

SCHOLARSHIP REPORT

This report should be completed by recipients of awards and scholarships from the Royal College of Physicians and Surgeons of Glasgow on completion of the activity for which they received their award or scholarship. Please complete all sections of the report form.

Please return your completed report via email to: scholarships@rcpsg.ac.uk

Or via mail to: Scholarships Committee Administrator, Royal College of Physicians and Surgeons of Glasgow,

232-242 St Vincent Street, Glasgow G2 5RJ, UK

Please use typeface when completing this form.

SECTION 1 PERSONAL AND AWARD DETAILS			
Title	Mr	PID	132521
Surname	Wong	Forename(s)	Chee Siong
Scholarship/award awarded	Volunteering Award	Amount awarded	£2500

SECTION 2 PROJECT/VISIT DETAILS			
Name/Title	Operation Giving Back after COVID		
Location	Bopolu, Gbarpolu County, Republic of Liberia		
Aims and objectives	 To gain insight into the practicalities and challenges of delivering healthcare in a resource limited setting. To gain some experience, particularly in Lichtenstein inguinal hernia open repair - variation in spectrum of clinical size and severity of groin (inguinal) hernia and in a different clinical or hospital setting. 		
Summary Include methodology, results and conclusions if applicable	Gbarpolu is one of fifteen counties in Liberia, located in the northern portion of the country. One of the hospitals in Gbarpolu is Chief Jallahlone Memorial Hospital, which serves a local population of 18, 298 (2008) and is designated as a secondary level healthcare facility. It is located approximately 80.3 miles (130 km) on the outskirts of the rural area of Bopolu district. Despite the distance, the journey takes almost five hours from Monrovia city by car due to extremely poor and treacherous road conditions. Hernia International is one of the hernia charities in the United Kingdom that provides professional and educational opportunities to surgeons and surgical trainees in the repair of long-standing groin hernias at rural hospitals around the world. Hernia International has served communities in the following 23 countries: West Africa (Gambia, Ivory Coast, Liberia, Nigeria, Sierra Leone, Senegal), East Africa (Ethiopia, Kenya, Tanzania, Uganda), Middle & Southern Africa (Malawi, Mozambique, Zimbabwe), Indian Subcontinent (Bangladesh, India, Pakistan), Southeast Asia (Cambodia), Central Asia (Mongolia), South America (Brazil, Ecuador, Peru), Central America (Guatemala, Haiti), and Eastern Europe (Moldova). Hernia international was initiated by Professor Andrew Kingsnorth with the aim to address global healthcare problem of hernia and to provide free of cost surgeries to patients in low-income communities suffering from this condition. In November 2022, I visited the Chief Jallahlone Memorial Hospital under the auspices of Hernia International. The surgical team comprises of 3 surgeons [Led by Mr. Arun Kumar Baskara (USA), Mr. Paul Skaife (UK), and Mr. Peter George (Liberia)]. This is the 6th mission of Hernia International Hernia was to assist and operate in the inguinal hernia open repair from 14th November – 18th November 2022.		
	I reached Monrovia Robert International airport around 8:45 pm and was picked up by Mr. George, who is one of the most altruistic visionaries I ever met and his passion for this humanitarian mission is impressive to say the least. Mr. George and I stopped by a local pharmacy (Figure 1) – to stock up a few essential items for the mission such as gauze, intravenous fluid (Figure 2), and bupivacaine for		

the spinal anaesthesia. We waited 3 days for Mr Baskara in Monrovia before embarking our journey to Bopolu whilst Mr Skaife had transport arranged for himself from the airport.

On Day 1: We reached the Chief Jallahlone Memorial Hospital (Figure 3) early afternoon on Monday, 21 November 2022. We were so pleased that Mr Baskara managed to bring all the suture material (Figure 4) and the mosquito net mesh (Figure 5) needed for this mission. After lunch, after a quick team brief (Figure 6) just outside of the operating theatre (Figure 7), we started the mission with our first six patients. I was told that the patients were admitted overnight by local trainees and some of them walked for five hours to the hospital. Patients were recruited through word of mouth via radio broadcasting about a month prior to the mission. All patients having open inguinal repair receive a STAT dose of intravenous ampicillin at induction and procedures were all performed under spinal anaesthesia. The method of sterilisation of the surgical instrument (Figure 8) was somehow unconventional compared to the NHS. This session was very well-received by the local trainees — with many reporting enthusiastically and that was their first operative experience in open repair of inguinal hernia.

Day 2 – 5: I remembered there were a few interesting cases – ganglion of the dorsum of hand, keloid of the ear and a large sliding hernia. We had to cancel a case (thyroidectomy) which was listed as we felt that it would not be safely performed in a limited resources clinical environment. Although we never met each other before, but I can sense we were working as a team. Mr Baskara (General and Bariatric Surgeon) (Figure 9) and I were in Operating Theatre (OT) 2, whilst Mr Skaife (General and Colorectal Surgeon) (Figure 10) was dealing with paediatric open inguinal hernia repair in OT 1. I (Figure 11) took an opportunity to teach Basic Surgical Skills (BSS) to those local trainees – emphasising the importance of a proper knot tying (square and surgeon knots), instrumental handling, and suturing. At the end of day 1, a nice cup of coffee was all that I needed (Figure 12). On Day 3 – we (Figure 13) visited a newly built Emirates Hospital Liberia which has a maximum capacity of 100 admitted patients (https://horizonconstruction.org/project/emirates-hospital-liberia/). This facility is set to be opened soon and currently waiting for a final approval from the Ministry of Health. On Day 4 – Dr Kpengba and I visited local schools and distributed 2B pencils to all primary and secondary school students (Figure 14). There was a fantastic sense of achievement throughout the department by the fifth and final day of the mission.

Total number of operations performed (in parentheses)

- Unilateral Open Inguinal Hernia Repair with MESH (26)
- Bilateral Open Inguinal Hernia Repair with MESH (3)
- Evacuation of Scrotal Haematoma (1)
- Excision of Keloid (2)
- Excision of Lipoma (5)
- Paediatric Open Inguinal hernia (5)
- Umbilical/Paraumbilical Open repair (7)
- Epigastric Hernia Open Repair (1)
- Excision of Ganglion (1)

Learning outcomes

Detail here how the aims and objectives were met

My time volunteering at Chief Jallahlone Memorial Hospital was rewarding, humbling, and enriching on both a personal and professional level. It was one of the most memorable experiences for me to date.

On a personal level, I certainly gained an insight into the challenges of working in a resource limited setting. It was a humbling experience which made me realise how fortunate we are to have a health care service in the United Kingdom that offers universal care. The hospital staffs did an incredible job in extremely difficult conditions with inadequate funding, resources, and staffing. Despite these limitations, everyone in this mission was enthusiastic and passionate about their work. We cannot thank the members of operating theatre team enough (Figure 15) - Anaesthetist (Dr. Saah Tamba and Roland Karnley), scrub nurses (Julius Lacksy, Othello Walters, Paul Harris, Rogers Corcor, Flomo Darziah), and surgical doctors (Dr. Ambrose Farwenel and Dr. Thomas Kpengba). We, as a team (Figure 16), could not have completed the mission successfully without them.

On a professional level, I have learnt that the size of the hernia in this part of the community is substantially larger compared to that of in the UK. Some of the repairs were rather straight forward

(with a clearly defined inguinal neuroanatomy), but the larger ones can be quite challenging especially when those cases were done under spinal anaesthesia. Kingsnorth classification describes a scale of technical difficulties in inguinal hernia operation that correlates directly with reducibility of the hernia and indirectly with groin-fat thickness [1]. This classification can be used by surgeon to guide for planning operating list therefore will enable a cost-effective training list for trainee. Majority of the patients were relatively fit medically and healthy, with no pre-existing medical conditions. They also had a higher pain threshold. To my surprise, none of the patients were complaining of pain on post-op day 1. Could this be related to their hardship and resilience in life - I somehow wondered?

Having noted several issues and challenges faced in this hospital. Locally – basic necessities and resources were lacking, for example, time-limited electricity supplied by a generator, surgical instruments, and medications. Nationally – there was a need for more government funding in healthcare sectors especially in rural/remote areas. Whilst the mission was challenging and frustrating at times, I found the whole experience exciting, mentally stimulating, and extremely rewarding.

Reference:

Kingsnorth, A.N., A clinical classification for patients with inguinal hernia. Hernia, 2004.
 8(3): p. 283-4.

Evaluation

How has this scholarship/award impacted on your clinical/NHS practice or equivalent? I hope that I was able to contribute positively during the short time I was working in the hospital. This would not be my last trip to Africa. Going forward, I would suggest:

- (a) Raise awareness and fundings via www.justgiving.com for next humanitarian mission
- (b) Incorporate Basic Surgical Skills (BSS) course with the mission. This could potentially be organised through the Royal College of Surgeons of England (RCSEng) (https://www.rcseng.ac.uk/education-and-exams/courses/search/basic-surgical-skills-intercollegiate-bss/)
- (c) Establish an external educational and training collaboration with the Royal College of Surgeons of Edinburgh (RCSEd) through the Faculty of Remote, Rural and Humanitarian Healthcare (https://www.rcsed.ac.uk/faculties/faculty-of-remote-rural-and-humanitarian-healthcare/activities-and-events)



Figure 1 At a local pharmacy – Mr. George orders a few essentials for the mission



Figure 2 Intravenous fluid (Normal Saline and Ringer's Lactate)







Figure 3 Chief Jallahlone Memorial Hospital's entrance and its compound







Figure 4 Suture material



Figure 5 Mosquito net mesh (LDPE mesh)



Figure 6 After lunch, a quick team brief before starting of our mission (From Right to Left: Mr. George, Mr. Baskara, and Mr. Skaife)



Figure 7 Operating theatre



Figure 8 Method of sterilisation (Autoclave)



Figure 9 The mission was led by Mr. Baskara

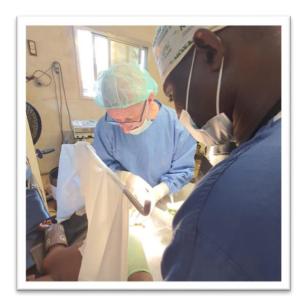


Figure 10 Mr. Skaife performs herniorrhaphy in paediatric patient (assisted by Othello)



 $\textbf{\it Figure 11} \ \textit{\it I identify an indirect hernia. Hernia sac is transfixed and reduced.}$





Figure 12 Having coffee after work



Figure 13 Our visit to the newly built Emirates Hospital Liberia







Figure 14 We distribute 2B pencils to all primary and secondary school students



Figure 15 Operating theatre staffs and I (From Right to Left: Dr. Kpengba, Julius Lacksy, Paul Harris, Rogers Corcor, Dr. Ambrose Farwenel, and Roland Karnley)





Figure 16 Team members of the mission (From Right to Left: Mr. George, Mr. Wong (Dr. Farwenel), Mr. Skaife, Dr. Kpengba, and Mr. Baskara)



SECTION 4 | EXPENDITURE

Breakdown of expenditures

Please demonstrate how the scholarship/award funding was used to support your project/visit

- Return flight from Birmingham to Monrovia (£528.41)
- Liberia Visa (£82.50)
- Depart Taxi to Birmingham Airport (£30)
- Return Train from Birmingham Airport (£5.69)
- Yellow fever vaccination (had been vaccinated before)
- Intravenous fluid (IV) Normal saline and Ringer's lactate (USD \$100)
- Bupivacaine for spinal injection (USD \$100)
- 2 Boxes of 2B pencils for local kids (£143.98)
- Food (USD \$200)
- Accommodation (\$255 + \$100 + \$180 = Total of USD \$535)
- Transportation (\$200 + \$40 = Total of USD \$240)

SECTION 5 | PUBLICATION

Scholarship/award reports may be published in College News. Please tick here if you agree to your report being published. ☐ I give permission for my report to be published in College News

If your report is selected for publishing, the editor of College News will be in touch to discuss this with you.

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