

# Developing healthcare in South Sudan

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## The Need

The provision of healthcare in South Sudan is offered by a 'mixed economy' of public hospitals and clinics, private hospitals and clinics, international aid organisations, and traditional community practice. Yet for most of the 11.7 million population [1], the provision of both primary and secondary healthcare is wholly insufficient. 90% of women give birth without medically trained assistance [2]. There are 2054 maternal deaths per 100,000 live births [3]. 68 out of every 1000 infants die within 12 months of their birth; 99 within five years [4]. Overall life expectancy is 55 years [5]. Put simply, the country does not have sufficient medical capacity to meet the need.

Currently, newly graduated doctors learn their clinical practice through work experience in hospital, supported by clinical supervision. This offers opportunities for bedside teaching and case review, but there is no formal educational structure or assessment. After twelve months work experience, young doctors may be placed in single-doctor primary care units, in isolated rural areas; an experience referred to by some as "hard time". Following this, they may seek further education and training abroad, or gravitate into private practice, but there is no coherent, national programme of Postgraduate Medical Education (PGME) and training, to further develop their medical skills and knowledge.

More than 80% of medical services in South Sudan are provided by international organisations [6]. Understandably, the delivery of primary care is a priority: there is an acute need for primary care, and effective primary care is the foundation of any national healthcare system. But primary care, without access to secondary care, is only a partial resolution. There is a clear need to develop medical skills and resources that will increase capacity across all the medical specialties, and so contribute to the delivery of accessible primary and secondary care. To this end, the Ministry of Health has committed to developing a comprehensive programme of PGME for South Sudan.

## Postgraduate medical education

South Sudan requires increased medical capacity. In terms of human resources, and in addition to nurses, midwives, technicians and managers, there is a pressing need for more and better trained doctors. Developing postgraduate medical education to meet this need requires a formal structure for its governance. The task then entails developing curricula for medical training in primary and secondary care; developing the teaching practice of a faculty of clinical supervisors and trainers; managing the learning experiences and training of graduate doctors; and providing assessment and accreditation.

The outcomes of this strategy will include:

1. Formal, structured training of postgraduate doctors.
2. More doctors capable of independent, safe practice in primary and secondary care in South Sudan.
3. More doctors ready to develop their skills in the advanced techniques available internationally.
4. More doctors available as teachers, and able to support both undergraduate and postgraduate medical education in South Sudan.

PGME will provide a training pathway for graduate doctors, where currently there is none. The initial postgraduate training experience will increase from one year to a two year period of 'Basic Medical Training' (BMT). The curriculum for BMT includes a rotation of hospital specialties, with clinical supervision, on and off-the-job teaching, formal assessment, and regulation of progress. Doctors will complete BMT with higher-level clinical skills and knowledge than is currently the case, and be better able to practice safely and effectively in the County Hospitals and rural areas.

Following BMT and a period of supported work as Medical Officers, doctors will be eligible to apply for Specialist Medical Training. Specialist training will allow a number of options. Doctors may train in one of the secondary care specialties, or



Figure 1. Faculty development at Juba Teaching Hospital (credit Rich Bregazzi)

they may train as primary care specialists. Primary care specialists will be able to offer a higher level of primary care, combined with further surgical or medical skills. This will enable them to deliver higher levels of medical care to patients, before requiring specialist referral.

### Progress to date

In March 2015, Cabinet approval was given for the establishment of the South Sudan College of Physicians and Surgeons (CPS), to provide educational governance of PGME. The Ministry of Health has appointed the author (RB) as Dean of PGME and of the College. Initially, our focus will be to develop and implement PGME, including curriculum development, faculty development, educational quality assurance, and the regulation of trainees' progress.

The new Postgraduate Medical Education Centre in the grounds of Juba Teaching Hospital is to be brought into use as the headquarters of the College, and as the main teaching resource for PGME in Juba. To this end, a medical library and high speed internet connectivity, to enable e-learning, are being developed.

Senior doctors at Juba Teaching Hospital, as members of the PGME teaching faculty, have been trained in teaching skills, mentoring, and leadership – see Figure 1. Over the course of 2015 there will be opportunities for faculty members to visit the UK for further development in medical education.

Basic Medical Training was launched in 2013, but was interrupted by the crisis of December 2013. BMT has now re-started in Juba Teaching Hospital. The BMT curriculum and training programme provide a foundation, from which specialist curricula in primary and secondary care will be developed.

### Support

There is significant support for these developments from individuals and organisations in the UK. The St Mary's Hospital/Juba Link group has developed a wide network in support of medical education in South Sudan, and the Gordon Memorial Trust continues to support educational activity. More recently, St John's College, Durham University, has set up a Centre for Healthcare Resourcing, with an objective to support the development of medical capacity in South Sudan. The UK medical Royal Colleges have also been generous in their support of clinical training in South Sudan, focusing initially on visiting

clinical trainers, and more recently on the development of e-learning resources.

### Objectives for 2015

However, success is dependent upon the leadership and commitment of the PGME faculty in South Sudan. It is through their efforts that we will establish PGME. Our early objectives are to:

- form the College of Physicians and Surgeons;
- open the PGME Centre in Juba Teaching Hospital;
- sustain BMT, supported by a training programme and e-learning resources; and
- develop curricula for specialist training in primary and secondary care.

We must also attend to the need to spread PGME, with the long term aim of a truly national programme.

The challenges for the provision of healthcare in South Sudan are well known. They include severe problems of resources, infrastructure, geography and politics. The scale of these problems, and the acute crises that emerge, distract from strategic developments, such as postgraduate medical education. Despite these challenges, the Ministry of Health, and doctors of Juba Teaching Hospital, are committed to establishing PGME in South Sudan. We must match that commitment with action.

### References

1. World Population Review. 2014. <http://worldpopulationreview.com/countries/south-sudan-population/>
2. Women's Security in South Sudan. 2012. <http://www.irinnews.org/report/95900/south-sudan-the-biggest-threat-to-a-woman-s-life>
3. UNDP in South Sudan. 2014. Improve maternal health [http://www.ss.undp.org/content/south\\_sudan/en/home/mdgoverview/overview/mdg5/](http://www.ss.undp.org/content/south_sudan/en/home/mdgoverview/overview/mdg5/)
4. The World Bank. <http://data.worldbank.org/indicator/SP.DYN.IMRT.IN> and <http://data.worldbank.org/indicator/SH.DYN.MORT>
5. The World Bank <http://data.worldbank.org/country/south-sudan>
6. Médecins Sans Frontières, South Sudan Crisis Update 2014 [http://www.msf.org.uk/sites/uk/files/southsudan-crisisupdate-august\\_final.pdf](http://www.msf.org.uk/sites/uk/files/southsudan-crisisupdate-august_final.pdf)

### Professor Rich Bregazzi, PhD, MSc, BSc (Hons)

Rich Bregazzi has been appointed to the post of Dean of the South Sudan College of Physicians and Surgeons and will be visiting for four months in the year. Rich has worked for some time with the team from the Isle of Wight and is a Visiting Research Fellow in Healthcare Education at St John's College Durham University. See his article on page 38 and his blog at <https://www.dur.ac.uk/st-johns.college/healthcareresourcing/postgraduatemedical>.