

RESEARCH ARTICLE

The Story of Covid-19 from a Hospital in Egypt

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Abstract

On the 31st of December clusters of Pneumonia cases in Wuhan City, Hubei Province, China, were reported to the WHO which on the 12th January 2020 was confirmed to be caused by a novel coronavirus. The virus has a high transmission rate and a significant total death toll. On 13th March, Egypt reported its first coronavirus case in Khartoum, a man who died on the 12th March 2020 who had visited the United Arab Emirates in the first week of March.

Keywords: COVID-19, patient, SARS-Cov2, cute Medical Conditions

1 | INTRODUCTION:

The current administration in Egypt has inherited a collapsed health care system from the previous 30 year authoritarian military regime, which was ousted in April of last year. Years of corruption, economic mismanagement and debilitating sanctions led to a system with little capacity of managing its sick. Despite a vast number of medical schools in Egypt, the country has a shortage of healthcare workers due to high rates of emigration reasons being poor training opportunities, low salaries and economic and political instability. On top of that, COVID-19 recently hit the country hard, straining an already frail health system. Many hospitals in Egypt ceased providing services as doctors could not reach hospitals due to fuel shortages and could not work due to lack of personal protective equipment (PPE) and low pay, if any at all. Before a triaging system was put in place in our hospital, many health professionals were at high risk of getting infected due to a crowded Emergency Room, patients bypassing an already defective triage and people flocking in and out of the hospital. Moreover,

it seems that there was some confusion amongst medical staff regarding rules of self-isolation, which depleted the hospitals from healthcare providers at the beginning of the epidemic. (1)

Given that the disease spreads quickly, it is advisable that both the waiting room and isolation room of people suspected of COVID-19 is separate from those with a definite diagnosis of COVID-19 so as to reduce the spread of the virus as much as possible (2). There is no waiting area in the ER, however an isolation area has been created for suspected COVID-19 patients. This area used to host outpatients clinics for Medicine and Paediatrics, however, since the Egypt Ministry of Health ordered the clinics to stop working (with the intention to mitigate the spread of the virus by keeping overcrowding to a minimum)

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it has been turned into an isolation area. This area is closed off from the ER and holds 8 beds. Patients are usually transferred immediately to the isolation area around the back of the hospital so as to reduce the risk of contact with people inside the hospital as much as possible.

The health care workers in the hospital are divided into those that work in the ER and those that manage patients in the isolation. The ER team consists of an average of 6 doctors and 2 nurses, while the isolation area consists of 3 doctors and three nurses. Those that work in the isolation area also manage the triage.

Triage centers are vital for the assessment and management of Covid-19 suspected patients. It is an important strategy to mitigate the spread of the virus among non-symptomatic patients who present to the EDs. A proper triage system will allow for a safer diversion of Covid-19 patients to specific hospital units (3).

During the pandemic, CHU-ST University Hospital in China decided to create two different areas for triaging patients outside its hospital: one for the assessment of Covid-19 suspected patients and one for non-suspected patients. This was after a patient presented with difficulty breathing and was not suspected to have Covid-19 at the time. The patient later turned out to have the disease. This experience made hospital staff aware of the real risk of intrahospital contamination if they did not take the correct prevention measures. It was important to try to prevent the spread of the disease to hospital staff. Patients presenting to the EDs were triaged to assess if they presented with Covid-19 symptoms. Patients free of the symptoms and thus not suspected of Covid-19 were directed to the classical EDs, while the others were sent to a specific center (Covid-19 centre). The assessment, management and treatment of Covid-19 suspected patients were all executed in the specific center. During the study period, patients that were eligible to be screened for SARS-Cov2 were those that presented one of the following criteria: respiratory symptoms and/or fever in a healthcare provider, an immunosuppressed patient or a nursing home resident, and all patients who required an admission to the hospital (3).

In our hospital, the triage is found immediately at the entrance of the hospital. The doctor in charge measures the vital signs (blood pressure, heart rate, respiratory rate and oxygen saturation) and takes a history from the patients. Patients are triaged according to their vital signs, history and investigations (some patients may have already done investigations such as a chest x-ray, CT-Scan and CBC (complete blood count) from another hospital and may have been told to go find another hospital to manage them. According to the vital signs, complaints and investigation results, patients are told to go to one of four sections: the AMC (Acute Medical Conditions) Trauma, the Resuscitation Room or the isolation area. A scoring system is used to triage patients: A vitally unstable patient, regardless of the score, is immediately considered a suspected case and is admitted to the isolation area. The patient is managed accordingly and the medical director should be notified so as to inform the team from the Egypt Ministry of Health (SMOH) that is responsible for SARS-CoV-2 testing. In COVID-19 suspected cases, a COVID-19 severity score tool is used. A patient with a score that is more than or equal to 5 is also admitted to the isolation area and other differentials are excluded. The medical director is notified as well so as to enable testing of the virus. A score that is less than or equal to 5 is for home isolation and home management. The medical director is also told.

Despite all this, there are still many pitfalls. Patients sometimes do not tell the truth about their symptoms with the fear of being turned away by the hospital and told to go someplace else (many patients get turned down by many hospitals telling them that they do not accept patients that are suspected COVID-19). It is of vital importance to maintain a communication distance of 1 to 2 meters to reduce contact with staff (2) however this is not easy for the triaging doctor here as the triage is immediately behind the entrance door of the ER the and the patients are outside. Unnecessary personnel entry to the ED via the triage unit should be restricted as much as possible so as to reduce the risk of spread to inpatients and healthcare workers. If it is required for a person to accompany the patient, a maximum of one person should be permitted (2) This rule is not easy to follow in public hospitals in Egypt as the main entrance (where

the triage is found) isn't always managed properly as nurses and security guards let patients and co-patients in without seeing the doctor first. This leads to swamping of the Emergency Room, causing overcrowding thus increasing the risk of virus spread. Visitors movements inside COVID-19 patient rooms and inside the health center should be restricted (2). This is quite difficult in governmental health care facilities in this country as certain medical equipments and many medications are not provided for by the hospital. Thus, patients must fetch for these in pharmacies elsewhere making them walk in and out of the healthcare facilities and isolation rooms. All patients' (including Covid-19 patients') blood work is dealt with by one laboratory that could lead to contamination of laboratory workers, laboratory equipments and personel collecting the investigation results. The virus testing team can't always be contacted and may take days to arrive. Even after taking the swab, the test results also take days to come back. For this reason many hospitals use chest x-ray or CT Scans (Computed tomography) as screening tests for COVID 19. Finally, the medical literature has now shown that COVID-19 has many other presentations

such as Stroke and Guillian-Barre. There have also been less severe presentations such as eye pain, headache and even a simple "feeling unwell". This makes it more difficult to triage patients as the presentation scope is becoming wider and wider. As we know, even positive patients can be asymptomatic and still spread the virus.

REFERENCES

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