Trainer’s Guide Topic:
COVID-19 Information Dissemination to Global Health Patients

Trainer’s Guide Development Team:
This guide was written, developed, and edited in collaboration with a team of five Boonshoft School of Medicine (BSOM) medical students alongside several BSOM faculty in the Global Health Department.

Purpose & Content:
The purpose of this training manual is to prepare the onboarding team at Five Rivers Health Centers at Dayton, OH to teach, guide, and support new global health patients in understanding COVID-19 symptoms, disease prevention measures, important vaccine information, and myths.

Objectives:
- Provide the onboarding team with the historical and cultural context with which to educate their patients on COVID-19
- Learn how to provide information effectively about COVID-19 to global health patients.
- Understand COVID-19 symptoms, myths
- Emphasize the importance of creating an open space for global health patients to voice their opinions, concerns, and questions via the prioritization of open-end questions.
Background:

Definition

COVID-19 is short for Coronavirus Disease 2019, the year this strain of coronavirus was first reported. It is caused by an enveloped, positive-sense, single-stranded RNA coronavirus named SARS-CoV-2, classified as a Severe Acute Respiratory Syndrome.

Transmission

It spreads very easily from person to person and occurs with close contact. The virus mainly spreads through droplets and in some cases by aerosolization. When sick people cough and sneeze into the air, the droplets can land on nearby surfaces and people or be inhaled into the lungs. Viral shedding appears to peak 24 to 48 hours before symptom onset, therefore it can be transmitted even when the infected person is presymptomatic. Additional means of transmission are possible but not established (eg, contact with infected environmental surfaces, fomites, fecal-oral route). The first known cases of COVID-19 appeared in Wuhan, China, in late 2019. The virus first passed from an animal to a human. Most recently, reports of coronaviruses closely related to SARS-CoV-2 have been found in bats in Japan, Cambodia and Thailand.

Variants

The CDC classified the following as variants of concern based on potential for increased transmissibility, greater severity of disease, reduction in protective effect of antibodies generated by previous disease or vaccination, reduced efficacy of available treatments, or reduced sensitivity of testing modalities.

- Delta (B.1.617.2 and AY lineages): first detected in India; characterized by increased transmissibility and possibly reduced neutralization by some monoclonal antibody treatments and post vaccine serum
- Omicron (B.1.1.529): circulating widely in South Africa in November, 2021; clinical significance in terms of transmissibility and severity of infection, as well as effectiveness of available treatments and vaccines, is being evaluated
Training Curriculum:

COVID-19 Symptoms

Typical Symptoms
- Cough
- Stuffy nose or congestion
- Fever or chills
- Shortness of breath or difficulty breathing
- Muscle or body aches
- Vomiting or diarrhea
- New loss of taste or smell
- Sore throat
- Loss of appetite

Seek medical care immediately if someone has emergency warning signs of COVID-19
- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion
- Inability to wake or stay awake
- Pale, gray, or blue-colored skin, lips, or nail beds, depending on skin tone

COVID-19 Standard Precautions

Hand Hygiene
- Hand hygiene is one the most effective measures to prevent the spread of infectious pathogens, including SARS-CoV-2.
- Wash hands with soap and water for at least 20 seconds using the cleanest water possible.
- Dry hands with single-use towels.
- Use an alcohol-based hand rub that contains 60% alcohol if soap and water are not available.
- When to wash hands to:
  - After blowing your nose, coughing, or sneezing
  - After being in a public place
  - Before and after caring for someone who is sick
  - Before, during, and after preparing food
  - Before eating food

Environmental Cleaning
- To clean environmental, non-porous, surfaces effectively clean surfaces thoroughly with water and soap.
- If applying a disinfectant solution, a concentration of either 0.1% sodium hypochlorite (1000 parts per million), hydrogen peroxide ≥0.5%, or 70-90% ethanol may be used and will be effective after a minimum contact time of 1 minute.
Respiratory Hygiene

- Sneez or cough into the elbow or using a tissue and disposing of it immediately in a bin with a lid.
- Perform hand hygiene after contact with respiratory secretions or objects that may be potentially contaminated with respiratory secretions.
- Open windows or doors to increase ventilation, if feasible.
- Avoid using a fan without the window or door open, as this may spread contaminated droplets to other occupants or areas where respiratory droplets would not reach on their own.

Physical Distancing

- Maintain at least a 2-meter distance from individuals (2 arms lengths) and practice greetings without touching, such as waving, placing a hand over your heart, bowing, or nodding your head.
- Plan for outdoor gatherings whenever possible, as this can facilitate physical distancing and increase ventilation.
- Within households, consider designating one person who is not at high risk of severe COVID-19 (older adults, people with medical conditions, pregnant and recently pregnant people) to leave the house for essential goods and services.
- At home, protect people who are at high risk of severe illness through physical separation (e.g., separate bedroom) while there is active COVID-19 transmission in the surrounding community. Ideally, this space would include its own sanitation facilities not used by other members of the household.

Universal Masking

- In areas where there is known community transmission, everyone over 2 years of age should wear masks in public indoor settings or when in someone else’s household.
  - This still applies if you are fully vaccinated, to maximize protection and prevent possibly spreading COVID-19 to others
- Everyone 2 years or older who is not fully vaccinated should wear a mask in indoor public places.
- In general, you do not need to wear a mask in outdoor settings.
  - In areas with high numbers of COVID-19 cases, consider wearing a mask in crowded outdoor settings and for activities with close contact with others who are not fully vaccinated.
- Choose a mask that:
  - Has two or more layers of washable, breathable fabric
  - Completely covers the nose and mouth
  - Fits snugly against the sides of the face and does not have gaps
  - Has a nose wire to prevent air from leaking out of the top of the mask
COVID-19 Myths

Myth: Can COVID-19 vaccines give me COVID-19?

FACT: NO. The vaccines used for COVID-19 only contain a portion of the virus to help your immune system recognize it in the future and be prepared to fight it off. The vaccines do not contain the full live virus that would cause COVID-19.

Myth: Do COVID-19 vaccines contain microchips?

FACT: NO. The vaccines do not contain microchips and they are not used to track you. The vaccines are used to prime your immune system to be prepared to fight off the virus if you contract it in the future.

Myth: Can receiving a COVID-19 vaccine cause you to be magnetic?

FACT: NO. The vaccine will not make you magnetic. It does not contain any ingredients that create an electromagnetic field.

Myth: Is it safe for me to get a COVID-19 vaccine if I would like to have a baby one day?

FACT: YES. There is no evidence linking the covid vaccine to infertility issues.

Myth: Is it safe for me to get a COVID-19 vaccine if I am pregnant or breastfeeding?

FACT: YES. People who are pregnant or recently pregnant are more likely to get severely ill with COVID-19 compared with people who are not pregnant. The CDC recommends the vaccine for people who are pregnant, breastfeeding, trying to get pregnant now, or might become pregnant in the future.

Myth: If I have already had COVID-19 and recovered, do I still need to get vaccinated with a COVID-19 vaccine?

FACT: YES. Vaccination will help protect you even if you have already had COVID-19. It is also not known how long a person has immunity after being infected with COVID-19.

Myth: Is it true that COVID-19 vaccines can cause severe allergic reactions and are not safe for people with allergies?

FACT: MAYBE. Severe allergic reactions may occur, but this is very rare. If you have a history of severe allergic reactions, talk to your doctor about getting the COVID-19 vaccine.
COVID-19 Vaccination

How the immune system works:

When germs, such as the virus that causes COVID-19, invade our bodies, they attack and multiply. This invasion, called an infection, is what causes illness. Our immune system uses several tools to fight infection. Blood contains red cells, which carry oxygen to tissues and organs, and white or immune cells, which fight infection. Different types of white blood cells fight infection in different ways.

How Covid-19 Vaccines Work:

Different types of vaccines work in different ways to offer protection. But with all types of vaccines, the body is left with a supply of “memory” T-lymphocytes as well as B-lymphocytes that will remember how to fight that virus in the future.

It typically takes a few weeks after vaccination for the body to produce T-lymphocytes and B-lymphocytes. Therefore, it is possible that a person could be infected with the virus that causes COVID-19 just before or just after vaccination and then get sick because the vaccine did not have enough time to provide protection.

To be fully vaccinated, you will need two shots of some COVID-19 vaccines.

- Two shots: If you get a COVID-19 vaccine that requires two shots, you are considered fully vaccinated two weeks after your second shot. Pfizer-BioNTech and Moderna COVID-19 vaccines require two shots.
- One Shot: If you get a COVID-19 vaccine that requires one shot, you are considered fully vaccinated two weeks after your shot. Johnson & Johnson’s Janssen COVID-19 vaccine only requires one shot.
- CDC does not recommend one vaccine over the other. Patients may choose a vaccine based on their own personal preference and discussion with their healthcare provider.

Common Vaccine Side-Effects:

Sometimes after vaccination, the process of building immunity can cause symptoms, such as fever. These symptoms are normal and are signs that the body is building immunity. Talk to a doctor about taking over-the-counter medicine, such as ibuprofen, acetaminophen, aspirin (only for people age 18 or older), or antihistamines for any pain and discomfort experienced after getting vaccinated.

Other common side effects:
- Pain
- Redness
- Swelling on the arm where the shot was given
- Tiredness
- Headache
- Muscle pain
● Chills
● Fever
● Nausea
● Some people have no side effects

Covid-19 Booster Shot:
A booster shot is for people who built enough protection after completing their primary vaccine series, but then that protection decreased over time. Everyone ages 18 years and older who is fully vaccinated is eligible for a booster.

The Possibility of COVID-19 after Vaccination:
COVID-19 vaccines are effective at preventing infection, serious illness, and death. Most people who get COVID-19 are unvaccinated. However, since vaccines are not 100% effective at preventing infection, some people who are fully vaccinated will still get COVID-19. An infection of a fully vaccinated person is referred to as a “vaccine breakthrough infection.” Fully vaccinated people with a vaccine breakthrough infection are less likely to develop serious illness than those who are unvaccinated and get COVID-19. This means they are much less likely to be hospitalized or die than people who are not vaccinated. People who get vaccine breakthrough infections can be contagious. People who have a condition or are taking medications that weaken their immune system may not be fully protected even if they are fully vaccinated. They should continue to take all precautions recommended for unvaccinated people, including wearing a well-fitted mask, until advised otherwise by their healthcare provider.

Open-Ended Questions
The need for patient-centered care is especially crucial when working with global health patients. Communication skills needed for patient-centered care include eliciting the patient’s agenda with open-ended questions, especially early on; not interrupting the patient; and engaging in focused active listening. Open-ended questions allow patients to discuss their concerns freely and are an efficient method of gathering medical information from patients. It is important to understand the patient’s perspective of the illness and to express empathy. Understanding the patient’s perspective entails exploring the patient’s feelings, ideas, concerns, and experience regarding the impact of the illness, as well as what the patient expects from the physician.

Examples
● What concerns do people in your community share about COVID-19?
● What questions do you have regarding COVID-19 or the vaccine?
● What challenges are you facing in your work environment or at home to protect yourself and prevent spread of COVID-19?
Key Messages:

- Coronavirus Disease 2019 is a coronavirus named SARS-CoV-2, classified as a Severe Acute Respiratory Syndrome.

- It spreads very easily from person to person through respiratory droplets.

- It can be transmitted even before the infected person is symptomatic.

- It is important to get vaccinated even if you have had prior infection COVID-19, because it is also not known how long a person has immunity after being infected with COVID-19. Vaccination will help protect you even if you have already had COVID-19.

- CDC does not recommend one vaccine over the other. Patients may choose a vaccine based on their own personal preference and discussion with their healthcare provider.

- The CDC recommends the vaccine for people who are pregnant, breastfeeding, trying to get pregnant now, or might become pregnant in the future.

- Fully vaccinated people with a vaccine breakthrough infection are less likely to develop serious illness than those who are unvaccinated and get COVID-19.

- Utilize open-ended questions to allow patients to discuss their concerns freely.
Citations


