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Research Paper

Health Anxiety as Costly Signalling: Clinical and Systemic Implications of an Undiagnosed Condition

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ABSTRACT

The present review examines how undiagnosed health anxiety, recently reclassified as Illness Anxiety Disorder in DSM-5, manifests through clinical and behavioural patterns and explores signalling theory as a conceptual framework to explain the persistence of these behaviors. The review synthesizes literature published between 2010 and 2024 from PubMed, PsycINFO, Google Scholar, and ResearchGate using a narrative approach. The findings indicate that undiagnosed health anxiety is reflected in diagnostic confusion, repeated reassurance-seeking, cyberchondria, medical mistrust, unsafe self-medication, and family-based anxiety by proxy. These behaviors consume considerable emotional, financial, and temporal resources yet rarely provide lasting relief. Signalling theory suggests that these actions operate as costly signals of distress that persist when recognition fails. In the Indian context, short consultation times, stigma, and cultural idioms of distress reinforce these patterns. The review emphasizes the need for early recognition, culturally sensitive interventions, and physician training to reduce unnecessary medical use and address invisible psychological suffering.

Keywords: *Health Anxiety, Illness Anxiety Disorder, Cyberchondria, Medical Mistrust, Self Medication, Signalling Theory*

In January 2024, a landmark Swedish nationwide registry study published in JAMA Psychiatry revealed that individuals diagnosed with Illness Anxiety Disorder faced an 84% higher risk of premature death compared to the general population, dying an average of five years earlier. The study also reported a significant increase in suicide rates and increased mortality from cardiovascular and respiratory causes. These findings highlight the potentially life-threatening consequences of untreated health anxiety, even in the absence of a confirmed medical illness. Although not as extreme as rare catastrophic events, this large-scale population data shows how health anxiety affects both individuals and the healthcare system.

In addition to its severe long-term consequences, health anxiety is far from rare. A large-scale study of 43,205 hospital outpatients found that 19.8% met criteria for clinically significant health anxiety (Tyrer et al., 2011). This means approximately one in five patients,

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highlighting the need for early recognition, especially since most cases remain undetected in regular practice.

Health anxiety refers to excessive and persistent worry about having or developing a serious illness, even when medical evaluations provide little or no evidence to support such concerns. In the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), it is formally recognized as Illness Anxiety Disorder, replacing the older term "hypochondriasis." People with health anxiety are not faking symptoms or deliberately seeking attention; instead, they often misinterpret normal bodily sensations, such as muscle twitches, headaches, or digestive discomfort, as signs of serious illness. They frequently seek medical reassurance, undergo diagnostic tests, and consult multiple specialists, yet find little or no relief from their fears. Importantly, health anxiety can be present in both clinical and non-clinical populations and often goes unrecognized, particularly in overburdened healthcare systems.

The importance of health anxiety extends beyond the individual level and into healthcare systems and society. First, it leads to repeated medical investigations, even after normal reports. This creates unnecessary pressure on already resource-limited health services and may delay diagnosis and treatment for those who genuinely need urgent care. In a well-known study, Barsky and colleagues (2001) found that patients with high health anxiety visited doctors approximately nine times a year, compared to six times for patients without such anxiety, and spent significantly more on outpatient care, around $1,312 annually. These findings point to the real economic and logistical burden imposed by the condition.

Second, health anxiety takes a serious emotional cost. Individuals with this disorder often live in constant fear, avoid daily activities, and withdraw socially due to worry about symptom triggers or fear of collapsing in public. They may obsessively monitor their body, check their pulse, or seek validation from friends and family. Multiple studies have shown that health anxiety significantly lowers quality of life and contributes to emotional distress, sleep disturbances, and depressive symptoms Terra, M., et al. (2024).

Third, health anxiety often results in mistrust toward medical professionals. A 2021 qualitative study by Brady and Raines found that individuals with health anxiety frequently reported dismissive or frustrating encounters with doctors. Over time, these negative experiences led to a phenomenon the authors described as "learned mistrust", a belief that medical professionals do not take their concerns seriously or lack the ability to help. As a result, patients became less likely to adhere to medical advice, more likely to change doctors frequently ("doctor shopping"), and more vulnerable to misinformation and alternative treatments (Brady et al., 2021).

Fourth, the inability to find satisfactory answers or reassurance from clinicians often pushes the individuals toward unreliable sources of information, especially the internet. This behavior, known as cyberchondria, involves compulsive searching of symptoms online (Starcevic & Berle, 2013; White & Horvitz, 2009). Ironically, while sufferers seek relief through information, they often encounter alarming or contradictory contents, which deepens their anxiety. A person looking up "mild headache" may come across terms like "brain tumor" or "aneurysm," causing a surge in fear and further fixation on bodily sensations. This may create a digital feedback loop that reinforces distress rather than reducing it.

These elements form what many researchers describe as a self-perpetuating pattern or reinforcing loop, rather than a fixed, linear cycle (Warwick & Salkovskis, 1990). A minor bodily sensation may trigger fear, leading to medical consultations and temporary relief. But reassurance doesn't last long, and doubt returns, often accompanied by online symptom-checking, emotional distress, and increased mistrust in professional care. The process may restart at any point in the loop, making it dynamic and difficult to interrupt without targeted psychological intervention. The cognitive-behavioral model of health anxiety explains this pattern as a combination of attentional bias toward bodily cues, cognitive distortions (e.g., catastrophizing), and maladaptive coping behaviors like avoidance or compulsive reassurance-seeking (Salkovskis & Warwick, 1986).

In India, the condition is particularly under-recognized may be due to a range of structural and cultural factors. Mental health training in primary care remains minimal, with most general practitioners receiving little or no exposure to psychiatric / psychological disorders during their medical education. In public outpatient departments, the average consultation time may be as short as three to five minutes per patient, hardly sufficient to explore underlying psychological issues. Consequently, health anxiety is often misclassified as malingering, somatization, or even anxiety unrelated to health. At the same time, many patients may not want to visit a mental health professional because of stigma or because they don't believe their symptoms are "all in their head." As a result, many people are left trying to get help in a confusing system that often doesn't respond to their psychological needs.

This paper argues that undiagnosed health anxiety is not only a psychological issue but also a gap in the system, one that causes distress on individuals, economic and logistical pressure on the healthcare system, and ethical demands on medical professionals. Drawing from existing psychological models, empirical research, and thematic patterns in patient narratives, this paper examines the clinical features, behavioural patterns and systematic challenges of health anxiety, with a focus on why it often goes undetected. This paper also considers health anxiety from the lens of signalling theory, highlighting how costly behaviours such as repeated doctor visit, diagnosis, self-medication may be signified as social or cultural signals of distress, which may shape both patient experiences, and medical responses.

METHOD

This paper adopts a narrative literature review to analyse existing research and conceptual frameworks related to health anxiety. The primary aim was to synthesize emerging clinical patterns, diagnostic challenges, behavioural patterns, health care utilisation and cultural interpretations rather than performing a statistical meta-analysis.

This method was chosen because health anxiety is a complex condition influenced by psychological, biological, cultural, social factors that are best explored through qualitative synthesis rather than only relying on quantitative analysis alone.

Search Strategy

Relevant literature was identified through electronic searches in databases such as PubMed, Google Scholar, PsycINFO, and ResearchGate, using keywords including "health anxiety," "illness anxiety disorder," "cyberchondria," "medical mistrust," "cultural idioms of distress," and "self-medication." Literature published between 2010 and 2024 was prioritized to capture recent conceptual advancements, though earlier foundational texts (e.g., Nichter, 1981) were included where culturally or conceptually significant.

Inclusion Criteria

- Peer-reviewed journal articles and systematic reviews
- Case reports or clinical studies involving health anxiety, cyberchondria, or psychosomatic symptoms
- Cross-cultural and ethnographic studies relevant to India or South Asia
- Conceptual or narrative reviews focused on illness anxiety or coping strategies.
- English-language publications only.

Analysis

The selected literature was thematically reviewed to identify patterns in clinical presentation, health care seeking behaviour, emotional consequences, diagnostic confusion, and cultural dimensions. Insights from Signalling theory was also used to explain how health anxiety persists in both individual and systemic contexts.

Diagnostic Confusion in Health Anxiety

One of the main difficulties in dealing with health anxiety is that its diagnosis has changed a lot over time. Over the past decades, the condition has undergone significant terminological shifts, from hypochondriasis under DSM-IV to its current bifurcation into Illness Anxiety Disorder (IAD) and Somatic Symptom Disorder (SSD) in DSM-5 (American Psychiatric Association, 2024; Newby et al., 2017). Despite these refinements, clinical clarity remains unclear, leading to misdiagnosis and mismanagement.

A pivotal study assessing 118 health-anxious patients revealed substantial overlap between DSM-IV hypochondriasis and DSM-5 disorders: 47% met criteria for IAD, 45% separately for SSD, while a minority showed mixed features. Reliability for IAD ($\kappa = 0.80$) and SSD ($\kappa = 0.92$) was high, in contrast to lower reliability for hypochondriasis ($\kappa = 0.60$), indicating both progress and persistent diagnostic ambiguity (Newby et al., 2017).

Further adding to the confusion, a recent review emphasizes that DSM-5's criteria, requiring mild versus moderate-to-severe somatic symptoms for IAD and SSD respectively, often fail to match clinical reality (Bailer et al., 2016; Current Psychiatry Reports, 2024). Many providers still struggle to distinguish anxiety-driven symptom misinterpretation from genuine somatic complaints (Bailer et al., 2016).

These findings suggest that inconsistent terminology and overlapping diagnostic criteria hinder timely recognition and treatment, leaving many individuals in a state of undiagnosed health anxiety where their distress remains invisible within medical care (Newby et al., 2017; Bailer et al., 2016).

This ambiguity is not limited to hypochondriasis versus IAD/SSD distinctions; a review of breast cancer survivorship literature found that health anxiety, fear of recurrence, worry, and uncertainty are often used interchangeably despite of having important conceptual differences, which further complicates its recognition in clinical settings (Maheu et al., 2021).

Reassurance-Seeking and Healthcare Burden

Reassurance-seeking is a common behaviour among individuals experiencing health anxiety, often involving consultations with multiple doctors, undergoing unnecessary diagnostic

tests, and still getting no lasting relief. Although such reassurance can provide temporary comfort, it reinforces anxiety and perpetuates a repetitive help-seeking cycle. A recent global systematic review estimated that health anxiety can drive per-person healthcare expenditures ranging from US $857 to over US $21,000 annually, depending on direct and indirect costs (Kawka et al., 2023). Similarly, a systematic review of anxiety disorders found that individuals with health anxiety and related conditions use healthcare services significantly more than the general population, even in settings with minimal somatic illness, reflecting a pattern of repeated medical visits without clear necessity (Horenstein et al., 2020). The COVID-19 pandemic further intensified this pattern: a study in Iraq reported that individuals in home quarantine exhibited elevated health anxiety and excessive reassurance-seeking despite lacking clinical signs of infection (Taha et al., 2021).

Collectively, these findings suggest that reassurance-seeking contributes to increased medical utilization and diminished cost-efficiency, but when health anxiety goes undiagnosed, these patterns are rarely understood as psychological in origin and instead manifest as persistent, unexplained overuse of medical services.

Cyberchondria and the Internet

Cyberchondria refers to the repetitive and anxiety-driven searching of medical information online, which paradoxically increases worry rather than reducing it. A meta-analysis of 20 studies involving 7,373 participants found a strong association between health anxiety and cyberchondria ($r = .62$), and a moderate correlation with general online health information seeking ($r = .34$) (McMullan, Berle, Arnáez, & Starcevic, 2019). Another systematic review and meta-analysis focused on the conceptualizations of cyberchondria and its relation to the anxiety spectrum also found a similarly strong correlation ($r = .63$) with health anxiety (Schenkel, Jungmann, Gropalis, & Witthöft, 2021). Furthermore, a structural model study with over 703 adults demonstrated that health-related metacognitions, cognitive biases, emotion regulation difficulties, and personality traits significantly predicted cyberchondriac behaviors (Nasiri, Mohammadkhani, Akbari, & Alilou, 2023).

Recent evidence adds to this by examining why health anxiety translates into compulsive online searching. A large-scale study of 615 adults (Błachnio, Przepiórka, Kot, Cudo, & Steuden, 2022) found that pessimism and difficulties in emotion regulation significantly mediated the relationship between health anxiety and cyberchondria. In other words, individuals high in health anxiety who also struggled with emotional regulation or a pessimistic outlook were especially likely to develop cyberchondriac patterns of excessive, compulsive, and distressing symptom searches. These findings suggest that negative emotional functioning not only co-occurs with cyberchondria but actively fuels the loop of reassurance-seeking and distress, highlighting intervention targets beyond cognitive distortions alone.

Collectively, these studies indicate that cyberchondria functions as a maladaptive safety behavior in health-anxious individuals. When health anxiety is undiagnosed, cyberchondria may emerge as a compensatory strategy, where the absence of formal recognition pushes patients toward unregulated, digital sources of information for reassurance.

Medical Mistrust and the Doctor–Patient Relationship

Mistrust toward healthcare providers is often a consequence of repeated invalidation in medical settings, particularly among those experiencing health anxiety. Patients frequently

express frustration that their symptoms are dismissed as mental rather than medical, leading to a crystallization of mistrust over time.

A qualitative study by Robert E. Brady and Armando N. Braz (2023) among individuals with severe health anxiety revealed persistent experiences of dismissal by clinicians, reinforcing feelings of being misunderstood or labeled "excessively anxious." This chronic invalidation contributes to what researchers describe as "learned mistrust," a persistent belief that the system cannot or will not help.

Adding to this evidence, a recent study in Innovation in Aging by Poshan Dahal, Eva Kahana, Nan Zhou, Yuanchang Zhao, and Dyanna Burnham (2023) demonstrated a clear negative association between health-related anxiety and the quality of doctor–patient relationships. Patients who reported poorer communication with their physicians experienced higher levels of health anxiety, while those who described stronger communication and relational trust showed comparatively lower anxiety.

These findings emphasize that effective communication reduces mistrust, but when health anxiety remains undiagnosed, repeated dismissal and misunderstanding in medical encounters may crystallize into chronic mistrust, further distancing patients from effective care.

Self-Medication in Health Anxiety

Self-medication has emerged as one of the most concerning behavioral responses in individuals experiencing health anxiety. Instead of addressing the psychological roots of their distress, such individuals frequently attempt to control symptoms through drug use without medical supervision. This pattern is not only unsafe but also reinforces the invisibility of health anxiety within formal healthcare systems.

Evidence from a large-scale survey by Jeffers et al. (2015) highlights this phenomenon in young adults. In a sample of 758 college students aged 18–25, the authors found that participants who engaged in non-medical use of prescription drugs (NMUPD) reported significantly higher levels of health anxiety, more frequent healthcare appointments, and a greater likelihood of chronic health conditions. Logistic regression analyses confirmed that health anxiety was an independent risk factor for NMUPD, even after controlling for depression, general anxiety, and sensation-seeking tendencies. This study underscores that excessive worry about health can directly drive risky self-directed medication practices, particularly in populations with easy access to prescription drugs.

Complementing these findings, a more recent study by Salmani et al. (2023) conducted among 241 medical sciences students in Northwestern Iran during the COVID-19 pandemic found that 51% engaged in self-medication, most commonly using herbal remedies (59.3%), multivitamins (54.5%), and antibiotics (21.1%). Importantly, the prevalence of self-medication was significantly associated with hypochondriasis ($p = 0.002$), suggesting that heightened health anxiety during the pandemic amplified unsafe drug use. The most frequently cited reasons were previous positive experiences with a drug and the perception that their condition did not require professional medical attention.

Together, these studies demonstrate that health anxiety can drive individuals toward two extremes of unsafe coping: 1. excessive reliance on prescription drugs without medical supervision, and unnecessary use of over-the-counter or alternative remedies. Both patterns

reflect an attempt to regain control in the face of uncertainty. In cases where health anxiety is undiagnosed, these self-medication behaviors may mask underlying psychological distress and continue the invisibility of the condition within healthcare systems.

Health Anxiety by Proxy (HAP)

While much of the literature conceptualizes health anxiety as self-focused, emerging research highlights its relational dimensions. Health Anxiety by Proxy (HAP) refers to excessive worry not about one's own health, but about the health of close others, most commonly children or partners. This expands the scope of health anxiety beyond the individual and into family systems, where it may shape help-seeking, medical utilization, and intergenerational experiences of distress.

A landmark study by Kubb and Foran (2024) introduced validated measures of HAP across three domains: anxiety for oneself, for a child, and for a partner. Findings indicated that health anxiety often clusters within individuals, such that those with high self-focused health anxiety were also significantly more likely to report high proxy anxiety. Among parents, elevated HAP was associated with overprotective behaviors, repeated healthcare consultations for children despite mild symptoms, and more attention toward minor bodily changes in family members. These behaviors mirror the reassurance-seeking cycles observed in self-directed health anxiety, but their impact extends further by shaping the medical pathways of dependents.

Clinically, HAP shows the relational burden of health anxiety. For children, parental hypervigilance can result in unnecessary medical testing, disrupted routines, and an increase in illness-related fear, potentially reinforcing anxiety in the next generation. For partners, excessive monitoring or doubt can strain relationships and complicate healthcare decision-making. From a systemic perspective, proxy-driven health anxiety may amplify healthcare overuse by multiplying consultations across family members, even when the original source of worry generates from the parent's or partner's anxiety rather than objective medical need.

In contexts such as India, where family caregiving is deeply rooted in cultural norms, the implications of HAP may be especially pronounced. Parents frequently act as gatekeepers to healthcare for their children, and spouses often influence each other's health decisions. Thus, anxiety by proxy could show patterns of overutilization, mistrust, and self-medication at the household level. When such proxy concerns remain undiagnosed as manifestations of health anxiety, the resulting behaviors may shape medical pathways for entire families, reinforcing systemic blind spots in recognition and care.

Health Anxiety as Costly Signaling of Vulnerability

Signalling theory offers a useful lens for understanding why apparently maladaptive behaviours in health anxiety persist. According to Zahavi's handicap principle, signals are credible when they impose real costs in terms of time, effort, or resources **(Zahavi, 1975).** Within psychology, illness behaviour such as displaying pain or repeatedly seeking help has been described as a social signal to elicit care or reduce demands (Nesse, 1991; Hagen, 2003). Similarly, cultural studies interpret bodily complaints as "idioms of distress," socially acceptable ways of communicating suffering (Nichter, 1981).

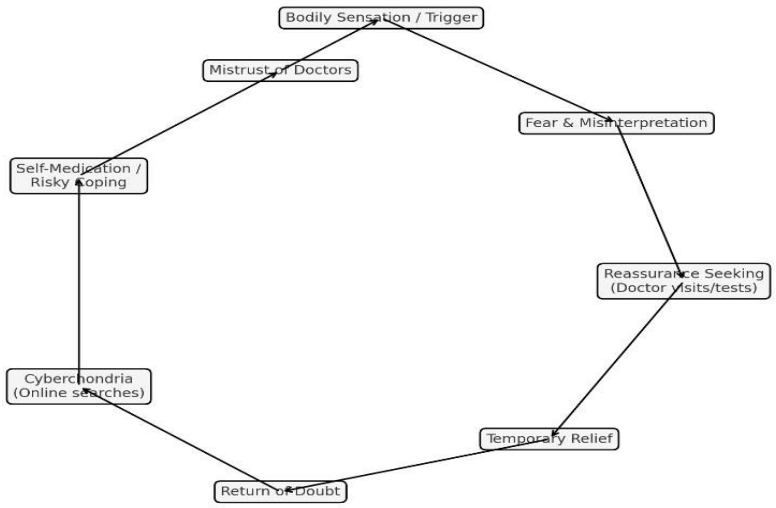
Viewed through this lens, health anxiety may be understood as a form of over-signalling. Patients incur financial costs through repeated medical consultations, lose time in hospitals, and endure emotional exhaustion, yet receive little relief because no clear disease is

identified. These very costs can make the distress appear credible to others, even as clinicians may dismiss the behaviour as exaggeration. When signals fail to secure reassurance, patients often escalate their efforts, contributing to cycles of reassurance-seeking, cyberchondria, and unsafe self-medication.

Empirical evidence supports aspects of this interpretation. De Barra and colleagues (2023) demonstrated that individuals sometimes accept painful or low-benefit medical procedures not merely for cure but to enhance the legitimacy of their illness. Such findings suggest that medical treatments themselves can operate as costly signals of need, a mechanism that may overlap with health anxiety behaviours.

This perspective does not imply that health anxiety is reducible to signalling processes. Direct evidence remains limited, but signalling theory provides a unifying framework to connect diverse behaviours, doctor shopping, repeated testing, mistrust, self-medication, under a common logic of costly communication. In contexts such as India, where somatic symptoms are culturally more legitimate than psychological complaints, this signalling tendency may be particularly reinforced, highlighting a systemic blind spot in healthcare.

Figure 1. Health Anxiety as a Costly Signalling Cycle



DISCUSSION

The findings of this review suggest that undiagnosed health anxiety is not only a personal worry but also a problem for the health system. People with health anxiety show different behaviours such as repeated reassurance-seeking, online symptom searches, mistrust of doctors, self-medication, and even anxiety about the health of family members. At first these appear to be separate issues, but together they point to one central problem: hidden anxiety that is being misread as physical illness.

When this happens, both patients and the healthcare system suffer. Patients remain caught in cycles of fear and exhaustion, while doctors spend time and resources on repeated tests that bring no lasting relief. Reassurance helps for a short time, but soon doubt returns, and the cycle begins again. Cyberchondria, or excessive online searching, also fuels this cycle by exposing people to alarming or misleading information. Mistrust develops when patients feel dismissed by doctors, which then makes them less likely to follow medical advice. Self-medication and proxy anxiety further hide the psychological roots of the problem and can create risk for both patients and their families.

Seen together, these behaviours may be explained through the idea of signalling theory. Signals are most believable when they are costly, and health anxiety often involves real costs—money spent on tests, time in hospitals, and emotional distress. Although these behaviours may not solve the anxiety, they act like signals of distress that push patients to continue seeking recognition. When such signals fail, mistrust grows and the cycle intensifies. This way of looking at health anxiety helps connect many different behaviours into one framework and explains why they continue despite being unhelpful.

In India, the challenge may be even greater. Consultation times in public hospitals are very short, and doctors have little training in psychosomatic conditions. Psychological distress often carries stigma, so patients may prefer to express their suffering through physical symptoms, which are more socially acceptable. Families also play a strong role in healthcare decisions, so proxy anxiety may multiply the problem across households. Together, these factors create a system where health anxiety is easily overlooked and mismanaged.

These insights have practical implications. General physicians need simple training to recognise patterns of health anxiety early and provide timely referrals. Public awareness about cyberchondria and unsafe self-medication is also needed, along with digital literacy programs that help people judge online health information more carefully. Brief and culturally adapted psychological interventions could be introduced in primary care to break the cycle of reassurance-seeking and mistrust.

This review also has some limits. Most of the research comes from Western countries, and studies from India and other low- and middle-income contexts are still limited. Much of the evidence is cross-sectional and depends on self-report, so stronger longitudinal and mixed-method studies are needed.

In summary, undiagnosed health anxiety is more than an individual fear; it is a systemic blind spot. By viewing it through the lens of signalling theory, we can see how different costly behaviours fit into a common pattern of distress communication. Recognising this pattern is important not only for reducing unnecessary medical use but also for addressing the invisible psychological suffering that affects patients and families alike.

CONCLUSION

To break the cycle of fear, reassurance-seeking, and mistrust, healthcare systems must recognise health anxiety early, before it translates into repeated investigations, unsafe coping, and serious emotional suffering. Training general physicians in the recognition of health anxiety, strengthening digital literacy, and developing brief culturally adapted psychological interventions are practical steps.

This review makes two main contributions. First, it synthesises diverse behavioural patterns—reassurance-seeking, cyberchondria, mistrust, self-medication, and proxy anxiety—into a single framework. Second, it introduces signalling theory as a novel conceptual lens, suggesting that these behaviours persist because they act as costly signals of distress. In India, where somatic symptoms are socially more legitimate than psychological complaints, this signalling tendency may be particularly reinforced, creating systemic blind spots.

Addressing health anxiety is not only a matter of reducing unnecessary healthcare use; it is an ethical imperative to respond to invisible psychological suffering. If neglected,

undiagnosed health anxiety will remain a silent but serious threat to both patients and healthcare systems.

Limitations

This review has certain limitations. Much of the available evidence on health anxiety comes from Western contexts, while data from India and other low- and middle-income countries remain limited. Most existing studies are cross-sectional and rely heavily on self-report measures, making it difficult to establish causal relationships. Proxy manifestations of health anxiety within families are still underexplored, and healthcare system level data are often anecdotal rather than empirical. Finally, the use of overlapping terms such as illness anxiety disorder, hypochondriasis, and cyberchondria creates conceptual inconsistencies across studies, which complicates the synthesis.

Future Research Directions

Future research on health anxiety may focus on the following domains:

1. **Epidemiology & Cultural Variation –** Large-scale epidemiological studies in India and other LMICs to estimate prevalence, alongside cross-cultural comparisons to examine the role of family involvement, stigma, and doctor–patient dynamics.
2. **Pathways & Mechanisms -**Longitudinal studies to find out the evolution of reassurance-seeking, cyberchondria, and mistrust; qualitative studies to capture illness interpretations; and exploration of "proxy anxiety," where parental health anxiety shapes children's health behavior.
3. **Health System Interaction –** Observational work on how general physicians manage unexplained symptoms, the impact of consultation length and communication style, and the economic burden of repeated tests led by health anxiety.
4. **Digital Health & Cyberchondria –** Investigations into patterns of internet use and their impact on anxiety, the effectiveness of digital literacy interventions are needed and an evaluation of AI-based symptom checkers may also be needed to see if they reduce harm or make problems worse.
5. **Interventions & Prevention –** Randomized controlled trials of brief CBT-based interventions in primary care, task-shifting approaches training community health workers or General physicians, and school/university programs to reduce early maladaptive anxiety.
6. **Medication & Self-Medication –**Studies linking health anxiety with over-the-counter drug use, antibiotic misuse, and the intersection of pharmacovigilance with psychological drivers of self-medication.
7. **Family & Social Context -** Research on caregiver burden, the influence of family reassurance or criticism on symptom persistence, and cultural scripts of illness that normalize or amplify health anxiety.

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Conflict of Interest

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