



## The impact of nurse leadership on patient outcomes

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### Abstract

**Background:** Nurse leadership plays a crucial role in influencing patient outcomes in healthcare settings. Effective nurse leaders are able to create a positive work environment that fosters collaboration, communication, and teamwork among healthcare providers. This, in turn, leads to improved patient care and outcomes. Therefore, in order to significantly improve the standard of patient outcomes, further research on nurse leadership is required. **Aim:** To explore and assess the impact of nurse leadership on patient outcomes. **Design:** A systematic review was conducted, from eleven and fifteen studies were included. **Result:** Relational leadership shown a positive relation with improved patient outcomes, including patient satisfaction, care quality, and safety environment. Furthermore, relational leadership reduced adverse events and medication errors. Patient satisfaction was also linked to task-oriented leadership styles.

**Keywords:** Leadership, Patient outcomes, Nurse, Systematic review

### Introduction

Nurses are essential resources in hospitals as they spend more time with patients than any other healthcare personnel. As such, through enhancing their performance, they contribute significantly to guaranteeing both the safety of patients and high-quality care. Even though nurses make up half of the healthcare workforce worldwide, there is a chronic shortage of nurses

in practically every nation. From 2020 to 2030, developed nations like the USA will require an additional 275,000 nurses. The International Council of Nurses estimates that 13 million additional nurses will be required worldwide to bridge the shortage in the coming years (**Nursing and midwifery, 2022**).

Worldwide, the primary cause of illness and mortality is errors in healthcare that injure patients. While relational leadership types, such as transformational leadership, are still linked to fewer unfavorable patient outcomes, researchers are connecting ineffective leadership to poor patient safety results. The dynamic field of nursing need dynamic leaders and role models. Nonetheless, the nursing profession faces difficulties in developing nurse leaders (**Miray et al., 2023**).

The responsibility of nurse leaders are to establish secure, healthy settings that will enable nursing staff to deliver patient-centered, superior, and economical care. Furthermore, these experts play a significant part in developing an environment that values interdisciplinary teamwork, which benefits nursing staff in terms of improving patient outcomes. It is necessary for nurse leaders to possess strategic management competence and a firm grasp of nursing implementation. (**Hult et al., 2023**).

In addition, they must be proficient in the operational settings and social and healthcare service systems, as well as competent to carry out evidence-based interventions. Human resource management and a focus on staff well-being have been shown to increase commitment among staff members. Nurse leaders deal with financial management on a regular basis in addition to developing staff and patient difficulties. But according to their own evaluations, nurse leaders are the least competent in these areas of their jobs (**Hult et al., 2023**).

A leader's ability to support strategic development is significantly impacted by organizational factors, including the number and skill mix of employees, the resources available, the support of human resources management, and leadership models (such as team leading, dual leadership, and shared governance) (**McKnight et al., 2019**). Leadership is also influenced by the distribution of power within an organization, the interpersonal connections of a nursing leader, trust, and the procedures of communication and decision-making. In addition, modern nurse leaders must decide for themselves on technological and digital solutions, remote leadership, and the quantity of centralized solutions (**Terkamo-Moisio, 2022**).

Problem-solving is an essential component of any leadership role, so the healthcare industry must endeavor to guarantee the future generation of excellent leaders. Lastly, because nurse leaders are held to a variety of standards, aspiring leaders must receive training that enhances their leadership abilities and qualities (**Cummings et al., 2021**). Numerous evaluations have consolidated the results of various leadership styles, and a great deal of research has been done on nursing leadership. Nevertheless, no study has gathered and evaluated the reviews in a methodical manner. Furthermore, organizational, nursing staff, and patient results have historically been provided in a fragmented manner; as a result, a thorough assessment is required to determine the needs for future research and to enhance the efficacy of nursing leadership.

## **The review**

### **1. Aim and Research Question**

This study aimed to explore, and describe reviews of impact of nursing leadership styles on patient outcomes. The research questions that led the review were as follows: Which nursing leadership styles were covered in the reviews that were included? and what is the impact of nurse leadership on patient outcomes?

### **2. Design**

The authors of this review conducted a systematic review to compile and contrast the results of earlier peer-reviewed reviews,. A total of 11 reviews and 15 studies met the eligibility criteria and were reviewed. The results of the systematic review of current literature on nurse leadership styles and patient outcome were reported using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) guidelines 33.

### **3. Methodology**

Eight electronic databases—Business Source Elite, the Cumulative Index to Nursing and Allied Health Literature (CINAHL), the authoritative economic literature index of the American Economic Association (EconLit), Medical Literature Analysis and Retrieval System Online (MEDLINE), PsycINFO, Pubmed, the Google Scholar, The Cochrane Library, and Web of Science—were thoroughly and methodically searched. The Population, Intervention, Comparison, Outcomes and Study (PICOS) format served as the foundation for the search strategy; in particular, P for nurses, managers, and patients; I for nursing leadership and management; C for health and social care organizations; O for organizational and patient outcomes; and S for systematic or non-systematic reviews. A preliminary search was carried out in these databases to find pertinent phrases and their synonyms before the final search. The primary ideas behind the initial search

### **4. Study selection**

According to the inclusion criteria listed in Table 1 below, all of the selected studies that were included in this systematic review had to meet certain requirements.

**Table 1. Inclusion/Exclusion Criteria.**

<b>Inclusion Criteria</b>	<b>Exclusion Criteria</b>
Peer Reviewed	Reviews published only as abstracts,

Inclusion Criteria	Exclusion Criteria
	reports, commentaries and non-peer-reviewed reviews
qualitative or quantitative outcomes that describe the relationship between nursing leadership and patient outcome	healthcare professionals other than nurses leaders
Include nurses leaders in the study sample	Not written in the English Language
Written in English	Published earlier than 2013
Published between 2013 and 2023 (to capture a broad range of research on our topic within the last decade)	

### **5. Data Extraction and Quality Assessment**

Data extraction was performed to gather information on study methodology, interventions, outcomes, and results. Quality assessment of included studies was conducted using standardized tools appropriate for respective study designs. A narrative synthesis of findings from the included studies was performed.

#### **Results**

The included reviews were published between 2013 and 2023. These reviews included a total of 300 original studies, of which 286 were quantitative, nine were qualitative and five represented mixed-methods studies.

Nurse staff assessments of several leadership types were used to describe nurse leadership in the included reviews. Based on the data, 36 different leadership styles were found. Nine task-oriented, five passive, and five destructive leadership styles were also included in the discovered reviews, with a total of 17 leadership styles being categorized as relational leadership types. Eleven reviews documented the transformational leadership style, which was the most prevalent. Five reviews described the transactional leadership approach. The included reviews reported a total of 13 patient-related outcomes.

Task-oriented leadership styles were also linked to patient satisfaction, but relational leadership was associated with better patient outcomes, specifically patient satisfaction, quality of care, and safety climate. Relational leadership also reduced medication errors and adverse events.

#### **Discussion**

Patient outcomes are influenced by a number of variables, such as the standard of nursing care given to the patient, the degree of the patient's sickness or condition, the physician's experience

and diagnosis, and the quality of care given to the patient. Put another way, a patient's full recovery depends on the efforts of the entire healthcare team. Ensuring the best patient outcomes is the ultimate goal, regardless of the nurse leadership style chosen. Patient satisfaction, length of hospital stay, medical error and adverse event rates, patient safety, and patient mortality are all examples of this (WHO, 2023).

Improved patient outcomes, particularly in terms of fewer adverse events, prescription errors, staff expertise, attrition, absenteeism, overtime, and nurse to patient ratios, are particularly closely correlated with transformational leadership. Accordingly, fostering a productive nursing workplace and enhancing patient outcomes depend heavily on competent nurse leadership (Asif et al., 2019).

A number of studies have demonstrated that nurse leadership improves patient outcomes. A cross-sectional data with a random sampling technique by Asif et al. in Pakistan found that a positive relationship between transformational leadership and patient outcomes as  $p\text{-value} < 0.01$  (Asif et al., 2019). Similarly, Ferrira et al. who conducted an integrative literature review and concluded that Transformational leadership had positive results for patient outcomes, and institutions alike (Ferreira et al., 2022).

As other authors have demonstrated, task-oriented leadership styles are linked to better quality of care in healthcare settings (Sfantou et al., 2017). Additionally, some authors have proposed that transactional leadership could improve patient satisfaction, assist in implementing strategies for preventing medication errors, foster learning from patient safety events, and enhance organizational learning (Hughes, 2019). Task-oriented leadership styles were linked to both positive and negative outcomes in the reviews identified through the literature search strategy.

### **Limitations**

Since the included studies' temporal spans were statistically significant, the notion of leadership may have evolved. Furthermore, a few evaluations were eliminated due to their language, which prevented us from determining if they met the requirements for inclusion.

### **Conclusion**

The results of studies released throughout the previous ten years were compiled in this systematic review of reviews. The findings indicated that relational leadership has been the main focus of contemporary nursing leadership research, but they also identified some neglected research areas. The positive effects of relational leadership styles on patient outcomes are well-documented by research.

Moreover, to obtain more understanding of the variables influencing leadership, it would also be crucial to improve the study on other leadership-related topics, such as leadership practices, competencies, job descriptions, and structural empowerment. In the near future, the proposed hypothetical model should be thoroughly examined and put to the test to see if it can be applied to healthcare institutions.

Since the main purpose of health care is to provide patient care, research on nursing leadership should also include patient outcomes in addition to staff results. We recommend that future

nursing research employ advanced approaches that adequately take into account different views on this complex issue, based on the review's findings.

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