

## Overview

IBD and ostomies are not conditions solely affecting the physical – mental health manifestations should be a consideration for any individual with IBD and/or an ostomy. It is thought that mental health conditions often go underdiagnosed in the IBD/ostomy population. In one study, 237 IBD patients (136 with Crohn's and 101 with UC) were recruited for a semi-structured interview with a psychiatrist in which 48% of the patients were diagnosed as having one psychiatric disorder. Of the 48% diagnosed with a psychiatric condition, 59% received this psychiatric diagnosis for the first time – meaning 28% of the IBD patients in this study had a mental health diagnosis without their prior knowledge (Marafini). Mental health conditions associated with IBD and ostomy can include, but are not limited, to those below:

# 15%

The prevalence of depression amongst individuals with IBD is thought to be around 15%.



- **Depression:** While it is normal to feel sad at times regarding an IBD diagnosis or ostomy, depression is not normal and not a condition to ignore. Sadness should be a temporary emotion that fades over time whereas depression is a long-term mental health condition in which feelings of sadness and despair fail to cease. In one systematic review of the literature on depression and IBD, depression prevalence was thought to be around 15% with certain factors increasing or decreasing risk (Neuendorf).

- **Anxiety:** As with sadness, bouts of anxiety associated with IBD and/or ostomy can be normal when short-term and arising during overwhelming or seemingly unmanageable situations. An anxiety disorder is defined by long-lasting periods of anxiety that arise unexpectedly or present in a manner incongruent with the anxiety-inducing situation. In a systematic review on anxiety and IBD, anxiety prevalence was thought to be approximately 21% with particular situations increasing or decreasing risk (Neuendorf).

# 21%

The prevalence of anxiety amongst individuals with IBD is thought to be around 21%.



## Post-traumatic stress (PTS)

- typical, often adaptive response to stress
- symptoms should cease within a month of the traumatic event
- should not significantly interfere with daily function

VS

- heightened, maladaptive response to a traumatic event
- symptoms do not cease within a reasonable timeframe

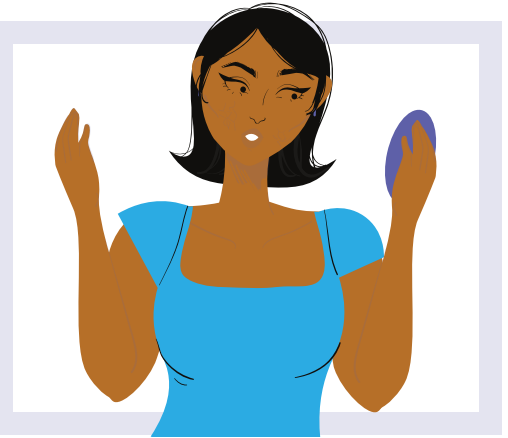
## Post-traumatic stress disorder (PTSD)

- **Post-traumatic stress (PTS)/post-traumatic stress disorder (PTSD):** PTS and PTSD are actually classified as a type of anxiety disorder, but due to their prevalence in medical trauma, we will be discussing them separately. PTS and PTSD are commonly confused conditions - not only do they share similarities in their naming but many symptoms are similar as well. PTS is a typical response to a traumatic situation in which an individual may notice an elevated heart rate, shakiness of the hands, sweatiness or nervousness/fear when thinking of the traumatic event or being introduced to triggers. PTS should resolve within a month of the traumatic event. PTSD is a long-term mental health condition in which the individual experiences flashbacks of the event, extreme anxiety/fear leading to impaired daily function or constant thoughts of the traumatic event. The difference between PTS and PTSD is duration and intensity. Approximately one-third of IBD patients report significant PTS symptoms with one-quarter reporting a PTSD diagnosis (Taft).

- **Eating disorders:** Eating disorders with IBD and ostomies can be difficult to distinguish from malnourishment associated with poor nutrient intake as a result of abdominal pain and disease activity. It makes sense that patients may become avoidant of certain foods due to fear of triggering symptoms; however, this avoidance can be taken too far and develop into an eating disorder. Particularly, individuals with IBD and ostomy are shown to be at risk for anorexia nervosa; however, they may also present with symptoms of other specified feeding or eating disorder (OSFED). OSFED includes avoidant/restrictive food intake disorder (ARFID) in which an individual displays intense aversion to eating particular groups of food. The classification of the food groups avoided can be dependent upon a number of factors (e.g. texture, smell, carbohydrates, fats, etc.). ARFID can commonly present with IBD and ostomy as patients may develop a disordered relationship with eating under the belief that excessive avoidance of certain foods can aid in management of their condition. Presentation of eating disorders in general practices is thought to be around 10% as opposed to 24% in gastroenterology practices (Werlang).



- **Body image dissatisfaction:** Numerous factors can contribute to poor body image in individuals with IBD and ostomies. Estimates of body image dissatisfaction prevalence in IBD patients ranges from 21–81% dependent upon the study. The presence of an ostomy is shown to further exacerbate body image dissatisfaction (Beese). Poor body image further contributes to impaired physical and mental health outcomes.



## Causes and Risk Factors in the General Population

- **Body ideal internalization:** From a young age, individuals are often told, either explicitly or implicitly, that they need to maintain a certain shape, size or figure in order to be deemed attractive from a societal viewpoint. Internalization of these perspectives can lead to heightened development of mental health conditions such as eating disorders, body image dissatisfaction, depression and anxiety.
- **Genetics:** Individuals with a strong family history of mental health conditions may be predisposed to development of mental health conditions themselves. Certain genetic variations have been associated with increased likelihood of certain mental illnesses (e.g. major depression, schizophrenia, bipolar disorder, etc.); however, at the time, further research is needed to validate the specific genes contributing to mental illness.
- **Environmental factors:** A number of sociocultural factors are correlated with increased risk of mental illness. Poverty, racism, adverse childhood events, trauma, etc. all contribute to heightened risk of developing later mental health conditions. It is important to note that certain structural and institutional systems can maintain these sociocultural barriers leading to sustained systems of adversity and associated health repercussions.

## Causes and Risk Factors in IBD/Ostomy Patients

- **Disease activity:** Active disease has been associated with increased risk of depression and anxiety. In one study, 42.5% of individuals with active IBD screened positive for depression whereas 18.1% of individuals in remission screened positive for depression. As far as anxiety prevalence, 22.5% of individuals with active disease screened positive for anxiety, while 9.6% of individuals in remission screened positive for anxiety (Karpin). The stress and lack of predictability associated with being in an active disease state may likely be contributing factors to increased rates of mental health comorbidities.



## Causes and Risk Factors in IBD/Ostomy Patients (continued...)

- **Perceived support system:** Individuals with strong and stable personal connections often feel they are better able to navigate mental health challenges as opposed to those with support networks perceived as unsustainable or weak. A diversity of relationships amongst significant others, family and friends was shown to also be valued and protective in navigating mental illness (Brooks).
- **Traumatic medical events:** Adverse events can heighten risk for mental health conditions. Particularly, with IBD and ostomies, traumatic medical events can contribute to a later PTSD diagnosis as well as increased risk of other mental health issues such as depression and anxiety (Cámara).
- **Weight fluctuations:** Dramatic fluctuations in weight, either from active disease or particular medication options (e.g. fluid retention with prednisone), can contribute to poor body image satisfaction and subsequent unbalanced eating and exercise habits as compensatory behaviors. This ultimately heightens risk of eating disorders and body image dissatisfaction.
- **Certain medications:** The connection between IBD medications and psychiatric manifestations is unclear. While certain studies show an elevated rate of mental health conditions, such as depression, with use of medications like TNF inhibitors, it is difficult to distinguish whether this elevated rate is from the medication itself or because many patients using TNF inhibitors have chronic health conditions which in turn increases risk of depression. In contrast to this, certain studies show decreased rates of depression once beginning TNF inhibitors; however, it is again difficult to distinguish if this is a result of the medication itself or because of improved disease management. Overall, there may be links between certain IBD medications and development of mental health manifestations, and individuals with concern should reach out to their healthcare provider.

## Signs and Symptoms

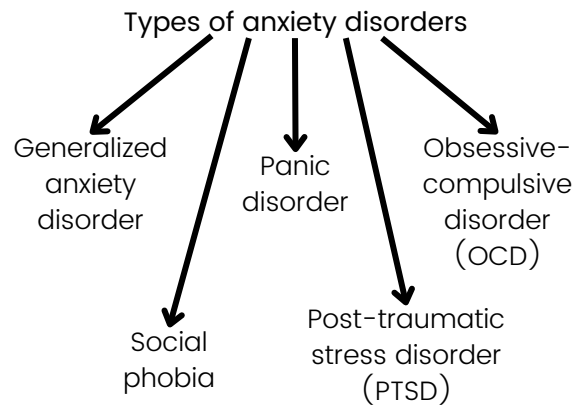
While there is no one “look” to mental health disorders and each individual’s case is unique, there are certain red flags to be aware of.

- **Depression:** In depression, individuals may often fall into a state of hopelessness in which they experience thoughts of self-loathing, worthlessness or helplessness. The individual may find they have a loss of interest in activities they once found stimulating. Irregularities in sleep habits, constant fatigue, fluctuations in appetite and weight may also be experienced. Comorbid conditions, namely anxiety, can accompany depression.



## Signs and Symptoms (continued...)

- **Anxiety:** There are numerous types of anxiety disorders such as generalized anxiety disorder, panic disorder and phobia-related disorders. In generalized anxiety disorder, an individual may display symptoms of restlessness, fatigue, difficulty concentrating, controlling feelings of worry and/or alterations in sleep habits for an extended timeframe. Panic disorder is classified by recurrent unexpected panic attacks whereas phobia-related disorders involve an intense aversion to specific objects or situations.



5 most common types of anxiety disorders - note these are not the only types of anxiety disorders simply the most common

### 4 divisions of PTSD symptoms:

- 1 intrusive thoughts
- 2 avoidance
- 3 heightened arousal
- 4 changes in physical/emotional reactions

- **PTSD:** Symptoms of PTSD can be divided into four main categories: intrusive thoughts, avoidance, heightened arousal and changes in physical/emotional reactions. Intrusive thoughts may present as repetitive, unwanted memories of the traumatic event. Avoidance behaviors can include resistance to conversation, certain locations or behaviors associated with the traumatic event. Heightened arousal may lead to irregular sleep patterns or extreme panic/anxiety in certain situations. Loss of interest in once-enjoyable activities, engagement in risky behaviors and fluctuations in weight may be signs of altered physical/emotional states.

- **Eating disorders:** Eating disorders can be classified in several ways with presentation largely dependent upon the specific eating disorder:
  - **Anorexia nervosa** occurs when an individual partakes in restrictive eating habits with the aim of decreasing body mass despite being in a malnourished state. Note that an individual can be in a malnourished state based on poor energy intake regardless of external appearances.
  - **Bulimia nervosa** is distinguished by compensatory behaviors to avoid weight gain such as self-induced vomiting, laxative misuse, fasting and excessive exercise.
  - **Binge eating disorder** is characterized by repeated episodes in which an individual consumes large volumes of food accompanied by feelings of loss of control, guilt and subsequent purging behaviors.



## Signs and Symptoms (continued...)

- Eating disorders (continued):
  - Otherwise specified feeding or eating disorder (OSFED) is a classification used to define eating behaviors that do not clinically fit into other categorizations of eating disorders. This can include **orthorexia nervosa** in which an individual has an unbalanced fixation on “clean and healthy eating” or **avoidant/restrictive food intake disorder (ARFID)** in which an individual is incredibly restrictive with the types and groups of food they eat. ARFID deserves special consideration for the IBD and ostomy community as many individuals suffering from gastrointestinal disorders may struggle with ARFID. It is natural that after eating a certain food and experiencing pain or increased symptoms, an individual may want to avoid that food in the future; however, in ARFID, this restriction gets taken to extremes and can lead to serious malnourishment and psychological stress. Individuals with IBD and ostomy are at increased risk of ARFID – likely due to fear of eating certain foods and elevating pain or symptoms.



- **Body image dissatisfaction:** While it is normal to have days where one may not feel as confident in their body, body image dissatisfaction is marked as a lasting sense of poor body confidence. Individuals may find themselves constantly body checking in the mirror, avoiding social situations because of how they look, feeling disgusted by their body and/or appearance and engaging in regular negative self-talk. 87% of IBD patients reported poor body image satisfaction (McDermott) with ostomies being shown to elevate body dissatisfaction (Song). Poor body image is also associated with a number of other psychiatric comorbidities.

## Diagnosis

The first step in diagnosis of mental health conditions typically involves ruling out other health conditions that may be contributory to mental health manifestations. For example, your physician may do a physical exam and run certain labs to eliminate issues with your thyroid. Elevated or depressed thyroid levels can contribute to certain mental health conditions; thus, ruling out other health conditions is an important first step in diagnosis of the underlying issue.





## Diagnosis (continued...)

Your physician will then do a psychological evaluation which may also require you to fill out several evaluation questionnaires. Based on the results of your psychological evaluation and screening questionnaires, your physician should then have a better idea of diagnosis and subsequent treatment.

## Treatment

Treatment of mental health comorbidities associated with IBD and ostomy generally fall into three categories. Individuals may need to utilize therapeutics from one category, two categories or all three.

- **Lifestyle considerations:** When applicable, it is important to address certain lifestyle management techniques that can aid in mental wellness. Balanced exercise and eating, meditation, support groups, self-care techniques, etc. can be protective and aid in treatment of certain mental health conditions. Additionally, it is important to evaluate components like disease activity and sociocultural factors which can contribute to mental illness.
- **Cognitive behavioral therapy (CBT):** CBT is a form of psychotherapy (talk therapy) recommended in treatment of numerous mental health conditions. The goal of CBT is to better identify negative thoughts, feelings and sensations in order to recognize and redirect these patterns of behavior. CBT focuses on breaking down issues that can feel overwhelming and uncontrollable into more manageable components.
- **Medication management:** In addition to sessions with a licensed therapist, a psychiatrist (or other knowledgeable physician) may also recommend certain medication options such as antidepressants (for management of depression, anxiety and PTSD) or anxiolytics (for management of anxiety). Medication therapies for eating disorder management are also currently being explored; however, the mechanisms and best therapeutic options are still up for debate as further research is accrued.

Therapeutic options for mental health conditions include:

- 1 Lifestyle considerations



- 2 Cognitive behavioral therapy (CBT)



- 3 Medication management



## Prevention

While there are many aspects of mental health conditions beyond the control of the individual, daily habits of self-care can help in prevention of mental illness. As mentioned in the treatment section above, engagement in balanced exercise and eating habits, meditation, support groups, etc. has been shown to be protective in development of certain mental health conditions. Emphasis on maintaining strong personal relationships and creating a sense of support can help in prevention of mental health conditions as well.

Management of underlying health conditions is also crucial in prevention of mental health comorbidities. Because of the strong link between active IBD and mental health manifestations, staying on top of IBD management is crucial.

It is important to note that much of prevention with mental illness involves evaluating the structural and institutional systems in which we operate to address sociocultural factors that can contribute to development of mental health conditions. Development of mental health issues is strongly linked with sociocultural factors such as poverty, racism, homophobia, etc. These are ideologies and systems that must be altered to increase accessibility and equality of individuals to access varying resources. Until these sociocultural barriers are addressed, individuals will continue to experience associated mental health comorbidities.

## Further Resources

- Crohn's and Colitis Canada: Mental Health and Wellness (<https://crohnsandcolitis.ca/About-Crohn-s-Colitis/IBD-Journey/Mental-Health-and-Wellness>)
- Crohn's and Colitis Foundation: Emotional Factors Fact Sheet (<https://www.crohnscolitisfoundation.org/sites/default/files/legacy/assets/pdfs/emotional.pdf>)
- Crohn's and Colitis UK: Mental Health and Wellbeing (<https://www.crohnsandcolitis.org.uk/about-crohns-and-colitis/publications/mental-wellbeing>)
- Moodfit: app that tracks mood to encourage more positive thought and behavior patterns
- Shine: app with daily reflection journals and meditations





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