



Collaborative Care: The Role Of Respiratory Therapists And Nurses In Managing Respiratory Disorders.

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Abstract

Effective management of respiratory disorders, such as asthma, chronic obstructive pulmonary disease (COPD), and acute respiratory distress syndrome (ARDS), requires the collaboration of a multidisciplinary healthcare team. Among these professionals, respiratory therapists (RTs) and nurses play a central role in providing comprehensive, patient-centered respiratory care. This article examines the roles and collaborative efforts of RTs and nurses in assessing, treating, and managing patients with respiratory disorders. It highlights how their combined expertise in respiratory therapies, patient education, monitoring, and emergency intervention contributes to improved patient outcomes and better quality of life for individuals with respiratory illnesses. Key strategies for enhancing teamwork, including communication protocols, regular interdisciplinary training, and clear role delineation, are discussed. Addressing the unique challenges in respiratory care collaboration can lead to optimized treatment and support for respiratory patients, particularly those in critical care or chronic management settings.

Keywords- Collaborative Care, Respiratory Disorders, Respiratory Therapists, Nurses, Multidisciplinary Teamwork, COPD, Asthma, Patient-Centered Care, Interdisciplinary Training, Respiratory Therapy.

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Introduction

Respiratory disorders, including asthma, chronic obstructive pulmonary disease (COPD), and acute respiratory distress syndrome (ARDS), are among the most common and complex health issues impacting global populations. These conditions require a comprehensive and dynamic approach to care, often involving multiple healthcare professionals to ensure optimal outcomes. In healthcare settings, respiratory therapists (RTs) and nurses play critical roles in managing these disorders, combining their expertise to assess, treat, and educate patients effectively.

The collaboration between RTs and nurses is particularly essential in environments such as intensive care units (ICUs), emergency departments, and pulmonary rehabilitation settings, where patients may experience acute respiratory episodes or need chronic disease management. By working together, RTs and nurses can provide a holistic approach to care, addressing both physiological and psychosocial needs.

This article examines the specific roles of respiratory therapists and nurses in managing respiratory disorders, focusing on how collaborative strategies contribute to improved patient outcomes. It also highlights the challenges faced in achieving effective collaboration and offers strategies to enhance teamwork in respiratory care settings. Through a coordinated, patient-centered approach, RTs and nurses ensure comprehensive care that maximizes recovery potential and improves the quality of life for individuals with respiratory conditions.

The Role of Respiratory Therapists in Managing Respiratory Disorders

Respiratory therapists (RTs) are specialized healthcare professionals dedicated to assessing, treating, and caring for patients with respiratory and cardiopulmonary conditions. They possess advanced knowledge in respiratory therapy techniques, which are essential for patients experiencing respiratory distress, chronic respiratory diseases, or acute respiratory emergencies. In managing respiratory disorders, RTs focus on optimizing lung function, preventing complications, and improving patients' overall quality of life. Here are the core responsibilities of respiratory therapists in managing respiratory disorders:

1. **Administering Respiratory Therapies-**RTs are responsible for delivering and managing various respiratory therapies, such as oxygen therapy, aerosolized medication treatments, and mechanical ventilation. For patients with conditions like asthma, COPD, and ARDS, RTs select

appropriate oxygen delivery devices and settings based on individual needs and adjust treatments as conditions evolve. In cases of severe respiratory distress, RTs initiate and manage non-invasive and invasive ventilation to maintain optimal oxygenation and ventilation.¹

2. **Conducting Pulmonary Function Tests (PFTs)**- Pulmonary function testing is a critical diagnostic tool used to assess the degree of lung impairment in patients with respiratory conditions. RTs conduct PFTs to measure lung volumes, capacities, and flow rates, which are key indicators in diagnosing and monitoring diseases such as asthma, COPD, and restrictive lung diseases. By interpreting the results of these tests, RTs play an essential role in guiding the clinical team's treatment planning and monitoring disease progression.²

3. **Operating Advanced Respiratory Equipment**- RTs are trained to operate and monitor sophisticated respiratory equipment, particularly in critical care settings where patients may require advanced respiratory support. For example, they manage ventilators in the ICU, carefully monitoring patients' responses to ventilation settings and adjusting them based on blood gas analysis and other indicators. This expertise is crucial for patients with severe respiratory failure, ensuring they receive tailored support that optimizes their breathing while minimizing potential complications.

4. **Patient and Family Education** -Education is a vital component of respiratory therapy, especially for patients with chronic respiratory conditions who need to manage their symptoms long-term. RTs educate patients and families on medication administration techniques, such as proper inhaler and nebulizer use, oxygen therapy at home, and techniques for conserving energy during breathing. They also provide guidance on lifestyle modifications, such as smoking cessation, which can prevent further lung damage and improve respiratory health outcomes.

5. **Emergency Response and Critical Care Support**- In emergency situations, such as respiratory arrest or acute asthma exacerbations, RTs play a frontline role in stabilizing the patient's respiratory status. They are skilled in advanced airway management techniques, including intubation, and collaborate with the critical care team to provide life-saving respiratory support. Their ability to respond swiftly and appropriately in emergency settings is essential to preventing severe complications and ensuring patient survival.

6. **Monitoring and Adjusting Treatment Plans**- RTs closely monitor patients' respiratory status, noting any changes in lung function or symptoms that may require treatment adjustments. Through continuous assessment, RTs can detect signs of deterioration early and collaborate with physicians and nurses to modify care plans as necessary. This proactive monitoring is especially important in chronic disease management, as it allows for timely interventions that can prevent hospital readmissions and complications.³

Conclusion of RT Role

Respiratory therapists bring an invaluable combination of technical expertise and patient-centered care to the management of respiratory disorders. Their roles encompass not only the administration of complex therapies and the operation of specialized equipment but also educating patients and families to ensure adherence to treatment plans. By delivering high-quality respiratory care and working closely with other healthcare providers, RTs play a central role in managing respiratory disorders, improving patient outcomes, and enhancing the overall effectiveness of the healthcare team's collaborative efforts.

The Role of Nurses in Managing Respiratory Disorders

Nurses play a crucial role in the comprehensive management of respiratory disorders, often serving as the first point of contact for patients with respiratory complaints. Their responsibilities extend beyond physical care to include patient education, emotional support, and coordination within the healthcare team. Nurses work across diverse settings, from acute hospital environments to community care, supporting patients with respiratory conditions such as asthma, chronic obstructive pulmonary disease (COPD), pneumonia, and acute respiratory distress syndrome (ARDS). Below are the key roles nurses fulfill in managing respiratory disorders:

1. **Initial and Ongoing Patient Assessment** -Nurses are responsible for conducting thorough assessments to evaluate patients' respiratory status. This includes monitoring vital signs (e.g., respiratory rate, oxygen saturation, heart rate), observing breathing patterns, and assessing for signs of respiratory distress such as labored breathing or cyanosis. By performing regular assessments, nurses can identify early signs of deterioration and escalate care to prevent complications, especially in patients with chronic respiratory diseases.
2. **Administering and Monitoring Medications**- Nurses administer prescribed respiratory medications, including bronchodilators, corticosteroids, and antibiotics, as part of the treatment plan for conditions like asthma and COPD. They also monitor patients for potential adverse effects, such as tachycardia or respiratory depression, and assess the effectiveness of these medications. Promptly addressing any side effects and coordinating with the healthcare team allows for safer and more effective medication management.
3. **Providing Oxygen Therapy and Breathing Assistance** -In patients with low blood oxygen levels or respiratory distress, nurses initiate and manage oxygen therapy according to prescribed protocols. This may involve setting up oxygen delivery devices such as nasal cannulas, masks, or high-flow systems and ensuring they are used safely and comfortably. In some settings, nurses may also

assist respiratory therapists in setting up and monitoring non-invasive ventilation, such as CPAP or BiPAP, for patients who need additional breathing support.⁴

4. **Education and Self-Management Support** -Education is a critical role for nurses, particularly for patients with chronic respiratory disorders. Nurses teach patients and their families about disease management techniques, medication adherence, and the correct use of inhalers and nebulizers. They also provide guidance on symptom recognition, helping patients to understand when to seek help in case of worsening symptoms. By empowering patients with knowledge, nurses enable individuals to manage their conditions effectively and prevent exacerbations, thereby improving quality of life and reducing hospital readmissions.

5. **Implementing and Monitoring Infection Control Measures** -Patients with respiratory disorders, especially those with compromised immune systems or chronic lung disease, are at higher risk of infections. Nurses play a critical role in implementing infection control measures, such as hand hygiene, respiratory etiquette, and isolation protocols when necessary. They also educate patients on ways to minimize infection risks, such as getting vaccinated and avoiding exposure to respiratory pathogens.

6. **Providing Psychosocial Support** -Respiratory disorders can significantly impact a patient's quality of life, often leading to anxiety, depression, and social isolation due to physical limitations. Nurses provide emotional support by listening to patients' concerns and helping them cope with their conditions. For patients with long-term respiratory issues, nurses may coordinate with mental health professionals to offer comprehensive support for psychological well-being, which is essential for holistic patient care.

7. **Coordinating Multidisciplinary Care** -Nurses serve as vital links within the healthcare team, coordinating with respiratory therapists, physicians, and other specialists to deliver seamless care. They communicate updates on patient progress, share assessment findings, and ensure that all team members are aligned in the treatment approach. This collaboration is essential in critical and acute care settings where rapid changes in a patient's respiratory status require timely interventions.

Conclusion of Nursing Role

Nurses play a pivotal role in managing respiratory disorders by combining clinical expertise with compassionate care. They are often the backbone of respiratory management, ensuring that patients receive timely assessments, appropriate medications, and necessary education for self-management. In collaboration with other healthcare providers, nurses contribute to a patient-centered approach that addresses both physical and emotional aspects of respiratory care, helping patients achieve optimal health outcomes and maintain a better quality of life. Through their direct and continuous

interaction with patients, nurses not only facilitate effective treatment but also foster a therapeutic relationship that builds trust and promotes adherence to care plans.

Collaborative Strategies for Effective Respiratory Care

Effective respiratory care relies on close collaboration among healthcare professionals, particularly respiratory therapists (RTs) and nurses, to deliver seamless, patient-centered care. Given the complexity of respiratory disorders, collaborative strategies help optimize treatment outcomes by integrating the unique skills and expertise of each team member. Below are some essential strategies that support collaboration between respiratory therapists, nurses, and other healthcare professionals in managing respiratory disorders:⁵

- 1. Interdisciplinary Communication and Information Sharing** -Clear and frequent communication is fundamental to effective collaboration in respiratory care. Regular interdisciplinary rounds, real-time updates, and shared electronic health records (EHRs) allow RTs, nurses, and other team members to stay informed of a patient's progress, respiratory status, and any recent interventions. This practice minimizes misunderstandings, ensures continuity of care, and allows all team members to address any concerns proactively. Daily huddles or bedside handoffs also enhance transparency and keep the entire team aligned in their goals for the patient.
- 2. Standardized Protocols and Guidelines** -Implementing standardized respiratory care protocols and guidelines ensures that all team members understand their roles and follow evidence-based practices for common respiratory treatments and emergencies. For instance, ventilator weaning protocols or oxygen therapy guidelines can help both nurses and RTs to follow a consistent approach, reducing variability and improving patient outcomes. Protocols also provide clear decision-making pathways, so team members can act promptly in response to changes in the patient's condition.
- 3. Cross-Training and Education** -Cross-training nurses and respiratory therapists to understand each other's roles and basic competencies enhances mutual respect, understanding, and teamwork. For example, nurses trained in respiratory equipment management or RTs knowledgeable in basic nursing assessments can fill in minor gaps when one professional is unavailable. Joint educational sessions and workshops help both groups stay informed of the latest advancements in respiratory care, fostering shared knowledge and collaborative problem-solving.
- 4. Collaborative Care Planning and Goal Setting** -Joint care planning and goal-setting sessions, involving the patient whenever possible, enable nurses, RTs, and physicians to create a unified approach to respiratory care. Each professional's input is critical: nurses provide insights into day-to-day patient care, while RTs offer expertise in specific respiratory interventions. Setting clear, shared

goals helps ensure that all team members understand the primary objectives—whether that’s reducing respiratory distress, improving oxygenation, or preparing the patient for discharge—and can work in concert to achieve them.

5. **Implementing a Patient-Centered Approach** -A patient-centered approach is central to effective respiratory care, where all team members focus on the individual needs, preferences, and values of the patient. For patients with chronic respiratory disorders, this often involves collaborative efforts to educate the patient on self-management, symptom recognition, and adherence to care plans. Nurses and RTs can jointly develop and deliver educational sessions for patients and their families, ensuring a consistent message and empowering patients to take an active role in their own care.

6. **Utilizing Technology to Support Collaboration** -Advanced technology can facilitate better collaboration through real-time patient monitoring, shared digital tools, and telecommunication systems. For example, remote monitoring devices and digital records allow team members to view a patient’s respiratory data at any time, enhancing responsiveness. Communication platforms like secure messaging apps support faster, direct communication between RTs and nurses, enabling them to address urgent patient needs promptly and adjust care plans as necessary.

7. **Quality Improvement and Feedback Mechanisms** -Regularly reviewing patient outcomes, identifying areas for improvement, and incorporating feedback into practice are key strategies for enhancing respiratory care. Multidisciplinary teams can conduct case reviews or debrief after critical respiratory cases to discuss successes, identify areas for improvement, and establish lessons learned. This collaborative approach to quality improvement not only improves patient outcomes but also strengthens team cohesion and fosters a culture of continuous learning.⁶

8. **Emotional Support and Interpersonal Collaboration** -In respiratory care, particularly in critical cases, emotional support and trust among team members are essential. By fostering an environment of mutual respect and empathy, nurses and RTs can work more effectively together. Supporting each other during high-stress situations, sharing the workload, and acknowledging each other's contributions helps create a cohesive, resilient team dynamic, which ultimately enhances patient care quality.

Conclusion of Collaborative Strategies

Through these collaborative strategies, healthcare professionals can achieve a unified approach to respiratory care, ensuring that patients benefit from the combined expertise of RTs, nurses, and other care providers. Effective teamwork, built on communication, shared goals, and mutual respect, not only improves clinical outcomes but also enhances patient satisfaction and supports a more

rewarding work environment for caregivers. As respiratory conditions continue to rise globally, leveraging collaboration in respiratory care remains critical to addressing patient needs comprehensively and efficiently.

Challenges in Collaborative Respiratory Care

Collaborative respiratory care brings together diverse healthcare professionals, including respiratory therapists (RTs), nurses, and physicians, to provide comprehensive, patient-centered treatment. However, effective collaboration in this field faces several challenges due to differing roles, communication barriers, and operational constraints. Recognizing and addressing these challenges is essential to enhance the quality of respiratory care and improve patient outcomes. Key challenges include:

1. **Role Clarity and Overlapping Responsibilities** -In respiratory care, the responsibilities of nurses, respiratory therapists, and other providers may overlap, leading to confusion and role ambiguity. Without clear definitions, team members might duplicate tasks or miss essential steps, impacting patient care efficiency and outcomes. For instance, both nurses and RTs may administer respiratory treatments, which requires a clear understanding of who is responsible for each intervention in a given scenario.
2. **Communication Barriers** -Effective collaboration requires seamless communication among all team members, but communication barriers are common in fast-paced respiratory care settings. Miscommunication or lack of timely updates on patient status can lead to delayed interventions or errors, particularly in critical care. Inconsistent documentation or lack of access to shared electronic health records (EHRs) can further impede communication and lead to information gaps.
3. **Time Constraints and Workload Pressures** -Respiratory care often involves managing patients in acute or critical conditions, which creates a high-stress environment with heavy workloads. Time constraints can hinder collaboration, as healthcare providers may not have the time for detailed discussions or joint care planning. Additionally, staffing shortages in nursing or respiratory therapy can increase the burden on existing staff, limiting opportunities for team-based collaboration.
4. **Differences in Training and Expertise** -Respiratory therapists and nurses have different training backgrounds, which can sometimes lead to variations in approach or understanding of respiratory care practices. Nurses may focus on holistic, patient-centered care, while RTs are typically specialized in respiratory interventions and equipment. This difference in perspective can occasionally result in disagreements over treatment priorities or methods, especially in complex or ambiguous cases.

5. **Hierarchical Structures in Healthcare** -Traditional hierarchies in healthcare can affect collaborative dynamics, as some team members may hesitate to contribute their perspectives or defer to higher-ranking professionals. This can be particularly challenging in respiratory care, where nurses and RTs must communicate openly with physicians to provide comprehensive care. Hierarchical barriers may prevent team members from speaking up about patient safety concerns, leading to suboptimal decision-making.

6. **Resource Limitations and Equipment Shortages**-Limited access to respiratory equipment or supplies, such as ventilators or oxygen delivery systems, can hinder collaborative respiratory care. When resources are scarce, team members may struggle to provide necessary treatments in a timely manner, creating tension within the team. Shortages may force healthcare providers to prioritize patients, which can lead to disagreements and compromise collaboration efforts.

7. **Inadequate Protocols and Inconsistent Standards**-Respiratory care protocols and standards may vary across healthcare institutions, leading to inconsistencies in practices and potential conflicts within interdisciplinary teams. If protocols are unclear or not consistently applied, there can be discrepancies in how respiratory care is managed, particularly in emergency situations. Without standardized guidelines, team members may differ in their approach, resulting in delayed or fragmented care.

8. **Limited Opportunities for Joint Training and Team Building**-Joint training and team-building exercises are essential for fostering strong collaboration, yet opportunities for these are often limited in respiratory care settings. When nurses, RTs, and other professionals lack training in teamwork and interdisciplinary collaboration, it can lead to misunderstandings, inefficiencies, and weaker professional relationships. Cross-training that enables each professional to understand the other's role is valuable but rarely implemented due to time and resource constraints.

9. **Burnout and Emotional Stress**-High levels of stress and burnout among healthcare providers working in respiratory care, particularly during pandemics or flu seasons, can strain collaborative efforts. Burnout can lead to decreased morale, reduced communication, and a lack of trust within the team. Emotional exhaustion may cause team members to become less receptive to input, further complicating collaboration.

Challenges in collaborative respiratory care are multifaceted, involving communication barriers, role ambiguity, and resource constraints. Addressing these challenges requires institutional support for standardized protocols, role clarification, and team-building efforts. By improving communication, fostering mutual understanding, and reducing hierarchical barriers, healthcare teams can create an

environment that encourages effective collaboration, ultimately leading to better respiratory care and patient outcomes.

Conclusion

In respiratory care, the collaboration between nurses, respiratory therapists, and other healthcare professionals is essential to delivering high-quality, patient-centered treatment. Effective collaborative care improves patient outcomes, reduces the risk of complications, and enhances the overall patient experience. However, several challenges—such as role ambiguity, communication barriers, and limited resources—can hinder these efforts. Addressing these issues requires a comprehensive approach that includes establishing clear roles, fostering open communication, implementing standardized protocols, and providing opportunities for joint training and team-building exercises. A supportive institutional framework that encourages collaboration and prioritizes a culture of safety is vital for overcoming these obstacles.

Ultimately, enhancing collaboration in respiratory care allows healthcare providers to leverage each other's expertise and strengths, ensuring that patients receive comprehensive and timely interventions. As respiratory conditions continue to rise globally, strengthening interdisciplinary teamwork in respiratory care is more critical than ever. By fostering a collaborative culture and addressing the barriers that hinder teamwork, healthcare providers can deliver higher-quality care that meets the complex needs of patients with respiratory disorders.

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