COVID-19

"On the seventh day the priest will make another examination. If he finds the affected area has not changed and the problem has not spread on the skin, the priest will quarantine the person for seven more days." –Lev 13:5 (NLT)

Background

The Coronavirus disease 2019 (COVID-19) was first reported to the World Health Organization (WHO) on 31st December 2019 from Wuhan City, Hubei Province, China. Barely a month later, on 30th January 2020, the WHO declared the outbreak a global health emergency. On 11th March 2020, the WHO declared COVID-19 a global pandemic. It has presently been reported in 188 countries across the world. In Nigeria, the disease has been reported in all 36 states and the FCT. It is barely 9 months old but has exerted a staggering socio-economic impact globally.

It is caused by a novel virus called severe acute respiratory syndrome virus 2 (SARS-CoV-2). Transmission is believed to occur through respiratory droplets from coughing, sneezing and close contact with infected people.

How does COVID-19 infection manifest?

People with the disease may have no symptoms at all (asymptomatic) while others may present with mild symptoms or severe illness and death. The symptoms below may indicate COVID-19 infection:

Fever; Cough; Difficulty breathing; Fatigue; Body aches; Headache; Recent loss of smell or taste; Sore throat; Running nose; Diarrhoea; Pneumonia.

What are the risk factors for severe COVID-19?

The following factors may predispose individuals to severe disease and mortality:

Advanced age (50years and over); Decreased immunity states; Diabetes; Cardiovascular disease; Hypertension; Chronic airway disease; Chronic kidney disease; Liver disease; Cancer sufferers; Severe obesity. Type A blood group has been suggested to predispose to respiratory failure in COVID-19 patients while blood group O appears to confer a protective effect.

Complications of COVID-19 may include pneumonia, acute respiratory distress syndrome, cardiac injury, septic shock, liver dysfunction, acute kidney injury and multiple organ failure.

How is COVID-19 diagnosed?

Definitive diagnosis of COVID-19 is via a microbiologic polymerase chain reaction (PCR) test. Nasal and sputum swabs are obtained from suspected individuals to carry out the tests. These tests are however not yet widely available. Other blood and antibody tests are currently being developed and used in some countries with accuracy levels less than the PCR test. Chest imaging is also used to assist diagnosis.

Treatment

Currently there is no cure for COVID-19. Treatment is largely supportive care. Medications which have currently shown some benefit include the antiretroviral drug Remdesivir and the corticosteroid drug Dexamethasone. Several drugs are presently undergoing clinical trials. The use of Chloroquine is highly controversial and has not gained wide acceptance. While some studies have shown some benefit with

use of Chloroquine, other studies show no benefits and suggest harmful outcomes with its use among high risk patients.

Prevention remains the best line of defence against COVID-19.

There is currently no vaccine against COVID-19. The following measures help prevent contracting the virus:

- 1. **Hand hygiene:** regular handwashing with soap and water for at least 20 seconds destroys the virus. Use alcohol-based hand sanitizers where soap and water are not available. Avoid touching your eyes, nose and mouth with unwashed hands. Avoid touching potentially contaminated surfaces in public places.
- 2. **Physical (social) distancing:** avoid close contact with people especially in public places. Maintain a safe minimum distance of 2 meters or 6 feet from others. This has been shown to reduce the risk of contracting the virus. Use non-contact greetings (use waves and gestures, avoid hand-shaking and hugs). Ensure you have adequate supply of groceries, medicines and essential items at home. Reduce non-essential outings and visits especially if you are an older adult.
- 3. Face coverings: use face masks when in public gatherings and when caring for sick relations. If you are a healthcare worker, use surgical face masks or N95 masks. Face masks made from fabric help reduce droplet contamination and transmission but are not effective barriers against breathing-in the virus! Face shields and goggles protect the face from potentially contaminated body fluids and splashes but are not substitutes to face masks. Use them with a face mask!
- 4. **Social etiquette:** cough or sneeze into a tissue paper and discard promptly & properly. In the absence of tissue, cough or sneeze into your bent elbow. Stay at home when you feel unwell, self-isolate or quarantine for at least 14 days if you have had close contact with a suspected COVID-19 patient.

Closing remarks

COVID-19 is not a death sentence! Most patients go on to make good recovery after the acute infection. With every passing week, healthcare providers and researchers learn more and more about this evolving infection and how best to manage it. A few months ago, it was thought that without ventilators and intensive care units (ICUs), patients would not survive the infection but that has changed! Most patients do well on supportive care currently.

Do not be swayed by conspiracy theories and deceptive political inclinations. COVID-19 is scientifically and practically here with us. It is preventable and managed with good outcomes.

References

 Centers for Disease Control and Prevention. Coronavirus Disease 2019 (COVID-19): People at Higher Risk. <u>https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/high-riskcomplications.html</u>. Mar 8, 2020.

- 2. CDC. Symptoms of Coronavirus. CDC. <u>https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html</u>. May 13, 2020.
- 3. Beigel JH, Tomashek KM, Dodd LE, et al. Remdesivir for the Treatment of Covid-19- Preliminary Report. *N Engl J Med*. May 22, 2020.
- 4. Sanders JM, Monogue ML, Jodlowski TZ, Cutrell JB. Pharmacologic Treatments for Coronavirus Disease 2019 (COVID-19): A Review. *JAMA*. Apr 13, 2020.
- 5. Advisory for Vulnerable Groups. The Elderly and Those with Pre-existing Medical Conditions. Nigerian Centre for Disease Control (NCDC). Version 2, June 2020.
- 6. When and how to use masks. World Health Organization (WHO). 7 Mar 2020.

Dr Stephen G, Gana

stephenganag@yahoo.com

Department of Surgery

ABUTH Zaria.