Visit Report for Supporting Urological/Laparoscopy Training and Studying Healthcare System in Liberia – Accredited by RCSEd / Funded by FRRHH RCSEd ( Faculty of Remote, Rural and Humanitarian Healthcare RCSEd)



# **Objectives**

*Surgical :* To support Endoscopic Urological Training and to lay strong foundations for establishing Urology training programme along with strengthening surgical services at John F Kennedy Medical Centre (JFKMC), Monrovia.

Public Health: To understand the overall healthcare system in post-conflict Liberia

#### **Host Team**

Venue: John F Kennedy Medical Centre, Monrovia, Liberia

Professor Peter Coleman - Surgical chair of JFKMC and Liberian College of Surgeons (LCPS)-Past Health Minister of Liberia.

Dr Ayun Cassel: Consultant Urological Surgeon- Fellowship in Urology at HOGIP, Senegal Dr Sherman: Consultant Surgeon and Dean A M Diglotti School of Medicine, University of Liberia

After much planning and a few postponed visits due to very strict COVID rules in Liberia, the workshop convened between 11<sup>th</sup> September -16<sup>th</sup> September 2022.

## **Pre-Visit Preparations and Travelling to Liberia**

With meticulous planning, a busy timetable was organised for the duration of the visit, which included combination of lectures and live workshop. As this was the first step of a long-term collaboration, several important meetings were planned for the week. I had acquired necessary equipment such as Laparoscopy kit, TURP resection loops, urinary catheters and stents and guidewires for efficient running of operating theatres. Full detailed equipment check was made with the host department as well before the visit.

### About Liberia:

A large part of my preparations was reading about the history of Liberia from the times of migration of Americo-Liberians in early 20<sup>th</sup> century, travelling in the historical ship named as "Elizabeth", touching the African shores in 1820s hoping to find their new home in West

Africa; the rise and fall of democracy in Liberia; the military coups starting in 1980s; the brutal civil wars of 1990; and the gradual recovery under the presidency of Harvard trained Nobel Laureate Ellen Johnson Sirleaf and current progress under the premiership of Balloon D'Or winning footballer George Weah.

Visiting Liberia even for workshops require a visa for British citizens. Although, through ministry back in Liberia, arrangements can be made for approval of visa on arrival, but it is advisable to get the visa from London embassy at least for the first visit to avoid any hassle at the airport on arrival. For London embassy application, it needs just a little paperwork, a fee of £ 100 and if applying by post, a round trip of only 2 days for the passport. Those living close to London, best is to visit the embassy for the same day service.

Totally convinced that I am heading to a very very special country, I landed on 09<sup>th</sup> September at Roberts International Airport, Monrovia and was picked up by my Urology colleague, Ayun Cassel, whom I was meeting after 3 years since the 2019 workshop in Senegal and who is now the only fellowship qualified Urologist in Liberia since the passing away of Dr. Walter L. Brumskine in 2016. The 10<sup>th</sup> of September was utilized to get to know my way around in the city and especially the important areas around the hospital as the experience of visiting Liberia was completely new to me and despite trying, I was unable to find a surgical colleague in the UK with prior experience of working in Liberia.

During the course of the week, I found the city buzzing with energy and excitement starting with early morning traffic jams at the main Tubman boulevard where the hotels, hospital and most of the commercial hub is located. The official language is English, but with 2 different versions. The first was the standard English and I found many Liberians to have a touch of American accent adopted through generations. However, interestingly, majority speak their own version of Liberian English which is nearly impossible to pick at normal pace. However paying more attention, I realized that they are simply speaking a fairly comprehensible English but with a very different accent.

Monrovia is surprisingly more expensive than expected when it comes to decent lodging and food. May be it's because most of the hotels and restaurants are used by visitors only belonging to foreign organisations. The official currency is both the Liberian and US dollars and they are happy to accept both.

### The Workshop

Day 1: We initiated our mission on Sunday as Day 1, and visited the only fully public sector hospital in Monrovia, the Redemption Hospital. The hospital was found to be very poorly equipped with empty wards due to non-attendance of doctors as the working conditions have continuously declined. The hospital had suffered significant damage, first due to the civil war and then due to Ebola Virus epidemic in 2014 and could never recover since then. The only functioning part was the Labor suite. Currently, with a \$54 million world bank grant and with help from other partners such as WHO, Gates Foundation and USAID, a new modern Redemption hospital is under-construction with a major focus on maternal and child health. We then visited Dr Sherman's private hospital facilities to asses laparoscopic system which was donated to JFK medical centre and used for the workshop, followed by visit to JFKMC to see the hospital.

Day 2: We started our day at JFKMC with Grand Rounds where I discussed the role of international collaborations to meet the surgical demands in Low and middle income countries (LMICs). Various examples such as the collaborations of both the Royal College of Surgeons of Ireland and The American college of Surgeons with the East African College (COSECSA) was discussed with resultant positive impact in both training and retention of workforce. This was followed by meetings with the hospital higher management and Liberian college of Physicians and Surgeons (LCPS) to discuss the plan for the surgical training and long term support including developing courses and workshops and involvement in Liberian surgical exams. They offered their full support to the hospital. We ended the day by the visit to the surgical wards and operating theatres to assess the operating capacity. It's very encouraging that a reasonable endoscopic system is already available and functioning which Dr Cassell has already acquired from companies in India. This includes kits for TURs and a short rigid ureteroscope with lithoclast for lower ureteric stones. The C-arm is available and functioning and support will be beneficial in further developing stone work in the future.

Day 3: The morning was spent delivering lectures on Endourology with active participation from Liberian team. It was very encouraging and morale boosting to see the Liberian residents' preparation and delivery of the lectures. As one of the objectives for the FRRHH funded visit was to understand healthcare system in the country, we made the visit to UN headquarters to meet the WHO country office executives.

With my both surgical and public health hats on, I delivered a lecture at the WHO office on sustainable surgical care in post-conflict Liberia and various aspects of achieving Universal health coverage (UHC). This turned out to be an engaging and an informative morning at the WHO as we discussed the total collapse of Liberian Healthcare system during the 12 years of civil war followed by Ebola Virus epidemic. Facts were learnt about the challenges during civil war, which left a shocking number of only around 30 physicians left in the country. Incidentally Professor Peter Coleman was one of the remaining doctors who served as the Health Minister during that period. Further impact was

- Worsening of maternal and childhood mortality amongst the highest in Sub-Saharan Africa
- A total of 242 out of 293 public health facilities were destroyed
- Public health personnel dropping from 3526 to 1396
- After gradual recovery, currently Liberia has 0.038 physicians and 0.532 nurses and midwives per 1000 population which is significantly lower than recommended 1/1000

Based on my lecture, I discussed various aspects of strengthening of primary and secondary care along with workforce development, with the Ethiopian model as the gold standard for primary care. I felt that, this is the area where FRRHH's capabilities frameworks can be utilized to improve the primary care training and outcomes.

I also discussed the role of community based health insurance and social insurance as effective means of achieving UHC, using models from Rwanda and Ghana as successful examples. Overall, it was an exceptionally useful learning experience for me being with the

WHO team which will lay foundation for future collaborative public health work in the country.

The afternoon was spent at JFKMC initiating hands on endoscopic Urology training focused on TURPs, TURBTs and Ureteroscopy.

Day 4-6: The last 3 days were fully focused on training with morning hour dedicated to lectures on Endo-Urology and basic principles of laparoscopy. This was followed by endoscopic urology training in TURPs (6 procedures), TURBTs (2) and Ureteroscopy for stone (1). On the last day, to initiate laparoscopy, after careful preparation and taking full safety measures, a diagnostic laparoscopy was performed successfully for an undescended testicle. This provided me a good idea about what further preparations are required to start formal laparoscopy training.

#### Other Observations:

Surgical services have revived in post-Conflict Liberia in the last 15 years by the structuring of training with the support of LCPS and surgical team getting further fellowship training overseas. Several General Surgical colleagues have acquired sub-specialist fellowship training in South Africa, India, Senegal and recently trained cardiothoracic surgeon in Ethiopia. However I feel much need for international collaborations for further progress in the years to come.

# Progress during the workshop and future aims:

Endoscopic training was commenced and local consultant already able to perform procedures safely and resident in Urology able to perform TURPs under supervision. This has set the tone for the host consultant to not only competently perform the procedure but also to start providing training to the residents. The department has also got expertise in TRUS prostate biopsies and diagnostic flexible cystoscopies. A number of surgical residents expressed interest in pursuing Urology. Host team also guided about auditing the Urological practice.

Basic laparoscopic procedure performed and considered safe. However feedback given to the hosts for acquiring further technology before initiating training in procedures such as laparoscopic hernia repair and cholecystectomy.

Support has been fully offered by Liberian college, hospital management, Ministry of Health and WHO regional offices to support the mission.

As we envisage, the project will proceed in 3 phases :

1. Completing Core Urological services portfolio. Timeline: 2023/2024:

This requires, acquiring disposable flexible uretero-scopes for intra-renal access to deal with relatively smaller stones. We aim to start flexible ureteroscopies in the next visit.

For larger stones, acquiring holmium laser may be a challenging task, both in terms of cost and mantainence. Similarly, PCNL services may require its own logistical and technical challenges. I feel, in the meantime developing basic laparoscopy may be a much more feasible and safer alternative to perform laparoscopic pyelolithotomies and avoid morbidity of open procedures.

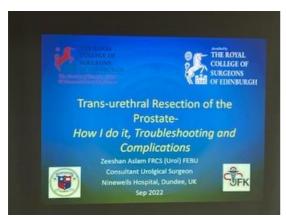
- 2. Capacity building with Urology fellowship. Time line: 2024 onwards: Following the meeting with the Liberian college and subsequent post-visit meetings with the health ministry and the host colleagues, it has been realized that, until a formal Urology training programme is established, a well-structured 2-3 years fellowship needs to be started at JFKMC. Post-exam general surgical training residents with interest in Urology would be eligible for that. This will help with the much needed capacity building. A proposal is currently being drafted by Dr cassell regarding that with the aim to start the fellowship in 2024.
- 3. Establishing a 2<sup>nd</sup> Urology unit with a view to initiating Liberian Urology training programme; Timeline: 2026 onwards

  Several discussions with the host team has led to the conclusion that a formal urology training programme will be best established as Pan-Liberian rather than just at JFKMC, With Liberia being a small country of 5 million, limiting training and services at JFKMC may not provide an adequate case load for a full training programme hosting more than 2 residents at the same time.

This has led to the proposal of need for another urology unit with core urology services, an idea which health ministry seems more interested in too. It has been proposed that rather than a 2<sup>nd</sup> unit within Monrovia, Phebe Hospital in Bong county, which is about 120 miles from the capital may be a better potential site for that. Being distant from Monrovia, it offers a further benefit of serving the local community who may not need to travel this distance to Monrovia for modern urological care. In the next workshop, we plan to visit the surgical department and are currently assessing the feasibility of performing endoscopic procedures at Phebe using JFKMC endoscopic equipment.







Lectures and demonstrations



Pre-workshop equipment check







**Endoscopic Procedures hands on training** 



The newly refurbished Surgical floor, once Occupied by rebel forces as machine gun Outposts during wars!!





Basic Laparoscopy demonstration









Visit to the UN headquarters and WHO country office to discuss healthcare system in Liberia Post civil war and how WHO can help to promote Surgical training





Meeting with Liberian College of Surgeons Team to support the training





Meeting with the Health Minister, Liberia who offered full support to the hospital







Short visit to the once functional government sector Redemption Hospital destroyed by the civil wars and then Ebola epidemic, with the Labor suite as the only functional part of the hospital



Phebe Hospital, Bong County Liberia. Preferred site for establishing a 2<sup>nd</sup> urology unit









Somewhat fascinating glimpses of American influence as one drives across Monrovia

ZA – Feb 2023