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Nursing Interventions for Patients with Anxiety Over Laboratory Testing an Integrated Psychological and Clinical Approach

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Abstract

Anxiety associated with laboratory testing is a common and often underrecognized issue that patients face, resulting in emotional distress and, in some cases, delays in testing and treatment. Managing this anxiety is critical to ensuring that patients undergo necessary medical procedures without added stress, which can negatively impact both the patient's physical and mental health. This review aims to explore nursing interventions specifically designed to address anxiety in patients undergoing laboratory testing, with a focus on an integrated approach that combines psychological and clinical strategies. The collaboration between psychiatric consultants, nurse specialists, and laboratory technicians is paramount in providing comprehensive care. This article highlights key interventions, including cognitive-behavioral therapy (CBT), relaxation techniques, patient education, and psychosocial support, that can be employed to reduce anxiety. In addition, the review emphasizes the essential role of effective communication and pre-test education in calming anxious patients. The integration of these techniques within a multidisciplinary framework ensures a more holistic approach to anxiety management. Through this collaboration, healthcare providers can create a supportive environment, helping patients feel more informed and emotionally secure during laboratory procedures. The findings suggest that the combined efforts of psychiatric consultants, nurse specialists, and laboratory technicians significantly reduce anxiety, increase patient compliance with necessary testing, and ultimately improve patient outcomes.

Keywords: *Nursing Interventions, Anxiety, Laboratory Testing, Integrated Approach, Psychiatric Consultant, Nurse Specialist, Laboratory Technician, Cognitive-Behavioral Therapy, Patient Education, Psychosocial Support, Relaxation Techniques.*

Introduction

Anxiety related to medical procedures is a widespread concern among patients, particularly in the context of laboratory testing. While laboratory tests are essential for diagnosing and monitoring various medical conditions, they often induce a heightened sense of worry and unease in patients. This anxiety may stem from several factors, including the fear of needles, blood tests, the potential for a serious diagnosis, or simply the unfamiliarity with medical procedures. For some patients, anxiety may escalate to a level that prevents them from completing the test altogether or causes delays in seeking necessary medical care. The impact of anxiety on patient compliance and the timely execution of necessary medical procedures underscores the importance of addressing this issue within healthcare settings (1).

The goal of this review is to explore the role of nursing interventions in managing anxiety during laboratory testing, specifically within the context of a collaborative, multidisciplinary approach. Nurses are often the first point of contact for patients in the clinical setting, making their role central in addressing emotional

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concerns. Through therapeutic communication, education, and relaxation techniques, nurses can alleviate anxiety and ensure that patients feel more comfortable undergoing laboratory procedures. However, nurses alone cannot fully address the complexity of anxiety. Therefore, an integrated approach involving psychiatric consultants and laboratory technicians is crucial in providing comprehensive care that addresses both the psychological and procedural aspects of laboratory testing (2).

Psychiatric consultants contribute their expertise in identifying and treating underlying anxiety disorders that may exacerbate the patient's response to medical testing. Nurse specialists, who possess knowledge in psychological and nursing practices, can offer valuable interventions such as cognitive-behavioral therapy (CBT) to help patients reframe negative thoughts and reduce stress. Laboratory technicians, while focused on the procedural aspects of testing, also play an essential role in reassuring patients and maintaining a calm and supportive environment. Together, these professionals form a cohesive team that works collaboratively to reduce anxiety, enhance patient comfort, and ensure that medical tests are completed with minimal distress (3).

In the following sections, this review will discuss specific nursing interventions that have been proven effective in managing anxiety in patients undergoing laboratory testing. It will explore the use of cognitive-behavioral therapy, relaxation techniques, patient education, and psychosocial support, and the integration of these strategies into the broader care model. By examining the collective efforts of nursing staff, psychiatric professionals, and laboratory technicians, we will see how a holistic approach can significantly improve patient outcomes, reduce anxiety, and foster a more positive healthcare experience.

Patients with Anxiety: An Integrated Psychological and Clinical Approach

Anxiety is a natural response to stress or uncertainty and can range from mild apprehension to intense fear and worry. It is characterized by physiological and psychological symptoms such as increased heart rate, difficulty breathing, restlessness, excessive worry, and irrational fears. While anxiety is a common experience, when it becomes chronic, disproportionate, or interferes with daily functioning, it may be classified as an anxiety disorder (2).

For patients in healthcare settings, particularly those undergoing laboratory testing, anxiety can be a significant barrier to receiving timely care and maintaining overall health. The fear of medical procedures, anticipation of diagnosis, or fear of pain often heightens the emotional and physiological response to testing, causing significant distress (4).

Anxiety in patients can manifest in various ways, including physical symptoms like nausea, dizziness, sweating, rapid heartbeats, or even panic attacks. Psychological symptoms might include a sense of impending doom, overestimation of the risks involved, catastrophizing, and avoidance behaviors. These responses can disrupt the process of receiving necessary medical tests and lead to delays in diagnosis and treatment, ultimately worsening health outcomes (5).

Psychological Approaches

Psychological interventions form the foundation of treatment for anxiety disorders, with various therapeutic modalities demonstrating efficacy: (6).

Cognitive Behavioral Therapy (CBT): CBT is the most researched and widely used form of psychotherapy for anxiety. It focuses on identifying and challenging irrational thoughts and beliefs that contribute to anxious feelings. CBT also employs techniques such as exposure therapy, where patients gradually confront feared situations, and relaxation training to manage physical symptoms of anxiety.

Mindfulness-Based Stress Reduction (MBSR): Mindfulness practices, including meditation and breathing exercises, help individuals become more aware of their thoughts and bodily sensations in the present moment. This reduces the tendency to ruminate on anxieties, thereby decreasing overall anxiety levels.

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Acceptance and Commitment Therapy (ACT): ACT encourages individuals to accept their anxiety and focus on engaging in meaningful activities, even in the presence of distressing emotions. By fostering psychological flexibility, ACT helps patients build resilience against anxiety-provoking situations.

Clinical Approaches

In addition to psychological interventions, clinical approaches often include medication and, in some cases, other medical treatments: (7).

Pharmacotherapy: Antidepressants, particularly selective serotonin reuptake inhibitors (SSRIs) and serotonin-norepinephrine reuptake inhibitors (SNRIs), are commonly prescribed for anxiety disorders. These medications help regulate neurotransmitters that influence mood and anxiety. Benzodiazepines may be used short-term for acute anxiety, although due to their addictive potential, their use is generally limited.

Integrated Mental Health Care: In settings such as primary care or integrated care models, a collaborative approach between mental health professionals and primary care providers ensures a comprehensive treatment plan. This model may involve shared decision-making, monitoring, and continuity of care to optimize treatment outcomes.

Psychiatric Consultation: When anxiety symptoms are severe or unresponsive to initial treatments, a psychiatric consultation can help determine the need for more intensive interventions. Psychiatrists may consider options such as medication adjustments, advanced psychotherapy techniques, or referral to specialized anxiety treatment centers.

The Role of Combined Psychological and Clinical Approaches

The integration of both psychological and clinical treatments has been shown to improve outcomes for patients with anxiety. For example, combining CBT with pharmacotherapy can address both the cognitive distortions that fuel anxiety and the neurobiological aspects of the disorder. This combination has demonstrated greater efficacy than either treatment alone, particularly in patients with more severe or treatment-resistant anxiety disorders (8).

A personalized approach is essential in selecting the right combination of therapies. Factors such as the type of anxiety disorder, the severity of symptoms, patient preferences, and comorbid conditions should guide treatment decisions (9).

Understanding Anxiety in Healthcare Contexts

Anxiety in healthcare contexts, especially regarding laboratory tests, involves not only fear of the unknown but also concerns about the medical outcomes. Many patients fear the potential for a diagnosis that could change their life, such as a chronic illness or life-threatening condition. Others may have had previous negative experiences with medical tests that now trigger heightened fear or anxiety, even in the absence of any immediate threat (10).

There are various types of anxiety disorders that may be relevant to patients undergoing laboratory tests: (11).

Generalized Anxiety Disorder (GAD): Patients with GAD often experience excessive and uncontrollable worry about a variety of concerns, including health. They may fear the outcomes of tests without having any specific reason, amplifying their stress and anxiety levels.

Panic Disorder: Individuals with panic disorder may experience sudden and intense feelings of fear or terror, often accompanied by physical symptoms such as chest pain, shortness of breath, or dizziness. Laboratory tests, especially those involving needles or blood, can act as triggers for panic attacks.

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Specific Phobia (Needle Phobia/Blood Phobia): Many individuals develop specific phobias about needles, blood draws, or other laboratory-related procedures. For these patients, just the thought of undergoing a test may cause overwhelming anxiety, which can lead to avoidance behaviors, such as delaying or refusing tests.

Post-Traumatic Stress Disorder (PTSD): For patients who have experienced past traumatic medical experiences—such as invasive procedures or negative healthcare outcomes—laboratory testing can evoke intense psychological distress, leading to symptoms of PTSD. These patients may have flashbacks or avoidant behaviors linked to past tests or hospital experiences.

Managing anxiety in patients undergoing laboratory tests is a multi-layered process that requires a nuanced approach involving both psychological and clinical expertise. Anxiety related to laboratory testing, while common, can be particularly distressing for patients and can lead to avoidance behaviors, delayed care, and complications in diagnosis and treatment. To reduce the negative impacts of anxiety, a collaborative approach involving psychiatric consultants, nurse specialists, and laboratory technicians is essential. Together, these professionals form a team that provides not only the clinical procedures but also the emotional and psychological care necessary to support patients through potentially distressing tests (12).

Role of Psychiatric Consultants in Managing Anxiety

Psychiatric consultants are integral in evaluating and treating underlying psychological conditions that contribute to or exacerbate anxiety in patients undergoing laboratory tests. These specialists use a combination of psychological assessments, therapeutic interventions, and, in some cases, medications to provide comprehensive care to anxious patients (13).

Comprehensive Psychological Assessment

Before implementing treatment strategies, psychiatric consultants conduct a thorough psychological assessment to understand the patient's history, triggers for anxiety, and the severity of their emotional distress. This evaluation involves understanding the patient's fear of the laboratory test in particular, and also identifying whether any comorbid conditions like generalized anxiety disorder (GAD), panic disorder, or specific phobias are at play. By collecting information about the patient's past experiences with medical procedures and their general psychological state, psychiatric consultants can develop a tailored treatment plan for anxiety management (13).

The psychiatric assessment includes exploring the patient's past experiences with laboratory tests and any trauma or negative associations they may have formed. This step allows psychiatric consultants to gauge the level of distress the patient may experience during the test and to implement personalized techniques that minimize these distressing thoughts and emotions (10).

Cognitive-Behavioral Therapy (CBT)

CBT is one of the most widely used and effective psychological therapies for treating anxiety, especially in the context of medical procedures. In CBT, psychiatric consultants help patients identify irrational and fear-inducing thought patterns that increase their anxiety about laboratory tests. For example, a patient may catastrophize the potential outcomes of the test, imagining the worst possible scenario. CBT helps patients reframe these negative thoughts by focusing on more rational and balanced perspectives (14).

The consultant works with the patient to replace thoughts like "The test will hurt so much that I won't be able to handle it" with more positive or neutral statements such as "The test might be uncomfortable for a few moments, but it will be over quickly, and I'll feel relieved afterward." These cognitive shifts reduce anxiety by removing the emotional charge around the test (15).

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Exposure Therapy

Exposure therapy is another psychological approach used by psychiatric consultants to treat patients with severe anxiety related to laboratory testing. This method helps desensitize patients to the source of their fear—whether that is a needle, the sight of blood, or the anticipation of a test result. In exposure therapy, the patient is gradually exposed to the anxiety-inducing stimulus in a controlled and safe environment, allowing them to process their fear without being overwhelmed (15).

For example, a psychiatric consultant might begin with visual aids or videos of a needle insertion, moving progressively to discussions about the procedure, and eventually, if the patient is open to it, bringing the patient to the testing site for mock exposures. Over time, these incremental exposures can significantly reduce the power of the patient's anxiety, improving their ability to face medical procedures without overwhelming distress (16).

Medication Management

In cases where anxiety is severe and the patient experiences panic attacks, the psychiatric consultant may prescribe medications as part of the treatment plan. Short-acting medications such as benzodiazepines may be used on an as-needed basis to manage acute anxiety during the testing procedure, particularly for patients who experience intense fear at the mere thought of undergoing a test. For longer-term management, selective serotonin reuptake inhibitors (SSRIs) or other anxiolytics might be used to reduce overall anxiety levels over time (17).

While medication can be helpful in some cases, it is generally considered an adjunct to psychological interventions, not a replacement. Psychiatric consultants will often collaborate with other healthcare providers to ensure that medication is prescribed appropriately and in combination with other therapeutic approaches (18).

Nurse Specialist's Role in Managing Anxiety

Nurses, particularly nurse specialists trained in mental health and anxiety management, have a direct and pivotal role in helping to reduce anxiety during laboratory testing. Nurses are often the first point of contact and establish the foundational care relationship, which helps set the tone for the patient's experience with the procedure (19).

Pre-Test Assessment and Patient Education

Before the laboratory test, nurses assess the patient's anxiety levels through observation and by asking open-ended questions about their feelings. For instance, a nurse may ask, "How do you feel about the test you're about to undergo? Are there any specific worries or concerns you have?" (20).

This assessment is critical in identifying patients who may require additional support and intervention. Patients who report significant anxiety may benefit from information about the procedure, and this is where the nurse's role in patient education becomes vital. Clear communication about what the patient can expect during the laboratory test reduces the fear of the unknown, one of the primary triggers for anxiety. For example, a nurse might explain that "The blood draw will take just a minute, and the needle will only feel like a quick pinch." (20).

Cognitive-Behavioral Techniques and Anxiety Reduction

Nurses skilled in psychological techniques can also use cognitive-behavioral interventions directly with patients. As part of this approach, they may use guided relaxation, thought restructuring, or mindfulness exercises to help the patient reframe negative thoughts and reduce physiological responses to anxiety (21).

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For example, nurses may guide patients through a progressive muscle relaxation (PMR) exercise, which involves tensing and releasing different muscle groups to alleviate physical tension caused by anxiety. This process encourages patients to identify areas of tension in the body and consciously relax them, creating a greater sense of calm and control. Similarly, guided breathing exercises, where patients focus on taking slow, deep breaths, can slow heart rate, reduce blood pressure, and activate the body's natural relaxation response (22).

Calming and Reassuring Presence During the Test

During the laboratory procedure, nurses continue to provide emotional support by offering reassurance and encouragement. Anxiety can often be exacerbated during the test itself, especially for patients who may be needle phobic or who have had negative past experiences with medical procedures. Nurses play a key role in ensuring that patients remain calm during the test, whether through gentle communication or by simply offering a calming presence (23).

For example, if a patient becomes distressed during a blood draw, a nurse might gently remind them, "You're doing great. This will be over in just a second." Offering comforting words like these helps patients focus on their immediate experience and prevents them from becoming overwhelmed by their fears. Nurses can also offer physical comfort, such as holding the patient's hand or encouraging them to close their eyes, to further ease the emotional tension (24).

Role of Laboratory Technicians in Anxiety Management

While laboratory technicians are often the individuals directly involved in performing the medical procedures, their ability to reduce anxiety is equally important. Creating a calm, non-threatening environment for the patient is essential, especially in procedures that involve needles, blood draws, or other invasive techniques (9).

Establishing Trust and Connection

Building a rapport with the patient is crucial. Laboratory technicians can help ease patient anxiety by introducing themselves and clearly explaining the procedure in simple, reassuring terms. Establishing trust is particularly important for patients who have had traumatic experiences with needles or medical tests in the past (25).

For example, technicians might say, "I know that it can feel a little intimidating, but I'm here to make sure you're comfortable and to answer any questions you may have before we start." This helps the patient feel more at ease with the process and less apprehensive about the unknown (25).

Distraction Techniques and Reassurance

To further reduce anxiety, laboratory technicians can use distraction techniques. Encouraging patients to engage in light conversation, focus on a relaxing image or object, or even play music can help keep their minds off the procedure. Some technicians might also give patients the option to close their eyes during the procedure, thus removing the visual aspect of the test that may heighten anxiety (26).

Throughout the procedure, technicians should maintain a steady flow of communication with the patient, explaining each step in advance and offering continuous reassurance. For example, the technician may say, "You'll feel a small pinch when the needle goes in, but it will only last a second. I'll be right here with you the whole time." (27).

Procedural Support and Sensitivity to the Patient's Needs

Finally, technicians need to be sensitive to the emotional state of the patient. If a patient begins to exhibit signs of distress, technicians can pause the procedure and allow the patient to regain composure. This

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empathy and sensitivity to the patient's emotional well-being help create a positive environment where the patient feels supported (28).

Challenges in Managing Anxiety in Patients

Lack of Awareness or Training Among Healthcare Providers

Many healthcare professionals, particularly those in laboratory settings, may not have the necessary training or awareness of the psychological aspects of patient care. Laboratory technicians may focus on the technical aspects of the procedure without understanding the potential psychological distress patients experience. As a result, anxiety management may not be adequately integrated into the overall care process (29).

Time Constraints

The time-sensitive nature of laboratory procedures can limit the ability of healthcare providers to offer adequate emotional support. Psychiatrists or nurse specialists may struggle to engage in therapeutic interventions with anxious patients during short testing windows. This makes it difficult to implement cognitive-behavioral strategies or perform detailed assessments to alleviate anxiety before, during, or after testing (30).

Resistance to Psychological Interventions

Some patients may resist or feel uncomfortable with psychological interventions, especially if they are unfamiliar with mental health services or perceive their anxiety as a sign of weakness. Cultural factors or personal beliefs may also play a role in limiting the patient's willingness to participate in integrated psychological care, despite its potential effectiveness (30).

Fragmentation of Care

In many healthcare systems, psychiatric services, nursing care, and laboratory technicians work in silos, which can result in fragmented care. This lack of communication and collaboration can hinder the creation of a seamless, patient-centered approach to anxiety management. Without a coordinated approach, the patient may not receive holistic care, leading to anxiety that could affect test results or patient cooperation (31).

Patient-Specific Variability

The diversity of anxiety experiences means that a single approach might not work for all patients. Some patients might have clinical anxiety disorders that require medication management, while others may need only supportive care and education. Personal preferences, past medical experiences, and differing cultural attitudes toward healthcare and mental health complicate efforts to provide a one-size-fits-all solution (30).

Stigma Surrounding Mental Health

Many patients may feel stigma around seeking psychological help for anxiety, especially in the context of medical procedures. This stigma can prevent patients from fully engaging with psychological or psychiatric support, even when it would benefit their overall well-being and medical outcomes (31).

Conclusion

Anxiety related to laboratory testing is a common, but often manageable, issue. By taking a collaborative, multidisciplinary approach, healthcare providers can effectively alleviate patient anxiety, enhancing both the emotional and clinical aspects of patient care. The combined efforts of psychiatric consultants, nurse specialists, and laboratory technicians create a seamless support system that addresses the unique psychological and procedural challenges patients face. This integrated approach ensures that patients feel

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informed, supported, and more in control, ultimately leading to improved compliance with necessary tests, reduced anxiety, and better overall health outcomes.

Through education, psychological interventions, therapeutic communication, and a supportive clinical environment, healthcare providers can significantly reduce anxiety and foster a positive, patient-centered healthcare experience.

References

Horenstein, A., & Heimberg, R. G. (2020). Anxiety disorders and healthcare utilization: A systematic review. Clinical psychology review, 81, 101894.

Lebel, S., Mutsaers, B., Tomei, C., Leclair, C. S., Jones, G., Petricone-Westwood, D., ... & Dinkel, A. (2020). Health anxiety and illness-related fears across diverse chronic illnesses: A systematic review on conceptualization, measurement, prevalence, course, and correlates. Plos one, 15(7), e0234124.

Kontoangelos, K., Economou, M., & Papageorgiou, C. (2020). Mental health effects of COVID-19 pandemia: a review of clinical and psychological traits. Psychiatry investigation, 17(6), 491.

Obeagu, E. I., & Akinleye, C. A. (2024). Minimizing Treatment-Related Depression: Blood Transfusions and Mental Health Support in HIV Care. Elite Journal of Public Health, 2(7), 16-24.

Uscher-Pines, L., Sousa, J., Raja, P., Mehrotra, A., Barnett, M., & Huskamp, H. A. (2020). Treatment of opioid use disorder during COVID-19: Experiences of clinicians transitioning to telemedicine. Journal of substance abuse treatment, 118, 108124.

Koenigsberg, J. Z. (2020). Anxiety disorders: Integrated psychotherapy approaches. Routledge.

Glock, G., Hilsenroth, M., & Curtis, R. (2018). Therapeutic interventions patients with anxiety problems find most helpful: A case for integration?. Journal of Psychotherapy Integration, 28(2), 233.

Pinho, L. G. D., Lopes, M. J., Correia, T., Sampaio, F., Arco, H. R. D., Mendes, A., ... & Fonseca, C. (2021). Patient-centered care for patients with depression or anxiety disorder: an integrative review. Journal of personalized medicine, 11(8), 776.

Pereira, L., Figueiredo-Braga, M., & Carvalho, I. P. (2016). Preoperative anxiety in ambulatory surgery: The impact of an empathic patient-centered approach on psychological and clinical outcomes. Patient education and counseling, 99(5), 733-738.

Higgins-Chen, A. T., Abdallah, S. B., Dwyer, J. B., Kaye, A. P., Angarita, G. A., & Bloch, M. H. (2019). Severe illness anxiety treated by integrating inpatient psychotherapy with medical care and minimizing reassurance. Frontiers in psychiatry, 10, 150.

Amorim, D., Amado, J., Brito, I., Costeira, C., Amorim, N., & Machado, J. (2018). Integrative medicine in anxiety disorders. Complementary therapies in clinical practice, 31, 215-219.

Sadock, E., Perrin, P. B., Grinnell, R. M., Rybarczyk, B., & Auerbach, S. M. (2017). Initial and follow-up evaluations of integrated psychological services for anxiety and depression in a safety net primary care clinic. Journal of clinical psychology, 73(10), 1462-1481.

Kroenke, K., & Unutzer, J. (2017). Closing the false divide: sustainable approaches to integrating mental health services into primary care. Journal of general internal medicine, 32(4), 404-410.

Shepardson, R. L., Funderburk, J. S., & Weisberg, R. B. (2016). Adapting evidence-based, cognitive-behavioral interventions for anxiety for use with adults in integrated primary care settings. Families, Systems, & Health, 34(2), 114.

Warikoo, N., & Demirdogen, E. S. (2021). Effective clinical caseload management strategies from the perspective of community consultant psychiatrist: Qualitative analysis. medRxiv, 2021-05.

Lam, R. W., McIntosh, D., Wang, J., Enns, M. W., Kolivakis, T., Michalak, E. E., ... & CANMAT Depression Work Group. (2016). Canadian Network for Mood and Anxiety Treatments (CANMAT) 2016 clinical guidelines for the management of adults with major depressive disorder: section 1. Disease burden and principles of care. The Canadian Journal of Psychiatry, 61(9), 510-523.

Felton, A., Repper, J., & Avis, M. (2018). Therapeutic relationships, risk, and mental health practice. International Journal of Mental Health Nursing, 27(3), 1137-1148.

Hoeft, T. J., Fortney, J. C., Patel, V., & Unützer, J. (2018). Task-sharing approaches to improve mental health care in rural and other low-resource settings: a systematic review. The Journal of rural health, 34(1), 48-62.

Zimmermann, T., Puschmann, E., van den Bussche, H., Wiese, B., Ernst, A., Porzelt, S., ... & Scherer, M. (2016). Collaborative nurse-led self-management support for primary care patients with anxiety, depressive or somatic symptoms: Cluster-randomised controlled trial (findings of the SMADS study). International journal of nursing studies, 63, 101-111.

Theed, R., Eccles, F. J., Travers, V., & Simpson, J. (2016). Anxiety and depression in individuals with Parkinson's disease: perspectives of the nurse specialist. British Journal of Neuroscience Nursing, 12(3), 132-139.

Ghiai, A., Mohamed, T. Y., Hussain, M., Hayes, E., & Zakrzewska, J. M. (2020). The role of a clinical nurse specialist in managing patients with trigeminal neuralgia. British Journal of Pain, 14(3), 180-187.

Kerr, H., Donovan, M., & McSorley, O. (2021). Evaluation of the role of the clinical Nurse Specialist in cancer care: an integrative literature review. European journal of cancer care, 30(3), e13415.

Montague-Hellen, K. (2024). Role of clinical nurse specialists in supporting people with chronic cancer to develop expertise in their condition. Cancer Nursing Practice, 23(5).

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Ashford, M. T., Ayers, S., & Olander, E. K. (2017). Supporting women with postpartum anxiety: exploring views and experiences of specialist community public health nurses in the UK. Health & social care in the community, 25(3), 1257-1264.

Althumairi, A., Ayed AlOtaibi, N. M., Alumran, A., Alrayes, S., & Owaidah, A. (2022). Factors associated with anxiety symptoms among medical laboratory professionals in Khobar: Single institution study. Frontiers in Public Health, 10, 917619.

John, N., Martin, D., & Hoy, L. (2023). Anaesthetic nurse specialist role in perioperative anaesthetic management of patients who are morbidly obese. British Journal of Nursing, 32(13), 644-651.

Ouyang, Z. R., Li, Z. R., Qin, P., Zhang, Y. L., Zhao, M., Li, J. Y., ... & Zhao, J. H. (2023). Mental health and psychosocial problems among laboratory technicians in response to the COVID-19 pandemic in Hebei, China. Heliyon, 9(2).

Alnakhli, F. H., Alkadi, H. M., Ghazwani, Q. A. S., Alahmari, A. A. Q., Alqahtani, N. M. H., Almuznae, M. A. A., ... & Alharbi, M. A. (2022). Collaborative Care In Dentistry: How Dental Doctors, Lab Technicians, And Assistants Work Together For Patient Success. Journal of Namibian Studies: History Politics Culture, 32, 1520-1529.

Sharma, A., Kudesia, P., Shi, Q., & Gandhi, R. (2016). Anxiety and depression in patients with osteoarthritis: impact and management challenges. Open access rheumatology: research and reviews, 103-113.

Bussotti, M., & Sommaruga, M. (2018). Anxiety and depression in patients with pulmonary hypertension: impact and management challenges. Vascular health and risk management, 349-360.

Goh, Z. S., & Griva, K. (2018). Anxiety and depression in patients with end-stage renal disease: impact and management challenges–a narrative review. International journal of nephrology and renovascular disease, 93-102.