Date of Publication: May 18, 2020

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Title: Emergency medicine in the era of COVID-19

These have been interesting times; facing a global pandemic while learning on the go. All are affected, no country is spared. It has been the biggest trial to health care systems in Africa more so emergency care systems which are pretty young and fragile especially in Kenya.

Emergency medicine plays a crucial role, as in any other epidemic, pandemic or disaster. Patients suspected of having Covid-19 present to the emergency department first. They come as walk-ins or by ambulance. It is here that most of the screening, testing and stabilization of the critically ill is done. Many have had to learn very fast, how to go about this with minimal exposure to staff and other patients. In this blog, we share practices and real fears faced in delivering emergency medicine in the era of covid-19

Some of the measures being taken include wearing of protective gear, erection of screening and testing tents aside from the main emergency departments, drive-through testing, limiting the number of visitors and visiting hours and allocating isolation rooms for symptomatic patients. These steps have so far proven effective in limiting spread within health facilities.

Handling a novel virus came with several issues. The most apparent would be inadequate quantities of personal protective equipment (PPEs) for staff. From surgical masks, N95 masks to full hazmat suits and goggles, there has been a spike in demand for them. Ideally, all staff would be in full suits all day. However, with the shortage, staff have had to optimize screening and triage to see which patients have to be attended to in full PPE. Kenya in particular, has been forced to depend less on imports and get supplies from our own manufacturers.

Another interesting problem, (we call it interesting because it stimulates thinking and discussion rather than fear and panic) is the constant change of screening and treatment protocols. Africa has been hit last and hence we have time to learn how other countries have dealt with the pandemic so far. Screening criteria has quickly shifted from targeted testing to mass testing of staff and the public. We have learnt the populations at highest risk and the physiological progression of the illness.

We now know that patients' presentation is not only limited to respiratory symptoms. This has widened criteria for screening and created anxiety that potentially any patient could have Covid-19. Consultations via telemedicine, Zoom application and social media platforms have replaced regular meetings and classes helping us get real time updates, monitor what is happening in other nations, and anticipate the difficulties they come across as well as providing a platform to discuss solutions.

There being no definitive drug for treatment, numerous protocols for treatment exist bringing confusion. Multiple drug trials currently continue the world over. At the pre-hospital and Emergency department level,

emphasis has been laid on staff protection, isolation and rapid intervention and disposition of the critically ill. For example, we have a protocol for intubating a patient in acute respiratory distress syndrome (ARDS) with COVID-19 specifically. Our numbers are not as high as in Europe or the USA (14 cases per 1 million population versus 4,407 cases per 1 million population in USA, 5,868 cases per 1million population in Spain) thus we have not reached the point of dedicating entire departments or hospitals to coronavirus care and we hope not to.

The psychological and social impact of the pandemic cannot be ignored. Focusing on its effects on prehospital and emergency staff as these are first responders, the anxiety and fear of getting infected at work is very apparent. Every call to pick a patient, every one received at the department brings a possibility of exposure. Many will not speak of the stigma involved but it exists. Frequent quarantine of colleagues and shortage of PPEs only elevates fear.

Staff are also very concerned about bringing the infection home to their own families. A number have resorted to either sending their immediate families to other relatives or taking up alternative accommodation arrangements. This separation from their loved ones for long takes a heavy toll on their emotional and mental health.

The lockdown has resulted in low attendance in most emergency departments (ED). Less trauma could be explained by less commuters on the roads. However, of concern is the low number of patients with stroke, myocardial infarction, diabetic complications, chronic obstructive pulmonary disease exacerbations and other typical emergencies that were the bread and butter of a normal shift. Where are they? Are they too fearful of COVID-19 to come to hospital? Most facilities, including ours have reduced clinic appointments and elective procedures in an effort to decongest the hospital. What happens to the people with chronic diseases who need follow up? They end up coming to the ED with complications which might be far too late. This is indeed worrying. Fortunately, telemedicine has offered a safe and relatively accessible avenue for patient follow-up and re-fill prescriptions for long term medication.

While we don't have immediate solutions, we are learning as we go, there's plenty we can do in the meantime. Increasing our testing capacity will give us the real figures of just how many are affected, mortality and recovery rates. Local sourcing of PPEs is key to guaranteeing staff protection and ease of mind at work. Prehospital and hospital preparation is paramount. Clear protocols on suspected COVID-19 patient flow and interventions (e.g. intubation and ventilation), handling of equipment (separate equipment for patients suspected/confirmed to have COVID -19, safe donning and doffing of PPEs) are needed for every department and facility. While numbers are still low, drills would greatly improve staff and institutional preparedness. Psychological support and counselling must be available for patients, their relatives and staff. Structured, coordinated efforts and communication between different facilities, regions and with the government is the only way to flatten the curve.

It is important to also consider what all this means for the future of Emergency medicine. Will we now give as much attention to infectious diseases as we have done to cardiovascular events? Will isolation centers be retained for future sporadic eruptions of the disease? Will we as emergency medicine copy paste what the West is doing or shall we rise to develop solutions applicable to our continent's situation? Will governments finally dedicate more funding to emergency care and healthcare in general? Answers will be evident at the end of this.

As it is, the whole world is at a standstill. All in all, Emergency medicine in Africa will never be the same after the pandemic. We hope it comes our stronger, more established and better equipped to handle anything.