



Evidence Review

An Integrative Review of Team Nursing and Delegation: Implications for Nurse Staffing during COVID-19

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Key words

evidence-based practice, care delivery system, critical care/intensive care, patient outcomes/health care outcomes/treatment outcomes, work environment/working conditions, nursing practice, medical/surgical

ABSTRACT

Background: During the COVID-19 pandemic, providing care for critically ill patients has been challenging due to the limited number of skilled nurses, rapid transmission of the virus, and increased patient acuity in relation to the virus. These factors have led to the implementation of team nursing as a model of nursing care out of necessity for resource allocation. Nurses can use prior evidence to inform the model of nursing care and reimagine patient care responsibilities during a crisis.

Purpose: To review the evidence for team nursing as a model of patient care and delegation and determine how it affects patient, nurse, and organizational outcomes.

Methods: We conducted an integrative review of team nursing and delegation using Whittemore and Knaf's (2005) methodology.

Results: We identified 22 team nursing articles, 21 delegation articles, and two papers about U.S. nursing laws and scopes of practice for delegation. Overall, team nursing had varied effects on patient, nursing, and organizational outcomes compared with other nursing care models. Education regarding delegation is critical for team nursing, and evidence indicates that it improves nurses' delegation knowledge, decision-making, and competency.

Linking evidence to action: Team nursing had both positive and negative outcomes for patients, nurses, and the organization. Delegation education improved team nursing care.

INTRODUCTION

The coronavirus (COVID-19) pandemic resulted in an unprecedented strain on health care due to rapid transmission, lack of global resources, and severe patient morbidity. Some intensive care units (ICUs) were overwhelmed with the number of critically ill patients infected with COVID-19. A nursing staffing shortage led to the reallocation of administrative staff to assist with clinical care and the reassignment of ambulatory or perioperative nurses to provide inpatient care on medical-surgical units. In turn, medical-surgical nurses were reallocated to critical care units to supplement an inadequate amount of trained ICU nurses. Therefore, some hospital leaders implemented team nursing as a staffing strategy. This staffing strategy required the delegation of tasks to nurses and other healthcare providers with minimal or no clinical specialty skills.

BACKGROUND: NURSING CARE MODELS

Nursing care models are methods for organizing nursing staff and assigning patient responsibilities and care tasks at the nursing unit (ward) level. Care models have varied over the past 50 years, but the four typical care models are team nursing, primary nursing, patient allocation (total patient care), and functional nursing. In team nursing, a group of nursing staff cares for a large number of patients for a single shift (Fernandez, Johnson, Tran, & Miranda, 2012). The team may include numerous unlicensed assistive personnel (UAP) and licensed practical nurses (LPNs) to reduce the number of registered nurses (RNs) required to provide patient care on a nursing unit (Dobson, Adamson, & Drexler, 2007). This model optimizes the nursing staff's skills, education, and qualification level (Dickerson & Latina, 2017). Team members share the responsibility of patient care, and

together they plan the nursing care for the shift (Kron, 1971; as cited in Carlsen & Malley, 1981).

In primary nursing, an individual nurse has 24-hour nursing responsibility for patients throughout their hospital stay, from admission to discharge (Mensik, 2017). Conversely, in the patient allocation model, an individual nurse cares for a small number of patients for one shift (Fernandez et al., 2012). Lastly, in functional nursing, the charge nurse or manager divides nursing work and assigns each staff member various tasks (Mensik, 2017). For example, UAPs provide personal care, the LPN administers medications, and the RN coordinates the patient's plan of care, completes the patient's assessment, and documents the findings in the health record.

Problem Identification

Hospitals have implemented team nursing to address resource capacity and patient acuity during the COVID-19 pandemic. Consequently, nurses began to ask about the evidence related to team nursing as a staffing strategy and its impact on outcomes. We decided to conduct an integrative review using the five stages of Whittemore and Knaf's (2005) integrative review methodology in order to provide an evidence-based response to the nurses' question. Our sampling frame of studies was broad and diverse because team nursing was not new. The concepts of interest were team nursing, delegation, and outcomes for patients, nurses, and the organization. The purpose of this integrative review was to summarize the outcomes of team nursing.

METHODS

We developed two PICOT (Population, Intervention, Comparison, Outcome, and Time frame) questions to guide the literature search component of our integrative review. The first question was, "In hospitals (P), how does team nursing (I) compared to other models of nursing care (C) affect outcomes (O)?" In an effort to include all the relevant literature on the outcomes of team nursing, we intentionally left the "O" of the PICOT broad. After reading a few papers about team nursing, we realized that delegation was a concept critical to successful team nursing, so we added a second PICOT question. The second question was, "In hospitals (P), how does team nursing delegation (I) compared to primary nursing (C) affect outcomes (O)?"

Identification and Screening

We systematically searched for published, peer-reviewed, English-language literature. The databases were Cumulative Index to Nursing and Allied Health Literature (CINAHL; EBSCO), Cochrane, PubMed, Scopus, Trip Pro, Joanna Briggs, ERIC, PsycINFO, and Web of Science. We did not set limits on publication dates (inception to May 29, 2020). We reviewed reference lists from retrieved publications to

identify additional papers (Figures 1 and 2; Moher, Liberati, Tetzlaff, Altman, & the PRISMA Group, 2009).

We divided our team into two groups to conduct two distinct searches related to team nursing and delegation. The team nursing search used a combination of keywords and controlled vocabulary terms like "team nursing care delivery model," "team nursing," "nursing models of care," "hospital," and "outcomes." We adapted the concept terms and search strategy using Boolean operators for each database to obtain the most results (i.e., used MeSH in PubMed). The team nursing search resulted in 2,490 articles, and two independent reviewers screened them for applicability and excluded 2,396 records.

Similarly, the delegation search team used a combination of keywords and controlled vocabulary—"delegation," "nursing AND hospital," and "outcomes" for the concepts—and adapted the search within each database. The delegation search yielded 1,918 articles that were screened for applicability by two independent reviewers, and the reviewers excluded 1,254 articles. Because nursing licensure is granted at the state level in the United States and policies regulating delegation may vary by state, we compared delegation practices from eight state websites to assist nurses working in different states during the COVID-19 pandemic.

Inclusion and Exclusion Criteria

We included published original research studies, systematic reviews, experimental research, non-experimental research, and expert opinion papers. The exclusion criteria were commentaries about editorials, published abstracts or conference proceedings, dissertations or theses, and gray literature. We excluded these evidence types to meet the demand for timely evidence-based information in a pandemic context.

Determination of Eligibility

Two independent reviewers worked in pairs to perform the full-text review to verify the inclusion criteria of publications. The team nursing group assessed 46 articles for eligibility and included 22 articles in the synthesis. The delegation group assessed 26 articles for eligibility and retained 23 for synthesis (Figures 1 and 2, Moher et al., 2009). We resolved the disagreement through consensus with a third member of the review team.

Quality Appraisal

We used the Helene Fuld Health Trust National Institute for Evidence-Based Practice in Nursing & Healthcare, Rapid Critical Appraisal (RCA) tools to assess the methodological quality and suitability for inclusion in the review (Melnyk & Fineout-Overholt, 2019). Two reviewers appraised each article, and articles were excluded due to poor quality, non-hospital practice setting (outpatient, community), and lack of match to the PICOT questions. If a systematic review

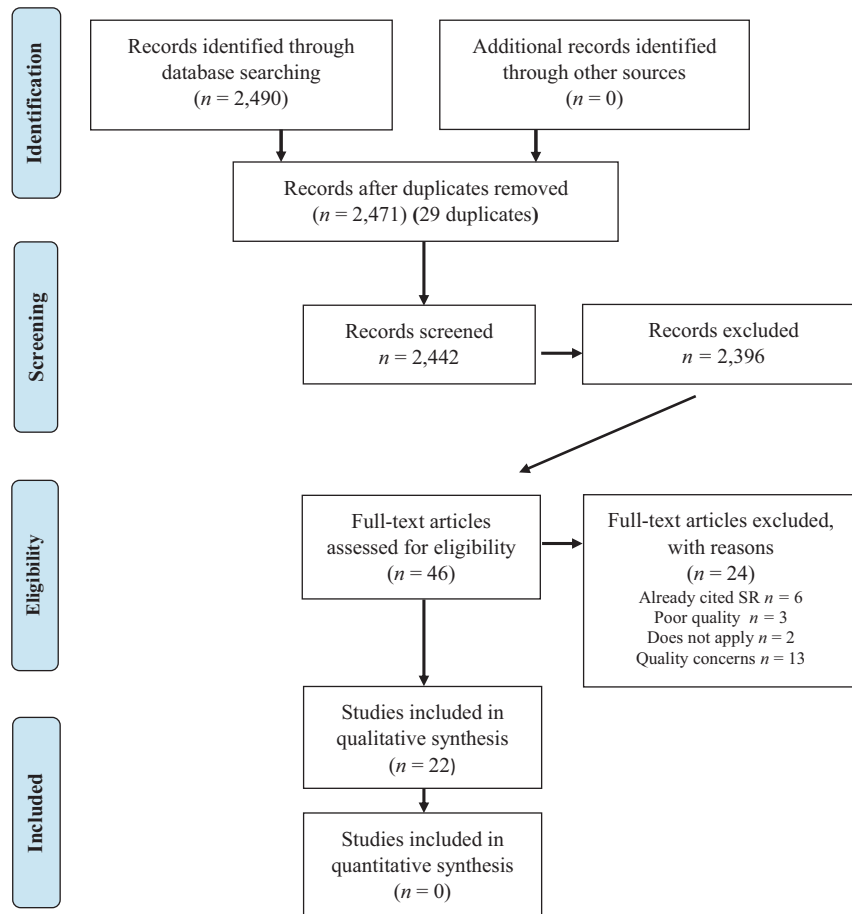


Figure 1. PRISMA flow diagram for team nursing literature search.

contained a particular study, we excluded the primary study to avoid counting it twice.

Reviewers evaluated studies as high, medium, or low quality by considering questions within the RCA tools. Overall, team nursing articles included two high-quality, 12 medium-quality, and eight low-quality articles. The delegation articles included zero high-quality papers, 19 medium-quality articles, and four low-quality articles.

Levels of Evidence

The final sample for this integrative review included two team nursing articles and 23 delegation references. The delegation references included 21 articles and two organizational statements from the American Nurses Association and the Academy of Medical Surgical Nurses (Tables S4, S5, S7, & S8). We used the Melnyk and Fineout-Overholt (2019) levels of evidence to classify articles according to the strength of evidence (Tables S2 and S4).

Data Analysis and Presentation

We extracted data from primary sources on study characteristics and methods related to the concept of team nursing

and delegation on a summary form. Each reviewer completed a summary form with the following data extraction fields for each individual study: citation, design and method, sample and setting, major variables and definitions, data analysis (statistical methods), outcomes, level of evidence, and critical worth to practice. We used data from the summary forms to critically synthesize and summarize findings across studies, presenting results in tabular format (synthesis tables). By keeping the literature search broad, our data analysis included patient, nursing, and organizational outcomes of team nursing.

RESULTS

Team Nursing: Patient Outcomes Analysis

We included ten papers in the synthesis of patient outcomes related to safety (adverse events, falls, medication errors, pressure ulcers/injury, infection, restraints), patient satisfaction, and pain scores (Table 1). Most papers compared primary nursing or the patient allocation (total patient care) model to team nursing, but a few hospitals implemented unique hybrid staffing models. Overall,

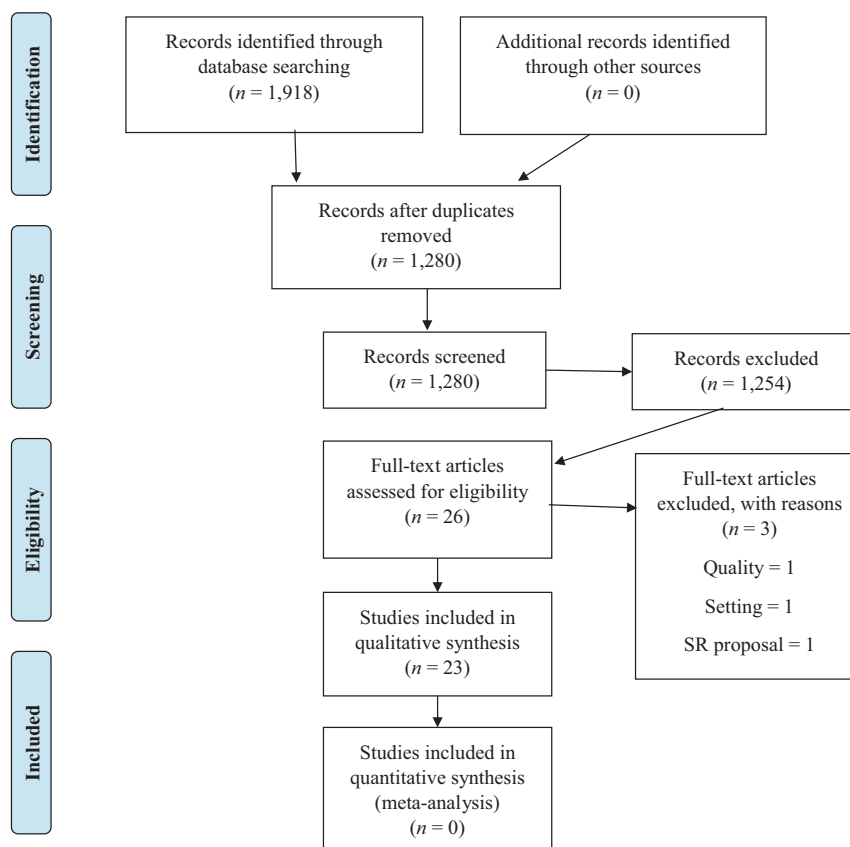


Figure 2. PRISMA flow diagram for delegation literature search.

the team nursing model did not show a statistically significant difference in patient satisfaction compared with other models of care. Fernandez et al., and's (2012) systematic review reported desirable patient outcomes such as decreased pain scores and decreased seclusion and restraints compared with other nursing care models. Dobson et al., (2007) reported decreased medication errors and fewer emergency codes outside the ICU after implementing a modified team nursing model (with more LPNs and UAPs and fewer RNs). Two studies reported decreased falls with team nursing compared with the patient allocation or modified team nursing model with fewer RNs (Dickerson & Latina, 2017; Dobson et al., 2007). Fernandez et al., (2012) reported that the evidence surrounding team nursing had inconsistent findings on falls and medication errors compared with other care models. On the contrary, several studies reported negative outcomes with team nursing such as increased adverse events compared with the patient allocation model (Havaei, MacPhee, & Dahinten, 2019), decreased mobility compared with a modified primary nursing model (Winslow et al., 2019), and decreased quality of care compared with primary nursing (Betz, Dickerson, & Wyatt, 1980).

Team Nursing: Nurse Outcomes Analysis

There were 14 articles included in the synthesis of nursing outcomes such as RN (job) satisfaction, attrition and turnover, absenteeism, and stress (Table 2). Ten studies examined the effect of team nursing on RN job satisfaction and engagement. Findings across these studies were inconsistent. Three studies reported an improvement in job satisfaction (Dickerson & Latina, 2017; Downs & Hoil, 2004; Murphy, Pearlman, Rea, & Papzian-Boyce, 1994); three studies reported a reduction (Hayman, Wilkes, & Cioffi, 2008; Mäkinen, Kivimäki, Elovainio, Virtanen, & Bond, 2003; Ryan, Poster, Auger, Davis, & Ringdahl, 1988); and three studies reported no difference (Carlsen & Malley, 1981; King, Long, & Lisy, 2015; Winslow et al., 2019). The systematic review by Fernandez et al., (2012) also found conflicting evidence about RN satisfaction.

Additional important outcomes when comparing team nursing to other models of care included RN attrition and turnover, absenteeism, staff communication, stress, and role clarity. Numerous studies found no difference in attrition and turnover when comparing team nursing to the patient allocation model (Hayman et al., 2008; King et al., 2015); modified team nursing model (Dobson et al., 2007);

Table 1. Synthesis of the Evidence on Team Nursing: Patient Outcomes

	1	6	7	10	11	13	18	20	21	22
Level of evidence	VI	VI	VI	SR (14) III*	VI	VI	VI	III	VI	VI
Comparison P = Primary nursing, where an individual nurse has 24-h total nursing responsibility for entire stay. PA = "Patient allocation" model, where an individual nurse cares for a small number of pts 1 shift. F (Functional) = Charge nurse assigns tasks T = Team nursing T(M): Team nursing based on geographical location	T to P	PA to T	T to T (LPN + ULP)	T, P, PA (case management), F	T/PP	T to PA	P (on duty)	P	P (modified)	PA
Adverse events						↑ _g				
Falls		↓	↓	I _d					■	
Medication errors			↓	I _d (Post 12-18 mos.)						
Pain scores				↓ _c (compared to PA)						
Patient satisfaction			↑	■			■	■	■	■
Pressure ulcers/injury				■ _{c, h}					■	
Infection rates				■ _{c, h}						
Seclusion & restraints				↓ _{c, h}						
Venous thromboembolism									■	
Mobility									↓	
Contact with nurses					■					
Quality of care	↓									
Number of emergency codes outside critical care			↓							

Note. 1 = Betz et al., 1980; 6 = Dickerson & Latina, 2017; 7 = Dobson et al., 2007; 10 = Fernandez et al., 2012; 11 = Hamera & O'Connell, 1981;

13 = Havaei et al., 2019; 18 = Murphy et al., 1994; 20 = Ryan et al., 1988; 21 = Winslow et al., 2019; 22 = Wu et al., 2000;

SR = Systematic review; ^a = low certainty of evidence and serious risk of bias and imprecision; ^b = low certainty of evidence and very serious risk of bias;

^c = one study; ^d = two studies; ^e = 3 out of 4 studies; ^f = 6 studies; ^g = high acuity; ^h = hybrid model; III = controlled trial without randomization; VI = single

descriptive or qualitative study, clinical practice guidelines, literature review, quality improvement, or EBP project; * Systematic review is a level III because it contains a controlled trial without randomization.

↑ = increase ↓ = decrease ■ = no statistically significant difference I = inconsistent findings

or a primary nursing model (Winslow et al., 2019). The reports on absenteeism included three articles that found no difference (Butler et al., 2019; Fernandez et al., 2012; Hayman et al., 2008) and one article that found a reduction compared with primary nursing (Murphy et al., 1994). For staff communication, one article reported improved staff communication after implementing a modified team nursing model (more LPNs, more UAPs, fewer RNs) compared with classic team nursing (Dobson et al., 2007), while a systematic review reported that team nursing had inconsistent effects on communication (Fernandez et al., 2012). A systematic review with one study that measured perceived stress with team nursing compared with other models found no difference (King et al., 2015), and Mäkinen, Kivimäki, Elovainio, and Virtanen (2003) also reported no stress difference between a functional and primary care nursing model and team nursing. Finally, the two articles that reported on role clarity found that there was no difference between models of care (Fernandez et al., 2012; Ryan et al., 1988).

Team Nursing: Organizational Outcomes Analysis

In addition to nursing and patient outcomes, there were organizational outcomes of team nursing including cost, perceived quality of care, and length of stay. When compared with other models of care, team nursing had mixed effects on cost. One group reported greater costs after implementing a modified team nursing model with more LPNs and UAPs and fewer RNs (Dobson et al., 2007) compared with a traditional team nursing model with more RNs. On the contrary, Hancock, Flynn, Derosa, Walter, and Conway (1984) reported cost savings after implementing a team nursing model compared with an all-RN staff. Betz et al., (1980) recommended primary nursing over team nursing based on a cost-effectiveness score comprised of nursing cost per patient day and quality of care.

In regard to the quality of patient care, two studies reported on care quality. Betz et al., (1980) calculated the proportion of nursing care quality items not achieved on primary and team nursing units before and after implementation. They reported that the quality of care scores improved

Table 2. Synthesis of the Evidence on Team Nursing: Nurse Outcomes

	2	3	6	7	8	10	13	14	15	16	17	18	20	21
Levels of evidence	SR (17) (V)**	VI	VI	VI	VII	SR (14) (III)*	VI	VI	SR (3) (V)**	VI	VI	VI	III	VI
Comparison	T/PA	P	PA	T to T (LPN + ULP)	NC	T, P, PA (case management), F	T to PA	PA	PA	F/P, T (M)	T, P, PA/T (M)	P (on duty)	P	P (modified)
Documentation						↑ _e								
RN (job) satisfaction/engagement		↓	↑		↑	I _f		↓	■ _c		↓	↑	↓	■
Attrition/turnover	↓ _{d, a}			■				■	■ _c			↓		■
Relationship with physicians				↑										
RN perceived missed care							↑							
RN perceived patient safety			↑											
RN perceived continuity of care			↑											
RN perceived responsibility/accountability		■	↑											
Availability of leadership/senior support						I _d								
Role clarity						■ _c							■	
Partnership w/discharge planning						↑ _c								
Professional development						↑ _c								
Number of health complaints						↑ _c								
Absenteeism						■ _d		■					↓	
Staff/interprofessional communication				↑		I _{d, h}								
Stress									■ _c	■				

Note. 2 = Butler et al., 2019; 3 = Carlsen & Malley, 1981; 6 = Dickerson & Latina, 2017; 7 = Dobson et al., 2007; 8 = Downs & Hoil, 2004; 10 = Fernandez et al., 2012; 13 = Havaei et al., 2019; 14 = Hayman et al., 2008; 15 = King et al., 2015; 16 = Mäkinen et al., 2003a; 17 = Mäkinen et al., 2003b; 18 = Murphy et al., 1994; 20 = Ryan et al., 1988; 21 = Winslow et al., 2019. UN = Unknown; SR = Systematic review; ^a = low certainty of evidence and serious risk of bias and imprecision; ^b = low certainty of evidence and very serious risk of bias; ^c = one study; ^d = two studies; ^e = 3 out of 4 studies; ^f = 6 studies; ^g = high acuity; ^h = hybrid model; N/A = qualitative study; NC = no comparison; II = controlled trial without randomization; V = systematic review or meta-synthesis of descriptive and qualitative studies; VI = single descriptive or qualitative study, clinical practice guidelines, literature review, quality improvement, or EBP project; VII = expert opinion; * Systematic review is a level III because it contains a controlled trial without randomization; ** Systematic review is a level V because it contains a descriptive or qualitative study.

↑ = increase ↓ = decrease ■ = no statistically significant difference I = inconsistent findings

twice as much with a primary nursing model compared with team nursing (Betz et al., 1980). The Fernandez et al., (2012) systematic review contained two papers that reported quality of care. The first paper compared primary and team nursing models and found no difference between the two models regarding quality of patient care (McPhail et al., 1990). The second paper compared numerous models of care and found no difference in quality of patient care between the models (Sjetne et al., 2009).

Team Nursing: Team Composition Analysis

Ten papers provided team member guidance for a team nursing model of care (Table S3). All papers reported using RNs in a team nursing model. Six of the 10 papers did not specify the educational preparation of the RN, while the other four papers used a non-BSN or BSN-prepared RN in their model. Seven papers included LPNs, four papers included a patient support aide, and one paper included a unit receptionist in the team nursing model.

Team Nursing: Qualitative Analysis

Three studies included a qualitative analysis of team nursing. Themes included the benefits of team nursing like

teamwork (Cioffi & Ferguson, 2009; O’Connell, Duke, Bennett, Crawford, & Korfiatis, 2006), adaptation to team nursing, and concerns with team nursing (Ferguson & Cioffi, 2011). Adaptation to team nursing was influenced by skill mix and inadequate supervision of less experienced staff (Ferguson & Cioffi, 2011). Team effectiveness depended on people helping each other (Cioffi & Ferguson, 2009), good communication skills (Cioffi & Ferguson, 2009; O’Connell et al., 2006), and the availability of mentor support (Cioffi & Ferguson, 2009; Ferguson & Cioffi, 2011). Nurses perceived that team nursing affected outcomes, like the quality of care (Cioffi & Ferguson, 2009; Ferguson & Cioffi, 2011). Some nurses perceived less missed care with team nursing (Cioffi & Ferguson, 2009), while other nurses reported greater overlooked care with team nursing because no one took responsibility for specific care tasks (O’Connell et al., 2006).

Delegation Analysis

We did not find any papers that directly measured the effects of nursing delegation on outcomes, yet nurses with ineffective delegation skills may have undesired effects on patient safety and care (Magnusson et al., 2017; Wagner,

2018). Therefore, hospitals need the right mix of skilled nursing personnel for the appropriate tasks (Bellury, Hodges, Camp, & Aduddell, 2016). To prepare staff for a team nursing model of care, we located seven papers that described the effect of delegation education on nursing and patient outcomes, and 14 articles contained specific educational content (Table S5). Twenty-three papers described delegable tasks (who may delegate to whom; Table S7), and 19 papers described delegation characteristics (Table S8). We also located two state board of nursing statements about delegation to make comparisons throughout the United states. (Table S6). The papers reported clear positive outcomes regarding the effects of education about delegation and educational content.

Outcomes of education about delegation

Seven papers reported the outcomes of nursing education about delegation (Table 3). In six of the seven papers, nurses who received education about delegation reported improved delegation knowledge and decision-making. Four papers reported improved delegation competency and respect. Nurses also reported improved communication skills in three papers. Patients also benefited from nurse delegation education, with two articles reporting reduced patient falls and one paper reporting fewer missed and delayed tasks.

Educational content about delegation

Fourteen papers included suggested educational content about delegation (Tables S4–S8). All of them included content about delegation decision-making. The foundation of this education is the “Five Rights of Delegation,” which include (National Council of State Boards of Nursing, 2016): (a) right task; (b) right circumstance; (c) right person; (d) right directions and communication; and (e) right supervision and evaluation. Thirteen papers stated that organizations needed to provide role knowledge about which tasks are delegable. It is also important to include supervision issues and strategies and update the appropriate policies to provide support (12 papers).

Delegated tasks

State Boards of Nursing define delegation within their scope of practice, laws, or policies. The Five Rights of Delegation were consistent in the state rules (Table S6). Nurses may delegate the implementation of tasks based upon the education, skills, and experience of the delegate. Nurses may not delegate assessment, planning evaluation, or nursing judgment. Overall, 23 papers reported delegation between team members based on role. Delegation can occur from the advanced practice registered nurse (APRN) to the RN, RN to RN, and RN to UAP (Table S7).

DISCUSSION

This integrative review provides evidence about how team nursing affects patient, nurse, and organizational outcomes. Overall, there was no statistically significant difference in patient outcomes between team nursing compared with other models of care. Similarly, most of the evidence about nursing and organizational outcomes was conflicted. Staff communication might improve with team nursing compared with other models of care, and experts report that frequent formal and informal communication is essential for the standardization of COVID-19 care (Griffin, Karas, Ivascu, & Lief, 2020).

We considered evidence regarding delegation because it intertwines with team nursing. Education about delegation ensures that all team members understand the Five Rights of Delegation to promote respectful, two-way communication and effective delegation. Experts assert that training and support to work in high-risk or unfamiliar roles create ethical obligations for COVID-19 care management (Dunn, Sheehan, Horden, Turnham, & Wilkinson, 2020). Organizations must develop policies that address the nursing scope of practice and reflect the state board of nursing scope of practice, laws, or policies specific to delegation.

Strengths and Limitations

A strength of this integrative review is its broad evaluation, as demonstrated by no limits on the publication dates or study designs. The presentation of data in synthesis tables facilitates data display, interpretation, and comparison of the outcomes of team nursing. We added a second PICOT question about delegation because we recognized that delegation was integral to the implementation and outcomes of team nursing. On the contrary, the scope of this review was limited to nursing care models and excluded interprofessional models. We did not conduct gray literature or dissertation searches, which limits the comprehensiveness of the search. Our search strategy did not include studies in other languages, which can introduce bias in the review process. Most importantly, none of the studies implemented team nursing during a pandemic, so the applicability of the outcomes to the current context warrants consideration.

IMPLICATIONS FOR PRACTICE AND FUTURE RESEARCH

Although there is a body of evidence about team nursing, the lack of consistent effects on outcomes makes it challenging to recommend it as a model of care. However, under the circumstances of staffing shortages in a life-threatening pandemic, team nursing is a reasonable option for resource allocation, and other experts agree (National Academies of Sciences, Engineering, & Medicine, 2020). An important

Table 3. Outcome Synthesis: Effects of Education About Delegation

	21	35	36	38	39	40	41
Levels of evidence	VI Mixed method	VI	VI	VI Mixed method	II	II	VI
Delegation knowledge	↑	↑	↑		↑	↑	↑
Delegation competency		↑	↑		↑	↑	
Decision-making	↑	↑	↑		↑	↑	↑
Nurse satisfaction	C		↑		↑	↑	↑
Effective/proper delegation		↑	↑				
Confidence in delegation skills						↑	
Communication skills		↑			↑	↑	
Respect	↑		↑		↑	↑	
Falls	↓			↓			
Pressure injury	C			C			
Patient satisfaction	↓			C			↑
Missing tasks		↓					
Delayed tasks		↓					

Note. 21 = Winslow, 2019; 35 = Salmond, 1995 Part 1; 36 = Salmond, 1995 Part 2; 38 = Wagner, 2018; 39 = Parsons, 1997; 40 = Parsons, 1999; 41 = Badovinac, 1999

Decreased = ↓ Increased = ↑ C = no difference

implication for practice is the evidence that indicates effective delegation as integral for team nursing success. To prevent undesirable outcomes, hospitals must provide staff with education regarding delegation, role clarity, clear responsibilities, and leadership support. We recommend formal education concerning the Five Rights of Delegation and communication.

The publication dates of articles within this integrative review occurred before the existence of COVID-19. Thus, it is unknown if the implementation of team nursing during COVID-19 will have the same or different outcomes. Future research is necessary to understand the effect of implementing team nursing quickly during a crisis. For example, medical-surgical nurses are performing critical care skills without the knowledge and experience of tenured critical care nurses. We do not know the effects of pushing the boundaries of clinical competence.

CONCLUSION

Overall, this integrative review demonstrated that team nursing does not have consistent effects on patient, nurse, or organizational outcomes in a non-pandemic environment. The availability of skilled nurses will continue to challenge the healthcare system during the COVID-19

pandemic. Nurse staffing strategies remain an opportunity for innovative solutions and nursing research during times of crisis.



LINKING ACTION TO EVIDENCE

- Team nursing had both positive and negative outcomes for patients, nurses, and the organization.
- Delegation education improved team nursing care.

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Table S1-9