



Obsessive-Compulsive Disorder and Illness Anxiety Disorder Following COVID-19: Shared Mechanisms and Primary Care Management

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Abstract

Background: The COVID-19 pandemic produced sustained psychological consequences that extended beyond the acute infectious period. Fear of infection, repeated public-health messaging, social isolation, uncertainty, exposure to illness-related information, and disruption of usual healthcare pathways contributed to increased anxiety, contamination concerns, compulsive behaviors, and excessive preoccupation with health. These effects were particularly relevant to obsessive-compulsive disorder and illness anxiety disorder, two conditions that may overlap in their presentation through recurrent health-related thoughts, reassurance seeking, repeated checking, avoidance, and excessive use of healthcare services. Although these disorders are diagnostically distinct, their boundaries may become difficult to recognize in patients whose symptoms emerged or worsened during and after the pandemic. Persistent physical symptoms after COVID-19 may further complicate assessment because genuine medical complaints can coexist with disproportionate illness fears or compulsive responses.

Aim: This review examines the relationship between obsessive-compulsive disorder and illness anxiety disorder following COVID-19, with emphasis on shared psychological, behavioral, neurobiological, and social mechanisms. It also explores the ways in which pandemic-related contamination fears, intolerance of uncertainty, heightened attention to bodily sensations, catastrophic interpretation of symptoms, cyberchondria, reassurance seeking, and avoidance may contribute to the onset or persistence of both disorders. Particular attention is given to diagnostic differentiation, clinical overlap, comorbid psychiatric conditions, functional impairment, healthcare utilization, and the challenges encountered in primary care. The review further evaluates the role of family physicians in early recognition, exclusion of important medical disease, structured assessment, patient education, treatment initiation, monitoring, referral, and continuity of care.

Conclusion: Obsessive-compulsive disorder and illness anxiety disorder represent important and potentially overlapping mental health consequences of the post-COVID-19 era. Their differentiation requires careful evaluation of the patient's dominant fears, the function of repetitive behaviors, the presence of intrusive thoughts, the degree of insight, and the relationship between symptoms and actual medical risk. Family physicians are well positioned to identify these conditions because of their longitudinal relationships with patients and their ability to integrate physical, psychological, familial, and social information. A collaborative, patient-centered approach combining appropriate medical assessment, cognitive-behavioral interventions, pharmacotherapy when indicated, and timely specialist referral may reduce distress, unnecessary investigations, healthcare overuse, and long-term disability.

Keywords: obsessive-compulsive disorder; illness anxiety disorder; COVID-19; primary care



Introduction

Obsessive-compulsive disorder (OCD) is a chronic and potentially disabling psychiatric condition characterized by intrusive, unwanted obsessions and repetitive behaviors or mental acts performed to reduce distress or prevent a feared outcome. Its manifestations are heterogeneous and may include contamination fears, checking rituals, concerns about responsibility for harm, symmetry-related behaviors, and intrusive aggressive, sexual, or religious thoughts. Although many affected individuals recognize that their fears or rituals are excessive, insight varies considerably, and severe symptoms can disrupt education, employment, relationships, self-care, and family functioning. OCD is also frequently underrecognized because patients may conceal symptoms owing to shame, interpret them as personality traits, or initially seek care for secondary physical consequences rather than for the underlying psychiatric disorder.[1]

Illness anxiety disorder (IAD), previously encompassed within the concept of hypochondriasis, is characterized by persistent preoccupation with having or acquiring a serious disease despite absent or mild somatic symptoms and an appropriate medical evaluation. Patients may repeatedly examine their bodies, search for health information, request investigations, seek reassurance from clinicians and relatives, or avoid medical settings because they fear confirmation of a serious diagnosis. Consequently, IAD may produce considerable distress, impaired functioning, repeated consultations, fragmented care, and potentially harmful diagnostic procedures. Unlike ordinary concern about health, the preoccupation is persistent, disproportionate to the objective medical risk, and poorly relieved by negative test results or professional reassurance.[2]

The COVID-19 pandemic created an exceptional environment in which vigilance toward infection, bodily symptoms, hygiene, and disease transmission became socially necessary. Repeated instructions regarding handwashing, surface cleaning, symptom monitoring, physical distancing, and avoidance of possible contamination were appropriate public-health measures; however, they closely resembled the fears and safety behaviors experienced by individuals with contamination-related OCD. For vulnerable patients, the boundary between adaptive precaution and pathological ritual became difficult to determine. Pandemic-related uncertainty, fear of infecting relatives, repeated exposure to threatening information, and disruption of psychiatric services contributed to the emergence or exacerbation of obsessive-compulsive symptoms, particularly among individuals with contamination fears and an increased sense of responsibility for preventing harm.[3]

COVID-19 also provided a potent trigger for illness anxiety. Heightened public attention to symptoms, mortality, variants, complications, and long-term health consequences encouraged repeated bodily monitoring and online health-information seeking. Benign sensations such as transient breathlessness, fatigue, palpitations, headache, or throat discomfort could consequently be interpreted as evidence of infection or serious postinfectious disease. This process may be amplified by intolerance of uncertainty, catastrophic interpretation, selective attention to bodily sensations, and cyberchondria. Reassurance seeking and repeated testing may briefly reduce anxiety but can reinforce the belief that danger must continually be excluded, thereby maintaining the cycle of health-related fear.[4]

The post-COVID period presents an additional diagnostic challenge because persistent fatigue, cognitive difficulty, dyspnea, sleep disturbance, palpitations, pain, and mood symptoms may occur after SARS-CoV-2 infection. Family physicians must therefore avoid two opposing errors: attributing genuine post-COVID manifestations to anxiety without adequate evaluation, and pursuing unlimited investigations when a patient's distress and healthcare use are primarily maintained by obsessive-compulsive or illness-anxiety mechanisms. The coexistence of real physical symptoms and disproportionate psychological responses further complicates this distinction. A longitudinal, biopsychosocial assessment is therefore more useful than a single encounter or a purely exclusion-based diagnostic approach.[5]

OCD and IAD are distinct disorders, yet they may converge around fear of disease, hypervigilance, checking, avoidance, reassurance seeking, and difficulty tolerating uncertainty. The principal distinction



often lies not in the observable behavior but in its underlying purpose. In OCD, repetitive behavior commonly neutralizes an intrusive obsession or prevents a feared consequence according to rigid internal rules; in IAD, behavior is primarily directed toward confirming or disproving the belief that serious illness is present. Nevertheless, some patients demonstrate features of both conditions, and repeated reassurance may function as a compulsion. Diagnostic assessment should therefore examine the form and content of thoughts, the perceived meaning of bodily sensations, the function of repetitive behaviors, the degree of insight, and the duration and functional consequences of symptoms.[1]

Family medicine occupies a central position in addressing this overlap because patients with contamination fears, bodily concerns, or repeated requests for medical assessment commonly present first—and sometimes exclusively—to primary care. Continuity enables the family physician to recognize changes from baseline, evaluate actual medical risk, identify repetitive patterns across consultations, assess family and social influences, and monitor psychiatric comorbidity or suicide risk. A trusted therapeutic relationship can also reduce fragmented care and facilitate shared management through psychoeducation, planned follow-up, judicious investigation, evidence-based pharmacotherapy, and referral for cognitive-behavioral therapy, including exposure and response prevention when OCD is present.[6]

Despite growing research on the separate effects of COVID-19 on obsessive-compulsive symptoms and health anxiety, the literature has more often examined these outcomes independently than as overlapping clinical presentations encountered in primary care. Limited attention has been given to how family physicians can distinguish adaptive postinfectious concern from IAD, contamination-related OCD, or combined symptom patterns while simultaneously evaluating possible post-COVID conditions. There is also a need for a clinically applicable framework that integrates shared mechanisms, diagnostic differentiation, healthcare-utilization patterns, initial management, safety assessment, and thresholds for specialist referral.

Accordingly, this review aims to examine the relationship between OCD and IAD following COVID-19, focusing on their shared cognitive, behavioral, neurobiological, and social mechanisms. It also aims to clarify their areas of overlap and diagnostic distinction, evaluate the influence of acute infection, pandemic-related stressors, and persistent post-COVID symptoms, and define the role of family physicians in early recognition, appropriate medical evaluation, longitudinal management, evidence-based treatment, and coordinated referral.

Obsessive-Compulsive Disorder: Clinical Features and Relevance After COVID-19

OCD is characterized by obsessions, compulsions, or both. Obsessions are recurrent intrusive thoughts, images, or urges that cause anxiety or distress, whereas compulsions are repetitive behaviors or mental acts performed to reduce distress or prevent a feared event. Common manifestations include contamination fears, repeated washing, checking, ordering, counting, reassurance seeking, and avoidance. Symptoms become clinically significant when they are time-consuming or impair personal, occupational, or social functioning.[7]

The clinical presentation of OCD is heterogeneous. Contamination and cleaning symptoms are especially relevant following COVID-19 because recommended infection-control behaviors may resemble compulsive rituals. Adaptive hygiene is proportionate to actual risk and can be discontinued when no longer necessary; compulsive cleaning is rigid, repetitive, distress-driven, and often continues despite recognition that the behavior is excessive. The function, intensity, and consequences of the behavior are therefore more diagnostically informative than the behavior alone.[7]

OCD commonly begins during childhood, adolescence, or early adulthood and often follows a persistent course. A recent World Mental Health Survey analysis reported a combined lifetime prevalence of 4.1% and found that more than 80% of cases began by early adulthood. Although many community cases were classified as mild, the disorder can produce major disability, particularly when symptoms are severe, concealed, or accompanied by poor insight.[8]

Psychiatric comorbidity is common and should be assessed routinely. Depressive disorders, other anxiety disorders, tic disorders, obsessive-compulsive-related disorders, neurodevelopmental conditions, and



personality disorders may complicate recognition and treatment. Comorbid depression is particularly important because it may increase functional impairment and suicide risk. Comprehensive assessment should therefore extend beyond the severity of obsessions and compulsions to mood, substance use, self-harm, family accommodation, and daily functioning.[9]

OCD remains underdetected and undertreated despite the availability of effective interventions. Patients may delay disclosure because of embarrassment, fear of judgment, or uncertainty about whether their symptoms represent a treatable condition. In primary care, clues include recurrent unexplained distress, prolonged washing routines, dermatitis caused by cleaning, repeated checking, excessive reassurance seeking, and family members participating in rituals. Direct, nonjudgmental questioning can shorten delays in diagnosis and treatment.[10]

Cognitive-behavioral therapy incorporating exposure and response prevention is a principal evidence-based psychological treatment. It involves gradual exposure to feared thoughts or situations while resisting the associated ritual or reassurance-seeking response. Selective serotonin reuptake inhibitors are also first-line treatments, particularly when symptoms are moderate to severe, psychotherapy is inaccessible, or psychiatric comorbidity is present. Combined treatment and psychiatric referral may be required for severe, complex, or treatment-resistant illness.[11]

Illness Anxiety Disorder: Clinical Features and Post-COVID Relevance

Illness anxiety disorder is characterized by persistent fear of having or developing a serious disease despite absent or mild physical symptoms and appropriate medical evaluation. Patients remain highly alert to bodily changes and may interpret normal sensations as evidence of illness. The resulting anxiety causes significant distress, impaired functioning, and repeated health-related behaviors.[12]

Two common patterns are recognized. Patients with the **care-seeking type** repeatedly consult clinicians, request investigations, check their bodies, or seek reassurance. Those with the **care-avoidant type** delay or avoid medical care because they fear receiving a serious diagnosis. Both patterns may occur at different times in the same patient and can interfere with appropriate healthcare.[12]

IAD differs from somatic symptom disorder because the central problem is fear of disease rather than distress caused by prominent physical symptoms. It must also be distinguished from OCD, panic disorder, generalized anxiety disorder, depressive illness, body dysmorphic disorder, and fixed somatic delusions. Diagnosis depends on the dominant concern, the function of health-related behaviors, and whether beliefs remain open to reconsideration.[13]

Health anxiety is maintained by a cycle of selective attention, catastrophic interpretation, anxiety, reassurance seeking, checking, and temporary relief. Reassurance often reduces distress only briefly, encouraging the patient to seek further consultations or tests when anxiety returns. Repeated investigation can therefore reinforce rather than resolve illness-related fear.[13]

The COVID-19 pandemic intensified several mechanisms associated with IAD. Continuous symptom monitoring, fear of infection, online health searches, exposure to mortality reports, and uncertainty regarding long-term complications increased attention to bodily sensations. Patients with pre-existing anxiety were particularly vulnerable to interpreting benign symptoms as signs of COVID-19 or serious postinfectious disease.[14]

Persistent symptoms following COVID-19 make diagnosis more complex because fatigue, dyspnea, palpitations, pain, sleep disturbance, and cognitive complaints may have genuine medical causes. Family physicians should perform proportionate clinical assessment while avoiding repetitive investigations unsupported by new findings. Recognizing both legitimate post-COVID symptoms and disproportionate illness fear prevents diagnostic overshadowing in either direction.[12]

IAD is associated with impaired quality of life, occupational absence, repeated consultations, and increased healthcare expenditure. A primary care study found that patients with severe health anxiety used substantially more healthcare resources than comparison patients. Fragmented consultations and repeated testing may also expose patients to incidental findings, procedural complications, and further anxiety.[15]

Management begins with an empathic therapeutic relationship and planned continuity with one principal clinician. Concerns should be acknowledged without repeatedly providing absolute reassurance. Regular



scheduled visits, clear thresholds for additional investigation, psychoeducation, and collaborative formulation can reduce emergency attendance and physician shopping. Cognitive-behavioral therapy is the best-supported psychological treatment, while antidepressants may be considered when symptoms are persistent or accompanied by depression or another anxiety disorder.[12]

Shared Mechanisms Linking OCD and IAD Following COVID-19

OCD and IAD share a tendency to overestimate health threats and interpret uncertainty as dangerous. During COVID-19, ambiguous information about infection, transmission, and long-term complications intensified these tendencies. Patients consequently experienced difficulty accepting that disease risk could be reduced but never completely eliminated.[16]

Heightened attention to bodily sensations is another shared mechanism. Minor respiratory, cardiovascular, or neurological sensations may be interpreted as evidence of infection or lasting damage. In IAD, this primarily reinforces fear of undiagnosed illness; in OCD, it may trigger intrusive contamination thoughts and repetitive attempts to neutralize perceived danger.[17]

Reassurance seeking, checking, avoidance, and excessive hygiene act as safety behaviors in both disorders. These responses provide temporary relief but prevent patients from learning that anxiety can decline without ritualized action or repeated medical confirmation. The temporary reduction in distress therefore reinforces the behavior and maintains the disorder.[16]

Intolerance of uncertainty is particularly important after COVID-19. Uncertainty concerning reinfection, emerging variants, persistent symptoms, or transmission to vulnerable relatives may lead to repeated testing, online searching, cleaning, and consultation. Patients with inflated responsibility may also believe that minor lapses in precaution could cause serious harm to others.[18]

Cyberchondria provides a further bridge between OCD and IAD. Repetitive online searching may begin as an attempt to gain certainty but often exposes patients to alarming, contradictory, or poorly contextualized information. This increases anxiety, promotes further searching, and strengthens obsessive or illness-related interpretations.[19]

Stress, isolation, disrupted routines, bereavement, and reduced access to mental healthcare also contributed to symptom persistence. Studies of patients with OCD found that many experienced worsening during the pandemic, particularly those with contamination symptoms. Pandemic conditions therefore acted as environmental stressors that amplified pre-existing cognitive and behavioral vulnerabilities.[20]

Although shared mechanisms are substantial, the disorders should not be treated as interchangeable. OCD is usually organized around intrusive thoughts and neutralizing rituals, whereas IAD centers on persistent fear of serious illness. Some patients, however, show mixed presentations in which bodily vigilance, contamination fears, reassurance seeking, and compulsive health research occur together.[16]

Family physicians should first determine whether the patient's concern is proportionate to an actual medical condition. A focused history, physical examination, and targeted investigations are necessary when clinically indicated, especially in patients with persistent post-COVID symptoms. However, repeated testing without new findings may reinforce anxiety and expose patients to unnecessary procedures.[21]

The central distinction is the purpose of the patient's thoughts and behaviors. In OCD, intrusive thoughts generate distress and lead to rituals intended to neutralize danger. In IAD, the dominant concern is having or acquiring a serious illness, and checking or consultation is used to obtain diagnostic certainty. Reassurance seeking may occur in both conditions and can function as a compulsion.[22]

Contamination-related OCD is suggested by rigid cleaning rules, repetitive rituals, inflated responsibility, and distress when rituals are interrupted. IAD is more likely when the patient repeatedly monitors bodily sensations, changes the feared diagnosis, seeks medical investigations, or remains preoccupied despite negative results. Mixed presentations should be recognized rather than forced into a single category.[23]

Assessment should also consider generalized anxiety disorder, panic disorder, depressive illness, somatic symptom disorder, post-traumatic stress disorder, psychosis, medication effects, and genuine post-COVID conditions. Fixed beliefs that cannot be reconsidered may suggest a delusional disorder, while prominent distress related to persistent physical symptoms may support somatic symptom disorder.[22]



Brief screening tools may support but not replace clinical assessment. The Yale-Brown Obsessive Compulsive Scale can measure OCD severity, while instruments such as the Short Health Anxiety Inventory or Whiteley Index may quantify health anxiety. Screening results should be interpreted alongside symptom duration, functional impairment, insight, avoidance, family accommodation, and healthcare-use patterns.[24]

Risk assessment is essential because both disorders may coexist with depression, severe functional impairment, and suicidal thinking. Direct questions should address hopelessness, self-harm, medication misuse, inability to perform essential activities, and risk arising from compulsive behavior. Urgent psychiatric evaluation is required when suicidality, psychosis, extreme self-neglect, or severe deterioration is identified.[25]

Primary Care Management

Family physicians should provide one coordinated care plan that addresses both physical and psychological concerns. Initial management includes validating the patient's distress, explaining the working diagnosis, identifying triggers and safety behaviors, and agreeing on scheduled follow-up. Continuity reduces fragmented consultations, repeated emergency visits, and conflicting medical advice.[26]

Medical investigations should be guided by history, examination, red flags, and meaningful clinical change. Repeating tests solely to provide reassurance is usually ineffective because relief is temporary and may strengthen future checking. The physician should explain why further testing is unnecessary while clearly stating which new symptoms would justify reassessment.[27]

For OCD, cognitive-behavioral therapy with exposure and response prevention and selective serotonin reuptake inhibitors are first-line treatments. Family physicians may initiate an SSRI in uncomplicated cases, monitor adherence and adverse effects, and explain that improvement may require an adequate dose and treatment duration. Referral is appropriate when symptoms are severe, diagnosis is uncertain, or treatment response is inadequate.[28]

For IAD, cognitive-behavioral therapy targets catastrophic interpretation, body checking, avoidance, reassurance seeking, and excessive health-information searching. Regular appointments should replace symptom-driven consultations. Antidepressants may be considered when health anxiety is persistent or accompanied by depression, generalized anxiety, panic symptoms, or functionally impairing distress.[27]

Family involvement may improve outcomes when relatives repeatedly provide reassurance, assist rituals, or reorganize daily life around the patient's fears. With consent, clinicians should explain how accommodation unintentionally maintains symptoms and encourage supportive responses that promote coping without participating in compulsive behavior.[28]

Post-COVID care should integrate symptom rehabilitation with mental healthcare. Genuine fatigue, dyspnea, sleep disturbance, or cognitive complaints should be managed appropriately, while excessive monitoring and avoidance are addressed gradually. Labeling all symptoms as psychological may damage trust, whereas unrestricted investigation may reinforce anxiety.[29]

Urgent referral is required for suicidal thoughts, psychosis, severe self-neglect, inability to perform essential activities, dangerous compulsions, or rapidly worsening symptoms. Specialist referral is also indicated for pregnancy-related OCD, pediatric cases, prominent tic disorders, diagnostic complexity, or failure of adequate psychotherapy and medication trials.[28]

Collaborative care involving family physicians, psychologists, psychiatrists, pharmacists, and rehabilitation professionals is preferable for complex cases. The family physician remains responsible for continuity, treatment monitoring, physical healthcare, medication safety, relapse recognition, and coordination between services.[26]

A major primary care challenge is balancing appropriate medical vigilance with avoidance of unnecessary investigation. Persistent post-COVID symptoms may require genuine assessment, yet repeated tests can reinforce catastrophic beliefs and reassurance dependence. Management should therefore be based on red flags, objective clinical change, and an agreed follow-up plan rather than anxiety intensity alone.[30]

Limited access to trained psychotherapists remains an important treatment barrier. Integrating behavioral



health professionals into primary care may improve referral completion, communication, and continuity. Stepped-care models can begin with psychoeducation and brief interventions, followed by structured CBT, psychiatric consultation, or specialist OCD services according to severity and treatment response.[31]

Digital interventions may expand access to CBT and exposure-based treatment, particularly where specialist services are limited. However, clinicians should distinguish therapeutic digital care from uncontrolled online symptom searching, which may maintain cyberchondria. Digital treatment should include clinical oversight, progress monitoring, and clear escalation pathways for high-risk or nonresponding patients.[30]

Prevention should focus on early identification of persistent contamination rituals, excessive body checking, repeated reassurance seeking, and maladaptive avoidance. Family physicians can provide balanced health information, promote reliable sources, and explain the difference between proportionate precaution and anxiety-driven behavior. Screening may be especially useful in patients with previous anxiety disorders, severe COVID-19 experiences, bereavement, or repeated unexplained consultations.[32]

Further research should clarify the prevalence and longitudinal course of combined OCD and IAD symptoms after COVID-19. Studies should also examine whether postinfectious inflammation, altered threat processing, social stress, or healthcare disruption contribute independently to symptom development. Primary care trials are needed to evaluate integrated assessment pathways and brief interventions for patients with overlapping physical and psychological symptoms.[33]

Conclusion

Obsessive-compulsive disorder and illness anxiety disorder may both emerge or worsen after COVID-19 through shared mechanisms including intolerance of uncertainty, heightened threat perception, bodily hypervigilance, catastrophic interpretation, reassurance seeking, checking, avoidance, and excessive health-information searching. Although these disorders overlap clinically, they remain distinguishable by the dominant fear and the function of repetitive behaviors. Family physicians are central to recognition because they can integrate longitudinal medical, psychological, family, and social information while excluding significant post-COVID disease without reinforcing anxiety through repeated unnecessary investigations. Effective care requires a therapeutic alliance, structured follow-up, proportionate assessment, cognitive-behavioral interventions, appropriate pharmacotherapy, family education, and timely specialist referral. Integrating mental healthcare into primary care can reduce distress, disability, fragmented consultations, and healthcare overuse while improving continuity and long-term outcomes.

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