

COVID-19-related patient discrimination by healthcare workers: A single-center experience

Akinwumi Ayodeji Akinbodewa¹, Oluwole Olugbenga Ige², Michael Olumide Gbala³, Gladys Oghenevo Akinbodewa⁴

From ¹Kidney Care Centre, Department of Medicine, ²Department of Orthopaedics, ³Department of Obstetrics and Gynaecology, University of Medical Sciences Teaching Hospital, ⁴Department of Bursary, University of Medical Sciences, Ondo State, Nigeria

Correspondence to: Dr. Akinwumi Ayodeji Akinbodewa, Department of Medicine, Kidney Care Centre, University of Medical Sciences Teaching Hospital, PMB 542, Ondo City, Ondo State, Nigeria. E-mail: ayoakinbodewa@yahoo.com

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ABSTRACT

Discrimination against patients, especially high-risk infectious cases, has been documented in many health-care facilities in Nigeria and abroad. This often results in suboptimal care and undesirable loss of life among such patients. Previously identified causes of this attitude include poor knowledge of the disease, perceived lack of capacity by hospital management to provide sufficient and appropriate personal protective equipment, and fear of exposure of self, colleagues, friends, and family to the infection. We hereby present three cases of suspected coronavirus disease (COVID)-19 in a tertiary health-care facility in Southwest Nigeria to highlight the risk of untimely death posed to patients with respiratory symptoms from other etiologies during the COVID-19 pandemic, need for early intervention by a senior physician and importance of adequate history taking in managing suspected cases of COVID-19.

Key words: *Coronavirus disease-19, Discrimination, Healthcare workers, nCorona virus, Nigeria*

The 2019 novel coronavirus (2019-nCoV) disease (later renamed coronavirus disease [COVID]-19) was first reported on December 1, 2019, in Wuhan, Central China [1]. On January 3, 2020, the 2019-nCoV was identified in samples of bronchoalveolar lavage fluid from a patient in Wuhan and was confirmed as the cause of the novel coronavirus-infected pneumonia [2]. This novel virus shares 79.5% of the genetic sequence with severe acute respiratory syndrome (SARS)-CoV and has 96.2% homology to a bat coronavirus [3]. Since then, it has spread to at least 170 nations.

On March 11, 2020, the World Health Organization declared the SARS-CoV-2 outbreak a pandemic due to the constantly increasing incidence outside China [4]. The first case in Nigeria was reported in an Italian male on February 28, 2020. Barely 6 weeks after the first case, 318 cases have been confirmed across 19 States in Nigeria and Abuja, the Federal Capital Territory [5]. There have been 70 discharges (22.0%) and ten deaths (3.1%). Two of the cases have been confirmed in Ondo State [5].

The Centre for Disease Control has published guidelines for healthcare workers to aid them in identifying people who are most likely to have COVID-19. Regardless of this, there exists widespread panic among healthcare workers. This is of major concern as it could lead to an inadequate clinical assessment by doctors and nurses thus resulting in a “hurried diagnosis of COVID-19” among patients with respiratory symptoms from other etiologies, consequent avoidance of such patients, refusal to offer otherwise required care and in some cases, unwarranted

mortality. Patient avoidance and refusal to offer care owing to fear of contracting infection have been previously reported among healthcare workers during the eras of Human immunodeficiency virus/acquired immunodeficiency viral and Ebola viral diseases (EVD), respectively [6,7]. Here, we present three cases that were confused for COVID-19 in a tertiary hospital in Ondo State, Nigeria, and management challenges.

Case 1

A 40-year-old farmer presented to the accident and emergency department at about 7:30 am of April 5, 2020, with complaints of fever (3 days) and acute dyspnoea (about 12 h) in association with cough, chest tightness, and excessive sweating. There was no loss of consciousness. Her temperature was 38.2°C, respiratory rate 40 breaths per minute with wheezes on auscultation. A provisional diagnosis of COVID-19 was made with adult-onset asthma considered as a differential diagnosis. She was placed on intranasal oxygen.

Our team was involved in the case when we took over from the Medical Officer on duty. A review of the patient’s record showed deficiencies in history-taking, examination, and management. Her vital signs had not been checked, blood samples were not drawn for the baseline tests, and a chest X-ray was not ordered. Even though IV access was initiated, intravenous drugs ordered by the casualty officer were not administered; the reason being fear of the emergency room

staff in making contact with the patient despite the availability of protective personal equipment.

We took history in accordance with guidelines for COVID-19 case definitions. It turned out that there was nothing that connected her epidemiologically to COVID-19. Importantly, 6 weeks earlier, she had registered with a secondary health-care facility on account of recurrent cough. In line with our local policy for COVID-19, the consultant conducted a patient examination. By this time (10:45 am), she was semi-conscious, dyspnoeic, and diaphoretic. Her respiratory rate had reduced to 26/min (prolonged inspiratory phase) with polyphonic wheezes in all the lung fields. The diagnosis was changed to life-threatening acute severe asthma.

Samples were drawn for full blood count, thick and thin blood film for malaria parasite, and serum chemistry. Statum doses of IV hydrocortisone 200 mg and aminophylline 250 mg were administered. Maintenance nebulized salbutamol 5 µg four hourly, IV hydrocortisone 200 mg six hourly, and hourly charting of vital signs were ordered. Laboratory results showed trophozoites of *Plasmodium falciparum*, leukocytosis (31,000 cells/mm³), and neutrophilia (84%). The serum creatinine, urea, and bicarbonate were 150.4 µmol/L, 5.8 mmol/L, and 28.6 mmol/L, respectively. The patient died after 12 h on April 05, 2020, before the chest X-ray could be done. The nasopharyngeal swab test result for SARS-Cov-2 was negative.

Case 2

A 22-year-old patient presented at the antenatal clinic on April 6, 2020, at 28 weeks gestation to the obstetrics emergency room with complaints of productive cough and sore throat (1 week), generalized musculoskeletal pain, headache, and fever of 24 h duration. She was reviewed by the senior registrar within 30 min. There was no history of recent travel to a country or state in Nigeria with COVID-19. There was no history of contact with suspected or confirmed cases of COVID-19. Her respiratory rate was reported as 40/min, but the temperature was 36.8°C. A diagnosis of upper respiratory tract infection was made. Differentials were malaria fever and COVID-19 in that order.

A review by the consultant showed that the patient was clinically stable with no evidence of respiratory distress. However, since she was being considered for COVID-19, the managing team decided on isolating her in the designated room, but this was resisted by the head of nurses who claimed that “I will not expose my nurses to undue risk of contracting COVID-19.” The hospital infection prevention and control (IPC) team was invited to advise on the next line of action at this point. After reviewing her record, the patient did not fit into any of the case definitions for COVID-19.

She was subsequently discharged home on antimalarial medication, erythromycin tabs 500 mg QDS, Vitamin C 100 mg, and paracetamol 1 g TDS. She was adequately educated on self-isolation and monitoring. Her verified phone contact was obtained for real-time monitoring. The patient’s symptoms had since improved after 5 days on antimalarial treatment.

Case 3

A 22-year-old known end-stage renal disease patient, who was poorly compliant to treatment due to financial constraint, was admitted. She presented to the adult accident and emergency on April 20, 2020, with vomiting (1 week), cough (1 day), and breathlessness (2 h) associated with hemoptysis and chest pain. There was no history of recent travel to the COVID-19 zone as she was just discharged home by the renal unit a few days earlier. Her vital signs were as follows; blood pressure 200/155 mmHg, respiratory rate 64/min, and SpO₂ of 96%. She was seen by the Junior Registrar on call who reviewed over the phone with the most senior physician.

The IPC team became involved when the most senior physician called to press for SARS-CovV-2 test for the patient and isolation, against which the patient protested. An electronic copy of the protocol for managing suspected COVID-19 cases was forwarded to the unit on call when it became obvious during the conversation that they were not abreast of this. The diagnosis was subsequently reviewed to acute pulmonary edema based on a new history of acute reduction in urine output, poor compliance to hemodialysis, and abnormal serum chemistry results; creatinine – 2,919 µmol/L, urea – 38.9 mmol/L, bicarbonate – 9.9 mmol/L, and potassium – 4.3 mmol/L. The patient was transferred to the renal team for emergency hemodialysis and related care.

DISCUSSION

The above cases probably represent what is currently on-going in most public hospitals in Nigeria and abroad. Our medical and nursing staff were generally unwilling to go near suspected cases for fear of contracting COVID-19. Similar scenarios have been reported previously as shown in a survey of 245 pediatric healthcare workers where only 80% of participants were willing to examine EVD patients and a further depleted proportion (64–79%) would go-ahead to perform procedures on them [8]. This attitude correlated with poor knowledge of EVD among the staff [8]. As a matter of fact, on the admission of the first Ebola patient in New York, a large number of the medical personnel called in sick; one of the nurses even pretended she had a stroke and there were some who even believed it was ethical to refuse care of such patients [8-10].

In our experience, even when adequate clinical evaluation pointed to other diseases as the cause of respiratory symptoms, the personnel was reluctant to go near the patients. They gave excuses such as inadequate provisions made by the hospital management for the isolation and care of suspected cases among others. A similar report was documented in a study in the United States of America, where less than half of the participants believed that their institution was well equipped to take care of patients with Ebola [7]. Filippo Anelli, President of Italy’s National Federation Order of Surgeons and Dentists, was quoted as saying, “*Our doctors have been sent to war unarmed; it is reasonable to assume that these events would have been largely avoidable if health workers had been correctly informed and equipped with sufficient personal protective equipment which instead continues to be in short supply*” [11].

Fear of contracting the disease was another contributory factor to the behavior of healthcare workers in our setting. This is probably further heightened by reports of COVID-19-related deaths among healthcare workers within and outside Nigeria [11,12]. For instance, Italy has lost more than a hundred doctors and other healthcare workers (mean age, 80 years) to COVID-19 so far [11].

In our study, we observed that early intervention by a senior physician improved the adequacy of medical history and adherence to guidelines for the COVID-19 case definition resulting in better diagnostic accuracy, level of care, and outcome for the patients. History taking should also be tailored toward identifying other causes of respiratory symptoms, particularly recurrent ones. The senior physician's administrative capacity enables him/her to interact with the management of other hospitals in search of relevant information so as to exclude previously diagnosed chronic (recurrent) respiratory illnesses such as asthma and chronic obstructive lung disease.

Adherence to Universal Basic Precautions should be routine practice for healthcare workers, COVID-19, or not. For instance, in one case report, forty-one healthcare workers were exposed to aerosol-generating procedures (endotracheal intubation, non-invasive ventilation, etc.) while caring for a man with community-acquired pneumonia who later tested positive for SARS-Cov-2. Amazingly, none of them contracted the viral infection as they all remained negative for SARS-Cov-2 after 14 days of surveillance [13]. This was attributed to the routine use of surgical masks, regular hand hygiene, and other standard procedures which protected them from being infected.

CONCLUSION

While COVID-19 remains a mysterious and scary infection to date, early intervention by an experienced, senior physician as well as adequate application of case definitions during clerking, is useful in ensuring that patients with respiratory symptoms of other etiologies aside COVID-19 are accurately diagnosed and offered unfettered care.

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