It was a very touching and heart warming experience to witness the huge amount of work that goes on and the dedication of the staff looking after this children.

My next visit was the Korean Missionary Hospital (Myungsung Christian Medical Center – MCM Hospital).

This is a private institution and has a well-equipped set up with very large compound, well-organised outpatient, operating rooms and a very good intensive care.

I have met the CEO of MCM Korean hospital Mr Kim who showed me the facility. The department of Neurosurgery from Addis Ababa University has a special arrangement with the Korean hospital where by they cover and offer neurosurgical and basic spinal procedures with the support of the Neurosurgical consultants and residents. It has on site 24 hour x-ray, CT provision. It is certainly a facility with good capacity and infrastructure to support a major spinal deformity surgery with the only limitation being that it is a private institution although a very well balanced and subsidised service cost.

My next visit was the Zewditu Memorial Hospital, another government hospital with an affiliation to the Addis Ababa University hospital where a team of spinal and Neurosurgical surgeons, spinal scrub nurses and physiotherapist from Nottingham spinal unit, UK, my own spinal department from UK, were giving free spinal surgical service.

I have witnessed surgical procedures performed by the team including resection of thoraco-lumbar primary spinal tumour, neurosurgical spinal intermedullary tumour resection and spinal decompressions for degenerative conditions. At the time of my visit they have already been in Addis Ababa for a week where they have done many spinal procedures including cervical and thoraco-lumab spinal fracture stabilisation, decompressions for tumours and degenerative disease at the Tikur Anbessa (Black Lion Hospital).

My over all impression following my visit is that there is an unimaginable case load of spinal deformity with a predominance of congenital and early onset kyphoscoliotic deformity and equally a significant number of children with post-tuberculosis spinal deformity who have severe disabilities. There is a huge and an unquantifiable demand for spinal deformity surgery in Ethiopia.

Tikur Anbessa Hospital, a major government university teaching hospital is an ideal place for the GOP site although it is under a huge demand and pressure from all the
other medical and surgical services. The other suitable site is the MCM Korean hospital that has a good setup, which is also a reflection of its private care.

Over all, I had a very productive and enjoyable time in Addis Ababa, Ethiopia with its nice weather. Despite the low socio-economic status, have very humble, hospitable and kind people who are welcoming. Everyone has been well supportive and showed a keen interest in the Scoliosis Research Societies Global out reach programme. I personally would be glad to go back and perform these challenging cases for the benefit of the patients.

Images from my trip are available for you to view below.
I would kindly ask the committee for a full endorsement of GOP site- Ethiopia based on my report and SRS GOP site assessment check list which I have submitted separately.

Hossein Mehdian MD FRCS
SRS Global Outreach Program Chairman, June 2014
Consultant Spinal Surgeon
Centre for Spinal Studies and Surgery
Nottingham, United Kingdom