

### Meet ICRC anaesthesiologists

For the occasion of the World Anaesthesia Day 2020, some of ICRC anaesthesiologists have shared experience about their work and the main challenges they face in the field.

World Anaesthesia Day takes place every October 16th and commemorates the first successful public demonstration of surgical anaesthesia. Friday 16 October 1846 marks the first successful demonstration of the inhalation of ether vapour as a means of overcoming pain of surgery by the dentist William Thomas Green Morton (1819–1868) at the Massachusetts General Hospital in Boston USA. This day was originally celebrated as "Ether Day". From the ether used 174 years ago, the anaesthesia had undergone gradual metamorphosis to the sophisticated state performed today.

### Mohamed Lamine Fall Goma, Democratic Republic of the Congo Anaesthesiologist



## ACTIVITES

Our work in the field consists of providing pre, per and postoperative care for patients admitted to the ICRC supported hospital facility. They are mostly victims of gunshot or stab wounds. With the structure found on site, by respecting ICRC protocols, we can do all types of anesthesia so that our patients receive the best care.

In the preoperative phase, a rapid assessment is made with the surgeon and once the decision of a surgical act is made, the anaesthetic strategy is adapted and the patient is accompanied to the operating room. Monitoring is ensured during the intervention by multi-parameterized monitors. Upon awakening, patients are monitored in the recovery room with hemodynamic stability and well-controlled pain.

We also mentor nurse anesthetists with whom we work because they are the ones who do the anesthesia in the hospital for the non-ICRC unit. Outside of the operating room, we do regular intensive care visits with local doctors and discuss patient care. During our mission with an average activity of five patients per day we did not lose any patient.

#### CHALLENGES

The main challenges today are that with a massive influx of patients our capacities can quickly be overwhelmed.



Aktham Elfarnawany Maiduguri, Nigeria Anaesthesiologist and ICU specialist



ACTIVITIES

As anaesthesiologists, our role starts from the moment any surgical patient is admitted to the hospital until the patient is operated and recovers on all levels. We receive the patients in the Emergency room, both anaesthetist and surgeon with the help of ER nurses, assess the patient, his vital signs and any other hidden injuries or pathologies.

The patients are optimized preoperatively unless there is an urgency to proceed immediately for surgery, in such cases we optimize the patients during the operation. Intraoperatively, a plan is tailored for each patient regarding his site of injury and the general condition.

A postoperative plan regarding antibiotics, pain killers and nutrition is also decided by the anaesthesiologist. Sometimes our roles extend further than the surgeons; as complications such neuropathic pain or even nociceptive pain with physiotherapy can extend for long durations.

## CHALLENGES

Working as an anaesthesiologist in low income contexts has different challenges. Most or might I say all patients may have never met a doctor or sought medical advice previously, so the patient may have underlying co-morbidities that might have not been diagnosed before. In addition, we work in countries with high numbers of patients with malnutrition and other diseases such as malaria, TB and HIV, with high liability for infection and sepsis and in turn prolonged hospital stays.

Unfortunately, Covid-19 presents nowadays an additional challenge that renders our work more difficult, due to the limitations in the availability of PPE's, difficulty in health education for the patients regarding physical distancing and other hand hygiene or respiratory hygiene advice.

Language barriers, inability to directly communicate with a patient, and the necessity of the presence of an interpreter pose additional challenge, you are never sure what you want to say is actually translated correctly to the patient. The absence of safe routes prevents to transfer the patient for medical treatment smoothly, some patients come days after their injury, which causes a simple injury to transform into a major problem. The availability of blood and blood products is also challenging, due to taboos regarding blood donation and also due to the unavailability of blood banks. There is a difficulty to perform lab investigations; it is either not available or takes long time to produce a result. The occurrence of mass casualties and influx of patients is common, in such cases with scarcity of anaesthesiologists and competent staff



to initiate proper resuscitation of all patients. The quality of care in the wards is also a challenge....

The presence of anaesthesiologist in such contexts is of crucial value, despite all the above challenges, yet we make sure that the quality of care to all patients is sustained. We are always keen to provide the knowledge and skills to all the staff in order to develop the capacity to deal with any sudden emergency situation.

#### Sanja Janjanin

Geneva, Switzerland Anaesthesiologist, HQ Specialist



### ACTIVITIES

I am based in the Headquarter as the focal point for anaesthesia. As a part of the Hospital Care programme, together with my colleagues, I am supporting the planning, implementation and progress monitoring of the ICRC hospital projects in the field.

My main task is to provide technical support to the field and to ensure that safe anaesthesia is delivered and the techniques/equipment adjusted to the context where we operate. My task is also to focus on the quality of anaesthesia and perioperative service by actively developing, updating and promoting standards of care, as well as being a part of global networking with external partners and academic institutions. Not less important, I also participate in building up a relevant pool of ICRC anaesthesiologists.

## CHALLENGES

Unfortunately, the ongoing conflicts are also in the areas where the resources had been already scarce with vulnerable health systems. Conflict and destruction have made this even worse. This means that we have to adjust our anaesthesia techniques and equipment to the environment, but still respecting minimal standards and promoting the safe practice.

We are also facing some complex and clinical cases that require ICU care or more complex surgeries that we are not able to support or there is no place where we could refer them to scale up, and this can be both a personal and a professional challenge.

At the same time, it is important to stress how much humanitarian work can be rewarding when we see patients recovered and able to return to their families. But, our job is also about the team spirit, the colleagues we meet during missions and an opportunity to have different perspectives.



Dmytro Kuchumov Cairo, Egypt Regional Health Specialist – NAME (Anaesthesiologist)



ACTIVITIES

From the tented ICRC/Norr/SARC hospital in arid surroundings of Al-Howl to Bajil rural hospital hidden somewhere between coastal lines of Hodeida and mountains of Yemen, giving technical support to the projects in region, following on proper implementation of our guidances, conducting trainings for resident colleagues, development and cooperation on the standards of care with partners from National societies and substituting whenever necessary our mobile anesthetists – these are some of the tasks of our field visits. Part of the job back in Cairo is focused on support given to the GVA team in policy making activities and best possible adaptation of medical practices into our realities.

Anaesthesiologists are specialist medical doctors who have undertaken additional training, usually over several years, in all forms of anaesthesia. While they are best known for administering the anaesthetics that are essential to safe surgery, anaesthesiologists are also involved in the care of the patient before and after surgery. They therefore have the potential to influence multiple steps in the patient pathway; perhaps more than any other doctor in a health care setting. For this reason, anaesthesiologists are leaders in the quality and safety of health care and have an important impact on patient outcomes.

The varied roles of the anaesthesiologist include but are not limited to: anaesthesia care during surgery, medical care before and after surgery (perioperative physician role), resuscitation, intensive care and critical emergency medicine, transport of the critically ill, pain medicine, including the management of post-operative pain, other types of acute pain, chronic pain and cancer pain, specialist anaesthesia for children, obstetrics, neurosurgery, cardiothoracic surgery and more.

Anaesthesiologists often occupy senior roles in hospitals due to their ability to see the "whole picture" in relation to the care of the individual or management of a hospital, as well as their team skills.

Globally, people are suffering because of a lack of access to safe anaesthesia and surgery. Safe anaesthesia is essential for safe surgery.



Akshaya Kumar Baral New Delhi, India Hospital Physician Specialist – Anaesthesiologist



ACTIVITES

Behind every successful surgery there is a successful anaesthesiologist. Anaesthesiologist has a multimodal approach to the patient. He is the pre-operative, intraoperative & post-operative physician for the patient going for surgery.

Before the surgery, anaesthesiologist optimizes the patient for surgery by treating the preexisting diseases like diabetes, hypertension, epilepsy etc., so that there are no intraoperative complications. During intraoperative period he anesthetizes the patient with repertoire of drugs & instruments, and maintains the hemodynamic of the patient, brings him back from the unconscious stage. During the post-operative period, the anaesthesiologist takes care of analgesia & fluid management till the patient finally recovers.

We also do capacity building of resident staffs & nurses and train them for all emergency procedures.

## CHALLENGES

In conflict zones, anaesthesiologists often work with limited resources and drugs, and almost no ICU facilities. They know how to work in extremely austere environment. Therefore, surgeons need to understand the limitations of the anaesthesiologist and both should work as a team. Behind every successful surgery, there is a successful anaesthesiologist.

Elizabeth Barber Maiduguri, Nigeria Anaesthesiologist



#### ACTIVITIES

I am working in a hospital that focus on treating weapon wounded patients. This usually means people who have gunshot wounds, been in explosions or cut with machetes or sometimes spears. At home in Australia I generally stay in the operating theatre. Here, with



ICRC I go to the wards to help on ward rounds, working closely with the surgeons to look after patients in entirety. Things such as the timing of surgeries, managing their pain and antibiotics, looking after their diets to help them heal. We are also involved in paediatric, receiving children with problems which require surgery and at this time of the year they can be very sick. I am lucky here, I work with another anaesthesiologist, which is good for sharing the call.

# CHALLENGES

There are many challenges working here, having different resources than you are used to; materiel, staff and time. The most emotionally difficult part is knowing some patients experience worse outcomes because they can't get what they need in time, or at all. This is especially heart breaking in the case of children.

Other challenges are 'mass casualty incidents' (MCI) which by definition is where there are more patients than the resources available. We have to make difficult decisions with the surgeons about who gets treatment, in which order, when they all need treatment. Mostly our patients arrive days after being injured because of distance and lack of security, which means the injuries are often infected and they will then need multiple surgeries to heal properly. Another challenge is not having enough blood to give as transfusions. And not being able to go into hospital during the curfew hours, when we have to give advice on the phone from someone else's assessment of the problem.

Earlier this year I was working in a hospital with ICRC (in Akobo, South Sudan) where we had to stay in tents, and other challenging living conditions. While I generally love camping, when you are operating 16 hours or more every day during a MCI, being able to sleep is important. When it's so hot you can't sleep, you are mentally drained before the next day begins, making everything more difficult. This combined and being always 'on' for an emergency can be exhausting. This is why generally the physician specialist role is a short-term mission because we don't follow business hours but are dictated to by the needs of our patients.

### Davidson Ocen Akobo, South Sudan Anaesthesiologist - Physician Specialist



#### ACTIVITIES

My responsibilities as anaesthesiologist include : preoperative management of weapon wounded and all surgical emergencies including management of mass casualty, pre-operative assessment of all patients, resuscitation of critical patients, prescriptions (antibiotic, tetanus prophylaxis with tetanus toxoid and immunoglobulin, blood transfusion, pain medication and



other medications) and nutritional assessment and prescription of diets for all weapon wounded patients using locally available food supplies.

I am also in charge of the intraoperative management of patients by performing anaesthesia during surgical operations using various anaesthesia techniques in accordance with internationally/ICRC recognized standards, of the post-operative management of weapon wounded and for all surgical emergencies. This includes post-operative monitoring and review of patients, post-operative pain management, basic investigations including taking X-rays and performing ultrasound scans (since we do not have a resident technician), antibiotic and other medical prescriptions and supporting physiotherapists in rehabilitating weapon wounded patients. Occasionally I stand in for paediatrician and general practitioner to manage non-surgical paediatrics, medical, and obstetric patients. I am also involved in generating and keeping statistics and records and teaching the residence staff.

## CHALLENGES

One of the first challenges is blood shortage. There is no blood bank in Akobo and our main source of blood is provided by donors who are usually patients' relatives or those contacted by patients. Usually it takes several days to get blood after prescription and this is a big challenge in emergencies situations. Patients brought by medevac usually face serious difficulties in getting someone to donate them blood since their relatives are not nearby. Most donors are also men since most women are either lactating or breastfeeding, underweight or elderly.

There is a transport challenge. Akobo is a remote town with no road network, few transport means (mainly by foot) and floods during raining season. Most patients reach hospital late and take long to leave hospital after discharge and this extends the duration of hospital stay.

We also face the Covid-19 pandemic challenge. Leave and end of mission rotation is greatly affected during this time of pandemic and most expatriate stay longer than expected in a hardship area. We need to have good stress coping mechanisms.

Barun Pradhan Juba, South Sudan Anaesthesiologist Physician Specialist



#### ACTIVITIES

I am currently working with Surgical Team in Juba. We mainly treat victims related to armed conflicts. In Hospital with ICRC we are looking after Two Wards, One Operation Theatre, and a High Dependency Unit.



As Anesthesiologists, our responsibility is to administer anesthesia, monitor patient before, during, and after anesthesia. We also counteract any adverse reactions or complications during the procedure. We help to provide maintain life support and airway management and help prepare patients for emergency surgery. Beside that we also examine patient, obtain medical history, and use diagnostic tests to determine risks during surgical procedures.

Anesthesiologist are also responsible to help and coordinate in lectures and simulation training for the local staff to help them update in skills and knowledge.

## CHALLENGES

Restricted movement and curfew hours are a challenge; due to security reasons it maybe unfeasible to attend the patient in case of an emergency during curfew hours. Critical patient in HDU may lack the care they need in perioperative periods as staff looking after the patient may lack adequate knowledge and skills.

Some of other challenges are limited availability of laboratory tests, lack of trained and experienced health staffs and language barriers.

Working in the field is a big challenge but a strong leadership and organizational skills can make sure that patients receive the most comprehensive and attentive care. A good team can always deliver this.

#### Carlos Cortes Gomez Juba, South Sudan Senior Anaesthesiologist



ACTIVITIES

I am in charge of the colleagues in two hospitals in the country and my work is to organize what's needed in our department in supplies, equipment, medications and at hospital supporting the HDU (High Dependency Unit), the wards and the operation theatre.

## CHALLENGES

Basically in South Sudan the main problem is the lack of local anaesthesiologists, poor or nonexisting surgical facilities and supplies and low knowledge of anaesthesia techniques. Due to a lack of skills, it may be difficult to train local staff.