THE COVIDSURG COLLABORATIVE STUDY ESTIMATES THAT 28,404,603 OPERATIONS WOULD BE CANCELLED OR POSTPONED DURING THE PEAK 12 WEEKS OF COVID-19 RELATED DISRUPTIONS (2,367,050 OPERATIONS PER WEEK).

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05 United In Lockdown
Covid-19 has all left us feeling vulnerable and uncertain. One.Surgery hosts a covid-19 Support Diary online, to allow users to reach out, speak freely and be heard. Here we share some diary extracts with the world.

09 A Conversation with Dr. Réginald Moreels
Dr. Réginald Moreels is a true global health advocate, working for many years in remote areas of the DRC. One.Surgery had the privilege and opportunity to speak to him about covid-19 and global surgery.

13 Global Scalpels - A Global Surgery Podcast
Global Scalpels is a brand new podcast dedicated to global surgery! Taylor and Riana, the hosts of the show describe their experiences in creating a wonderful new asset to the global surgery landscape.

19 A World Affected By Covid-19
From Peru to Belgium, hospitals and healthcare workers have had to suddenly prepare for an influx of covid-19 cases. Learn how two departments, 1000s of miles away, responded to this crisis.

27 Update Your Knowledge
During lockdown, we are all having to learn new skills, whilst socially isolating. The use of masks is now commonplace, and recommended in day to day use! Learn how to make one in our new educational series!

30 We Are Brazil
Brazil is in covid-19 turmoil. Mariana is a medical student in Brazil and describes her feelings in the current crisis affecting her country.
SURGICAL LOCKDOWN

June 2020

Dearest Readers,

A hospital is akin to a chaotic, populous city. As I am rushing through the hospital corridors, I can not help but think of the metaphor of a city. There are neighbours in their doorways talking about the weather, whilst others rushing to get to their respective departments or appointment on time. And just like in any city in the morning, there are people (a lot of people!) getting coffee.

Furthermore there's even traffic jams! Only a couple of days ago, I almost caused a traffic accident, when I forgot to give priority to the nurse who came with a bed from the right. And just like so many cities around the world, COVID-19 swept over the place, with devastating effects in every aspect of our hospital cities. Entire departments were suddenly forced to lock down.

Without doubt, COVID-19 was the cause of many disastrous and calamitous events. However, as we face this new enemy, we also saw our citizens rising to the cause. Doctors, nurses, technicians, health care personnel and non-healthcare personnel alike collectively addressing the crisis; as if to say "This is OUR city and we will damn well defend it!"

Solidarity hasn't only surpassed the walls of our cities, but even transcended borders, uniting people from all over the world to collectively bring the virus to a halt. Within this issue, we shed light on the effects of COVID-19 on our cities: our hospitals and our surgical societies by letting our citizens share their voices and tell their stories of these difficult times.

With love always

Florence Van Belleghem
florence@one.surgery
United In Lockdown

EXTRACTS FROM THE ONE.SURGERY COVID SUPPORT DIARIES
Here I am working alone
A NHS nurse shielded at home.
I feel guilty for my colleagues on the frontline,
I miss my team, my structure, my distinct
home/work lines.

My children are desperate for social interaction
I feel guilty when they become a distraction
And guilty because mummy
Should play, bake and be funny.

My mum is alone and I hear in her voice
An enforced isolation made without choice.
Her birthday on a day the nation is celebrating
A victory, that came with a cost
A price again we are sadly facing.

I speak to parents in who’s voices I hear
Anxiety, desperation and fear.
I help them with all the resources I have
And hope by the end I may hear them laugh.

I am a NHS nurse in our 200th year
Who would of thought we would find ourselves
here?

I am a Health Visitor striving to give families
support
Find solutions to problems
And remotely give a shoulder
And time... to pause

I’m a mother, a wife, a daughter
A wearer of so many different hats
Sometimes it’s hard to balance all that

I am a NHS nurse and I'll give all I’ve got
I am a NHS nurse our strength never stops
I am a NHS nurse and in that I take pride
I am a NHS nurse and I CAN take this in my stride.

Keep going everyone,
we can get through this x
"We need to stand as one, push our apparent differences aside, and reach the human within. We connect not because of our race or stature, but our humanity."
- Maryam Ali Khan

"It’s hard to not cry thinking about these people. They haven’t seen their families in weeks."
- Anonymous

"My mom is going through chemotherapy. I’m terrified for her. I’m scared she’ll get sick in the hospital. I want things to go back to normal."
- Anonymous

"I have to admit I struggle to feel inspired, or emotional, or anything other than numb to it now."
- Anonymous

"Why should others experience such suffering while here life slowly returns to normal?"

Why should healthcare workers have to choose between sacrificing their own health to treat infected patients due to a shortage of PPE or refuse and live with the haunting regret?"
- Tim Hall
Write or speak your covid diary online

Be anonymous, be named.
Be private, be public.

VISIT THE DIARIES

https://one.surgery/covid-support/
ONE SURGERY HAD THE OPPORTUNITY TO TALK TO A TRUE GLOBAL HEALTH ADVOCATE, DR. RÉGINALD MOREELS. DR. MOREELS HAS ADVOCATED FOR IMPROVING GLOBAL HEALTH THROUGHOUT HIS CAREER - AS FORMER CHAIRMAN OF THE BELGIAN AFFILIATE OF DOCTORS WITHOUT BORDERS, AS THE FORMER BELGIAN SECRETARY OF STATE, AND AS A FORMER BELGIAN MINISTER OF DEVELOPMENT COOPERATION. FURTHERMORE, HE HAS BEEN WORKING AS A GLOBAL SURGEON FOR YEARS, WORKING IN REMOTE AREAS WITH ONLY THE BARE MINIMUM OF MEDICAL SUPPLIES. FOR THE PAST FEW YEARS, DR. MOREELS HAS BEEN TRULY INVESTING IN BENI, A CITY IN NORTH EASTERN DEMOCRATIC REPUBLIC OF CONGO, WHERE HE IS ALSO BUILDING A HOSPITAL. HE DISCUSSES SOME EFFECTS OF COVID-19 ON GLOBAL SURGERY, HUMANITARIAN WORK AND HEALTHCARE SYSTEMS.
COVID-19 has spread throughout the world. Although you are a Belgian surgeon, you've mainly been working in Beni as of late. What is the situation like?

I just came back from an Ebola-tormented Beni, only to arrive in a by Coronavirus tormented Belgium. Every epidemic, every pandemic is a global disaster. Even when health care personnel are ready to take care of infected people, some patients will still die. And wherever you are, for a health care worker, every death is a fiasco and every survivor a success. However in experiencing both the Belgian and Congolese situation, I’ve noticed some striking differences, and I can’t help but pose some questions.

Why is it that in Beni the first cases of COVID-19 have only now started to occur, when China has invested so much in regions like Beni, and has so many of its civilians working in that area, and flights to Congo continued as normal –when so many countries around the world had already banned most of international transportation.

Could it be the different climate? COVID-19 seems not to thrive as much in the African climate as it does in Europe, China, and the USA. Or is it (maybe this is just a pious wish) because the people of Sub-Saharan Africa have a higher resistance against COVID 19?

Secondly, I can't help but make some remarks: It has become apparent to me that even the well-organized contingency plans of high-performance health care systems have been inadequate, some of the most prosperous countries have been vigorously shaken to say the least. It is not only the emergency departments and intensive care units that have been put through the ringer, but the supply and availability of medical and protective equipment has been heavily put to the test. This applies to countries in both Europe and Africa.

Is a city like Beni, or a country like Congo prepared for a pandemic like COVID-19?

Many of the health care systems in Sub-Saharan Africa are well-functioning systems on paper, but in practice this varies enormously. And even in the larger hospitals in some of the metropolises some of the systems are malfunctioning. Only a few days ago I had some cancer patients on consultation with tumours so far advanced that the only thing they could do, was wait to die. This of course impacts me immensely. The healthcare system is stunted with its organisation, personnel management, and the availability and quality of medical supplies and equipment.

It is however true that by experience with epidemics many of these countries are better prepared than most, to take care of a pandemic of this kind. Measures like washing your hands at the borders and in hospitals, shops and catering were already practiced in cities like Beni. Temperature is often measured and vaccinations are taking place on a large scale (depending on the stockage), but because of political instability and military situations, these preventive measures have been weakened or have disappeared. Social discipline has disappeared after years of absent or corrupt leadership. Only peer pressure of colleagues, friends and NGOs sometimes forces people to take the measures seriously.
In many of the Sub-Saharan countries, Centers for Disease Control have been established. These really bring hope to the unstable health care systems. However the efficiency of these centers can be doubted when considering how poorly they are often supported. Except for Rwanda, none of the Sub-Saharan African countries I’ve worked in have been able to reach the minimum of 5-7% of national budget that should be directed to healthcare. Furthermore, the absence of any kind of insurance in many of these countries makes adequate healthcare nearly impossible for most civilians.

COVID-19 is mainly feared because it can cause acute respiratory distress (ARDS). In the Belgian hospitals this can be taken care of with O2 therapy and respirators in ICU settings. In the referral center of Beni where I’ve been working, there are only 2 functioning devices that can concentrate ambient air into purer air. A respirator isn’t available, not one – and no one is educated to operate such a device. A patient with ARDS, even just one patient can thus not be taken care of. Furthermore, the health care system in Beni has been severely disrupted by the Ebola crisis. The system hasn’t nearly had the time to properly recover. The only glimmer of light I can see here is that there’s still some of the protective equipment and medical supplies available, because of the Ebola epidemic.

You mention Ebola, how is COVID-19 different?

First of all Ebola has a mortality rate of 68% while the lethality of COVID-19 is only about 3% (up to 15% in high-risk groups), although the aforementioned factors obviously increase that number.

Secondly, the coronaviruses, which are spread by droplets, are more contagious then the Ebola virus which is spread by body fluids.

Third, the incubation period of Ebola lasts about 2-21 days and people are probably at that time not contagious, while the incubation period of COVID-19 is only 5-7 days, but people in this window are thought to be contagious.

What do you think will be the consequences of COVID-19 on a city like Beni?

The true extend of what the effects of COVID-19 will be, can only be guessed. In Beni, the consequences of the Ebola epidemic haven’t been played out. But it has become increasingly clear that the consequences will be far more extensive than first expected. Non-essential health care has diminished, which has halted the development of important health care facilities and measures.

For the past 4 years, I have been starting up a medical and surgical facility to help bring adequate surgical and clinical care to the millions of people in Beni that currently have no access to surgery. Just like with every other facility, the ebola epidemic and corona pandemic have diminished the further development of adequate surgical care.

Reducing care also had other consequences: Mass vaccination has stopped, and it has already become clear that the measles – which are often deadly in a region like Beni – are on the rise again.

Support Unichir:

Unichir strives to become a top level medical and surgical care center, alongside a training center for local young surgeons. Find out more: https://www.unichir.africa/
The fact is, if Africa is hit by Corona in a way similar to the way China, Europe, and the USA are affected, we can expect the continent to become a graveyard.

I’d like to add that what people often don’t consider is that there are enormous differences in the way international, national, and local health care personnel work and in the way they are paid. In addition, the sudden availability of medical supplies and logistics equipment for this one disease creates a gap in comparison with the scarcity of supplies for every other disease in these regions.

Also, there is a lack of preparation of the local people who are suddenly confronted with the sudden arrival of foreigners in full protective equipment who take their dead away, who start testing people, and who implement all kinds of rules. This has caused a social shock that can’t be ignored in places like Beni.

Furthermore, I’ve noticed that every epidemic causes fear and panic and further stigmatization. The infected person who infects others is the ‘bad guy’, and the government can never do enough. Ebola became a political virus, brought in by whites, COVID 19 was considered a Chinese invasion, now Europeans are being pointed out in Africa and the world. Fear diminishes with the length of the epidemic, which can trigger a flare-up, and stigmas are circulating around the world.

On a positive note however, I’ve also noticed that with every pandemic and epidemic, there is an incredible sense of solidarity that arises as a natural reflex. People unite in their stand against the disease. And I would say that a little less competition, a little less greed, and a little more daily solidarity of this kind would do us all some good.
GLOBAL SCALPELS
A GLOBAL SURGERY PODCAST

RIANA PATEL
TAYLOR D. OTTESEN
Missiles are targeting our hospitals. We are filling tires with sand to create shock absorbers on the roof. You can hear the fighter planes overhead as people duck for cover. We start the operation in the hospital corridor with only flashlights. Lives lost. Resources gone...

You close your eyes and are imagining this scene; however, you’re not sitting in a conference, listening to the experiences of Syrian war-time surgeon, Dr. Mahmoud Hariri. Instead, you are sitting on your couch, or you’re running, or you’re cooking - welcome to the Global Scalpels podcast!

The current covid-19 pandemic has shut down economies, restricted travel, and stretched our healthcare systems to the edge, but despite this time of destruction, we wanted to make a platform for creation, a platform for growth, and a platform for unity.

The Global Scalpels podcast was recently founded and is launching on June 5th, 2020. Its date on the 5th of each month, as well as its signature 5 final questions are dedicated to the 5 billion people worldwide without access to safe, accessible surgery (1). With this podcast, we aim to inspire, engage, and promote action to solve challenges in global surgery by highlighting a range of topics. The podcast is targeted towards anyone interested in the field of global surgery - surgeons, technology wizards, business people, and researchers alike. We hope to highlight that global surgery is a team effort and that engagement with all professionals, such as designers, entrepreneurs, advocacy gurus, and clinicians, is essential to provide the 143 million additional surgical procedures required annually.

Who should we expect to see on the podcast?

#globalsurgery

As social media demonstrates, not all valuable work in global surgery belongs in an academic journal, hidden behind a paywall. Whilst we acknowledge the importance of peer-reviewed information, the presence of these journals biases the academic world of global surgery towards works authored by clinicians for clinicians. This is in stark contrast to the ethos of health system strengthening, which relies on a multi-disciplinary approach, engaging everyone from economists to government advisors. At present, there is a scarcity of platforms engaging with these other important players in the field of global surgery. Our podcast sets out to change this.
By highlighting both our non-clinician colleagues alongside clinicians, we hope to leverage their diverse experiences and their knowledge to inspire and teach. The power of a personal anecdote can be far greater than a p-value, and certainly more accessible to a wider audience. Furthermore, we hope that many of our speakers, who come from non-traditional backgrounds or have had non-traditional careers, can highlight the myriad ways listeners can create their own career paths in global surgery. For example, how did a doctoral researcher in immunology transition from working with immunoglobulin heavy chains to value-based healthcare, or a neurosurgeon start writing for Forbes? You'll have to listen to the podcast to find out!

We were initially worried that it would be difficult to convince people to sacrifice an hour of their time for an interview with our team, especially with our digital footprint initially being limited to a logo on an otherwise empty social media page. However, we found the exact opposite. Support has poured in from around the globe. Our speakers have been enthusiastic about the podcast, and we are excited to share their stories. This speaks volumes to the passion of our guests for their work, and we are immensely grateful for the time they have all donated.

Controversies Surrounding “Global” Podcasts:

A question we kept asking ourselves at the beginning was, “how can we ensure our Global Scalpels podcast is truly global?” In creating the podcast, we wanted to ensure our platform embraced inclusivity as one of its core values. Despite the best intentions, global surgery can be inequitable at times – skewed in terms of gender, language, and high-income country-centric. Thus, we have attempted to engage with diverse guests to produce shows with equitable representation. We have also highlighted these issues with our guests, gaining advice on how we can ensure low- and middle-income country colleagues are heard, included, and empowered. Just some of our amazing guests have included a doctor from Morocco talking about student initiatives, technology innovators from Malawi talking about SurgAfrica’s WhatsApp clinician connector, and so many more!

While we recognize the medium of a podcast may be difficult for some to access due to language or internet connectivity issues, we are doing our best to make it accessible by making it completely free and available on a wide range of platforms. These can be downloaded directly to be heard from a mobile phone, shared via WhatsApp, or played for a friend. We hope in this manner our platform will reach both high-income country and low and middle income country colleagues equally.
Lessons Learned:

For anyone wanting to get involved in global surgery, participate in our podcast, or even create their own, we offer the following five tips:
1. Don’t be afraid to reach out to people via whatever means – Twitter, LinkedIn, or even through a mutual connection.
2. Be prepared. Know your audience, your speakers, and help them to prepare as well so they have time to think about the stories that have moved them and what they would like to share.
3. Do your research on audio equipment. Good sound quality is key to the audience’s experience, but you also don’t need to spend a fortune to have a high quality product.
4. Work in a team. Find like-minded people who share the same vision and are willing to commit time to making the project a success.
5. Finally, don’t forget to enjoy recording. It is a privilege to speak with our guests, who are often very entertaining. We always feel like we are getting a one-on-one lecture with the most intelligent and thoughtful individuals and feel so blessed to have them with us and to share their stories with you all!

Conclusion:

Our first series of the “Global Scalpels” podcast will be available on June 5th, 2020 on Spotify, Apple Podcasts, Google Play, and on our website (www.globalscalpels.com). We hope our podcast creates a medium for inspiration, for reflection, and more importantly, for collaboration. When people from across the healthcare spectrum come together to tackle an issue through a multidisciplinary approach, the possibilities are truly endless - and the product, amazing. And who knows, you may just find yourself breaking down walls and finding new ways to tackle global surgery whilst in this covid lockdown...

References:
Taylor Ottesen

Hi! My name is Taylor and I am a current 4th-year medical student at Yale School of Medicine in the United States and am currently finishing an MBA at the University of Cambridge in the UK.

Although I grew up in the US, I became interested in international work at a young age. During college, I moved to Southern India to study in a small village and eventually founded my own non-profit organization working with slum and village students which we ran for about 5 years. During that time, I lost two very close friends to very treatable diseases - this is when global health became extremely personal to me. I have since made it a career goal to never turn a blind eye to problems in global health.

I subsequently applied to medical school and was fortunate to be accepted. Since that time, I have worked with many organizations to expand healthcare access and understanding including the World Health Organization, National Health Service (UK), Ukrainian Institute on Public Health and Policy, Doctors Without Borders, and Siemens Healthineers. Through my experience in business school and other organizations, I found a whole host of people doing extraordinary things in global surgery that were often not recognized. We hope that by creating this podcast it will give a platform for those unsung heroes with incredible initiatives around the world.

Riana Patel

Hi, my name is Riana, and I am a core surgical trainee working in England. I graduated from Barts and The London School of Medicine & Dentistry in 2017, and subsequently worked as an Academic Foundation Doctor in the Oxford Global Surgery Group from 2017-2019.

I've been interested in global surgery for a little while, but for me, one of the most poignant experiences that has inspired my work in global surgery was from working as part of a paediatric surgery partnership with a Tanzanian hospital. It was humbling to see such skilled clinicians in Tanzania dedicating their lives to managing children with surgically-treatable conditions. I was able to appreciate the commonality we all have as members of surgical teams worldwide - the same knowledge, the same values, and the same drive to do the best for our patients. At the time, I was, and still am, very aware that this partnership with our Tanzanian colleagues gave me more than I was able to contribute to the local team.

It made me reflect on what someone at a junior stage in their career could do to contribute to the global surgery cause. One such thing is advocacy and awareness. And this is why I got involved with creating this podcast. Hopefully, this podcast is something that is accessible to all and inspires others to think about how they too can get involved in an ethical manner.
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PODCASTS WE SUPPORT AND LOVE...

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A WORLD AFFECTED BY COVID-19
FROM PERU TO BELGIUM
XIMENA VÁSQUEZ & DR VINCENT VAN BELLEGHEM
The coronavirus has swept over the earth, forcing entire countries to go in lockdown. Countless people have been affected and the totality of the disastrous effects still remain unclear. However, all over the world, people have been standing up to the virus; uniting in the fight against the horrendous pandemic. With One.Surgery, we’ve had the opportunity to shed some light on the measures taken by different countries in various parts of the world: actions taken in Peru by the Peruvian Society of endoscopic surgery, the Latin American Association of Endoscopic Surgery and the Cayetano Heredia hospital. Also, in Belgium, actions taken by the emergency department of the AZ Groeninge hospital.

On March 5th, the first case of COVID 19 was identified in Peru. As of April 28th, the number of reported cases had risen to 31 190, with 854 reported COVID deaths. Facts and figures were communicated by the Peruvian Society of endoscopic surgery to the endoscopic surgeons. All non-essential activities were ordered to be cancelled. All the medical visits were ordered to have the least number of possible participants; decision-making meetings were ordered to be held virtually where possible and finally, it was informed that the most experienced person has to perform the surgical procedures.

2. Precautions in airway management:

- Consider avoiding general anaesthesia with intubation.
- Intubation and extubation should be performed in a room with negative pressure if possible, to avoid the high risk of aerosolization.
- It is recommended not to use air conditioning (room with positive pressure) or fans.
- Only the doctor in charge of intubation should be present.
- A mandatory waiting period of the surgical team (15 minutes) in another environment after intubation and extubation.

Clear surgical guides were developed to serve as manuals. Some of these manuals are included here.

A PRACTICAL GUIDE FOR SURGERY AND COVID-19.

1. Preoperative considerations:

- Surgical patients should be tested for COVID-19 preoperatively.
- Informed consent discussion must cover the risk of exposure to COVID-19 and higher prevalence of complications.
- Use of PPE such as N95 mask, glasses and/or face shield.
- Minimum use of personal accessories in the room such as cellphones, watches, pens etc.
- Identify the patient’s operating room, if it is COVID-19 suspected or confirmed.
- The operating room should have adequate filtration and ventilation.
- Consider avoiding laparoscopic surgery without a CO2.
- Consider a room with negative pressure if available.
- Traffic route plan in the operating room.
3. Laparoscopy and Pneumoperitoneum:

- It is strongly recommended to use CO2 filters.
- Avoid leakage during the procedure.
- Pneumoperitoneum should be evacuated via a filtration system before trocar removal or extraction.

EMERGENCY SURGERY AND COVID-19

1. Analysis of the Institution’s Resources:

- Adequate PPE
- Exclusive COVID-19 Operations Room.
- Availability of the Intensive Care Unit
- Availability of Interventional Radiology.
- Availability of Laparoscopy with CO2 Filters
- Establish the level of participation of residents.
- Establish institutional protocols.

2. Establish the Correct Diagnosis;
- Ensuring that the patient requires surgery.

3. If available, test for COVID-19:

- Rapid test (Ig G, Ig M).
- PCR (If feasible, obtain the result before surgery)
- Chest tomography.

4. Establish Individualized Management:

- Recommendation M: Medical/Conservative Management.
- Recommendation Q: Surgical management

5. Establish Protocols, Guides and institutional filters.

SURGERY IN CANCER PATIENTS AND COVID-19

- Hospitals and Cancer Institutes are not in the first line of action against the Coronavirus.
- The Peruvian Ministry of Health (MINSA) can restrict its activities, according to the evolution of the pandemic and intra-hospital cases.
- Cancer care cannot stop, so priorities should be established with the aim of:
  - Ensuring the continuity of medical care for oncological patients.
  - Protect healthcare workers and patients from a possible contagion.
  - Consider the availability of resources for the intra-hospital care of the pandemic.
In Peru, a central government committee system against the pandemic has been organized by the President. The measures they've established include the migration of surgical departments to non-COVID areas, the designation of new roles like coordinator of the surgical area, the division of healthcare workers into 2 groups: a group that takes care of COVID patients and a group that looks after the non-COVID patients. Lastly, a research group was installed to focus on the development of protocols in accordance with the capabilities of the Peruvian Health Care system.

Although the Peruvian government has made some excellent contingency plans and national guidelines to cope with COVID-19, unfortunately and sadly, by the 22nd of April, the number of infected doctors had already risen to 237. Differentiated triage has become essential to deal with the pandemic: it functions as the first filter to determine if the patient will be treated in a COVID or non-COVID area. In parallel with the government efforts national mobile hospitals have been installed that even include intensive care units, exclusively for infected patients. Graduated young doctors have also offered to provide medical services in the most affected areas such as the jungle and the northern part of the country.

On March 15th, Peru was one of the first Latin American countries to establish a national lockdown. Since then, the president has extended the lockdown due to the increase of coronavirus cases and deaths. The last announcement on May 22th extended the lockdown until June 30th.

Despite the low economic, human, and structural resources, the Peruvian government has elaborated an emergency response system against COVID-19 to mitigate the country’s health, social and economic impact, and to reduce the spread of the virus. Urban areas have been reorganized in order to provide care. The Lima 2019 Pan American and Parapan American Village has temporarily been made available to health sector authorities to treat COVID-19 coronavirus patients and cope with the pandemic.

Starting on March 19th, an entire tower has been opened to make the Villa a Hospital for the care of infected patients. With the support of the Armed Forces, the transfer and placement of beds, mattresses, sheets and night tables has been carried out.

References:
- Dr. Giuliano Borda Luque - Chief of Surgery - Cayetano Hereditario Hospital
- Peruvian Society of endoscopic surgery
- The Latin American Association of Endoscopic Surgery
Phase 0:

By the end of February, messages were started coming in from the fellow physicians of Belgium and neighbouring countries. It was getting clear that COVID-19 wasn't going to be something to be ignored. The emergency department had to be activated and prepared to properly deal with the situation in accordance with the infectious diseases contingency plan. This meant compartmentalization of the department to prepare 3 boxes + a room to change into protective equipment. Furthermore, this compartment had to have a separate entrance and exit and be compatible with negative pressure. In this scenario, patients had to be referred to some specific hospitals after initial admission. This method miraculously corresponded with the initial instructions from the government about the reception of COVID-19 patients. The government had appointed the St-Pieters hospital in Brussels and the UZ Antwerp as referral centres. However, it soon became apparent that these referral centres didn’t have the necessary capacity, so the larger hospitals had to take care of the patients themselves.

Dr Vincent Van Belleghem, anaesthesiologist, emergency doctor and head of the emergency department at the AZ Groeninge hospital in Belgium reflects on the measures taken to face the COVID-19 pandemic:

"Sometimes large hospitals are accused of being too bulky to change quickly and efficiently. We have been able to prove the contrary."

Consequently, a new patient flow had to be set up. Agreements had to be made with the other departments and the management board to ensure the safe admission of these patients.

Phase 1:

On March 2nd, the emergency department took the initiative to elaborate and expand the existing emergency plans to be able to adequately handle a remarkable rise in patients, should it occur. The infrastructure of our emergency admission allows us to adapt quickly to emergency situations us to switch very quickly where many patients have to be taken care of at once. Luckily, we had practised this kind of scenario in 2019.

During my career, no crisis in health care has ever had an impact on the organization of the Emergency department similar to the impact of the current COVID-19 pandemic. In just a few days, we had to completely rethink the entire functioning, staffing and infrastructure of our familiar, rather large emergency department. Furthermore the newly implemented reformatations had to be able to stand for a long time: e.g. several months or even longer. For some perspective, the AZ Groeninge Hospital is a hospital of 1066 beds, with 45,000 emergency admissions per year.

Sadly, it soon became clear that the corona pandemic wasn’t going to be a short story. Therefore, we opted not to expand the ED with tents, but with fixed structures where we could offer maximum comfort for both patients and healthcare personnels. Here the technical service performed a small miracle. During the afternoon of March 2nd on monday, the first plan was made to add an extension to our emergency admission with a separate entrance and waiting room, an observation room for 6 beds and an administration zone near the ambulance hall.
This plan was approved by the Management Committee on March 3rd, tuesday. On March 4th we had a fully operational construction with facilities for water, electricity, Wi-Fi, heating, oxygen and compressed air. Luckily, everything was set up just a week before we had to put this whole new construction to use.

By that time, reports from Italy became increasingly dramatic and sitting back was not an option. We closely watched the corona curve of Italy. extrapolated to our emergency admission and this would mean that by the end of week 12, around March 20th, we could expect a grave capacity problem in our emergency admission.

Phase 2:

Our emergency admission was split into a COVID and a non-COVID zone. In terms of logistics, this was again quite an impressive feat. Both zones had to be able to handle polytraumas, acute myocardial infarcts, resuscitation and stroke in the same high-quality way with a need for an observation room in both zones.

The CT and ultrasound of the emergency department were assigned to the COVID zone, where the radiologists had to work in full protective equipment. Additional monitors, ultrasounds and ventilators were installed. Protective equipment was requested; software adjustments were made in KWS (the clinical web application most hospitals in Belgium use), medications were deduplicated and a new room was set up for all of this equipment.

From the management board, we received an alarming message about the availability and quantity of protective equipment that we had to take into account. In the initial phase, we were also inundated with scientific and pseudo-scientific information. Literature about the best treatment strategies and requests to participate in scientific studies kept coming in. As you can imagine, it was a chaotic time with frequent and intensive meetings with all the actors. A scientific task force was set up to compile, verify and make all medical information available for all medical disciplines involved to implement a uniform medical policy. A lot of attention was also given to adequately inform our employees.
Adjustments to the work schedules, new tasks, the decision to withdraw our dear volunteers from the work floor, agreements regarding the use of personal protective equipment, etc. Nurses and doctors were informed through joint communication on a regular basis. But it still wasn’t enough. Even before we initiated phase 2, we were already brainstorming with a number of key figures about phase 3. If the government measures did not flatten the curve, we would have a new problem in terms of capacity by mid-April. During phase 3, we would have to put the entire emergency department into use as a COVID zone. This would mean that we could no longer admit any of the non-COVID patients there. We would need an entire new place to treat these patients.

It soon became clear that the current physiotherapy department in the C block would be an ideal location to serve as a separate emergency department. After discussing this idea with the physiotherapists and the management board, we were able to proceed very quickly with the technical department to redesign this department. Triage boxes were arranged, examination rooms were set up and an additional bedroom for 10 patients was provided along with 2 resuscitation rooms. Here too, oxygen and compressed air lines were relocated. Finally, an additional exit to the parking was provided.

This immense expansion of the emergency admission, of course, meant that the necessary personnel had to be found to staff this entire department. Thanks to the enormous solidarity between the doctors, an extra waiting list of doctors who were willing to help out at the emergency department service were set up in no time. To help out the nurses already working at the ED, we could count on the personnel that was deployed from the operating theatre.

On March 19th, Thursday at 6.30 a.m., we effectively made the switch from phase 1 to phase 2. During this time nurses from the operating room were also deployed to the ED to be effectively prepared for the possible switch to phase 3. To date, the capacity of phase 2 is still sufficient. The flattening of the curve has fortunately come about.
We are now at the beginning of May and the number of registrations is levelling off further, with a clear decrease in the number of deaths. The government is starting to relax the lock-down measures. The hospital is planning a gradual restart of the consultation and operation activities. On April 30th, we started to extend our non-COVID zone again little by little and we are again seeing an increasing number of non-COVID related registrations. At this moment, it remains to be seen whether a second peak will arise and whether the planned relaxation of government measures can continue.

"The corona time is a milestone in the history of our healthcare."

Working in full protective equipment is challenging and requires optimal concentration. Furthermore, it makes communication quite difficult. By forcing a mandatory change every 4 hours for both doctors and nurses, we have been able to reduce the heavy workload. The solidarity of the Belgian people has also pleasantly charmed us. We were able to convert our conversation room into a lounge room with 3 large seats to take a break. The candy, the fruit, the chocolate, the cakes... The despair in the eyes of many staff members to keep the 'coronapounds' under control with some decency sometimes leads to hilarious scenes.

It is already clear that the COVID pandemic will continue for months in the operation of our emergency department. In any case, I am convinced that the early preparation, the constructive cooperation of the various services and the great solidarity within the hospital have been the keys to our successful strategy. The experience of the past few months has allowed me to look to the future with confidence, with this team, with this service, with this hospital.
UPDATE YOUR KNOWLEDGE

EPISODE 1:
HOW TO MAKE YOUR OWN MASK
I. Sewn cloth face mask

Materials:
- 2 rectangles of cotton fabric 20cm x 25cm
- 2 elastic bands of about 20cm (or rubber bands, cloth strips, hair ties, ...)
- Needle and thread
- Scissors
- Sewing machine

Step 1: Cut out two rectangles of cotton fabric 20cm x 25cm. Stack the two rectangles upon each other (You will sew the masks as if it was a single piece of fabric.

Step 2: Fold over the long sides 0.5cm and stitch down. Next fold over the short sides 1cm and stitch down

Step 3: Run a 20cm length elastic through the wider hem on each side of the mask (these will be the ear loops). Use a large needle (or a bobby pin) to thread i through. Tie the ends tight.

(If you only have strings, you can make the ties longer and tie the mask behind your head.)

Step 4: Gently pull on the elastic so that the knots are tucked inside the mask. Gather the sides of the mask on the elastic and adjust so the mask fits your face. Then securely stitch the elastic in place to it from slipping.

Tip: You can always leave an opening to put in a filter between both pieces of fabric.
II. Quick cut T-shirt face covering (no sew method)

Materials:
- T-shirt
- Scissors

Step 1: Cut off the bottom 18cm of your shirt.
Step 2: Cut out a rectangle from 16cm x 17cm.
Step 3: Cut the strings.
Step 4: Tie strings around your neck and over the top of your head.

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Bandana face covering (no sew method)

Materials:
- Bandana (or square cotton cloth of approximately 50cm x 50cm)
- Rubber bands (or hair ties)
- Scissors

Step 1: Fold your bandana in half.
Step 2: Fold top down and fold bottom up.
Step 3: Place rubber bands (or hair ties) about 15 cm apart.
Step 4: Fold sides to the middle and tuck.

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REFERENCE

Centers for Disease and Control and Prevention
WE ARE BRAZIL

A personal account of one of the thousands of Marias and Anas

MARIANA COSTA FERREIRA RIGHI RODRIGUES

PHOTO BY IGOR RODRIGUES ON UNSPLASH
My name is Mariana, the combination of the two most common female names in Brazil, MARIA and ANA. As the name says, I’m Brazilian. I am also one of the country’s 211.5 million inhabitants. But, luckily for me, I am not part of the group of more than 501,985 confirmed cases of COVID-19, or 28,872 deaths. (1,2)

About a 1000 deaths are recorded every 24 hours. Every day, hundreds of Marias and Anas die. I live in Brazil, the country with the 2nd most confirmed cases in the world and the 4th highest number of deaths. (3)

In these 8,516,000 km² of land, we Marias and Anas not only have to worry about COVID-19, we are also faced with a lack of empathy and compassion throughout many parts of society. Economical issues are placed higher in value than life despite the current ravaging pandemic. (4) Brazil’s government reflects the inconsequential position of many Brazilians, ultimately declaring the whole COVID-19 threat a hysteria. This strengthens the rumor that COVID-19 is nothing more than the flu, resulting in many people adopting an attitude of breaking social isolation, which therefore endangers the entire population. (5, 6)
It is important to note that during this period of social isolation, there have been many personnel changes in the Ministry of Health. Those who were in favor of quarantine were replaced or asked to stop being part of the government. This resulted in increased confusion within our country about public health affairs.

And because of that, Marias and Anas, Joãos and Josés from all over Brazil are infected and many of them are dying. The truth is that, in this challenging context, everyone has to make a difference, and we will only solve the problem by working together and thinking about each other. More compassion within our community is urgently needed.

My name is Mariana, the combination of the two most common female names in Brazil, MARIA and ANA. As the name says, I am Brazilian. I am the daughter of Ana and José, I am the sister of Juliana and Isabella, I am the girlfriend of Lucas. He is the son of Juan, husband of Leila, who is the mother of Felipe and Lucas. Lucas is thus boyfriend of one of the thousands of Marianas in Brazil, one of the thousands of Brazilians who can be contaminated every day, in an endless cycle, where only awareness can improve things.

Brazil is a country where confusion prevails in the middle of this worldwide pandemic, where half the population does not respect quarantine, where health ministers are disposable and where money and personal needs are placed above life. (5)
It is sad, it is death, it is contamination, it is a need for change and it is Brazil. It is the reality of Marias and Anas. It is the personal account of one of them. It is the outburst of one of them. It is the request for help and relief for population awareness, basic education, citizenship, empathy and compassion, for health.

My name is Mariana, the combination of the two most common female names in Brazil, MARIA and ANA. I am Brazilian and, today, I fear, I fear for my country, I fear for Brazilians, I fear for the thousands of Marias and Anas. I fear for us humans, I fear for the future and I long for a solution.

Mariana can be contacted on Twitter: @costarighi

REFERENCES


OURS IS A CIRCLE OF FRIENDSHIPS UNITED BY IDEALS

JULIETTE GORDON LOW

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