COVID-19 Coronavirus

Description/Etiology
Coronavirus disease 2019 (COVID-19) is a highly infectious, potentially fatal acute respiratory infection caused by a novel coronavirus that has been named SARS-CoV-2. The disease was first identified in December 2019 in Wuhan, a city in Hubei Province in central China, and has been declared a pandemic. Disease severity ranges from mild respiratory illness to severe illness.

SARS-CoV-2 is closely related to SARS-CoV, which caused the severe acute respiratory syndrome (SARS) epidemic in 2003–2004. It likely evolved from a strain found in bats. Whether there was an intermediate host is unclear. Initial COVID-19 cases were linked to a seafood and live animal market in Wuhan, suggesting that early cases resulted from animal-to-human transmission. Subsequent person-to-person transmission has been primarily through large respiratory droplets produced by coughing or sneezing. Indirect transmission through contact with contaminated surfaces/objects or exposure to elevated aerosol concentrations in enclosed spaces appears to have been responsible for some infections; however, person-to-person airborne transmission over long distances is unlikely. Transmission by asymptomatic carriers appears possible.

Signs/symptoms develop after an average incubation period of 2–7 days. The most common symptoms are fever, dry cough, and shortness of breath. Complications include respiratory complications (e.g., acute respiratory distress syndrome [ARDS], respiratory failure), infectious complications (e.g., secondary infection, sepsis, septic shock), cardiac complications (e.g., acute cardiac injury, arrhythmias), acute kidney injury, liver dysfunction, multiple organ dysfunction/failure, complications of critical illness (e.g., ventilator-associated pneumonia, venous thromboembolism, catheter-related bloodstream infection, pressure injury, stress ulcers), and death.

There is no specific antiviral treatment or preventive vaccine. Management involves implementing infection-control measures and providing supportive care. Infection-control measures include implementing standard precautions, contact precautions, and droplet precautions during all patient care; using airborne precautions for aerosol-generating procedures (e.g., intubation, open suctioning of respiratory tract); using appropriate personal protective equipment (PPE; i.e., N95 or higher-level respirator [facemask is acceptable alternative if respirators are not available], eye/face protection [goggles or face shield], long-sleeved gown, and gloves); performing rapid, safe triage of symptomatic patients; promoting patient respiratory hygiene, cough etiquette, and hand hygiene; appropriately placing and isolating patients; and managing visitor access/movement. Supportive care may include symptomatic relief (e.g., antipyretics for fever), respiratory support, fluid management, empiric antimicrobials for sepsis, close patient monitoring for clinical deterioration, and prophylactic measures to reduce risk of complications.

The COVID-19 pandemic, as well as measures taken to reduce transmission of the virus (e.g., social distancing, “stay at home” orders), have had significant social, psychological, and financial impacts worldwide. Certain populations are particularly vulnerable to both direct and indirect effects of the disease. Persons who are homeless, refugees, incarcerated, or who live in congregate facilities (e.g., nursing homes) are often unable to follow preventive measures (e.g., frequent handwashing, maintaining physical distance from others) and are at increased risk of contracting and spreading the disease. Individuals
experiencing mental health problems, substance use disorders, and/or homelessness often have increased likelihood of smoking, drug and alcohol abuse, poor nutrition, and preexisting medical conditions, all of which place them at higher risk of complications and death if they contract the disease. Stress, worry, and diminished sense of safety associated with the pandemic can trigger or exacerbate anxiety, depression, and other mental health problems. Quarantines, self-isolation, and social distancing may lead to frustration, boredom, and loneliness, particularly for those who are not able to access their usual supports. Older adults are at higher risk of death with COVID-19 and thus are advised to not leave their homes, but this can have the unintended consequence of increasing their isolation. Healthcare workers at the front lines of the pandemic are at increased risk both of infection and the impacts of high levels of stress. Persons who have or are suspected to have the disease, and persons of Chinese descent (because the virus was first identified in China), may be negatively impacted by stigma.

**Facts and Figures**

A cluster of cases of acute respiratory illness, now known to have been the first cases of COVID-19, first occurred in Wuhan, a city in Hubei Province in central China, in December 2019. The first two cases in the United States were reported on January 14, 2020.

As of April 6, 2020, there were 1,210,956 confirmed cases and 67,594 deaths worldwide. Of these, 83,005 cases and 3,340 deaths occurred in China. The United States had the highest number of cases worldwide (330,891), as well as 8,910 deaths (U.S. Centers for Disease Control and Prevention [CDC], 2020c). Other countries with high numbers of reported cases/deaths include Italy (119,827 cases and 14,681 deaths), Spain (117,710 cases and 10,935 deaths), Germany (87,778 cases and 1,158 deaths), France (63,536 cases and 6,493 deaths), and Iran (53,183 cases and 3,294 deaths) (WHO, 2020b).

Although most patients (81%) develop mild illness, 14% develop severe disease that requires hospitalization and oxygen support and 5% require ICU admission (WHO, 2020a).

The average infected person transmits the virus to 2.2–3.6 other persons (Li et al., 2020; Lai et al., 2020).

Among United States cases of COVID-19, 1.7% were in children under 18 years old (CDC, 2020i).

In a survey of healthcare providers caring for individuals with COVID-19, high levels of distress (71.5%), depression (50.4%), anxiety (44.6%), and insomnia (34%) were reported (Lai et al., 2020). Investigators who conducted a review of 24 articles concluded that quarantines could have lasting psychological effects, with longer periods of quarantine associated with more adverse impacts (Brooks et al., 2020).

**Risk Factors**

Risk factors for developing COVID-19 include residing in or traveling to an area with widespread sustained transmission of \textit{SARS-CoV-2} and living with, being an intimate partner of, providing care to, or having other close contact (i.e., being within approximately 6 ft/2 m) for a prolonged period or having direct contact with secretions) with a person with COVID-19.

Possible risk factors for severe illness include older age, underlying medical conditions (e.g., cardiovascular disease, chronic respiratory disease, diabetes mellitus, hypertension, cancer, liver disease, immunocompromise, pregnancy), secondary infection, elevated inflammatory indicators (e.g., C-reactive protein), and history of smoking.

**Signs and Symptoms/Clinical Presentation**

Signs and symptoms develop after an average incubation period of 2–7 days. Common manifestations include fever (may be prolonged or intermittent), dry cough, muscle aches, fatigue, and shortness of breath. Less common signs and symptoms include sore throat, headache, confusion, cough with sputum production and/or hemoptysis, chest pain, diarrhea, nausea, and vomiting. Laboratory abnormalities may include leukopenia, leukocytosis, lymphopenia, prolonged prothrombin time, and elevated liver enzymes.

Clinical presentation tends to be less severe in children than in adults. Signs and symptoms typically are limited to fever and cough.

**Social Work Assessment**

- **Client History**
  - Complete a comprehensive biopsychosocial-spiritual assessment to include information on physical, mental, environmental, social, financial, and medical factors
  - Assess for symptoms of anxiety, depression, PTSD, and increased substance use triggered or exacerbated by the COVID-19 pandemic
Assess for psychosocial impacts of COVID-19, including employment, housing, transportation, childcare

Relevant Diagnostic Assessments and Screening Tools
• There are no diagnostic assessment or screening tools specific to COVID-19
• The social worker should utilize established assessment tools as indicated for anxiety, depression, or acute or post-traumatic stress

Laboratory and Diagnostic Tests of Interest to the Social Worker
• Blood tests such as CBC, blood cultures, liver enzymes, lactate dehydrogenase, muscle enzymes, and C-reactive protein
• Routine tests for other respiratory pathogens including influenza virus
• Real-time RT-PCR testing using upper respiratory tract specimens (nasopharyngeal swab and possibly oropharyngeal swab) and lower respiratory tract specimens, if available, for diagnosis
• Chest X-ray or CT scan

Social Work Treatment Summary
The unique training of social workers enables them to bring a systemic approach to treating individuals with COVID-19 and their families, members of vulnerable populations who are at increased risk for COVID-19, and individuals who are experiencing psychosocial impacts associated with the pandemic. The nature of intervention and specific treatment models used will vary depending on the client’s assessed needs and may include evidence-based approaches to treat any underlying mental health and/or substance use disorders. Generalist practice skills, including supportive presence, effective communication, emotional connection, and creating a supportive environment, should be utilized. Thorough assessment is helpful to understand the extent and nature of the impact of the COVID-19 pandemic on the client’s life (e.g., work, school, peers, home life, social support, economic status). Any interventions provided must be ethnically and culturally sensitive, as well as adaptable to the client’s changing needs and circumstances, in order to provide the highest level of care to the family.

Psychological first aid (PFA) is a short-term intervention often utilized to provide support to persons who are experiencing distress resulting from a natural disaster, pandemic, or other crisis. PFA can be implemented remotely (e.g., by phone or telehealth app). The International Federation of the Red Cross and Red Crescent Reference Centre for Psychosocial Support (Psychosocial Centre) recommends three broad phases of PFA for individuals seeking support with the COVID-19 pandemic:

• Look (assess the client’s needs, current situation, and real or imagined risks he or she is facing)
• Listen (explore the client’s needs, normalize the client’s feelings/responses, provide emotional support, explore how client has coped with situations in the past, suggest calming techniques [e.g., breathing, relaxation exercises])
• Link (assist the client with specific information, referrals, problem-solving, and/or connecting with support system)

The following strategies are recommended when working with individuals experiencing distress in pandemic situations:

• Establish safety
  • Social workers should be knowledgeable of strategies to prevent the spread of COVID-19 and adjust practices as necessary. Many clinicians and agencies have adopted telework and telehealth practices to provide continuity of services while also protecting their clients and themselves from spreading the virus
  • In settings where in-person contact is required, the social worker should:
    – Screen clients and refer those who have suspected exposure or show signs of illness for medical follow-up
    – Perform hand hygiene (using alcohol-based hand rub containing at least 60% alcohol or by washing hands with soap and water for at least 20 seconds) before and after all patient contact

• Follow recommended precautions for COVID-19, including standard and transmission-based precautions and airborne precautions if exposed to aerosol-generating procedures. For additional information, see Social Work Practice & Skill ... Contact Precautions, Following -- an Overview; Social Work Practice & Skill ... Droplet Precautions, Following – an Overview and Social Work Practice & Skill ... Airborne Precautions, Following – an Overview

• Empower clients by providing concrete information about the disease and reasonable ways to prepare and protect themselves
• Teach clients to recognize stress reactions and use strategies to reduce their distress. It can be helpful for clients to limit their exposure to news
• Encourage clients to maximize positive coping and self-care to alleviate distress by using self-calming skills; practicing health-protective behaviors (e.g., nutrition, rest and exercise); and limiting potentially harmful ones (e.g., alcohol use, smoking)
• Assist clients to find ways to engage in positive activities and access social supports despite social distancing measures
• Cultivate a positive outlook in clients while acknowledging legitimate risks
Social workers should be aware of their own cultural values, beliefs, and biases and develop specialized knowledge about the histories, traditions, and values of their clients. Social workers should adopt treatment methodologies that reflect their knowledge of the cultural diversity of the communities in which they practice.

Social workers shall practice with awareness of and adherence to the social work principles of respect for human rights and human dignity, social justice, and professional conduct as described in the International Federation of Social Workers (IFSW) Global Social Work Statement of Ethical Principles (IFSW, 2018), as well as the national code of ethics that applies in the country in which they practice. For example, in the United States, social workers should adhere to the National Association of Social Workers (NASW) Code of Ethics core values of service, social justice, dignity and worth of the person, importance of human relationships, integrity, and competence; and become knowledgeable of the NASW ethical standards as they apply to clients affected by the COVID-19 pandemic and practice accordingly (NASW, 2017).

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<tr>
<th>Problem</th>
<th>Goal</th>
<th>Intervention</th>
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<tbody>
<tr>
<td>Client is at risk for COVID-19</td>
<td>Reduced risk of disease and complications</td>
<td>Provide concrete information from credible sources (e.g., WHO, CDC) regarding COVID-19, signs/symptoms, how it is transmitted, and how clients can protect themselves and others from transmission; educate client regarding the importance of good nutrition, sleep, and exercise and reducing harmful behaviors (e.g., smoking) in order to optimize health; refer to healthcare provider if indicated.</td>
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| Client is suspected to have COVID-19 or COVID-19 has been diagnosed | Client will receive adequate supports during quarantine, self-isolation, and/or illness; risk of transmission to others will be minimized | Educate the client regarding COVID-19 and the need for isolation; ensure that client is receiving necessary health care; assess client’s basic needs and refer for supportive services (e.g., food, shelter) as needed; assess client’s psychosocial needs and provide emotional support and referrals as indicated. |
| Client is experiencing distress and/or mental health symptoms associated with COVID-19 | Client will experience reduced distress and improved coping | Elicit client’s concerns, normalize stress reactions; complete a thorough biopsychosocial-spiritual assessment, including screening for mental health/substance use disorder(s) and providing or making referrals for evidence-based treatment if indicated; assist client to identify/learn positive coping skills to reduce stress; encourage client to limit media exposure regarding COVID-19 to once or twice daily; encourage client to increase health protective behaviors (e.g., nutrition, rest, exercise) and to reduce potentially harmful behaviors (e.g., alcohol use, smoking); assist client in finding ways of connecting with family, friends, and broader community despite social distancing measures; foster hope |

**Applicable Laws and Regulations**

Many countries have enacted policies or laws in response to the numerous health, social, and financial impacts of the COVID-19 pandemic. In the United States, three relief packages were passed in March 2020 to provide financial assistance to individuals and businesses: Coronavirus Preparedness and Response Supplemental Appropriations Act (P.L. 116-23), the Families First Coronavirus Response Act (P.L. 116-127), and the Coronavirus Aid, Relief, and Economic Security (CARES) Act (P.L. 116-136).

Social workers should be prepared to make adjustments in their practices when necessary to avoid interruption of services. Telehealth has emerged as a means of providing services when in-person contact is not possible; however, social workers choosing to provide telehealth services must be competent in the use of technology should they choose to use it, knowledgeable of licensing standards regarding telehealth services, have a plan to maintain the client’s privacy, and obtain client consent to the use of technology. In the United States, federal guidelines have changed to allow reimbursement for telehealth services.

Each country has its own standards for cultural competency and diversity in social work practice. Social workers must be aware of the standards of practice set forth by their governing body (National Association of Social Workers, British Association of Social Workers, etc.), and practice accordingly.

**Available Services and Resources**


Food for Thought

› Most human coronaviruses cause mild respiratory infections, such as the common cold. However, in recent years, epidemics of severe acute respiratory syndrome coronavirus (SARS-CoV) and Middle East respiratory syndrome coronavirus (MERS-CoV) resulted in more than 10,000 total cases and mortality rates of 10% and 37%, respectively (Gerber & Anderson, 2016; Huang et al., 2020)

› Although SARS-CoV-2 has been found in patient stools, whether fecal-oral transmission is possible is unclear (Lai et al., 2020)

› A number of possible treatments for COVID-19 are currently under investigation, including the antimalarial drug chloroquine (WHO, 2020e)

Red Flags

› The appropriate health department should be notified immediately of individuals with suspected COVID-19. Public health staff will help determine if testing is warranted and coordinate testing

› Healthcare clinicians caring for individuals with known or suspected COVID-19 must immediately implement standard precautions, contact precautions, and droplet precautions, and apply airborne precautions for aerosol-generating procedures. PPE must be used during all patient-care activities. This includes an N95 or higher-level respirator (facemask is acceptable alternative if respirators are not available), eye/face protection (goggles or face shield), long-sleeved gown, and gloves

› Patient isolation measures, whether in the home or in a health care setting, are important to prevent spread of COVID-19

› Individuals with mild clinical presentation may experience clinical deterioration during the second week of illness. Monitoring for progression to lower respiratory tract disease is imperative

› It is anticipated that rates of child maltreatment and intimate partner violence will increase as a result of increased stressors and social isolation

› Mental health disorders may increase as the immediate threat of the disease subsides. Social workers should monitor existing clients and be prepared for a potential increase in needs

Discharge Planning

› Provide information about signs and symptoms of COVID-19, the most common of which are fever, dry cough, and shortness of breath

› Teach clients ways to protect themselves and others from contracting COVID-19, such as by:
   • Frequent handwashing with soap and water for at least 20 seconds or use of hand sanitizer containing at least 60% alcohol, especially after contact with ill persons or being in a public place
   • Avoiding touching face, eyes, and mouth with potentially contaminated hands
   • Daily cleaning and disinfecting of frequently touched surfaces (e.g., countertops, tables, doorknobs, phones)
   • Avoiding close contact with persons with acute respiratory infections
• Social distancing (i.e., avoiding congregate settings and mass gatherings, and maintaining distance of approximately 6 feet/2 meters from others when possible) in areas of community spread
• Protecting others if you are potentially infected by staying home, practicing respiratory hygiene and cough etiquette, and wearing a facemask while around others

Provide written materials to reinforce teaching and provide additional resources, including:

**DSM 5 Codes**

- There are no applicable DSM-5 codes

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**References**


