

Practice Environment and Healthcare Professionals' Workplace Wellbeing in Critical Care Settings

Abstract

Introduction

Healthcare professionals working in critical care settings bear the frontline responsibility to address contemporary health challenges within a complex and stressful workplace environment. This interprofessional environment poses significant psychological challenges for critical care healthcare professionals, often resulting in burnout and turnover, potentially compromising patient outcomes. Addressing these issues is essential to ensuring a healthy workforce capable of providing high-quality care. This thesis endeavours to formulate a novel evidence-based organisational framework designed to enhance the interprofessional workplace environment and the wellbeing of critical care professionals, including doctors, nurses, and allied health practitioners.

Aim

The primary objective of this research is to develop and validate the Critical Care Workplace Wellbeing (CCWW) Framework, an evidence-based model designed to improve the practice environment and overall wellbeing of critical care healthcare professionals. By providing a structured approach to enhancing workplace conditions, the CCWW Framework aims to support the mental, emotional, and physical health of healthcare professionals, thereby enhancing job satisfaction, reducing turnover, and improving patient outcomes.

Methods

This research employed a pragmatic exploratory sequential mixed-methods approach, structured into six interdependent phases. It began with an integrative review of existing frameworks and models, including the Dynamic Model of Workplace Wellbeing and the WHO Healthy Workplace Model, which informed the development of the preliminary CCWW Framework. The subsequent phases consisted of two mixed-methods systematic reviews that examined the critical care practice environment, healthcare professionals' perceptions of workplace wellbeing, and the effectiveness of organisation-level interventions.

The research then focused on the development and validation of the Interprofessional Practice Environment Scale (IPES) for Critical Care Health Professionals, a tool specifically designed to assess the quality of the practice environment from an interprofessional perspective. This scale addressed a critical gap in the literature, which previously lacked tools that captured interprofessional perceptions of the workplace environment in critical care settings. The cross-sectional study involved all healthcare professionals working in critical care units across Australia and New Zealand and employed structural equation modelling (SEM) to explore the relationships between the workplace environment, wellbeing outcomes (such as burnout and job satisfaction), and other factors like workplace violence and intention to leave.

Results

The integrative review resulted in the development of the preliminary CCWW Framework. Additionally, the findings from both the integrative review and systematic reviews provided critical insights into factors influencing workplace wellbeing in critical care settings. Key factors identified include leadership quality, which was strongly correlated with positive wellbeing

outcomes such as higher job satisfaction and reduced burnout. Adequate resource allocation was also crucial, as departments with sufficient resources reported lower burnout levels and higher retention rates. Furthermore, robust social support systems significantly mitigated workplace stress and reduced turnover.

The development of the IPES filled a significant gap in the literature by providing a rigorous tool for measuring elements of the practice environment from an interprofessional perspective. In the cross-sectional study, which included all healthcare professionals from critical care units across Australia and New Zealand, significant correlations were identified between a well-structured practice environment and positive wellbeing indicators. For instance, departments with clear communication channels, adequate staffing, and a collaborative culture reported lower levels of burnout and higher intentions to remain in their positions. Conversely, environments characterised by poor resource allocation, lack of support, and high levels of workplace violence were associated with increased intentions to leave and lower job satisfaction.

Structural equation modelling further elucidated the complex relationships between these factors. The analysis confirmed that the quality of the practice environment directly influences the workplace wellbeing of healthcare professionals. It also highlighted the mediating role of workplace violence, demonstrating that experiences of violence significantly exacerbate negative wellbeing outcomes, even in otherwise supportive environments. These findings underscore the importance of comprehensive, multi-faceted interventions that address both the structural and interpersonal aspects of the workplace.

Additionally, the results indicated that organisational interventions, such as leadership training, enhanced interprofessional communication, and targeted resource allocation, can

effectively improve the practice environment. When implemented systematically, these interventions contribute to a more resilient and satisfied workforce capable of delivering higher-quality care. The integration of all findings led to the refinement and updating of the CCWW Framework, which now consists of 23 elements grouped into three domains—structure, process, and outcomes—providing a practical and actionable model for healthcare organisations.

Recommendations

The thesis recommends that healthcare organisations adopt the CCWW Framework as a central strategy for improving workplace wellbeing. Key recommendations include investing in leadership development programs, fostering interprofessional collaboration, ensuring continuous monitoring of workplace conditions using tools like the IPES, and allocating adequate resources to support critical care teams. These steps are crucial for creating a supportive, well-structured work environment that enhances job satisfaction, reduces burnout, and ultimately improves patient care.

Limitations

While the CCWW Framework offers a comprehensive approach to improving workplace wellbeing, this research has limitations. The framework's validation is based on data from specific critical care settings, primarily within Australia and New Zealand, which may limit its generalisability to other regions or healthcare systems. Additionally, the cross-sectional nature of the study provides a snapshot in time, which may not capture the dynamic changes in workplace environments or the long-term effects of interventions. Future research should focus on longitudinal studies to further validate and refine the framework across diverse healthcare contexts.

Conclusion

The CCWW Framework offers healthcare organisations a robust and practical tool to address the key factors influencing workplace wellbeing in critical care settings, including leadership, resource allocation, professional development, and social support. By implementing this framework, organisations can enhance job satisfaction, reduce burnout, and improve patient care outcomes. This research significantly contributes to the field of workplace wellbeing by filling critical gaps in the literature, particularly the need for an interprofessional perspective and validated measurement tools like the IPES. The CCWW Framework provides an evidence-based foundation for future studies and intervention strategies, ensuring that the wellbeing of critical care professionals is adequately supported in a rapidly evolving healthcare landscape.

Keywords

critical care, healthcare professionals, workplace wellbeing, practice environment, interprofessional practice environment scale, burnout, job satisfaction, intention to leave, workplace environment, organisational interventions, leadership, mixed-methods systematic review, structural equation modelling