



Nursing Interventions for Patients with Health-Related Anxiety

**Abdullah Dhafi Sayer Alanazi^{1*}, Noura Saleh Aqil Alomim², Majed Abdullah D Alshammari³,
Aysha Alsaddi Baggan Alenizi⁴, Entisar Mofareh M Alruwaili⁵, Mona Shamat Fayyadh
Alanazi⁶, Fahad Abdallah Muhaymid Almutairi⁷, Rehab Swelh Asaj Alanzi⁸, Abdulhade
Hamad S Almufrej⁹, Wejdan Muhammad Karim Alanazi¹⁰, Faizah Farhan J Alshammri¹¹**

¹Nursing Technician – Eradah and Mental Health Complex – Northern Borders Health Cluster – Ministry of Health – Arar – Northern Borders Region – Saudi Arabia.

* **Corresponding Author Email:** aalanazi214@moh.gov.sa - **ORCID:** 0000-0002-2227-9951

²Nursing Specialist – Eradah and Mental Health Complex – Northern Borders Health Cluster – Ministry of Health – Arar – Northern Borders Region – Saudi Arabia

Email: nalomim@moh.gov.sa - **ORCID:** 0000-0002-2227-8852

³Nursing Technician – East Al-Muhammadiyah Primary Health Care Center – Hafr Al-Batin Health Cluster – Ministry of Health – Hafr Al-Batin – Eastern Province – Saudi Arabia

Email: maalshamery@moh.gov.sa - **ORCID:** 0000-0002-2227-0953

⁴Nursing Technician – Northern Medical Tower – Northern Borders Health Cluster – Ministry of Health – Arar – Northern Borders Region – Saudi Arabia.

Email: ayshaaa@moh.gov.sa - **ORCID:** 0000-0002-2227-8954

⁵Nursing Technician – Forensic Medical Services Center (Deaths Affairs Administration) – Al-Jouf Health Cluster – Ministry of Health – Sakaka – Al-Jouf Region – Saudi Arabia.

Email: amruwaili@moh.gov.sa - **ORCID:** 0000-0002-2227-7955

⁶Nursing Technician – Branch of the Ministry of Health – Ministry of Health – Arar – Northern Borders Region – Saudi Arabia

Email: Alnzymny779@gmail.com - **ORCID:** 0000-0002-2227-6956

⁷Nursing Technician – Long-Term Care Hospital – Northern Borders Health Cluster – Ministry of Health – Arar – Northern Borders Region – Saudi Arabia

Email: Falmutairi100@moh.gov.sa - **ORCID:** 0000-0002-2227-5957

⁸Nursing Technician – Al-Salihiyah Al-Awsat Primary Health Care Center – Northern Borders Health Cluster – Ministry of Health – Arar – Northern Borders Region – Saudi Arabia

Email: rsalanzi@moh.gov.sa - **ORCID:** 0000-0002-2227-4958

⁹Nursing Technician – Tumair Primary Health Care Center – Second Riyadh Health Cluster – Ministry of Health – Tumair – Riyadh Region – Saudi Arabia

Email: Alhade7708@gmail.com - **ORCID:** 0000-0002-2227-3959

¹⁰Nursing – Maternity and Children Hospital – Al-Jouf Health Cluster – Ministry of Health – Sakaka – Al-Jouf Region – Saudi Arabia

Email: wemoalanazi@moh.gov.sa - **ORCID:** 0000-0002-2227-2900

¹¹Nursing Technician – Sababah Primary Health Care Center – Hail Health Cluster – Ministry of Health – Hail – Hail Region – Saudi Arabia.

Email: Faizahfa@moh.gov.sa - **ORCID:** 0000-0002-2227-1910

Article Info:

DOI: 10.22399/ijcesen.4653

Received : 01 June 2024

Accepted : 30 June 2024

Keywords

Abstract:

Nursing interventions for patients with health-related anxiety focus on safety, education, and coping strategies to reduce excessive worry about health while maintaining appropriate vigilance. Begin with a compassionate assessment to identify triggers, baseline anxiety levels, and coping styles, as well as any somatic symptoms that may mimic or accompany illness concerns. Establish a calm, nonjudgmental

health-related anxiety, nursing interventions, cognitive-behavioral techniques, relaxation training, patient education

environment, use reflective listening, and validate the patient's fears while avoiding reassurance that fuels dependency. Further interventions emphasize safety planning and empowerment to prevent escalation or crisis, including identifying early warning signs of anxiety and establishing coping plans for high-stress periods. Encourage participation in meaningful activities, social support, and routines to restore a sense of control. Consider referral to mental health services for CBT or guided self-help if anxiety remains high, and assess for comorbid conditions such as depression or somatic symptom disorder. Monitor for adverse effects of medications if prescribed, and ensure that pharmacologic treatments are coordinated with the physician. Continuity of care, regular follow-up, and patient education about the normal variability of health symptoms help maintain realigned health perceptions and reduce excessive health-related anxiety over time.

1. Introduction

Health-related anxiety (HRA), a pervasive and clinically significant condition, exists on a continuum ranging from mild, transient worry about symptoms to the severe, disabling preoccupation characteristic of disorders such as Illness Anxiety Disorder (IAD, formerly hypochondriasis) and Somatic Symptom Disorder [1]. It is defined as excessive fear of or preoccupation with having a serious illness, based on a misinterpretation of benign bodily sensations or minor symptoms, which persists despite appropriate medical evaluation and reassurance [2]. This anxiety is not merely a patient trait but a complex biopsychosocial phenomenon that significantly impacts healthcare delivery, patient outcomes, and system efficiency. In an era of readily accessible, and often alarming, online medical information ("cyberchondria"), the prevalence and salience of HRA have intensified, making its management a critical competency for modern nursing practice [3].

The implications of unaddressed HRA are profound and multifaceted. For the patient, it generates immense psychological distress, functional impairment, and a diminished quality of life. Individuals may engage in persistent health-checking behaviors (e.g., frequent self-examination, repetitive research) or, paradoxically, in avoidance behaviors (e.g., avoiding doctors or hospitals for fear of bad news) [4]. Physiologically, the sustained stress response associated with chronic anxiety can exacerbate actual medical conditions, creating a vicious cycle where anxiety worsens symptoms, which in turn fuels further anxiety [5]. From a healthcare system perspective, HRA contributes to substantial economic burden through unnecessary diagnostic tests, specialist referrals, emergency department visits, and inappropriate utilization of resources, often termed "high utilization" [6]. Furthermore, it can strain the therapeutic relationship, leading to frustration for both clinicians and patients, and potentially resulting in

missed diagnoses as genuine symptoms are dismissed as "just anxiety."

Within this challenging landscape, the nursing profession occupies a uniquely pivotal position. Nurses are often the first and most frequent point of contact for patients within healthcare systems. They engage with patients across diverse settings—from primary care clinics and inpatient wards to community health centers and telehealth platforms. This consistent, frontline presence affords nurses unparalleled opportunities to identify, assess, and intervene in cases of HRA. The core principles of nursing—holistic, patient-centered care, therapeutic communication, and health education—are intrinsically aligned with the needs of this patient population [7]. Unlike a physician's encounter, which may be necessarily brief and focused on differential diagnosis, nursing interactions often allow for more extended dialogue, exploration of patient concerns, and the building of a trusting, longitudinal relationship. This relationship is the bedrock upon which effective interventions for HRA are built.

Therefore, the management of health-related anxiety is not an adjunct to nursing care but a fundamental aspect of it. Effective intervention requires a shift from a purely biomedical, symptom-dismissive approach to a biopsychosocial model that validates the patient's distress while strategically and compassionately addressing the maladaptive thoughts and behaviors that sustain it [8].

2. Comprehensive Assessment and Identification of Health-Related Anxiety

The foundation of any effective nursing intervention is a thorough, sensitive, and systematic assessment. Accurate identification of HRA is crucial, as mislabeling can lead to either the neglect of genuine pathology or the perpetuation of unnecessary anxiety. Nursing assessment in this context is a multi-faceted process that integrates observation, skilled interviewing, and the judicious

use of standardized tools, all conducted within a framework of empathy and validation.

The initial step often involves astute clinical observation and a review of the patient's history. Recurrent, non-urgent healthcare visits for the same or varying somatic complaints, a voluminous and detailed medical record brimming with negative test results, and a pattern of "doctor-shopping" are potential red flags [9]. During the interaction, the nurse may observe signs of heightened anxiety: hypervigilance to bodily sensations, frequent self-referencing (e.g., touching a body part while describing a concern), and a pronounced focus on catastrophic health outcomes. The patient's history should be explored not only for medical events but also for psychosocial stressors, past trauma, family history of serious illness, and prior experiences with the healthcare system, all of which can be predisposing or perpetuating factors for HRA [10]. Central to the assessment is the therapeutic interview. The nurse's approach must balance a non-judgmental, curious stance with the need to gather specific information. Key lines of inquiry include exploring the patient's health beliefs: What is their understanding of the symptom's cause? What is their perceived threat? The nurse should assess safety-seeking and reassurance-seeking behaviors: How often do they check their body or research symptoms online? What happens after they receive medical reassurance—does their anxiety subside or return quickly? [11] It is also critical to evaluate the functional impact: How is this worry affecting their work, relationships, and daily activities? Importantly, the assessment must rule out other primary anxiety disorders (e.g., Generalized Anxiety Disorder, Panic Disorder) and depressive disorders, which frequently co-occur with or mimic HRA [12].

To objectify and quantify the severity of HRA, nurses can utilize brief, validated screening instruments. The Whiteley Index-7 is a concise 7-item scale widely used to screen for hypochondriacal concerns and bodily preoccupation [13]. The Health Anxiety Inventory (HAI) and its short form (SHAI) are more comprehensive tools designed specifically to measure the spectrum of health anxiety, including items on perceived likelihood of illness, feared consequences, and bodily vigilance [14]. Incorporating such tools into routine nursing intake in primary care or specialty clinics (e.g., cardiology, neurology) where HRA is prevalent can facilitate early identification. The goal of the assessment is not to arrive at a definitive psychiatric diagnosis—though this may be a subsequent step—but to formulate a nursing understanding of the patient's experience, identify

maintaining factors, and establish a baseline from which to measure intervention outcomes. This detailed assessment informs every subsequent intervention, ensuring it is tailored to the individual's specific fears, behaviors, and needs.

3. Therapeutic Communication and the Establishment of a Collaborative Alliance

The nurse-patient relationship is the single most potent tool in managing health-related anxiety. Without a foundation of trust and collaboration, even the most evidence-based techniques will be ineffective. Therapeutic communication in this context requires specific skills that move beyond simple reassurance to a process of validation, curiosity, and shared understanding. The primary objective is to shift the dynamic from one where the patient is desperately seeking certainty about the absence of disease to one where the patient and nurse collaboratively work to manage the distress of uncertainty.

A critical, and often challenging, principle is to avoid providing premature or repetitive reassurance. While counterintuitive, repeatedly telling an anxious patient "the tests are normal, there's nothing wrong" is iatrogenic. It provides only transient relief, reinforcing the cycle where anxiety builds, reassurance is sought, anxiety briefly drops, and then returns, often stronger, necessitating more reassurance—a process known as the "reassurance cycle" [15]. Instead, nurses should practice *validating the distress without validating the catastrophic thought*. This involves statements like, "I can see how frightening it is to experience these sensations and not have a clear explanation," or "It makes complete sense that you're worried, given what you've been feeling." This validation demonstrates that the nurse is listening and takes the patient's suffering seriously, which in itself is therapeutic and builds rapport [16].

The next step is to utilize guided discovery and Socratic questioning to gently explore the patient's thought patterns. Rather than challenging beliefs directly, which can feel confrontational, the nurse asks open-ended questions that encourage reflection: "What is the worst thing you fear might be happening?" "How likely do you truly believe that is, on a scale of 0 to 100?" "What is the evidence for and against that thought?" "Are there any other, less catastrophic, explanations for this symptom?" [17]. This process helps the patient begin to externalize and examine their anxiety-driven thoughts as mental events rather than absolute truths. It also provides the nurse with crucial insight into the patient's specific cognitive

distortions, such as catastrophizing (e.g., "This headache must be a brain tumor") or probability overestimation.

Finally, communication should focus on normalizing benign bodily sensations and reframing the goal of care. Nurses can provide psychoeducation about how anxiety itself produces very real physical symptoms (e.g., palpitations, dizziness, paresthesia), creating a self-fulfilling prophecy [18]. They can explain the normal variability of bodily sensations and how heightened attention amplifies them. The collaborative alliance is solidified by explicitly reframing the treatment goal. The nurse can state, "My sense is that our goal may not be to find a definitive medical cause for every sensation—as we've seen, that search can be exhausting and increase worry. Instead, would you be willing to work with me on a new goal: to help you reduce the distress and interference these symptoms cause, so you can get back to living your life?" [19]. This shifts the focus from elusive certainty to manageable improvement in quality of life, establishing a partnership for the interventions that follow.

4. Cognitive-Behavioral Techniques in Nursing Practice

Cognitive-behavioral therapy (CBT) is the psychological treatment with the strongest evidence base for health anxiety disorders [20]. While advanced techniques are delivered by trained therapists, core CBT principles and strategies can be effectively integrated into general and advanced practice nursing care. These techniques target the dysfunctional thoughts and behaviors that maintain HRA, providing patients with practical skills to regain control.

A primary behavioral target is the reduction of safety-seeking and reassurance-seeking behaviors. Nurses can work with patients to collaboratively develop a "behavioral experiment" or a graded exposure plan. For instance, if a patient checks their pulse 50 times a day, the nurse might help them agree to reduce this to 30 times for a week, monitoring and discussing the outcome (e.g., "Did your fear come true? Did your anxiety eventually decrease?"). For a patient who seeks frequent doctor visits, the plan might involve scheduling a single, longer consultation in a month instead of making an urgent appointment, using interim strategies to cope with anxiety spikes [21]. The key is to design these experiments as tests of the patient's fearful predictions, thereby gathering disconfirming evidence. Similarly, exposure involves systematically and gradually confronting feared situations (e.g., reading a medical article,

watching a TV show about illness, visiting a hospital waiting room without having an appointment) without engaging in safety behaviors, to learn that anxiety naturally habituates and the feared catastrophe does not occur [22].

On the cognitive front, nurses can facilitate structured thought records. This involves helping patients log triggering situations, their automatic anxious thoughts, the resulting emotions and bodily sensations, and then working to generate more balanced, alternative thoughts. For example: Trigger: "Feeling a twinge in my chest." Automatic thought: "This is a heart attack. I'm going to die." Emotion: Terror, panic. Alternative thought: "This is a common muscle twinge or a symptom of anxiety. I have had this dozens of times and been checked by a cardiologist. My heart is healthy. The anxiety is making it feel worse." [23]. The nurse guides the patient in evaluating the evidence for both thoughts, not as a Pollyannaish exercise, but as a realistic appraisal. This practice builds cognitive flexibility and reduces the automaticity of catastrophic interpretations.

Another powerful technique is behavioral activation, particularly for patients whose HRA has led to significant avoidance and withdrawal. When patients avoid activities, social events, or exercise for fear of triggering symptoms or having a medical crisis in public, their world shrinks, and depression often sets in, exacerbating anxiety. Nurses can collaborate with patients to identify valued activities they have abandoned and create a structured, gradual plan to re-engage with them. Starting with small, manageable steps (e.g., a 5-minute walk, a brief coffee with a friend), the patient rebuilds a sense of mastery and pleasure, which counteracts the helplessness fostered by HRA and provides evidence that engagement is possible and safe [24]. Through these core CBT-informed strategies, nurses empower patients to become active agents in managing their anxiety rather than passive victims of their symptoms.

5. Structured Psychoeducation and Empowerment

Knowledge is a foundational intervention for health-related anxiety, but it must be delivered in a structured, strategic, and empathetic manner to be therapeutic rather than fuel for further rumination. Nursing-led psychoeducation aims to demystify the mind-body connection, explain the mechanisms of anxiety, and provide a coherent, normalizing framework for the patient's distressing experience. This process transforms the patient from a bewildered sufferer into an informed self-manager.

A central component is educating patients about the neurophysiology of anxiety and the stress response. Nurses can explain, in accessible language, how the sympathetic nervous system ("fight-or-flight") is activated by perceived threat, releasing adrenaline and cortisol. This leads to the very real physical sensations they fear: increased heart rate, rapid breathing, muscle tension, dizziness, and gastrointestinal distress [25]. Crucially, the education must highlight that these sensations are harmless, albeit uncomfortable, side effects of an overactive alarm system. Diagrams or simple metaphors (e.g., "a car alarm going off when there's no burglar") can be helpful. This explanation provides a benign, alternative diagnosis for their symptoms, directly challenging the catastrophic interpretation of illness. Building on this, psychoeducation must directly address the role of attention and interpretation. Nurses can explain the concept of "body vigilance" or "selective attention": how when we fear something in our body, our brain becomes a hyper-vigilant scanner for any related sensation, inevitably finding and amplifying normal background noise [26]. A related concept is the "self-fulfilling prophecy": fear of a heart attack causes panic, which causes palpitations, which confirms the fear. Teaching patients about these cycles—the vicious cycle of symptom → catastrophic thought → anxiety → physiological arousal → worsened symptom—helps them externalize the problem. It becomes "my anxiety disorder is doing this" rather than "I have a terrible disease." Finally, psychoeducation should equip patients with a concrete "toolkit" for symptom management during distress. This goes beyond general advice to include specific, practiced techniques. These can include controlled breathing exercises (e.g., diaphragmatic breathing, 4-7-8 breathing) to counteract hyperventilation and calm the nervous system [27]. Grounding techniques (e.g., the 5-4-3-2-1 exercise: naming 5 things you see, 4 you feel, 3 you hear, 2 you smell, 1 you taste) can help divert attention from internal catastrophic thoughts to the external, present-moment environment [28]. Nurses should introduce these tools in a calm state, practice them with the patient, and encourage their regular use, not just during crises. This structured education empowers patients by giving them a coherent narrative for their suffering and practical strategies to regain a sense of control, reducing helplessness and dependency on the healthcare system for reassurance.

6. Mindfulness and Acceptance-Based Strategies

For many patients with chronic health-related anxiety, the struggle to eliminate uncertainty and

control bodily sensations becomes the core of their suffering. Mindfulness and Acceptance and Commitment Therapy (ACT)-based strategies offer a paradigm shift: from control to acceptance, from fusion with thoughts to mindful observation, and from symptom-focused living to value-directed action. These approaches, highly compatible with nursing's holistic philosophy, help patients develop a different, less reactive relationship with their internal experiences.

Mindfulness, in this context, is taught as the practice of paying deliberate, non-judgmental attention to the present moment. Nurses can guide patients in applying this specifically to health anxiety. Instead of reacting to a symptom with immediate panic ("This pain is dangerous!"), the patient is encouraged to pause and observe it with curiosity: "I am noticing a sensation of tightness in my chest. It has a specific location, intensity, and quality. My mind is labeling it as 'heart attack.' I am noticing feelings of fear arising." [29]. This process of "cognitive defusion" helps patients see anxious thoughts as just thoughts, not facts or commands. Simple exercises, such as saying a feared thought repeatedly until it loses its emotional impact, or labeling thoughts ("Ah, there's the 'catastrophizing' story again"), can be introduced and practiced.

A core ACT principle relevant to HRA is the concept of "expansion" or "making room" for uncomfortable sensations. Nurses can use metaphors to illustrate this, such as comparing the struggle with anxiety to being in a tug-of-war with a monster; the more you pull, the harder it pulls back. The alternative is to "drop the rope." Practically, this involves guiding patients to stop fighting the sensation of anxiety. Instead, they are taught to breathe into the area of discomfort, soften around it, and allow it to be present without trying to push it away or analyze it [30]. This acceptance paradoxically reduces the secondary suffering—the panic about being panicked—and often diminishes the intensity of the primary sensation.

The ultimate aim of acceptance-based work is not passive resignation but liberated action. This is where values clarification becomes crucial. Nurses can facilitate conversations that help patients identify what is truly important to them—family, work, creativity, friendship, adventure—that has been sidelined by health preoccupation. The therapeutic work then focuses on helping patients commit to taking small, concrete steps aligned with those values, even while anxiety or uncomfortable sensations are present. For example, a patient who values connection might commit to attending a family dinner despite feeling nausea, practicing mindfulness of the nausea while engaging in conversation. This "values-based action" provides a

powerful motivational alternative to the avoidance and checking behaviors driven by anxiety, restoring a sense of meaning and direction to the patient's life [31].

7. Collaborative Care and Interprofessional Communication

Effective management of health-related anxiety is rarely achieved by a single provider in isolation. It requires a coordinated, consistent, and strategically aligned approach across the healthcare team. The nurse, often serving as care coordinator and the most consistent point of contact, plays a critical role in facilitating this collaborative care model. This involves bridging communication between the patient, primary care providers, medical specialists, and mental health professionals to ensure a unified, non-iogenic approach.

A primary nursing responsibility is to advocate for and help establish a clear, consistent medical "home," typically with a single primary care physician or nurse practitioner. The nurse can facilitate a meeting or communication where the care plan for HRA is explicitly discussed and agreed upon. This plan should include guidelines for scheduled, non-crisis-based appointments (e.g., every 3 months) rather than symptom-contingent visits, and agreements on the appropriate use of diagnostic testing, avoiding repetitive "just-in-case" investigations that reinforce illness fear [32]. The nurse ensures all team members understand the rationale: that the goal is to break the cycle of symptom → medical visit/testing → temporary reassurance, and to shift focus to functional improvement and anxiety management.

Communication with consulting medical specialists is equally vital. When a patient is referred for a specialist opinion (which may sometimes be necessary to rule out genuine pathology or provide definitive reassurance), the nurse can prepare both the patient and the specialist. For the patient, preparation involves setting realistic expectations: "The cardiologist will do a thorough exam to check your heart structure. A normal result is our hope, and if we get it, it will be one piece of data we use to work on anxiety." For the specialist, a brief, respectful note from the primary team can frame the consultation: "Thank you for seeing Ms. X. We are managing her for significant health anxiety regarding cardiac symptoms. A definitive assessment from you would be invaluable in our ongoing work to help her manage this anxiety. We plan to continue follow-up in primary care." [33]. This prevents the specialist from inadvertently reinforcing anxiety through excessive testing or off-hand alarming statements, and ensures the

consultative finding is integrated into the overall therapeutic plan.

Perhaps the most crucial collaboration is with mental health professionals—psychiatrists, psychologists, and clinical social workers. Nurses are instrumental in facilitating warm handoffs and referrals. They can normalize the referral: "Working with a therapist who specializes in health anxiety is like seeing a specialist for your mind. They have advanced tools, like CBT, that are the gold-standard treatment for what you're experiencing, and we will work together as a team" [34]. In a collaborative care model, the nurse may serve as the "care manager," maintaining regular contact with the patient, monitoring symptoms using standardized scales like the SHAI, and providing brief interventions while the therapist delivers more intensive CBT. Regular team huddles or shared electronic health record notes ensure everyone is aligned, providing the patient with a consistent, coherent message and a wraparound support system, which is essential for managing this chronic, relapsing condition.

8. Adapting Interventions Across Healthcare Settings

The principles of managing health-related anxiety are universal, but their application must be skillfully adapted to the constraints and opportunities of different clinical settings. The acuity, duration of contact, and primary purpose of the setting all influence how a nurse prioritizes and implements interventions. From the brief encounter in an emergency department to the longitudinal relationship in primary care, nursing sensitivity to context is key.

In **primary care and outpatient clinics**, the nurse has the greatest opportunity for proactive, longitudinal management. Here, interventions can be comprehensive and phased over time. The nurse can conduct formal screening, deliver structured psychoeducation groups, schedule regular follow-up "check-ins" focused on anxiety management rather than new symptoms, and work intensively on CBT techniques and behavioral experiments [35]. The continuity of care allows for the deep therapeutic alliance necessary for challenging deeply ingrained health beliefs. Nursing time can be dedicated to reviewing thought records, planning exposure exercises, and coordinating with the broader care team.

The **inpatient hospital setting** presents unique challenges. A patient admitted for a genuine medical condition may have pre-existing HRA dramatically exacerbated by the hospitalization, or a patient with severe HRA may be admitted for

exhaustive testing. Here, nursing interventions are necessarily more focused and immediate. The priority is to manage acute distress and prevent the hospitalization from becoming a traumatic, reinforcing event. Nurses can use validation and normalization extensively: "It's completely normal to feel scared and hyper-aware of every sensation in the hospital." They can implement calming techniques at the bedside—guided breathing, brief mindfulness exercises—to reduce panic [36]. Crucially, they must collaborate closely with the medical team to ensure a consistent message about the care plan, gently challenge excessive requests for vital sign checks or lab draws if not medically indicated, and focus care on recovery and mobilization rather than illness reinforcement. Discharge planning must include a clear follow-up plan with the primary care team to transition the focus back to anxiety management.

Emergency Departments (ED) are ground zero for acute health anxiety crises, often in the form of panic attacks misinterpreted as medical emergencies. The nursing role here is one of skillful de-escalation and redirection. After urgent medical causes are ruled out, the communication shifts from diagnostic investigation to compassionate crisis management. The nurse can provide a powerful intervention by offering a definitive, calm explanation: "All the tests we've done are normal and show your heart and other organs are working well. What you experienced was a severe panic attack—an overwhelming wave of anxiety that causes these terrifying physical feelings. The good news is, it's not dangerous to your body, but it feels awful." [37]. The nurse can then provide a "prescription" for follow-up: a printed resource on panic attacks, a referral to a primary care provider for ongoing management, or, if available, an on-site mental health liaison. The goal is to break the pattern of using the ED for reassurance and to create a pathway to more appropriate, longitudinal care.

9. The Role of Technology: Telehealth and Digital Therapeutics

The digital age has profoundly influenced health-related anxiety, both as a catalyst (via cyberchondria) and as a potential vehicle for intervention. Technology-based tools, when integrated thoughtfully into nursing practice, can extend the reach and enhance the efficacy of traditional interventions, offering support in real-time and in the patient's own environment.

Telehealth nursing, particularly via video conferencing, has become a mainstream modality. For patients with HRA, it offers unique advantages.

It eliminates the anxiety associated with traveling to and waiting in medical settings, which can itself trigger symptoms. It allows the nurse to observe the patient in their home context. Most importantly, it facilitates consistent, accessible follow-up, which is crucial for monitoring progress, troubleshooting challenges with CBT homework, and providing support during setbacks [38]. Nursing consultations can focus exclusively on anxiety management without the expectation of a physical exam, reinforcing the psychological nature of the work. However, nurses must also be adept at managing the limitations, such as the potential for technological glitches to increase patient frustration or anxiety.

Digital therapeutics and curated online resources represent a powerful adjunct to nursing care. Nurses can prescribe or recommend evidence-based mobile applications designed for anxiety management. These apps may offer modules on psychoeducation about anxiety, guided mindfulness and meditation exercises, tools for logging symptoms and thoughts, and structured CBT programs [39]. By reviewing a patient's use of such an app in a follow-up visit, the nurse can reinforce learning and tailor further guidance. Furthermore, nurses can combat cyberchondria by directing patients to reputable, balanced online health information sources (e.g., websites of major medical centers, government health agencies) and teaching critical appraisal skills for online content. Guiding patients on how to conduct a "behavioral experiment" with their internet use—such as deliberately avoiding symptom searches for a day and noting the effect on anxiety—can be an effective intervention [40].

However, the use of technology requires careful navigation of ethical and practical considerations. Not all patients have equal digital literacy or access. The therapeutic relationship must still be established before relying heavily on digital tools. Nurses must also be aware of the risk that apps or online tracking could become a new form of compulsive health-checking. Therefore, technology should be framed as a tool to support the therapeutic process and foster self-efficacy, not as a replacement for the human connection and clinical judgment inherent in the nurse-patient relationship [41]. The nurse's role is to curate, recommend, and integrate these digital resources into a cohesive, personalized care plan.

10. Conclusion

Health-related anxiety is a prevalent, debilitating, and costly condition that sits at the intersection of physical and mental health. Its effective

management is not a peripheral concern but a central challenge and opportunity for contemporary nursing practice. As this comprehensive analysis has detailed, nurses are uniquely positioned to lead this care through their frontline presence, holistic orientation, and capacity to build enduring therapeutic alliances. The intervention spectrum is broad and evidence-based, encompassing systematic assessment, mastery of therapeutic communication, the application of core cognitive-behavioral and mindfulness techniques, structured psychoeducation, and the facilitation of collaborative, interprofessional care. These strategies must be artfully adapted to the specific context, whether it be the longitudinal engagement of primary care, the acute environment of the hospital, or the crisis-oriented setting of the emergency department.

The integration of technology further expands the nurse's toolkit, offering new avenues for support and education while requiring mindful implementation. The overarching goal transcends the simplistic aim of providing reassurance. Instead, it is to empower patients to break free from the exhausting cycles of fear, checking, and avoidance. By validating distress, educating about the mind-body connection, challenging maladaptive thoughts and behaviors, and fostering acceptance and values-based living, nurses enable patients to reclaim their lives from health anxiety. This work reduces human suffering, improves the management of comorbid medical conditions, and promotes the rational and effective use of healthcare resources. As healthcare continues to evolve, the advanced knowledge and skilled intervention of nurses in the realm of health-related anxiety will remain an indispensable component of high-quality, compassionate, and cost-effective patient care. Future directions will likely involve greater standardization of nursing protocols for HRA, enhanced training in brief CBT techniques, and more seamless integration of digital health tools, all aimed at ensuring that this vulnerable population receives the informed, empathetic, and effective support they need.

Author Statements:

- **Ethical approval:** The conducted research is not related to either human or animal use.
- **Conflict of interest:** The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper

- **Acknowledgement:** The authors declare that they have nobody or no-company to acknowledge.
- **Author contributions:** The authors declare that they have equal right on this paper.
- **Funding information:** The authors declare that there is no funding to be acknowledged.
- **Data availability statement:** The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

References

1. Herling S. F., Greve I. E., Vasilevskis E. E., et al., "Interventions for Preventing Intensive Care Unit Delirium in Adults," *Cochrane Database of Systematic Reviews* 11 (2018): CD009783.
2. Peris A., Bonizzoli M., Iozzelli D., et al., "Early Intra-Intensive Care Unit Psychological Intervention Promotes Recovery From Post Traumatic Stress Disorders, Anxiety and Depression Symptoms in Critically Ill Patients," *Critical Care Medicine* 15, no. 1 (2011): R41.
3. McManus J., Pathansali R., Hassan H., et al., "The Course of Delirium in Acute Stroke," *Age and Ageing* 38, no. 4 (2009): 385–389.
4. Folstein M. F., Folstein S. E., and McHugh P. R., "“Mini-Mental State”: A Practical Method for Grading the Cognitive State of Patients for the Clinician," *Journal of Psychiatric Research* 12, no. 3 (1975): 189–198.
5. Maier W., Buller R., Philipp M., and Heuser I., "The Hamilton Anxiety Scale: Reliability, Validity, and Sensitivity to Change in Anxiety and Depressive Disorders," *Journal of Affective Disorders* 14, no. 1 (1988): 61–68.
6. Ouimet S., Kavanagh B. P., Gottfried S. B., and Skrobik Y., "Incidence, Risk Factors, and Consequences of ICU Delirium," *Intensive Care Medicine* 33 (2007): 66–73.
7. Zheng Y., Zhang L., Ma S., et al., "Care Intervention on Psychological Outcomes Among Patients Admitted to Intensive Care Unit: An Umbrella Review of Systematic Reviews and Meta-Analyses," *Systematic Reviews* 12, no. 1 (2023): 237.
8. Pick S., Goldstein L. H., Perez D. L., and Nicholson T. R., "Emotional Processing in Functional Neurological Disorder: A Review, Biopsychosocial Model, and Research Agenda," *Journal of Neurology, Neurosurgery and Psychiatry* 90, no. 6 (2019): 704–711.
9. Kakar E., Ottens T., Stads S., et al., "Effect of a Music Intervention on Anxiety in Adult Critically Ill Patients: A Multicenter Randomized Clinical Trial," *Journal of Intensive Care* 11, no. 1 (2023): 36.
10. Bassi T. G., Rohrs E. C., and Reynolds S. C., "Systematic Review of Cognitive Impairment and

- Brain Insult After Mechanical Ventilation,” *Critical Care (London, England)* 25, no. 1 (2021): 99.
11. Hair J., Black W. C., Babin B. J., and Anderson R. E., *Multivariate Data Analysis*, 7th ed. (Pearson Educational International, 2010).
 12. Pandharipande P. P., Girard T. D., and Ely E. W., “Long-Term Cognitive Impairment After Critical Illness,” *New England Journal of Medicine* 370, no. 2 (2014): 185–186.
 13. Kiyohara L. Y., Kayano L. K., Oliveira L. M., et al., “Surgery Information Reduces Anxiety in the Preoperative Period,” *Revista do Hospital das Clínicas da Faculdade de Medicina da Universidade de São Paulo* 59, no. 2 (2004): 51–56.
 14. Wade D., Als N., Bell V., et al., “Providing Psychological Support to People in Intensive Care: Development and Feasibility Study of a Nurse-Led Intervention to Prevent Acute Stress and Long-Term Morbidity,” *BMJ Open* 8, no. 7 (2018): e021083.
 15. Gonçalves K. K. N., Silva J. I., Gomes E. T., Pinheiro L. L. S., Figueiredo T. R., and Bezerra S. M. M., “Anxiety in the Preoperative Period of Heart Surgery,” *Revista Brasileira de Enfermagem* 69 (2016): 397–403.
 16. Ferro J. M., Caeiro L., and Verdelho A., “Delirium in acute stroke,” *Current Opinion in Neurology* 15, no. 1 (2002): 51–55.
 17. Peplau H., “A Working Definition of Anxiety,” in *Some Clinical Approaches to Psychiatric Nursing*, eds. S. Burd and M. Marshall (Macmillan, 1963).
 18. Kim C.-Y., *Psychiatric Assessment Instruments* (Hanampc, 2001).
 19. Fleischer S., Berg A., Behrens J., et al., “Does an Additional Structured Information Program During the Intensive Care Unit Stay Reduce Anxiety in ICU Patients? A Multicenter Randomized Controlled Trial,” *BMC Anesthesiology* 14 (2014): 48.
 20. Yu M. Y., Park J. W., Hyun M. S., and Lee Y. J., “Factors Related to Delirium Occurrence Among Patients in the Intensive Care Units,” *Journal of Korean Clinical Nursing Research* 14, no. 1 (2008): 151–160.
 21. Dong Y., Zhang L., Chen L. W., et al., “Music Therapy for Pain and Anxiety in Patients After Cardiac Valve Replacement: A Randomized Controlled Clinical Trial,” *BMC Cardiovascular Disorders* 23, no. 1 (2023): 32.
 22. Sharkiya S. H., “Quality Communication Can Improve Patient-Centred Health Outcomes Among Older Patients: A Rapid Review,” *BMC Health Services Research* 23, no. 1 (2023): 886.
 23. Haruna J., Unoki T., Nagano N., Kamishima S., and Kuribara T., “Effectiveness of Nurse-Led Interventions for the Prevention of Mental Health Issues in Patients Leaving Intensive Care: A Systematic Review,” *Healthcare* 10, no. 9 (2022): 1716.
 24. Shim M. Y., Song S. H., Lee M., et al., “The Effects of Delirium Prevention Intervention on the Delirium Incidence Among Postoperative Patients in a Surgical Intensive Care Unit,” *Journal of Korean Clinical Nursing Research* 21, no. 1 (2015): 43–52.
 25. Sessler C. N., Gosnell M. S., Grap M. J., et al., “The Richmond Agitation-Sedation Scale: Validity and Reliability in Adult Intensive Care Unit Patients,” *American Journal of Respiratory and Critical Care Medicine* 166, no. 10 (2002): 1338–1344.
 26. Ma J., Li C., Zhang W., et al., “Preoperative Anxiety Predicted the Incidence of Postoperative Delirium in Patients Undergoing Total Hip Arthroplasty: A Prospective Cohort Study,” *BMC Anesthesiology* 21 (2021): 1–8.
 27. Haymore J. B. and Patel N., “Delirium in the Neuro Intensive Care Unit,” *Critical Care Nursing Clinics of North America* 28, no. 1 (2016): 21–35.
 28. Nikayin S., Rabiee A., Hashem M. D., et al., “Anxiety Symptoms in Survivors of Critical Illness: A Systematic Review and Meta-Analysis,” *General Hospital Psychiatry* 43 (2016): 23–29.
 29. MacLulich A. M. J., Hosie A., Tiegues Z., and Davis D. H. J., “Three Key Areas in Progressing Delirium Practice and Knowledge: Recognition and Relief of Distress, New Directions in Delirium Epidemiology and Developing Better Research Assessments,” *Age and Ageing* 51, no. 11 (2022): afac271.
 30. Hernández-Palazón J., Fuentes-García D., Falcón-Araña L., et al., “Assessment of Preoperative Anxiety in Cardiac Surgery Patients Lacking a History of Anxiety: Contributing Factors and Postoperative Morbidity,” *Journal of Cardiothoracic and Vascular Anesthesia* 32, no. 1 (2018): 236–244.
 31. hakhraoui K., Laurent A., Bioy A., and Quenot J. P., “Psychological Experience of Patients 3 Months After a Stay in the Intensive Care Unit: A Descriptive and Qualitative Study,” *Journal of Critical Care* 30, no. 3 (2015): 599–605.
 32. Kwon Y.-C. and Park J.-H., “Korean Version of Mini-Mental State Examination (MMSE-K) Part I: Development of the Test for the Elderly,” *Journal of Korean Neuropsychiatric Association* 28, no. 1 (1989): 125–135.
 33. Ely E. W., Inouye S. K., Bernard G. R., et al., “Delirium in Mechanically Ventilated Patients: Validity and Reliability of the Confusion Assessment Method for the Intensive Care Unit (CAM-ICU),” *JAMA* 286, no. 21 (2001): 2703–2710.
 34. Yoo H. J. and Shim J., “The Impact of Family Care Visitation Programme on Patients and Caregivers in the Intensive Care Unit: A Mixed Methods Study,” *Journal of Clinical Nursing* 32, no. 13–14 (2023): 3797–3809.
 35. Parker A. M., Aldabain L., Akhlaghi N., et al., “Cognitive Stimulation in an Intensive Care Unit: A Qualitative Evaluation of Barriers to and Facilitators of Implementation,” *Critical Care Nurse* 41, no. 2 (2021): 51–60.
 36. Shdaifat S. A. and Al Qadire M., “Anxiety and Depression Among Patients Admitted to Intensive

- Care,” *Nursing in Critical Care* 27, no. 1 (2022): 106–112.
37. VandenBos G. R., *APA Dictionary of Psychology* (American Psychological Association, 2007).
 38. Latour J. M., Kentish-Barnes N., Jacques T., et al., “Improving the Intensive Care Experience From the Perspectives of Different Stakeholders,” *Critical Care* 26, no. 1 (2022): 218.
 39. Gélinas C., “Pain Assessment in the Critically Ill Adult: Recent Evidence and New Trends,” *Intensive & Critical Care Nursing* 34 (2016): 1–11.
 40. Bouchard M., Lecomte T., Cloutier B., Herrera-Roberge J., and Potvin S., “Dropout Rates in Psychosocial Interventions for People With Both Severe Mental Illness and Substance Misuse: A Systematic Review and Meta-Analysis,” *Frontiers in Psychiatry* 13 (2022): 842329.
 41. Zou J., Chen Q., Wang J., Gu M., Jiang X., and Mao M., “Effects of Virtual Reality for Psychological Health of ICU Patients: A Study Protocol for Systematic Review and Meta-Analysis,” *BMJ Open* 13, no. 7 (2023): e073660.