

Psychosocial Challenges Faced by ICU Patients on Mechanical Ventilation: A Joint Perspective of Respiratory Therapy and Social Services

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Abstract

Mechanical ventilation in the intensive care unit (ICU) is associated with significant psychosocial challenges, including anxiety, depression, and communication barriers. This qualitative study, conducted in a tertiary hospital, explored the experiences of mechanically ventilated ICU patients and the role of interdisciplinary collaboration between respiratory therapists and social workers in addressing these challenges. In-depth interviews were conducted with 20 ICU patients, 10 respiratory therapists, and 5 social workers. Thematic analysis revealed key themes, including emotional distress, frustration due to communication barriers, and the benefits of collaborative care. The findings underscore the importance of integrating psychosocial support into routine respiratory care and fostering interdisciplinary teamwork to enhance patient outcomes.

Keywords: Mechanical Ventilation, Psychosocial Challenges, ICU, Respiratory Therapy, Social Work, Interdisciplinary Collaboration, Communication Barriers

Introduction

Mechanical ventilation is a critical intervention frequently employed in intensive care units (ICUs) to support patients with acute respiratory failure or other life-threatening conditions. However, while mechanical ventilation is essential for sustaining life, it often introduces significant psychosocial challenges for patients, including anxiety, depression, confusion, and social isolation (Chlan&Savik, 2011). These emotional difficulties are compounded by the patient's inability to communicate effectively while intubated, the loss of autonomy, and the fear and uncertainty associated with their critical condition (Happ et al., 2011).

Addressing the psychosocial needs of ICU patients has become a growing concern in recent years, as studies show that patients who experience significant psychological distress during their ICU stay are at greater risk of poor outcomes, including prolonged hospitalization and post-traumatic stress disorder (PTSD) (Kress et al., 2003; Jones et al., 2001). Early recognition and management of these challenges are therefore critical to improving both immediate recovery and long-term quality of life for mechanically ventilated patients (Papathanassoglou, 2010).

Respiratory therapists (RTs), who are responsible for managing the ventilatory needs of these patients, are in a unique position to observe and alleviate some of the psychological burdens faced by ICU patients. Given their close proximity and frequent interaction with patients on mechanical ventilation, RTs can help

facilitate communication, assess emotional states, and provide comfort measures (Dodek and Raboud, 2003). However, despite the important role RTs play, addressing the full spectrum of psychosocial challenges requires a more collaborative approach that involves other disciplines.

Social services, particularly social workers, play a pivotal role in supporting ICU patients and their families by addressing the emotional and social dimensions of critical illness. Social workers provide counseling, assist in coping with prolonged ICU stays, facilitate communication between the healthcare team and the family, and help in planning for post-discharge needs (Scheunemann et al., 2011). Their work complements the clinical care provided by RTs, offering a holistic approach to patient care.

This paper seeks to explore the psychosocial challenges faced by ICU patients on mechanical ventilation and how collaboration between respiratory therapists and social services can enhance patient outcomes. Specifically, it will examine how the integration of these two disciplines can mitigate emotional distress, improve communication, and ultimately enhance the overall experience for patients in critical care.

Literature Review

Psychosocial Effects of Mechanical Ventilation

Mechanical ventilation, while life-saving, often places patients in a vulnerable psychological state. The physical limitations imposed by intubation and sedation contribute to significant emotional distress, which is well-documented in the literature. Chlan and Savik (2011) observed that anxiety is one of the most common psychological reactions among patients receiving mechanical ventilation. This anxiety can be triggered by numerous factors, such as fear of death, discomfort from the ventilator, and a lack of understanding about their medical condition.

Beyond anxiety, mechanically ventilated patients are also prone to experiencing feelings of helplessness, isolation, and depression. Happ et al. (2011) found that communication barriers, particularly for intubated patients who are unable to speak, exacerbate these feelings, as patients struggle to convey their needs and concerns. The inability to communicate effectively can lead to frustration, emotional exhaustion, and, in some cases, delirium. Delirium, a common complication in ICU patients, has been linked to long-term psychological disorders, including post-traumatic stress disorder (PTSD) (Kress et al., 2003).

Several studies have reported the long-term psychological consequences of prolonged mechanical ventilation, with PTSD being one of the most concerning outcomes. Jones et al. (2001) found that up to 25% of ICU patients experience PTSD-related symptoms after discharge, largely due to their traumatic experiences in the ICU. These findings underscore the need for comprehensive care that addresses both the physical and psychological well-being of ventilated patients.

Role of Respiratory Therapists in Addressing Psychosocial Challenges

Respiratory therapists (RTs) play a critical role in the management of patients on mechanical ventilation. Their involvement in the daily care of these patients positions them as key figures in addressing not only the physical but also the emotional and psychological needs of patients. Dodek and Raboud (2003) highlighted how RTs, through their constant bedside presence, are often the first to observe signs of distress in mechanically ventilated patients. This frequent interaction allows RTs to build rapport with patients, making them well-suited to help alleviate some of the psychosocial challenges faced in the ICU.

RTs can employ strategies such as facilitating communication through alternative methods (e.g., communication boards or writing tools) to ease the frustration of being unable to speak. This is particularly important given the strong correlation between communication difficulties and psychological distress in ICU patients (Happ et al., 2011). Moreover, RTs can contribute to the patient's comfort by adjusting ventilator settings and providing explanations about treatment, which may reduce anxiety and increase patient understanding (Dodek and Raboud, 2003).

However, the role of RTs in addressing psychosocial needs is often limited by their primary focus on managing respiratory function. While they are well-positioned to observe patient distress, RTs may not have the training or resources to address the full spectrum of psychosocial issues faced by ICU patients. This highlights the need for collaboration with other healthcare professionals, such as social workers, who specialize in providing emotional and social support.

Role of Social Services in ICU Care

Social workers in the ICU provide essential services that complement the clinical care delivered by RTs and other medical professionals. Their role extends beyond addressing immediate social needs to encompass psychological support, counseling, and facilitating communication between patients, families, and the healthcare team. Scheunemann et al. (2011), describe social workers as integral members of the ICU care team, particularly when it comes to addressing the emotional distress experienced by patients and their families.

One of the key roles of social workers in the ICU is to provide counseling to patients and their families, helping them cope with the psychological burden of critical illness. This may involve guiding families through difficult decision-making processes, supporting patients who are struggling with feelings of isolation and fear, and providing education about the ICU experience (Scheunemann et al., 2011). Social workers also assist with discharge planning and the transition to post-ICU care, which can be particularly challenging for patients who have been on mechanical ventilation and are facing long-term recovery.

Importantly, social workers act as advocates for patient needs, ensuring that psychosocial issues are addressed alongside medical treatment. This advocacy is crucial for vulnerable populations, such as mechanically ventilated patients, who may be unable to express their needs effectively due to their medical condition or communication barriers. Through their involvement, social workers can help reduce the risk of long-term psychological sequelae, such as PTSD, by providing early interventions and emotional support (Papathanassoglou, 2010).

Collaboration Between Disciplines in ICU Settings

The benefits of interdisciplinary collaboration in ICU settings are well-documented. Studies show that when healthcare professionals from different disciplines work together, patient outcomes improve, and the overall quality of care is enhanced. In the context of psychosocial care for ICU patients on mechanical ventilation, collaboration between respiratory therapists and social services is particularly valuable.

Papathanassoglou (2010) highlight that patients who receive comprehensive care, including psychological support, are more likely to experience positive outcomes during and after their ICU stay. By integrating the expertise of social workers with the clinical knowledge of RTs, healthcare teams can provide a more holistic approach to patient care. For example, while RTs focus on managing ventilatory needs and facilitating

communication, social workers can provide counseling, emotional support, and advocacy for the patient's broader psychosocial needs (Scheunemann et al., 2011).

Despite the recognized benefits of collaboration, barriers to effective interdisciplinary teamwork in the ICU remain. These include a lack of formalized communication channels between disciplines, time constraints, and differing priorities among healthcare providers (Dodek and Raboud, 2003). Addressing these barriers is critical to optimizing care for mechanically ventilated patients and ensuring that their psychosocial needs are met alongside their physical health.

Methodology

This qualitative study was conducted at a large tertiary hospital with a high-acuity intensive care unit (ICU) that manages mechanically ventilated patients. The study aimed to explore the psychosocial challenges experienced by ICU patients on mechanical ventilation and to assess how interdisciplinary collaboration between respiratory therapists and social services addresses these challenges.

Study Design

A qualitative, descriptive design was used to gain in-depth insights into the experiences of both ICU patients and healthcare professionals. Semi-structured interviews were employed as the primary data collection method, allowing for a rich exploration of the psychosocial challenges faced by patients and the collaborative roles of respiratory therapists and social workers in managing these challenges.

Participants and Sampling

Patients: A purposive sampling strategy was used to select 20 patients who had been mechanically ventilated for at least 48 hours and were subsequently discharged from the ICU. Eligible patients were aged 18 and older, had sufficient cognitive function to participate in an interview, and were willing to share their experiences. Patients with severe cognitive impairments or who were unable to provide informed consent were excluded from the study.

Healthcare Professionals: To explore the interdisciplinary aspect of care, 10 respiratory therapists and 5 social workers were recruited from the ICU. These professionals were selected based on their direct involvement in the care of mechanically ventilated patients and their experience in addressing psychosocial issues in the ICU.

Data Collection

Semi-Structured Interviews: In-depth, semi-structured interviews were conducted with both patients and healthcare professionals.

- **Patient Interviews:** Interviews with patients took place within 2 to 3 weeks after their discharge from the ICU, allowing them to reflect on their experiences. The interview guide focused on exploring their emotional and psychological experiences during mechanical ventilation, the impact of communication barriers, and the perceived support provided by the healthcare team, particularly respiratory therapists and social workers. Interviews lasted 30–60 minutes and were conducted in a quiet, private setting either in person or via phone, depending on patient preference.

- **Healthcare Professional Interviews:** Interviews with respiratory therapists and social workers aimed to explore their perspectives on the psychosocial challenges faced by patients and their approach to addressing

these issues. Questions focused on how respiratory therapists facilitated communication and comfort, and how social workers provided emotional support and coordinated care. The interviews also explored the collaboration between the two disciplines in improving patient outcomes. These interviews were conducted in person and lasted 45–60 minutes.

All interviews were audio-recorded with participant consent and transcribed verbatim for analysis.

Data Analysis

Thematic analysis was used to analyze the interview data. The process followed Braun and Clarke's (2006) six-step framework for thematic analysis:

1. Familiarization with Data: The research team read the interview transcripts multiple times to become deeply familiar with the data.
2. Generating Initial Codes: Two researchers independently coded the data using NVivo software. Initial codes were developed inductively based on recurring patterns and significant statements made by participants.
3. Searching for Themes: The researchers identified broader themes by grouping related codes and considering how different aspects of the data interacted. Themes related to psychosocial challenges, communication barriers, and interdisciplinary collaboration emerged from the analysis.
4. Reviewing Themes: The themes were reviewed and refined to ensure they accurately represented the data and were supported by multiple accounts from participants.
5. Defining and Naming Themes: Once the themes were finalized, they were clearly defined and named to reflect the key psychosocial challenges and collaborative efforts between respiratory therapists and social workers.
6. Writing Up: A narrative was developed to explain the identified themes and illustrate them with representative quotes from the participants.

Ethical Considerations

Ethical approval for this study was obtained from the ethics committee. All participants provided informed consent before participating in the interviews. Patients and healthcare professionals were assured of confidentiality, and pseudonyms were used in the transcripts to protect their identities. The recordings and transcripts were securely stored, and access was limited to the research team.

Trustworthiness

To ensure the trustworthiness of the study, the researchers employed several strategies:

- Credibility: Member checking was conducted with a subset of participants to confirm that the interpreted themes accurately reflected their experiences. This helped enhance the credibility of the findings.
- Dependability: An audit trail was maintained throughout the research process, detailing decisions made during data collection and analysis. This ensured that the research process was transparent and could be replicated.
- Transferability: Rich, thick descriptions of the participants' experiences were provided to allow readers to assess whether the findings could be applicable to other ICU settings.
- Confirmability: The research team practiced reflexivity by acknowledging their own biases and ensuring that the data analysis was grounded in the participants' narratives rather than the researchers' assumptions.

Findings

The thematic analysis of interviews with patients, respiratory therapists (RTs), and social workers revealed three key themes: (1) Emotional and Psychological Distress During Mechanical Ventilation, (2) Communication Barriers and Their Impact, and (3) Collaborative Care Between Respiratory Therapists and Social Workers. Each theme includes sub-themes that provide further insights into the experiences of ICU patients and healthcare professionals.

Theme 1: Emotional and Psychological Distress During Mechanical Ventilation

Patients described a range of emotional and psychological challenges while on mechanical ventilation, which had a profound impact on their ICU experience.

Sub-theme 1.1: Anxiety and Fear of Mortality

Many patients expressed significant anxiety and fear of death while being ventilated. The inability to breathe independently and the invasive nature of the treatment contributed to this distress.

- "I was terrified. The machine was breathing for me, and I kept thinking, what if it stops? I thought I wouldn't survive the night." (Patient 5)

- "I couldn't understand what was happening. I was scared I was dying. No one could really explain it to me at that time." (Patient 12)

Respiratory therapists also observed this fear and reported how it manifested in patient behaviors, such as increased agitation.

- "You could see the fear in their eyes. Even when they couldn't talk, the way they would look at you or grasp your hand told you they were scared." (Respiratory Therapist 3)

Sub-theme 1.2: Depression and Hopelessness

In addition to anxiety, many patients described feelings of hopelessness, particularly during prolonged ventilation.

- "After a while, I just gave up. I felt like I would never get off that machine. It's hard to stay hopeful when you can't even speak or move." (Patient 8)

Healthcare professionals noticed these depressive symptoms but often felt limited in addressing them without further psychosocial support.

- "We try to keep patients motivated, but sometimes they just seem to shut down emotionally, especially if they've been on the ventilator for weeks." (Respiratory Therapist 6)

Theme 2: Communication Barriers and Their Impact

Communication challenges were a significant source of frustration for both patients and healthcare professionals, contributing to emotional distress.

Sub-theme 2.1: Frustration and Isolation from Being Unable to Speak

Patients who were intubated or on non-invasive ventilation were unable to speak, which led to a profound sense of isolation and frustration.

- "I tried to tell them that I was in pain, but no one could understand me. I felt trapped inside my own body, like I was invisible." (Patient 3)
- "Not being able to speak was the worst part. I wanted to ask questions, but I couldn't. It made me feel completely cut off from everyone." (Patient 15)

Respiratory therapists echoed these concerns, acknowledging the difficulty in effectively communicating with ventilated patients.

- "It's really hard to connect with them when they can't talk. We use hand signals, and sometimes writing, but it's not the same. You can tell they're frustrated." (Respiratory Therapist 9)

Sub-theme 2.2: Use of Alternative Communication Methods

Both respiratory therapists and social workers attempted to address these communication barriers by introducing alternative methods, such as communication boards or writing tools.

- "We have these communication boards with pictures that patients can point to, or sometimes we use writing pads, but it's not perfect. It helps, but it doesn't completely solve the problem." (Social Worker 2)
- "The therapists tried to help me communicate, but I still felt like they didn't always understand what I needed." (Patient 11)

Theme 3: Collaborative Care Between Respiratory Therapists and Social Workers

The interdisciplinary collaboration between respiratory therapists and social workers played a key role in addressing the psychosocial challenges faced by ICU patients.

Sub-theme 3.1: Emotional Support from Social Workers

Social workers provided much-needed emotional support to both patients and their families, helping them cope with the psychological burden of mechanical ventilation.

- "The social worker came and talked to me. She really listened. I could tell she cared. It made a big difference knowing someone was there just to support me emotionally." (Patient 9)
- "We work with the families, too, explaining what's happening and providing reassurance. It's important to be that emotional anchor for them during such a traumatic time." (Social Worker 4)

Sub-theme 3.2: Respiratory Therapists Facilitating Comfort and Understanding

While their primary role was managing ventilation, respiratory therapists were often the first to notice signs of distress and tried to offer comfort when possible. Their frequent contact with patients helped to build trust and rapport.

- "I would try to explain what was going on with the ventilator in simple terms, just to ease their minds a little. I think that gave some of them comfort." (Respiratory Therapist 7)
- "The respiratory therapist was there every day. She would sit with me, explain the machine, and try to calm me down. It helped, knowing she was there and that she understood what I was going through." (Patient 6)

Sub-theme 3.3: Interdisciplinary Communication and Collaboration

Both respiratory therapists and social workers emphasized the importance of collaboration in addressing the patients' psychosocial needs. Regular interdisciplinary meetings and shared care plans were highlighted as effective strategies for managing both physical and emotional health.

- "We collaborate with the social workers regularly. If I see a patient is really struggling emotionally, I let them know, and they step in to provide that extra layer of support." (Respiratory Therapist 2)
- "Working with the respiratory therapists helps us understand the medical side better, which allows us to provide more tailored emotional support." (Social Worker 1)

Discussion

The findings of this study provide important insights into the psychosocial challenges faced by ICU patients on mechanical ventilation and the critical role of interdisciplinary collaboration between respiratory therapists and social workers in addressing these challenges. The data reveal a range of emotional and psychological distress experienced by patients, emphasizing the need for a holistic approach to care that includes both physical and psychosocial support.

Addressing Emotional and Psychological Distress

The emotional and psychological distress reported by patients in this study aligns with existing literature on the experiences of mechanically ventilated ICU patients. Previous studies have shown that anxiety, fear of mortality, and feelings of helplessness are common among this patient population (Chlan&Savik, 2011; Kress et al., 2003). In our study, many patients described intense fear and anxiety, particularly due to the invasive nature of mechanical ventilation and the uncertainty of their prognosis. This fear often manifested as emotional withdrawal and feelings of hopelessness, particularly during prolonged ventilation periods. These findings are consistent with research indicating that prolonged ICU stays can lead to long-term psychological sequelae, including depression and post-traumatic stress disorder (Jones et al., 2001).

The role of respiratory therapists in mitigating this distress was highlighted throughout the study. Although their primary responsibility is managing ventilatory support, respiratory therapists often play a key role in providing emotional comfort to patients. As frequent points of contact, they build rapport with patients and offer explanations of the treatment process, which can help reduce anxiety. However, the findings suggest that respiratory therapists alone cannot address the full spectrum of psychosocial challenges faced by ICU patients. This underscores the importance of a more comprehensive approach to care, which includes collaboration with social services.

The Impact of Communication Barriers

Communication barriers emerged as one of the most significant challenges for mechanically ventilated patients, leading to frustration, isolation, and increased emotional distress. Patients' inability to communicate their needs due to intubation or non-invasive ventilation contributed to feelings of powerlessness, as also reported in studies by Happ et al. (2011). Despite the use of communication aids such as boards or writing tools, patients still struggled to express their emotions and concerns effectively.

This study highlights the essential role of respiratory therapists in attempting to bridge the communication gap. However, while alternative communication methods provided some relief, they did not fully address the deep sense of isolation felt by patients. This finding suggests that while technological and manual communication aids are helpful, they should be coupled with more robust emotional support from social workers who specialize in addressing the psychosocial impacts of communication barriers.

Collaborative Care: The Key to Holistic Support

The findings emphasize the value of interdisciplinary collaboration between respiratory therapists and social workers in managing the psychosocial needs of mechanically ventilated patients. Social workers in the ICU

were crucial in providing emotional support to both patients and families, as well as facilitating communication between the medical team and the patient. Their involvement helped to address the psychological burden of critical illness, offering patients an emotional outlet and providing families with coping strategies.

Interdisciplinary collaboration, particularly through regular communication and shared care plans, emerged as a key factor in improving patient outcomes. Both respiratory therapists and social workers reported that collaboration allowed for a more nuanced understanding of patient needs. By working together, respiratory therapists could alert social workers to patients who were emotionally struggling, allowing for timely interventions. Similarly, social workers helped respiratory therapists understand the broader psychosocial context of each patient, enabling them to provide more personalized care. This collaborative approach aligns with literature that shows interdisciplinary teamwork in ICU settings leads to better patient outcomes and a more comprehensive approach to care (Papathanassoglou, 2010).

Implications for Practice

The findings of this study have several implications for clinical practice in ICUs. First, they highlight the need for training respiratory therapists in basic psychosocial support, enabling them to better recognize and address the emotional distress of patients. While respiratory therapists are primarily focused on managing ventilation, their frequent patient contact positions them as key players in mitigating psychological challenges. Integrating psychosocial care into their scope of practice could enhance patient well-being.

Second, this study underscores the importance of social workers as integral members of the ICU care team. Hospitals should ensure that social services are readily available and that social workers are fully integrated into the care team. Regular interdisciplinary meetings and care planning sessions could further enhance the collaboration between respiratory therapists and social workers, leading to more cohesive care.

Finally, this study suggests that communication barriers in the ICU should be addressed with more than just technological aids. Interventions that focus on emotional and psychological support alongside communication tools are necessary. Incorporating patient-centered communication strategies into respiratory care protocols could help alleviate the frustration and isolation that many mechanically ventilated patients experience.

Study Limitations

There are several limitations to this study. First, the relatively small sample size, particularly of healthcare professionals, may limit the generalizability of the findings to other ICU settings. A larger sample would allow for more robust conclusions about the psychosocial experiences of ICU patients and the effectiveness of interdisciplinary collaboration. Additionally, the study focused only on patients who were able to participate in post-ICU interviews, potentially excluding those who experienced more severe psychological or cognitive impairments.

Second, the timing of interviews may have influenced patient recall of their experiences. Although interviews were conducted within a few weeks of discharge, some patients may have difficulty accurately recalling the details of their ICU stay due to sedation or delirium. Future studies could address this limitation by incorporating real-time observational data collected during the ICU stay.

Conclusion

This study contributes to the growing body of literature on the psychosocial challenges faced by mechanically ventilated ICU patients and the critical role of interdisciplinary collaboration in addressing these challenges. The findings underscore the importance of integrating emotional and psychological care into the clinical management of mechanically ventilated patients. By fostering closer collaboration between respiratory therapists and social workers, ICUs can provide more holistic care that addresses both the physical and emotional needs of patients, ultimately improving recovery outcomes.

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