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# COVID-19 Clinical Corner

## Impact of Eating Disorders on COVID-19 Outcomes

### Key Messages: Impact of Eating Disorders

- *The stress experienced while living through a pandemic can be challenging for any patient, but may be increased for those living with eating disorders. The additional stress can trigger relapses and interfere with recovery.*
- *Patients with eating disorders may already have a compromised health status. They are at high risk for frailty (anorexia nervosa), electrolyte disturbances (bulimia nervosa) and cardiovascular risk, which can place them at risk for poor outcomes if infected with COVID-19.*
- *Low body weight associated with anorexia nervosa can make COVID-19 present differently and as a result may go undetected.*
- *Providing patient-centred care to those with eating disorders is key and should involve a multidisciplinary approach. Focus should be on early identification patients at risk for, or living with, an eating disorder.*
- *Ensuring accurate documentation of a patient's weight in kilograms in the individual patient's medical chart will help with calculations for energy / nutrient requirements, body mass index (BMI) and optimal dosing of medications.*

Eating disorders are generally characterized by “disturbed eating-related behaviours causing altered consumption of food and impairing health or functioning.” (7) Among these disorders are anorexia nervosa, bulimia nervosa and binge eating disorder.

In anorexia nervosa, the patient has an intense fear of gaining weight and may refuse to keep their weight at a normal weight for their body by restricting the amount of food they eat or exercising excessively (or both). They may feel overweight regardless of their actual weight. Their self-worth may be tied to their body weight. Food restriction can negatively impact the body as it can cause heart and kidney problems, low blood iron, bone loss (osteoporosis), digestive problems, low heart rate and low blood pressure in women.

In bulimia nervosa, there are periods of food restriction followed by binge-eating with recurrent compensating behaviours to purge the body of food (vomiting, excessive exercise, abuse of laxatives, etc...). Patients may feel overweight regardless of their actual weight. Their self-worth may be tied to their body weight. Resulting health problems include kidney issues, dehydration and digestive problems, where vomiting can damage the patient's teeth, mouth and throat.

*Symptoms of malnutrition include chest wall pain, palpitations, loss of consciousness, hematemesis, seizures, abdominal pain, muscle weakness or cramping, and episodes of confusion.*

The effect of the current pandemic on patients with eating disorders is unknown; managing eating disorders in the context of COVID-19 is complex. The current situation has raised people's levels of stress, contributing to increases in their anxiety and depression which can contribute to patient relapses and new cases at risk for developing eating disorders (1,2,3,4).

Eating disorders are well known to be associated with a variety of medical complications and elevated risk of mortality. According to the Canadian Mental Health Association, about 90% of people diagnosed with anorexia and bulimia are women but binge-eating disorder affects men and women more equally (5). A 2017 CSC study looking at the prevalence rates of mental illness amongst federally incarcerated women found the prevalence rate of eating disorders to be 11% (6).

Binge-eating disorder involves periods of over-eating, which can be used as a way to cope or find comfort. Patients may feel they cannot control how much they eat and therefore after bingeing feel distressed, depressed, or guilty. Health problems include increased risk of developing type 2 diabetes, high blood pressure, or weight concerns (in general, patient tend to have higher BMI and more likely to be obese).

As such, patients with eating disorders are at high risk for frailty (i.e. anorexia nervosa) and electrolyte disturbances (i.e. bulimia nervosa) which can result in poor COVID-19 outcomes

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especially in the context of acquiring a life-threatening illness while malnourished. Binge-eating disorders are associated with type 2 diabetes and hypertension, conditions or comorbidities noted to be most risky for poor COVID-19 outcomes.

**What can we do for our patients?**

CSC clinicians should be aware of the intersection of COVID-19 and eating disorders, including associated risk factors and complications.

Providing support for patients with eating disorders can be challenging. We can help by ensuring those with an eating disorder receive appropriate support and treatment and have it noted in the OHIS-EMR in a common location so all members of the healthcare team are aware. Clinicians should also specify if a patient is in partial or full remission to modify the treatment plan, as appropriate. Providing patient-centred care to those with eating disorders involves a multidisciplinary approach.

Assessing, recognizing and managing patients who are at nutritional risk and/or who are experiencing the short-term and long-term effects of their eating disorder warrant a referral to the dietician. In addition, those with eating disorders have a high prevalence of co-morbid psychiatric disorder and should be referred to mental health for support. It is important for clinicians to document the patient’s weight accurately in their individual charts as this informs calculations for energy/nutrient requirements, body mass index (BMI) and optimal dosing of medications. Managing these patients takes a collaborative approach.

Patients with binge eating disorder may also benefit from undergoing a global CVD (cardiovascular disease) risk reduction and education surrounding how to reduce their CVD risk.

CSC clinicians can also support patients struggling with eating disorders by acknowledging we are in challenging times and encouraging them to reach out for help. Health staff should check in regularly with patients and see how they are doing continue to encourage them to eat well and focus on staying healthy (mind, body and spirit).

Stay tuned as more data becomes available.

Please send any other clinical questions related to COVID-19 to [GEN-NHQ Pharmacy](#).

Continue to emphasize personal protection measures to prevent transmitting, spreading, or acquiring COVID-19, specifically (8, 9):

- Regular hand hygiene, using alcohol based hand rub or soap and water (dry hands with a single-use towel)
- Observe and maintain physical distancing
- Optimize respiratory hygiene. Cover mouth and nose with tissue when coughing or sneezing or cough into the bend of your arm, discard tissue immediately in a covered bin, and perform hand hygiene
- Avoid touching eyes, nose or mouth as the virus can survive on surfaces.

Continue to emphasize importance of vaccinations including pneumococcal vaccine given the increased risk of secondary bacterial infection with COVID-19 patients.

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