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Health Anxiety: Epidemiology, Symptoms, Diagnosis, and Treatment

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Narrative Clinical Review

Abstract—Health anxiety ranges from understandable concern about bodily change to persistent fear of serious illness that consumes attention, prompts repeated checking or reassurance, and restricts life. It may occur with or without diagnosed medical disease, so good care cannot be organized around a false choice between physical and psychological explanations. This narrative clinical review examines epidemiology, symptom patterns, diagnosis and differential diagnosis, communication, cognitive-behavioral formulation, treatment evidence, digital health searching, service use, relapse prevention, and safety. Evidence available through 30 November 2024 supports cognitive behavioral therapy (CBT), including therapist-guided internet delivery, as the best-established psychological treatment. Antidepressant medication has some trial support, although comparative and long-term evidence is less developed. The review argues that proportionate medical assessment and psychological treatment are complementary: clinicians should investigate credible new risk, explain what has and has not been excluded, and avoid both reflexive testing and premature psychologizing. Reassurance is most useful when it becomes a shared plan for responding to uncertainty rather than a short-lived promise of safety. A formulation linking threat meaning, selective attention, bodily arousal, checking, avoidance, and interpersonal reassurance can identify testable intervention targets. Therapeutic communication is therefore not an adjunct to treatment; it can either stabilize continuity and reflective choice or inadvertently reinforce the cycle of alarm.

Index Terms—health anxiety, illness anxiety disorder, hypochondriasis, somatic symptom disorder, cognitive behavioral therapy, clinical communication

I. INTRODUCTION

Concern about health is not inherently pathological. Bodily sensations can signal disease, and uncertainty about illness can reasonably command attention. Health anxiety becomes clinically important when the probability or consequences of illness are repeatedly overestimated, attention narrows around possible threat, and attempts to obtain certainty consume time or reduce functioning. The resulting pattern may include body checking, online searching, repeated consultation, requests for tests, avoidance of health information, or avoidance of activity for fear of harm. These behaviors can look opposite, yet both are organized around the same problem: an urgent effort to prevent or resolve an intolerable medical possibility (Warwick & Salkovskis, 1990; Creed & Barsky, 2004).

The presentation is often misunderstood as anxiety in the absence of disease. That definition is unsafe and clinically unhelpful. A patient may have genuine chronic illness and also experience disproportionate preoccupation, just as a person without a current diagnosis may later develop one. DSM-5 moved away from requiring symptoms to be medically unexplained and distinguished illness anxiety disorder, in which somatic symptoms are absent or mild, from somatic symptom disorder, in which distressing symptoms are prominent and accompanied by excessive thoughts, feelings, or behaviors (American Psychiatric Association, 2013; Dimsdale et al., 2013). Diagnosis concerns the response to health uncertainty and symptoms, not proof that the body is disease-free.

This distinction places communication at the center of care. A clinician who says only that tests are normal may unintentionally leave the feared interpretation untouched; a clinician who attributes symptoms to anxiety before adequate assessment may damage trust and miss disease. Productive care holds two propositions together: credible medical risk deserves proportionate evaluation, and repeated attempts to eliminate all uncertainty can maintain distress. The clinical task is to build enough shared understanding that a patient can respond to new symptoms safely without allowing every sensation to become an emergency. This review develops that task from epidemiology and diagnosis through treatment and relapse planning.

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II. SCOPE AND REVIEW METHOD

This narrative clinical review uses a literature-search cutoff of 30 November 2024, one calendar month before the nominal issue date of 31 December 2024. Sources were eligible only when a journal article, book, guideline, or stable public record was publicly available by that cutoff; a later issue assignment did not make an unavailable source eligible. Searches combined terms for health anxiety, hypochondriasis, illness anxiety disorder, somatic symptom disorder, epidemiology, diagnosis, differential diagnosis, cognitive behavioral therapy, pharmacotherapy, internet treatment, cyberchondria, reassurance, health-care use, and clinical communication. Reference lists of systematic reviews and pivotal trials were checked for foundational measures and treatment studies.

Priority was given to diagnostic sources, epidemiological studies, randomized trials, systematic reviews, validated assessment measures, and authoritative guidance. The literature spans changing diagnostic systems: many treatment studies enrolled patients with hypochondriasis under DSM-III or DSM-IV criteria, whereas contemporary practice may use illness anxiety disorder or somatic symptom disorder. Those groups overlap but are not identical. The review therefore treats historical diagnoses explicitly and avoids assuming that every result transfers unchanged to all current presentations. It is narrative rather than systematic, does not calculate pooled effects, and uses causal language only when design and evidence justify it.

The organizing question is clinical rather than taxonomic: how can a practitioner recognize a self-maintaining pattern, preserve appropriate medical vigilance, and offer treatment without dismissing the patient's experience? Evidence was interpreted with attention to comparator strength, follow-up, attrition, treatment setting, and the difference between statistical symptom change and meaningful recovery. Because prevalence estimates depend strongly on definitions and setting, ranges are reported as context rather than universal rates. Communication and continuity were included as treatment-relevant processes even where direct mediation evidence remains limited.

III. DEFINITIONS, FREQUENCY, AND CLINICAL BURDEN

Health anxiety is dimensional. Transient concern can follow a symptom, diagnosis, bereavement, public-health threat, or exposure to illness information. At greater intensity, illness-related thoughts become recurrent, difficult to disengage from, and behaviorally consequential. The Whiteley tradition measured hypochondriacal attitudes, bodily preoccupation, and disease fear long before current diagnostic categories, illustrating that the clinical construct is broader than any single manual diagnosis (Barsky et al., 1990). The Health Anxiety Inventory was later designed around processes that could apply even when physical illness is present, including worry, attentional focus, and perceived consequences of illness (Salkovskis et al., 2002).

Prevalence estimates vary because studies use different thresholds, populations, and labels. Reviews describe clinically significant health anxiety in community and medical settings, with higher concentrations among patients repeatedly attending services or awaiting specialist assessment (Creed & Barsky, 2004). In a large sample across medical clinics, Tyrer and colleagues found substantial health anxiety, although estimates differed by specialty and case definition (Tyrer et al., 2011). The useful conclusion is not a single percentage. It is that health anxiety is common enough to be expected in ordinary medical practice and sufficiently impairing to warrant recognition rather than repeated unstructured reassurance.

Burden extends beyond distress scores. Patients may lose work, sleep, activity, money, and time; partners or family members may become drawn into checking and reassurance; clinicians may face repeated urgent contacts and fragmented records. High use of tests does not imply fabrication, and reduced use does not imply mild illness because avoidance can be equally disabling. Health anxiety can also coexist with depression, panic, obsessive-compulsive symptoms, trauma, and medical morbidity. A meta-analysis found cohort-related increases across university-student samples collected from 1985 to 2017, but that selected population does not establish a corresponding population-wide trend (Kosic et al., 2020). The cost of the condition lies in the pattern of fear and response, not simply in the number of consultations.

The feared disease may change while the organizing process remains stable. A normal cardiac assessment can be followed by concern about neurological illness; reassurance about one sensation can redirect attention to another. Conversely, persistent concern about one organ system may be entirely appropriate when objective risk is evolving. Longitudinal assessment asks what remains constant across episodes: the standard of certainty sought, the amount of time consumed, the response to contrary evidence, and the loss of valued activity. This process-level continuity can support treatment without implying that every new concern is merely a disguised version of the last one.

Table 1. A dimensional view of health-related concern

Domain	Adaptive possibility	Potentially maintaining pattern
Attention	Noticing a new or changing symptom	Sustained scanning that amplifies ordinary variation
Information seeking	Using a trusted source to decide next steps	Repeated searching that increases threat and uncertainty
Consultation	Seeking proportionate assessment	Serial consultations without an agreed continuity plan

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Domain	Adaptive possibility	Potentially maintaining pattern
Self-protection	Following medical advice	Avoiding activity, places, or information beyond medical need
Support	Discussing fear and practical needs	Reassurance rituals that briefly reduce anxiety and then recur

IV. SYMPTOMS AS A CYCLE OF THREAT AND CERTAINTY SEEKING

The presenting complaint is often a disease possibility rather than anxiety: a headache may mean a brain tumor, palpitations a fatal arrhythmia, or a skin change cancer. The interpretation recruits attention, and attention makes further sensations easier to detect. Arousal can then produce additional bodily changes, which seem to confirm the interpretation. Memory becomes selective for alarming examples, while benign explanations feel like risks rather than alternatives. The cognitive-behavioral account does not claim that symptoms are imagined. It proposes that meaning, attention, physiology, and behavior can amplify one another whether the initiating sensation is benign, stress-related, or medically explained (Warwick & Salkovskis, 1990; Salkovskis et al., 2003).

Safety behaviors promise information or protection. A patient may palpate lymph nodes, compare both sides of the body, measure pulse or oxygen repeatedly, inspect stool, ask a partner to judge appearance, search symptoms, or arrange repeated tests. Relief after a normal result is real, but it can teach that checking prevented catastrophe and that the next doubt also requires checking. Avoidance works similarly: declining exercise prevents learning whether exertion is tolerable; avoiding a medical program prevents contact with uncertainty; avoiding the word cancer leaves its meaning unexamined. The common function is short-term threat reduction at the cost of longer-term learning.

Not all repeated health behavior is excessive. Monitoring may be medically indicated, and a new symptom may warrant review. The distinction depends on agreed clinical purpose, frequency, response to evidence, and functional impact. A useful assessment asks what the patient predicts will happen without the behavior, how long relief lasts, and whether the behavior produces new doubt. It also asks what matters beyond symptom control: returning to work, sleeping beside a partner without checking, exercising safely, or being present with children. These answers transform an argument about whether concern is rational into a formulation of what the concern is doing.

V. DIAGNOSIS AFTER PROPORTIONATE MEDICAL ASSESSMENT

Diagnosis begins with the symptom and its context, not with a presumption of anxiety. History, examination, records, medication effects, family history, and appropriate tests should be guided by ordinary medical standards. Red flags, objective change, or a materially altered pattern require reconsideration. Conversely, an indefinite sequence of tests may create incidental findings, false positives, procedural risk, and more uncertainty. The goal is neither zero investigation nor exhaustive exclusion; it is proportionate assessment followed by an explicit account of what the findings mean and what would justify reassessment. Henningsen and colleagues similarly argue for integrated care of bodily distress rather than a split between medical and psychiatric ownership (Henningsen et al., 2007).

DSM-5 illness anxiety disorder requires preoccupation with having or acquiring serious illness, high health anxiety, and excessive health-related behaviors or maladaptive avoidance, generally with absent or mild somatic symptoms and persistence for at least six months. Somatic symptom disorder instead requires one or more distressing somatic symptoms plus disproportionate thoughts, anxiety, or time and energy; medical explanation is not a criterion (American Psychiatric Association, 2013; Dimsdale et al., 2013). Scarella and colleagues found clinically meaningful overlap and differences when DSM-IV hypochondriasis was reclassified, reinforcing that the change was not merely terminological (Scarella et al., 2019).

A diagnosis should be offered as a positive formulation, not a verdict that nothing is wrong. The clinician can name the recognizable cycle: bodily concern repeatedly triggers threat appraisal, checking or avoidance, brief relief, and renewed doubt. Asking whether this account fits the patient's experience invites correction. It also preserves epistemic humility: clinician and patient can agree that future symptoms will be assessed according to a plan while treating the current pattern. The diagnostic conversation succeeds when it increases safety and options, not when the patient is compelled to concede a psychological cause.

Documentation can either preserve or undermine that balance. A chart label of 'health anxiety' without the completed assessment and safety-net plan invites diagnostic overshadowing; a list of repeated negative tests without a formulation invites the next clinician to restart investigation. A useful record states the current medical findings, the anxiety-maintaining pattern, agreed thresholds for reassessment, and relevant changes that would reopen the differential. It also records the patient's understanding and unresolved concerns. Continuity then becomes more than seeing the same clinician: it is continuity of reasoning that remains available for

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correction when evidence changes (Scarella et al., 2019; Tyrer, 2020).

VI. DIFFERENTIAL DIAGNOSIS AND COMORBIDITY

Health anxiety overlaps with several conditions, and the dominant maintaining process matters for treatment. Panic disorder centers on abrupt surges and feared immediate consequences such as collapse or loss of control, although interoceptive fear may resemble illness concern. Obsessive-compulsive disorder may involve contamination, responsibility, or intrusive disease thoughts with ritualized neutralization. Generalized anxiety spans multiple domains; depression can bring ruminative pessimism, guilt, and bodily slowing; post-traumatic stress may link sensations to a specific threatening event. Body dysmorphic disorder concerns perceived appearance defects rather than disease itself. Delusional conviction requires assessment of psychosis and flexibility of belief.

Medical conditions, medication effects, substance use, sleep disturbance, and neurocognitive change remain part of the differential. Health concern may also be proportionate to an unstable diagnosis, poor access to care, previous medical error, discrimination, or communication that left important questions unanswered. A formulation that ignores these experiences can misclassify justified vigilance as pathology. At the same time, genuine illness does not protect against a secondary cycle of catastrophic interpretation and checking. The question is not whether symptoms are real, but whether particular cognitive and behavioral responses have become excessive, inflexible, and impairing relative to the situation.

Structured measures can support but not replace diagnosis. The Health Anxiety Inventory and its short form assess worry, vigilance, reassurance, and anticipated consequences, while the Whiteley Index captures related hypochondriacal concerns (Barsky et al., 1990; Salkovskis et al., 2002). Scores are useful for baseline and change when interpreted alongside function and medical context. They are not screens that authorize clinicians to stop listening. A careful assessment also covers suicidality, self-neglect, medication misuse, harmful self-testing, financial impact, relationship strain, and the possibility that repeated reassurance is occurring across several services without coordination. The conceptual overlap with panic, obsessive-compulsive, and other anxiety presentations supports process-based differential questions rather than diagnosis by a single scale (Abramowitz et al., 2007b).

Table 2. Selected differential considerations

Presentation	Distinguishing question	Clinical implication
Medical disease	Is there objective change, a red flag, or an altered pattern?	Investigate proportionately; do not attribute by exclusion alone
Panic disorder	Is fear organized around abrupt attacks and immediate catastrophe?	Assess panic cycle and consider interoceptive exposure
Obsessive-compulsive disorder	Are intrusive thoughts and rituals broader than illness reassurance?	Formulate obsessional responsibility and compulsions
Generalized anxiety	Does uncontrollable worry extend across several life domains?	Address transdiagnostic worry while retaining health-specific work
Depression	Are hopelessness, anhedonia, and self-harm risk prominent?	Treat mood and risk directly; reduced reassurance alone is insufficient
Psychosis or neurocognitive change	Is conviction fixed, bizarre, or accompanied by impaired cognition?	Seek appropriate psychiatric or medical assessment

VII. THERAPEUTIC COMMUNICATION, CONTINUITY, AND TRUST

Communication can reduce fragmentation before any formal psychotherapy begins. A consistent clinician who summarizes findings, names remaining uncertainty, and specifies review thresholds offers something different from repeated reassurance. The message is not simply that no disease was found. It is that the current evidence supports a plan: what can be watched, what action is reasonable, which changes need prompt review, and when routine follow-up will occur. This structure makes uncertainty shared and bounded. It can also reduce the pressure on both patient and clinician to achieve impossible certainty in a single encounter.

Validation should address experience without confirming the feared diagnosis. Statements such as “the pain and the fear are affecting your day” are more accurate than either “nothing is wrong” or “this is all anxiety.” Open questions can clarify the feared outcome, the meaning of prior medical experiences, and what the patient heard from earlier explanations. Teach-back is useful when discussing risk: the patient describes the plan in their own words, allowing discrepancies to be repaired. The tone matters because shame and perceived dismissal can intensify searching, defensive argument, or uncoordinated consultation.

Partners and relatives may become reassurance providers, symptom monitors, or gatekeepers to care. With consent, therapy can help them respond empathically without repeatedly resolving the same uncertainty. A partner might acknowledge fear, remind the patient of the agreed plan, and ask which valued action is possible now. This is not emotional withdrawal. It shifts support from certainty-giving to agency

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and connection. The inference is clinically plausible but should not be overstated: direct evidence for specific communication components is thinner than evidence for multicomponent CBT. Communication is best treated as a mechanism to observe and refine, not a universal script.

The form of reassurance matters. 'You definitely do not have cancer' offers certainty the clinician may not possess and leaves no method for the next doubt. 'The examination and current evidence do not indicate cancer; these specified changes would justify review' communicates a conditional conclusion and an action threshold. The patient can then be asked what they heard, because probability language is often remembered as either dismissal or hidden alarm. This exchange does not guarantee that reassurance will last. It converts reassurance from a verdict into shared reasoning, making it possible to observe whether repeated requests reflect missing information, mistrust, or the short-lived relief cycle described in the formulation.

VIII. A COGNITIVE-BEHAVIORAL FORMULATION

A CBT formulation begins with a recent episode in enough detail to reveal sequence. What was noticed? What illness did it suggest? What image or memory appeared? How certain and how dangerous did it feel? What happened in the body? What did the patient do next, whom did they contact, and what happened to fear over minutes and hours? Repeating this analysis across episodes usually identifies a small number of loops. The formulation should also include learning history, such as personal illness, bereavement, caregiving, frightening media, or previous dismissal by clinicians, without assuming a single origin.

The model developed by Warwick and Salkovskis proposes that dysfunctional assumptions about health and illness can lead ambiguous information to be interpreted as serious threat (Warwick & Salkovskis, 1990). Selective attention increases access to bodily evidence; anxiety changes sensations; checking, reassurance, and avoidance prevent disconfirmation. Salkovskis and colleagues translated this account into a treatment centered on jointly testing the alternative explanations “serious illness” and “health-anxiety process,” rather than asking a patient to accept reassurance on authority (Salkovskis et al., 2003). The formulation is useful precisely when it generates a fair test.

Formulations should contain contextual and relational maintaining factors. Irregular access to primary care, conflicting medical messages, a partner's understandable alarm, or employment that penalizes sickness can change the meaning of symptoms and the feasibility of experiments. A diagram that blames “misinterpretation” while omitting these facts will feel thin because it is thin. The strongest formulation explains both why the current response makes sense and how it has become costly. It ends with a proposition the patient can examine: if repeated checking is maintaining attention and doubt, then reducing checking in a planned, medically safe way should alter fear or functioning over time.

IX. CBT METHODS: FROM REASSURANCE TO LEARNING

CBT for health anxiety is a coordinated set of learning tasks rather than a debate about whether illness exists. Psychoeducation maps the cycle and normalizes bodily variability. Attention training helps patients notice when focus has narrowed and deliberately re-engage with external activity. Cognitive work examines probability, cost, coping, and the standards of certainty being applied. Behavioral experiments compare predictions: delaying a pulse check, reducing online searches, exercising within medical advice, reading previously avoided information, or allowing a sensation to rise and fall without immediate interpretation. Each task needs a prediction and an observable result.

Reassurance reduction is often misunderstood as refusal of care. In good treatment it is planned, graded, and paired with a safety framework. The therapist distinguishes medically indicated monitoring from rituals, agrees how new symptoms will be handled, and reviews what occurred when a reassurance request was delayed. The outcome is not merely lower anxiety during the task. Patients can learn that urges fluctuate, that attention affects symptom salience, that uncertainty can be carried, and that action can be chosen without a final verdict. Clark and colleagues' randomized trial and subsequent clinical account by Salkovskis and colleagues support cognitive-behavioral treatment for hypochondriasis (Clark et al., 1998; Salkovskis et al., 2003).

Treatment also restores the life displaced by vigilance. Activity scheduling, graded return to movement, sleep routines, social reconnection, and work goals provide competing sources of information and meaning. This is not distraction as denial; it tests whether life can widen while uncertainty remains. The patient and therapist review data collaboratively, including experiments that do not work. A failed task may indicate that the target behavior was misidentified, instructions became another safety ritual, the dose was too abrupt, depression is limiting engagement, or medical context changed. Revision, rather than insistence, preserves both scientific discipline and alliance.

Experiments involving health behavior require a pre-agreed medical boundary. Delaying an unnecessary pulse check is different from ignoring a monitoring instruction; returning to exercise is different from testing symptoms against medical advice. The therapist and patient specify which behavior is anxiety-driven, what credible hazard has already been considered, and what finding would stop the experiment. This preparation does not eliminate uncertainty, and it should not become another elaborate reassurance ritual. Its purpose is to

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ensure that learning concerns attention, checking, or avoidance rather than the unsafe proposition that bodily evidence never warrants action.

Table 3. Linking maintaining processes to testable treatment tasks

Proposed process	Possible task	Learning question
Selective bodily attention	Alternate internal focus with absorbed external activity	Does attention alter intensity, salience, or urgency?
Repeated checking	Delay and then reduce a medically unnecessary check	Does the urge change without checking, and how long does relief usually last?
Catastrophic prediction	Write probability, consequence, and coping predictions before follow-up	Which prediction best fits the later evidence?
Avoidance	Approach a safe activity or health cue in graded steps	Can anxiety and uncertainty be tolerated without the feared outcome?
Interpersonal reassurance	Use an agreed empathic response without repeated certainty	Can connection remain while the ritual changes?

X. EVIDENCE FOR PSYCHOLOGICAL TREATMENT

Randomized trials establish CBT as the most studied psychological treatment for severe health anxiety and historical hypochondriasis. Clark and colleagues found cognitive therapy beneficial compared with control conditions, and Greeven and colleagues found CBT effective relative to paroxetine and placebo in a three-arm trial, although designs, diagnostic criteria, and outcome timing differ (Clark et al., 1998; Greeven et al., 2007). In the CHAMP trial, adapted CBT delivered in medical settings produced sustained reductions in health anxiety relative to standard care, with follow-up reported to five years (Tyrer et al., 2017). These results support access to treatment within ordinary health services rather than requiring patients first to accept a psychiatric identity.

Meta-analysis by Olatunji and colleagues found psychological treatments effective for hypochondriasis/health anxiety, with CBT receiving the largest evidence base, but the number and size of trials limited detailed moderator conclusions (Olatunji et al., 2014). Follow-up matters because temporary reassurance can mimic early improvement. Hedman and colleagues reported gains after internet-based CBT and maintenance at one year, indicating that carefully structured remote delivery can support change beyond the acute endpoint for some patients (Hedman et al., 2011; Hedman et al., 2013). These findings predate the rapid expansion of digital care and should not be generalized to every app or unguided program.

Trials often enroll participants willing to accept a psychological intervention and may exclude acute risk, unstable medical conditions, or severe comorbidity; therapist expertise and care coordination may also be difficult to reproduce. The evidence supports formulation-guided CBT for reducing health-anxiety symptoms and impairment in face-to-face and guided internet formats, but it does not show that every patient benefits or that any one component is sufficient. When treatment does not help, clinicians should review the diagnosis, new medical information, comorbidity, access and engagement barriers, and the maintaining model.

XI. MEDICATION AND COMBINED CARE

Medication evidence is less extensive than the CBT literature, but it is not absent. The Greeven trial provided mixed evidence: pooled CBT and paroxetine outperformed placebo, but paroxetine alone did not significantly outperform placebo in the intent-to-treat responder analysis; the completer analysis favored paroxetine (Greeven et al., 2007). Fallon and colleagues later found fluoxetine and combined treatment beneficial in a large randomized study, with combined care showing advantages on some outcomes rather than an unqualified superiority across all measures (Fallon et al., 2017). Historical diagnostic criteria again require caution when applying results to DSM-5 illness anxiety disorder.

Medication may be especially relevant when comorbid depression, panic, obsessive-compulsive symptoms, or generalized anxiety is prominent. The decision should follow the evidence and safety guidance for those conditions as well as the health-anxiety formulation. Early side effects can themselves become threat cues; anticipatory discussion should be accurate rather than falsely reassuring. A written plan can identify expected effects, concerning changes, whom to contact, and when response will be reviewed. Abrupt discontinuation, unsupervised dose changes, and repeated switching in response to transient sensations can increase both medical risk and uncertainty.

Combined care should mean coordinated care, not parallel messages from clinicians. If one clinician repeatedly orders tests while another asks the patient to reduce checking, the contradiction becomes part of the maintaining system. With consent, primary care, specialty care, and therapy can agree roles, medical review thresholds, and language for uncertainty. NICE guidance for generalized anxiety and panic is relevant when those disorders are primary or comorbid, but it should not be treated as a health-anxiety-specific protocol (National Institute for Health and Care Excellence, 2011). Patient preference, prior response, access, adverse effects, and medical status remain central to shared decisions.

Medication discussions also test the quality of coordination. Patients should be encouraged to report new symptoms, and prescribers should avoid both reflexive discontinuation and reflexive attribution to anxiety. Clear responsibility for follow-

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up helps distinguish expected effects, urgent warnings, and the point at which benefit will be reviewed.

XII. DIGITAL SEARCHING, SERVICES, AND LIFE CONTEXT

Online information can improve access and help patients ask informed questions. It can also turn uncertainty into an endless search because every answer supplies new symptoms and rare diagnoses. The term cyberchondria describes an excessive or escalating relationship between health-related searching and distress, not ordinary use of digital health information (Starcevic & Berle, 2013). A meta-analysis found a positive association between health anxiety and online health-information seeking, but predominantly cross-sectional associations cannot establish whether searching causes anxiety, anxiety causes searching, or both are shaped by another factor (McMullan et al., 2019).

Assessment should therefore examine function rather than screen time alone. What begins the search, which sources are used, what counts as an answer, how anxiety changes during and after searching, and what activity is displaced? An experiment might restrict searching to a trusted source and a planned time, record predictions before searching, or compare a search episode with following the agreed care plan. Digital treatment is different from uncontrolled searching: guided internet CBT provides a formulation, ordered tasks, feedback, and outcome monitoring, features present in the work by Hedman and colleagues (Hedman et al., 2011; Hedman et al., 2013).

Service design can either contain or multiply the problem. Fragmented urgent consultations can make each encounter begin again, whereas continuity lets clinicians judge change against a known baseline. Health anxiety is often missed in medical settings despite being treatable (Tyrer, 2020). A designated clinician, shared record, scheduled review, and agreed route for new symptoms may reduce duplication without closing access. Because service-level trials are fewer than individual CBT trials, this remains a plausible service hypothesis rather than an established treatment effect: continuity may improve the coherence of decisions even before symptom scores change.

When a patient has diagnosed disease, therapy must separate warranted self-management from anxiety-driven excess. A person with diabetes, cancer history, cardiac disease, or autoimmune illness may need symptom monitoring and rapid action under specified conditions. The therapist should not redesign that plan independently. Instead, patient, relevant medical clinician, and therapist can identify which observations are required, how often, what threshold prompts action, and which additional behaviors serve no medical purpose. The formulation then targets the excess around a legitimate core rather than treating all vigilance as pathological.

Culture and social position affect both illness meaning and access to reassurance. Some patients have experienced diagnostic delay, racism, gender bias, poverty, or inaccessible care; heightened vigilance may reflect learned necessity. Others live with a partner whose own loss or trauma amplifies alarm. Language differences can make probabilistic explanations feel evasive, while low health literacy can make safety-net instructions difficult to use. Adaptation requires checking understanding and practical feasibility, not merely simplifying vocabulary. A clinician should be willing to revise the formulation when fear is being sustained by a real gap in care.

Developmental and family context also matters. Although this review emphasizes adults, caregiving roles and family accommodation can shape presentation at any age. The patient may fear leaving dependants, repeating a parent's illness, or burdening a partner. Values work can make these meanings explicit and prevent treatment from becoming symptom arithmetic. The aim is not indifference to health. It is flexible care: attending when evidence calls for action, stepping back when monitoring has become ritualized, and preserving relationships and activities that health fear has crowded out.

XIII. MONITORING, RELAPSE PREVENTION, AND MEANINGFUL OUTCOMES

Monitoring should include health-anxiety severity, behavior, functioning, and safety. A brief validated scale can track worry and vigilance, but the same score may accompany very different lives. Useful individualized indicators include time spent checking, number of unplanned consultations, avoided activities, online-search duration, sleep, work attendance, and the ability to follow an agreed medical plan. Measures should inform conversation, not become a new checking ritual. Reviewing trends at planned intervals is usually more informative than interpreting every day-to-day fluctuation (Abramowitz et al., 2007a; Salkovskis et al., 2002).

Relapse prevention starts before therapy ends. Patient and therapist identify early signs, recurrent triggers, effective experiments, and situations that genuinely require medical review. A written plan can distinguish an old anxiety pattern from a materially new symptom while acknowledging that the distinction will sometimes remain uncertain. It should specify first responses, trusted sources, support from partners, medication procedures, and escalation routes. The plan is not a guarantee against illness; it is a method for making safer decisions when fear is high.

Outcome should not be defined as never worrying about health. Illness, aging, and loss make that goal neither realistic nor humane. More meaningful change includes responding proportionately, tolerating unresolved possibility, recovering

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attention, and communicating fear without making a partner or clinician repeatedly certify safety. One-year internet-CBT follow-up and the CHAMP trial show improvement beyond an immediate post-treatment endpoint, but group averages do not predict an individual's course (Hedman et al., 2013; Tyrer et al., 2014). Return of symptoms is information for reapplying or revising the model, not evidence that all previous progress was false.

XIV. SAFETY, ETHICS, AND WHEN THE FORMULATION MUST CHANGE

Psychological treatment must never become a blanket explanation for new physical symptoms. Acute chest pain, severe breathlessness, focal neurological change, significant bleeding, rapidly worsening symptoms, marked weight loss, fever with systemic illness, delirium, or other local red flags require appropriate urgent assessment. This list is illustrative, not a substitute for clinical guidance. The relevant rule is broader: a change in objective findings, risk factors, or symptom pattern should reopen medical reasoning. A previous health-anxiety diagnosis does not reduce a patient's entitlement to ordinary diagnostic care.

Mental-health safety also requires direct assessment. Persistent fear can lead to despair, self-harm, hazardous self-examination, substance use, medication misuse, excessive radiation exposure through fragmented testing, or severe restriction of eating and activity. Depression, psychosis, obsessive-compulsive disorder, trauma, and cognitive impairment may need parallel or alternative care. Clinicians should know the limits of their competence and use local emergency, safeguarding, and specialty pathways. Remote treatment is inappropriate when necessary medical or risk assessment cannot be conducted safely.

Ethically, the patient needs an account of both potential benefit and uncertainty. Reducing reassurance may cause short-term distress; exposure tasks should be collaborative and medically appropriate; communication with relatives or clinicians requires consent except where law and immediate safety justify otherwise. If the patient's fear increases, functioning deteriorates, or predicted learning does not occur, the response is reassessment rather than escalation by habit. The formulation is a provisional tool. Its willingness to yield to new evidence is what distinguishes it from the fixed certainty it is meant to treat.

Safety conditions for health-anxiety treatment

- Reassess credible new symptoms and altered patterns according to usual medical standards.
- Do not use a psychological diagnosis to override red flags or objective change.
- Assess suicide risk, self-neglect, medication misuse, harmful checking, and severe functional restriction.
- Coordinate medically indicated monitoring before reducing related safety behaviors.
- Revise the formulation when evidence, risk, or context changes.

XV. LIMITATIONS AND RESEARCH PRIORITIES

The evidence base is constrained by diagnostic transition. Trials of hypochondriasis often enrolled participants who would be divided across current DSM-5 diagnoses, and current illness anxiety disorder has a smaller direct trial literature. Treatment studies vary in medical setting, clinician background, comparator, intensity, and follow-up. Blinding psychotherapy participants and therapists is impossible, and self-report outcomes may share content with treatment targets. Evidence for CBT is stronger than evidence for the specific mediators assumed to produce change. Component and mediation studies are needed to test which learning processes matter for whom.

Underrepresented groups require particular attention. Research should include patients with significant concurrent medical disease, diverse cultural and socioeconomic backgrounds, limited digital access, older adults, and patients whose mistrust follows genuine failures of care. Trials should report adverse events, medical investigations, health-service use, functional outcomes, and whether reductions in consultation ever delay necessary diagnosis. Digital interventions need comparison not only with waiting lists but with credible active care, along with transparent reporting of guidance, engagement, privacy, and escalation procedures. A 2023 systematic review found that unwanted outcomes are not absent from CBT for pathological health anxiety: about 10% of participants reported at least one adverse event and 17% dropped out across 19 randomized trials, although substantial heterogeneity and inconsistent reporting limit precise attribution (Axelsson & Hedman-Lagerlöf, 2023).

Communication and continuity are plausible treatment mechanisms, yet are often described more confidently than they are measured. Future work could test whether explicit uncertainty plans, teach-back, consistent clinician assignment, or partner responses change checking, unplanned use, alliance, and functioning. The most valuable studies will not ask whether reassurance is simply good or bad. They will specify its content, timing, interpersonal function, and downstream learning. This would connect health-system behavior to individual formulation without blaming patients for seeking help.

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XVI. CONCLUSION

Health anxiety is a clinically significant pattern in which threat meaning, attention, arousal, checking, avoidance, reassurance, and context can narrow a life. It should not be reduced either to hidden disease awaiting enough tests or to imaginary illness disproved by normal results. Because the pattern can coexist with medical disease, proportionate assessment and a revisable safety plan are prerequisites for psychological care.

Evidence supports formulation-guided CBT, including guided internet delivery, and offers more limited support for serotonergic medication. Treatment should turn reassurance into learning, restore valued activity, and coordinate medical and psychological messages. The therapeutic relationship matters because patients must be able to report symptoms, fear, doubt, and disagreement without either party reaching reflexively for certainty. Continuity and explicit uncertainty management may provide a practical bridge between safe medical vigilance and less anxiety-maintaining behavior. Current evidence supports this as a clinically coherent hypothesis, but direct testing remains limited.

XVII. CONFLICTS OF INTEREST AND DISCLOSURES

Conflicts of interest—The author developed and writes about Communication-Focused Therapy (CFT). Where CFT is discussed, it is presented as a formulation perspective and not as a substitute for established assessment, evidence-based treatment, or independent replication. No other conflict of interest was reported.

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Patient material—No identifiable patient material is presented. Any brief examples are generic composites created to illustrate clinical reasoning and are not case reports.

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