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Author

Rixon, Andrew, Elder, Elizabeth, Bull, Claudia, Crilly OAM, Julia, Østervan, Christina, Frieslich, Hayley, Robertson, Shaun, Pink, Ed, Wilson, Samuel

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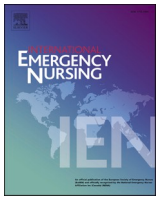

Leadership conceptions of nurses and physicians in emergency care: A scoping review

Andrew Rixon [a,b,c,*], Elizabeth Elder [b,c,d,e], Claudia Bull [e], Julia Crilly OAM [c,d,e], Christina Østervan [f,g], Hayley Frieslich [d], Shaun Robertson [d], Ed Pink [h,i], Samuel Wilson [j]

[a] Department of Business Strategy and Innovation – Griffith Business School, Griffith University, Gold Coast, Queensland, Australia
[b] Centre for Work, Organisation and Wellbeing, Griffith University, Gold Coast, Queensland, Australia
[c] Menzies Health Institute Queensland, Griffith University, Gold Coast, Queensland, Australia
[d] Department of Emergency Medicine, Gold Coast Health, Gold Coast, Queensland, Australia
[e] School of Nursing and Midwifery, Griffith University, Gold Coast, Queensland, Australia
[f] Department of Emergency Medicine, Odense University Hospital, Odense, Denmark
[g] University of Southern Denmark, Odense, Denmark
[h] QEII Hospital, Brisbane, Queensland, Australia
[i] School of Medicine and Dentistry, Griffith University, Gold Coast, Queensland, Australia
[j] Department of Management and Marketing, Swinburne Business School, Swinburne University of Technology, Melbourne, Australia

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ABSTRACT

Background: The Emergency Department (ED) is a setting where teamwork and leadership is imperative, however, the literature to date is mostly discipline (nursing or medical) specific. This scoping review aimed to map what is known about nurses' and physicians' conceptions of leadership in the ED to understand similarities, differences, and opportunities for leadership development and research.

Method: Guided by the Joanna Briggs Institute approach, and Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR) Guidelines, a systematic search of three electronic databases was performed. The Mixed Methods Assessment Tool was used for quality appraisal of included articles.

Results: In total, 37 articles were included. Four key findings emerged: 1) leadership was rarely explicitly defined; 2) nurse leaders tended to be characterised as agents of continuity whilst physician leaders tended to be characterised as agents of change and continuity; 3) the clarification of expectations from nurse leaders was more evident than expectations from physician leaders; and 4) leadership discourse tended to be traditional rather than contemporary.

Conclusion: Despite the proliferation of studies into ED nurse, physician and interprofessional leadership, opportunities exist to integrate learnings from other sectors to strengthen the development of current and next generation of ED leaders.

1. Introduction

Improving the quality and sustainability of healthcare systems is a global challenge that highlights the need and opportunity for leadership by nurses and physicians. High quality leadership within healthcare is essential due to its positive association with clinician job satisfaction, staff retention, organisational outcomes, and patient safety [1,2,3]. However, the leadership literature in healthcare generally [4], and in relation to nurse [5] and physician leadership [6] in particular, has been criticised for its fragmentation, neglect of leadership theory, and disconnect from the wider leadership literature. Despite the proliferation of healthcare leadership research in recent years, the picture of nurse, physician and interprofessional leadership, including in the emergency department (ED) context, remains unclear [7,8].

EDs are critical access points for patients into hospital services. The ED is a stressful [9] and sometimes demoralising [10] place to work, made more challenging by the need to manage the hospital-community and ED-hospital interfaces. Addressing these and other challenges

* Corresponding author.
E-mail address: a.rixon@griffith.edu.au (A. Rixon).

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requires good interprofessional relations within the ED and between departments [11] and sophisticated interpersonal, management and leadership skills in addition to exemplary clinical skills. However, surprisingly little is known about leadership in ED settings. Moreover, similarities and differences in ED nurses' and physicians' conceptions and expectations of leadership are unknown, as are, by extension, their respective leadership development needs. Despite calls for strong emergency care leadership [2], it is not obvious what such leadership consists of or how it might be developed.

Given these gaps, more remains to be learnt about the nature, similarities and differences in nurse and physician leadership in the ED setting. The aim of this scoping review was to identify, map, and synthesise current evidence to provide insight into leadership conceptions of nurses and physicians in ED settings. The specific objectives of this scoping review were to: 1) ascertain the similarities and differences in leadership conceptions for nurses and physicians in ED settings; and 2) identify gaps to inform future directions for research into ED leadership and leadership development.

2. Method

2.1. Design

This scoping review [12] was guided by the Joanna Briggs Institute (JBI) approach [13], which comprises nine steps: 1) defining and aligning the objectives and questions; 2) developing and aligning the inclusion criteria with the objectives and questions; 3) describing the planned approach to evidence searching, selection, data extraction and presentation of the evidence; 4) searching the evidence; 5) selecting the evidence; 6) extracting the evidence; 7) analysis of the evidence; 8) presentation of the results; and 9) summarising the evidence, making conclusions and noting implications. This review was reported according to the PRISMA extension for Scoping Reviews guidelines (PRISMA-ScR) [14].

2.2. Research question

The broad research question that motivated this scoping review was *What is known about the leadership conceptions of nurses and physicians in ED settings?*

2.3. Identifying relevant studies

Eligibility criteria. The focal population were clinicians (e.g., physicians, nurses), the concept was leadership (e.g., conceptions of and beliefs about leadership, discourses about leadership, leadership self-perception, leadership development), and the context was emergency care (e.g., emergency medicine, accident and emergency, emergency room). Studies were included if they were peer-reviewed empirical studies that met all three population, concept, context, and other inclusion criteria. The full eligibility criteria are presented in Table 1.

Search. A systematic search of three electronic databases (Embase, Scopus and EBSCOhost) for articles that met the inclusion criteria was conducted. Subject Headings (MeSH) and Boolean operators, such as AND, OR and/or NOT were applied to the search. Stemming using an '*', and wildcards '?', were used to widen the search. Our search strategy was developed in consultation with a health librarian.

Study selection. The results from the searches were uploaded into Covidence®—a web platform for systematic reviews—and duplicates were identified and removed. CB and EE independently screened title and abstracts, and AR resolved conflicts. CB and AR independently screened the full text of articles, and SW resolved conflicts. The PRISMA flowchart is presented in Fig. 1.

2.4. Data charting

Studies included in this review were charted and classified according to author, date, country, study focus, context, study aims, method, definition of leadership, general management, leadership skills and practices, leadership theory, and leadership discourse. An assessment of the quality of the research methodology was undertaken using the revised Mixed Methods Assessment Tool (MMAT) [15]. Criteria were assessed against each study design type, and researchers identified whether criterion were met or not using 'Yes', 'No' and 'Can't tell' response options. Quality assessment was undertaken by CB, CO and a research assistant with differences moderated by EE.

2.5. Collating, summarising and reporting results

A qualitative description to summarise and synthesise the data was undertaken. Qualitative thematic analysis, as described by Levac et al. [16], was used to code and categorise the concepts identified in this review. There are a variety of different models, frameworks and typologies in the leadership literature [17]. Gordon et al [18] offer a five-part typology of leadership discourses that make sense of leadership conceptions in a health context (see Table 2). This five-part typology of leadership discourses was used to inform independent coding (by AR and SW) by focussing on three specific areas i) definition of leadership; ii) general management and leadership skills and practices; and iii) cited leadership theory, with disagreements resolved through discussion (see Table 4). It was selected because it enabled capturing a wide range of leadership ideologies and practices relevant to emergency care settings, facilitating a nuanced understanding of leadership dynamics.

Table 1
Population, Concept, Context and inclusion and exclusion criteria.

Population: Clinicians (e.g., physicians, nurses)
Concept: Leadership (e.g., conceptions of and beliefs about leadership, discourses about leadership, leadership self-perception, leadership development)
Context: Emergency care (e.g., emergency medicine, accident and emergency, emergency room)
Inclusion criteria
Peer-reviewed empirical studies published as quantitative, qualitative and mixed-methods studies of leadership in emergency care.
Articles published between 2013 and 2023.
Articles published in the English language.
Articles that focus on population AND concept AND context.
Exclusion criteria
Literature focused on leadership in non-emergency care contexts, including general practice.
Review articles, including *meta*-analyses, systematic, scoping and rapid reviews.Non-peer-reviewed and grey literature sources such as documents from government and non-government organizations (e.g., policy documents)
, conference proceedings, academic dissertations, books, book chapters, and editorials and opinion pieces.
Articles published before 2013.
Articles not published in the English language.
Articles not available as full text.

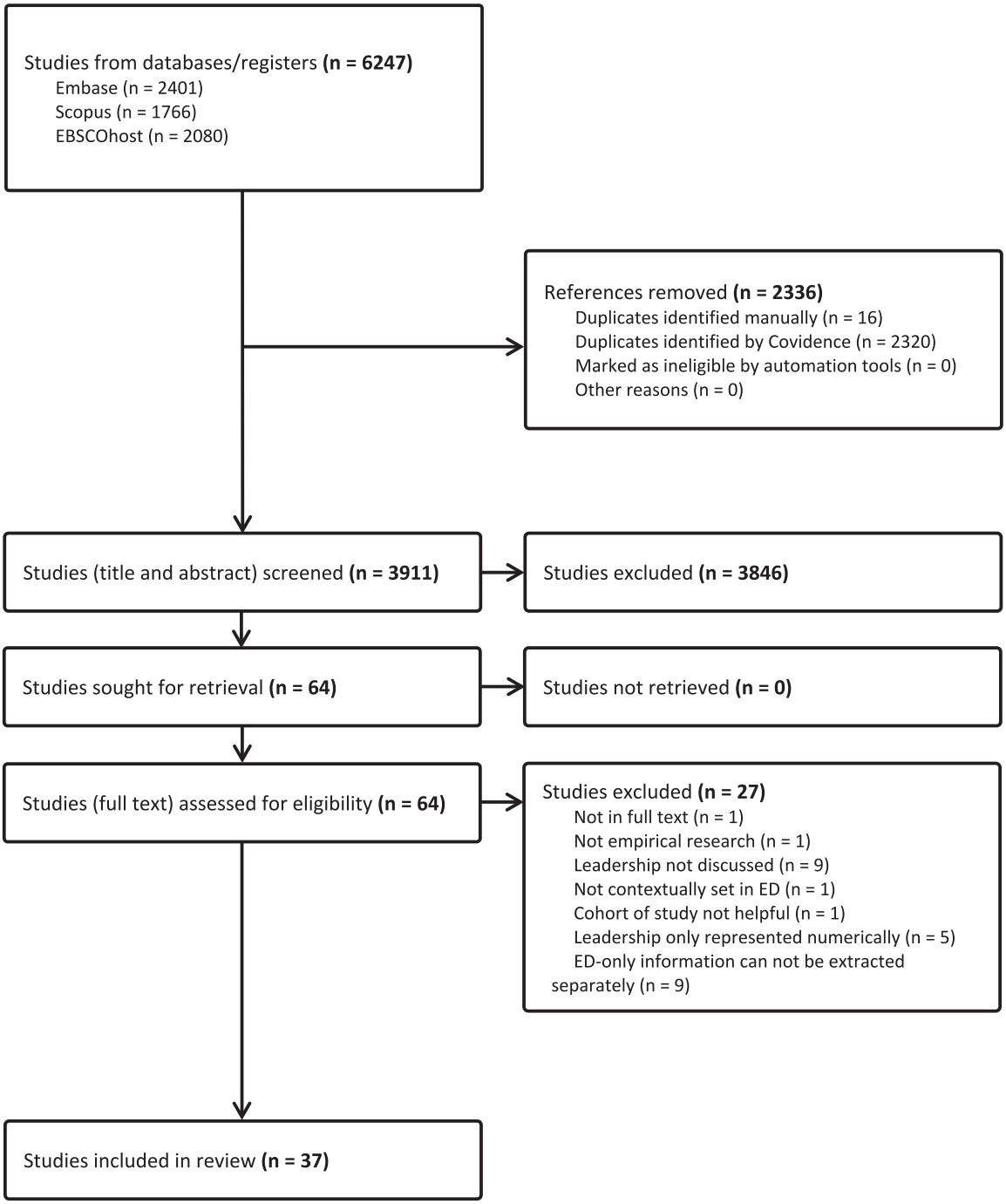

Fig. 1. Preferred Reporting Items for Systematic Reviews and Meta Analyses Flowchart.

3. Results

3.1. Study characteristics

Thirty-seven articles met the criteria for inclusion and are summarised in Table 3. The identified studies were undertaken between 2013 and 2023 and conducted in various countries including: USA (n = 6); Australia (n = 5); Brazil (n = 4); Canada (n = 4); Sweden (n = 3); Iran (n = 2); Norway (n = 2); United Kingdom (n = 2); New Zealand (n = 2); and one study each from the Middle East (not specified); China; Jordan; Finland; Ecuador; Indonesia; Australasia (Australia and New Zealand) and Pacific Nations. The sample size of the studies ranged between 8 and 377 participants and used a variety of methodologies. Most studies employed qualitative interviewing (n = 19). Other research methods included: mixed methods (n = 6); quantitative survey (n = 5); Delphi (n = 3); focus groups (n = 2); and observations (n = 3). All were cross-sectional and used either convenience, snowball, or purposive sampling strategies. The participants in the included studies comprised nurses (n = 10), senior nurses (n = 5), nurses and senior nurses (n = 1), trainee physicians (n = 2), physicians (n = 3), senior physicians (n = 2), nurses and physicians (n = 7) and a range of ED staff and/or administrative staff and hospital executive (n = 7). The ages of the participants ranged between 31 and 64 years. The tenure of working in EDs was between two and 34 years, although some studies did not provided information on participants' tenure in the ED.

Table 2
Discourses of leadership [18].

Leadership discourse	Nature of discourse	Example leadership theories
Individualist	Individualist discourses focus on leaders as individuals exerting 'power' over others to meet leader-defined goals.	Trait theory, Styles theory, Skills theory.
Contextual	Contextual discourses contend that context, specifically the social context, determines how a leader behaves.	Situational leadership theory, Least preferred co-worker theory, Path-goal theory.
Early relational	Early relational discourses focus on the leader–follower relationship. This relationship is either based on transactional exchanges between leaders and their followers or the leader's transformational ability to 'inspire' their followers to act.	Leader-member exchange theory, Transformational leadership theory
Current relational	Current relational discourses construe leadership as a socially constructed process generated through interactions between team members. On this view, anyone can practice leadership.	Shared leadership, Distributed leadership, Leader-as-practice.
Complexity	Complexity discourses characterise leadership is an emergent process occurring within complex adaptive systems. Leadership has many forms and is distributed across an organisation at all levels.	Complexity leadership theory

3.2. Quality appraisal

Using the MMAT, 25 qualitative, six quantitative and six mixed methods studies were appraised. Some of the chosen methodologies, and data reporting impacted the quality of the studies included as did the quality of the prose used in some of the publications. The MMAT findings are presented in Table 3.

3.3. Conceptions of leadership

Of the 37 articles included in this review, 11 provided a definition of leadership and of these 5 cited a recognised definition of leadership (Table 4). Of these, six were from a nursing perspective, two from medical, and three interdisciplinary. Nursing leadership definitions were characterised by shared leadership and team dynamics [19,25]; setting direction and influencing others to achieve goals [23,37]; and awareness, adaptability, and constructive change [44,51]. Physician leadership definitions highlighted the clinical and medical dimensions of physician leadership [46], the latter reflected in practices such as setting the ED's vision and strategy, and providing inspiration [48]. Clinical leadership and clinical decision-making with a patient-centred perspective were central to interprofessional leadership definitions [35]. Interprofessional leadership also emphasised the variety of forms of leadership that can be effective in interprofessional contexts [31], reflecting contingency and situational conceptions of leadership, which view an individual's specific approach to leadership as contingent on the motivation and ability of his or her followers or team members [38]. Overall, there was a strong emphasis on collaboration and teamwork in leadership in interprofessional ED settings.

3.4. General management and leadership skills and practices

The general management and leadership skills and practices reported in the nursing studies reflected the multifaceted nature of nursing leadership. Studies highlighted the importance of communication [19,22,51,53]; team building [23,25,29]; decision-making and problem solving [19,22,27]; resource management and staff supervision [19,24,33,40]; empowerment and encouragement [25,37,44]; and task coordination and delegation [24,29,55]. The medical perspective on leadership highlighted communication skills and team management [28,49,50], problem solving [28] and task delegation and resource management [20,42].

Collaborative approaches were identified as important in professional (i.e., collaboration between either nurses [41] or physicians [44]) and or interprofessional contexts [34,36,54]. Managing patient flow [35,38], the need to support and foster collaborative team dynamics [34,36], and strategic planning across different professional disciplines [21] were the foci of leadership in the interprofessional context. Finally, studies demonstrated a focus on facilitating communication and mutual support among healthcare professionals [30,43].

Although one study [25] explicitly examined nurses' leadership expectations of emergency physicians, there were no explicit studies of physicians' expectations of nurse leadership. Strategic and systems leadership skills, which was highlighted in the physician-related literature, was a key area of difference between characterisations of nurse and physician leadership. To illustrate this orientation of physicians towards health systems leadership, Tupesis et al. [52] highlighted the role of physicians in quality improvement, healthcare policy, vision goals and strategy and Sinclair et al. [48] emphasised the role of physicians in developing coalitions and systems transformation.

3.5. Leadership theory and discourse

Of the 37 articles included, only eight cited or explicitly drew upon leadership theory in the formulation of the study or the interpretation of the results (Table 4). Three theories were referenced in four nurse-focused studies; namely, shared leadership [19], Kouzes and Posner's Leadership Model [23,37] and Trait theory [53]. Two physician-focused studies cited leadership theory (crisis resource management [28] and paradox theory [47]) and two interprofessional studies cited leadership theory (Styles theory [31] and Path-Goal Theory [38]).

Of the 37 studies included in the review, leadership discourses were identified in 28 studies. Most (n = 14) reflected an 'individualist' discourse, a trend most pronounced in physician-focused studies. A further six studies reflected a 'contextual' discourse, a trend that was especially pronounced in nurse-focused studies. The 'early relational', 'current relational' and 'complexity' discourses, which were far less prominent, were fairly evenly distributed among the remaining studies (see Fig. 2).

4. Discussion

In this scoping review, we sought to identify and map what is known about leadership conceptions of nurses and physicians in EDs. Our review revealed four key findings: 1) leadership was rarely explicitly defined; 2) nurse leaders tended to be characterised as agents of continuity whilst physician leaders tended to be characterised as agents of change *and* continuity; 3) the clarification of expectations from nurse leaders was more evident than expectations from physician leaders; and 4) leadership discourse tended to be traditional rather than contemporaneous.

Given the dearth of definitions of ED leadership in the studies included in this review, our discussion draws on broader management and leadership literature and a four-part typology of organisational work tasks and challenges: 1) organising (i.e., processes designed to achieve a desired outcome), 2) performing (i.e., goal choice and attainment), 3) learning (i.e., change and innovation), and 4) belonging (i.e., identity and group membership) [56].

The general management and leadership skills and practices identified in the ED nurse-focused studies revealed a strong focus on performing (e.g., articulation of performance goals, issue prioritization), a moderate focus on organising (e.g., task coordination and delegation,

Table 3
Details of the studies included in this review.

Author, date	Country	Study focus	Context	Study aims	Design, participants, procedure	MMAT assessment
Armstrong et al. [19]	New Zealand	Nurses	Team (resuscitation)	To determine whether a simulation programme could improve team performance and nurse leadership skills in the ED.	*Design*: Quantitative, pre-interventional, post-observational. *Participants*: 15 senior ED nurses. *Procedure*: This study examined the effect of a simulation training program on teamwork and leadership in the setting of cardiopulmonary resuscitation.	All quality criteria met for a quantitative non-randomised study.
Chalupnik & Atkins [20]	United Kingdom	Physicians	Team (training)	To explore the complexities of interactions within *ad hoc* medical teams.	*Design*: Qualitative. *Participants*: 7 trainee physicians. *Procedure*: Simulated trauma case scenario whereby junior doctors managed a small team of healthcare professionals.	All quality criteria met for a qualitative study.
Chang at al. [21]	United States of America	Interprofessional	Hospital (ED crowding)	To identify effective organisational practices to reduce ED crowding using a positive deviance approach.	*Design*: Mixed methods. *Participants*: 60 key leaders (physicians, nurses, quality improvement specialists, and administrators) across 12 hospitals. *Procedure*: A set of high- and low-performing hospitals were selected on measures of ED crowding and then semi-structured interviews with hospital leaders and staff were conducted to glean insights into the organizational factors that distinguish high- from low-performing hospitals.	Unable to tell if the different components of the study adhere to the quality criteria of each tradition of the methods involved (criterion 5.5) due to concerns relating to representativeness of the sample population.
Clements at al. [22]	Australia	Nurses	Team (resuscitation)	To assess the effect of allocating senior nurses as team leaders of trauma patient assessment and resuscitation on communication, documentation and perceptions of leadership within an ED.	*Design*: Quantitative. *Participants*: 31 emergency nursing staff. *Procedure*: Pre- and post-test study of nursing staff perceptions of leadership and communication before and after the implementation of a nurse leader role.	It is unclear how different participants were compared to non-participants (criterion 4.2)
Connolly et al. [23]	New Zealand	Nurses	EM Practice Level	To examine clinical leadership of registered nurses in an ED.	*Design*: Mixed methods. *Participants*: 112 registered nurses. *Procedure*: Non-experimental descriptive online survey with quantitative and qualitative questions.	All quality criteria met for a quantitative study.
da Silva Barreto et al. [24]	Brazil	Nurses	EM Practice Level	To explore nursing staff beliefs about the nurse's role in ED.	*Design*: Qualitative. *Participants*: 70 nurses. *Procedure*: Descriptive in-person, individual interviews on the topic of the nurse's role in emergency care service.	Difficult to assess 1.3, 1.4 and 1.5 due to language used within the paper.
Daouk-Öyry et al. [25]	Middle East (unspecified)	Nurses	EM Practice Level	To develop a competency model for emergency physicians from the perspective of nurses.	*Design*: Mixed methods. *Participants*: 36 registered nurses. *Procedure*: Secondary analysis of non-experimental descriptive online survey with quantitative and qualitative questions.	As this study focussed on the open-ended responses of the survey criterions 5.2 and 5.5 are difficult to assess.
dos Santos et al. [26]	Brazil	Nurses	EM Practice Level	The identify nurses' beliefs about management of care-related challenges in an ED.	*Design*: Qualitative. *Participants*: 36 ED nurses. *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Estevam et al. [27]	Brazil	Nurses	EM Practice Level	To understand the senses elaborated by nursing technicians on nurses'	*Design*: Qualitative. *Participants*: 17 nursing technicians.	Difficult to assess, 1.4 and 1.5 due to language used within the paper.

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Table 3 (*continued*)

Author, date	Country	Study focus	Context	Study aims	Design, participants, procedure	MMAT assessment
				leadership in emergency situations in the hospital context.	*Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	
Gartland et al. [28]	USA	Physicians	Team (training)	To evaluate the effect of a formal simulation-based leadership training program on EM residents' resuscitation team leadership.	*Design*: Mixed methods. *Participants*: 37 junior EM residents. *Procedure*: Simulation case studies.	Due to the sample size representativeness and therefore generalisability was not ensured (criterion 5.5).
Grover et al. [29]	Australia	Nurses	EM Practice Level	To explore emergency nurses' perceptions, attitudes and experience of teamwork in the ED.	*Design*: Qualitative. *Participants*: 12 registered nurses. *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Hai-ping et al. [30]	China	Interprofessional	EM Practice Level	To explore how cultural values are connected to teamwork between physicians and nurses in EDs.	*Design*: Qualitative. *Participants*: 10 nurses and 10 physicians. *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Härgestam et al. [31]	Sweden	Interprofessional	Team (training)	To investigate communication during *in-situ* trauma team training and its relation to demographics and leadership style.	*Design*: Mixed methods. *Participants*: 96 personnel from 16 trauma teams. *Procedure*: Participants recorded a 5-minute video about teamwork in emergency settings, followed by a participation in a 15-minute simulation scenario.	As only the quantitative findings are presented and no rationale for the use of mixed methodology criterion 5.2 has not been met. Due to the sample size representativeness and therefore generalisability was not ensured (criterion 5.5).
Hjertstrøm et al. [32]	Norway	Nurses	EM Practice Level	To explore the role of nurse leaders as facilitators of service development in rural emergency services.	*Design*: Qualitative. *Participants*: 2 nurse leaders and 6 nurses who worked in the ED. *Procedure*: Shadowing and in-situ interviews with participants as they went about their work in the ED.	All quality criteria met for a qualitative study.
Holmgren et al. [33]	Sweden	Nurses	EM Practice Level	To explore how charge nurses perceive their role in managing daily work and major incidents in the ED.	*Design*: Qualitative. *Participants*: 12 registered nurses. *Procedure*: Online focus groups using a semi-structured interview guide.	All quality criteria met for a qualitative study.
Hosseini et al. [34]	Iran	Interprofessional	Team (resuscitation)	To identify the dimensions of teamwork based on the experiences of members of the resuscitation team.	*Design*: Qualitative. *Participants*: 13 emergency nurses and 3 medical residents working in a resuscitation team in an ED. *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Husebø & Olsen [35]	Norway	Interprofessional	EM Practice Level	To explore the activities performed by clinical leaders and to identify similarities and differences between the activities performed by charge nurses and those performed by doctors on-call in the ED after completion of a leadership course.	*Design*: Qualitative. *Participants*: 5 nurses and 4 on-call physicians. *Procedure*: Shadowing participants as they went about their work.	All quality criteria met for a qualitative study.
Keshmiri & Mohradi [36]	Iran	Interprofessional	EM Practice Level	To explore factors that are influential in leading an interprofessional team from the perspective of team directors in the ED.	*Design*: Qualitative. *Participants*: 12 EM physicians and 3 head nurses. *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Khrais & Nashwan [37]	Jordan	Nurses	EM Practice Level	To explore the leadership practices of nurses in relation to structural and psychological empowerment during COVID-19.	*Design*: Quantitative. *Participants*: 193 emergency nurses. *Procedure*: Online survey of participants' perceptions of leadership practices and empowerment.	All quality criteria met for a quantitative descriptive study.

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Table 3 (*continued*)

Author, date	Country	Study focus	Context	Study aims	Design, participants, procedure	MMAT assessment
Lahiri et al. [38]	England	Interprofessional	Department Level	To explore the effect of "board rounds" and leadership in improving patient flow in EDs.	*Design*: Quantitative. *Participants*: 51 ED clinicians and managers. *Procedure*: Surveys of leadership styles and perceived effectiveness of 'board rounds'.	All quality criteria met for a quantitative descriptive study.
Leonard-Roberts et al. [39]	Australia	Nurses	EM Practice Level	To explore how senior nurses respond to escalations of care for patients who experience clinical deterioration in the ED.	*Design*: Qualitative. *Participants*: 10 nursing shift leaders. *Procedure*: Observational study.	All quality criteria met for a quantitative descriptive study, however due to the sample size representativeness and therefore generalisability was not ensured (criterion 4.2)
Leonard-Roberts et al. [40]	Australia	Nurses	EM Practice Level	To explore ED nurses-in-charge perceptions of their role in responding to episodes of escalation of care for clinical deterioration of ED patients.	*Design*: Qualitative. *Participants*: 10 nursing shift leaders. *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Linden et al. [41]	USA	Physicians	Team (resuscitation)	To examine EM residents' perceptions of gender as it intersects with resuscitation team dynamics and the experience of acquiring resuscitation leadership skills.	*Design*: Qualitative. *Participants*: 16 emergency medicine residents in resuscitation teams. *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Loch et al. [42]	Canada	Physicians	Department Level	To evaluate whether emergency physician leadership can improve patient throughput.	*Design*: Qualitative. *Participants*: 8 physicians and 5 registered nurses. *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Milton et al. [43]	Sweden	Interprofessional	EM Practice Level	To identify healthcare professionals perceptions of critical incidents and linked to the enablers of and barriers to interprofessional teamwork in an ED.	*Design*: Qualitative. *Participants*: 28 ED staff (physicians, nurses, nursing assistants, administrators). *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Nurmeksela et al. [44]	Finland	Nurses	EM Practice Level	To identify nurse managers' work content and develop a corresponding questionnaire.	*Design*: Quantitative. *Participants*: 61 nurse managers. *Procedure*: Survey.	All quality criteria met for a quantitative descriptive study.
Patiño et al. [45]	Ecuador	Physicians	EM Practice Level	To identify current challenges in the specialty and the state of emergency care.	*Design*: Qualitative. *Participants*: 25 emergency medicine staff (EM specialists, public health specialists, physicians, GPs, prehospital personnel). *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Phillips et al. [46]	Pacific countries (Fiji, Kiribati, Papua New Guinea, Samoa, Solomon Islands and Tonga)	Physicians	EM Practice Level	To explore the activities, responsibilities, and experience of leadership.	*Design*: Qualitative. *Participants*: 12 emergency medicine physicians from a range of Pacific nations. *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Rixon et al. [47]	Australia and New Zealand	Physicians	EM Practice Level	To identify the leadership challenges.	*Design*: Mixed methods. *Participants*: 87 ED Medical Directors. *Procedure*: Online Delphi study.	All quality criteria met for a mixed method study.
Sinclair et al. [48]	Canada	Physicians	EM Practice Level	To explore EM leaders' beliefs about the key elements of leadership.	*Design*: Qualitative. *Participants*: 8 EM experts. *Procedure*: Panel discussion.	All quality criteria met for a qualitative study.
Tanner et al. [49]	USA	Physicians	EM Practice Level	To identify the patient care and staff safety challenges that COVID-19 presented to the paediatric EDs.	*Design*: Qualitative. *Participants*: 14 PEM fellowship-trained physicians. *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Thoma et al. [50]	Canada	Physicians	EM Practice Level	To identify the administration and leadership competencies	*Design*: Mixed methods. *Participants*: 57 EM experts in	From the data presented from this Delphi study criterions 5.3,

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Table 3 (*continued*)

Author, date	Country	Study focus	Context	Study aims	Design, participants, procedure	MMAT assessment
				for speciality emergency physicians that enable them to contribute effectively to clinical, research, and education programs.	academia, administration and education. *Procedure*: Delphi study.	5.4 and 5.5 were not able to be assessed.
Trisyani et al. [51]	Indonesia	Nurses	EM Practice Level	To explore the emergency nurses' competencies in the clinical ED context.	*Design*: Qualitative. *Participants*: 57 ED nurses. *Procedure*: Focus groups and interviews.	All quality criteria met for a qualitative study.
Tupesis et al. [52]	USA	Physicians	EM Practice Level	The develop a novel curriculum on administrative leadership development within EM.	*Design*: Mixed methods. *Participants*: 377 members of the International Federation of Emergency Medicine. *Procedure*: Online survey with quantitative and open-ended questions.	All quality criteria met for a qualitative study.
Van Osch et al. [53]	Canada	Physicians	EM Practice Level	To explore the factors that promote an experienced nurse's intention to stay in emergency or critical care.	*Design*: Qualitative. *Participants*: 13 emergency nurses. *Procedure*: Descriptive, exploratory, in-person semi-structured interviews.	All quality criteria met for a qualitative study.
Wilson et al. [54]	USA	Physicians	EM Practice Level	To explore the factors that influenced physicians' engagement in efforts to improve Interprofessional Collaborative Practice in EDs.	*Design*: Qualitative. *Participants*: 12 ED site coordinators. *Procedure*: Exploratory multi-case study design.	All quality criteria met for a qualitative study.
Wise et al. [55]	Australia	Nurses	EM Practice Level	To describe how nurse coordinators accomplished day-to-day interprofessional coordination in an ED team.	*Design*: Qualitative. *Participants*: 19 ED physicians, registered nurses and nurse practitioners. *Procedure*: Descriptive, exploratory semi-structured interviews.	All quality criteria met for a qualitative study.

ED = emergency department; EM = emergency medicine; MMAT = mixed methods assessment tool.

staff supervision), with considerably less emphasis on belonging (e.g., team building, support) and especially learning (e.g., challenging the process, coaching staff). This suggested that ED nurses' conceptions of leaders are centred more on management rather than leadership, whereby they are focused on system maintenance and supporting existing ways of working rather than challenging them. This emphasis on performing and organising also characterised representations of leadership in interprofessional contexts. By contrast, the skills and practices identified in the ED physician-focused studies revealed broadly equal attention to performing (e.g., articulating clear expectations, providing regular feedback to staff), organising (e.g., task coordination and delegation, planning), belonging (e.g., team building, develop coalitions) and learning (e.g., quality improvement, system transformation). This constellation suggests that ED physicians' conceptions of leaders are as concerned as much with management as leadership, highlighting an expectation for physicians to serve as agents of continuity as well as change.

5. Implications and recommendations

Our findings have several implications for future research. With respect to leadership research, our finding that leadership was typically undefined and theoretically untethered in the studies included in this review is consistent with Wilson et al. [7] who found a comparable lack of definition and use of leadership theory in their review of formal clinical and medical leadership in EDs. Moreover, our review adds further evidence to the notion that studies of leadership in emergency care settings, including EDs, are in their infancy [8,47,57,58]. Several lines of inquiry for future research are suggested by the findings of our review.

First, explicit studies of nurses' and physicians' conceptions of leadership and followership in EDs are warranted. Gordon and colleagues' [18] qualitative study of conceptions of leadership and followership in healthcare by medical trainees offers a potential framework for such research. Second, although the studies included in this review generally reflected 'individualist' and to a lesser extent 'contextual' leadership discourses, studies of the dynamic use of shared, hierarchical, and deindividualised approaches to leadership in emergency care [59] suggest that the leadership practices in ED settings are more sophisticated and complex than is suggested by the corpus of studies included in this review. Studies in the context of resuscitation, managing patient flow, and over-crowding may offer fruitful avenues for future research to explore and reveal the types of professional and interprofessional practices that reflect contemporary relational and complexity conceptions of leadership. Third, our findings hint at the types of 'boundary work' (i.e., the competitive or collaborative work professionals undertake to influence the demarcations and distinctions between groups [60,61]) that clinicians undertake to ensure optimal patient outcomes. Given that nurses often bear the responsibility for the often-invisible boundary work in ED settings [55], further research is needed to better understand the dynamics of leadership in this context.

With respect to leadership development, there are opportunities to develop the leadership literacy of ED nurses and physicians. The dominance of 'individualist' and 'contextual' leadership discourses revealed in this review is instructive about how leadership is conceptualised in healthcare in general among nurses and physicians specifically. This knowledge would provide a powerful starting point in leadership development programs that seek to foster nurses' and physicians' awareness of their tacit or implicit theories of leadership [62], as well as their understanding of the ways in which their leadership repertoire and effectiveness can be expanded. Ultimately, improving the quality of nurse, physician and interprofessional leadership in EDs will likely improve a host of factors, including clinician job satisfaction, staff retention, organisational climate, and patient safety [1,2,3].

Table 4
Conceptions of leadership in emergency care.

Author, date	Study focus	Core question	Definition of leadership	General management and leadership skills and practices	Cited leadership theory	Leadership discourse
Armstrong et al. [19]	Nurses	How are nurse leadership skills improved in resus training?	Shared leadership is a dynamic, interactive processes that allows teams to achieve common goals with a more lateral hierarchical structure compared to traditional vertical leadership styles.	Good time management, co-operation and resource management, communication and interaction, assessment, and decision-making.	Shared leadership	Current relational
Chalupnik & Atkins [20]	Physicians	How do trainee doctors communicate to lead effectively?	—	Task delegation	—	Early relational
Chang at al. [21]	Interprofessional	What is the role of hospital-wide leadership in addressing overcrowding?	—	Issue prioritization, articulation of performance goals, provision of resources to achieve these goals, leadership on the floor to monitor performance.	—	Current relational
Clements at al. [22]	Nurses	How does the nurse leader in resuscitation impact nurses views of leadership?	—	Effective communication, decision-making, instruction, initiation of treatment.	—	Individualist
Connolly et al. [23]	Nurses	What helps RNs to be clinical leaders in the ED?	Clinical leadership refers to (nurse) behaviours that provide direction and support to patients and the healthcare team in the delivery of patient care.	Challenges the process, inspires a shared vision, enables others to act, provides direction, influences others, engages with others to find solutions, team building, empowers others.	Kouzes and Posner Leadership Model	Early relational
da Silva Barreto et al. [24]	Nurses	What are the leadership functions of nurses?	—	Direct and coordinate the activities of other team members, delegate and assign tasks, supervise staff.	—	Contextual
Daouk-Öyry et al. [25]	Nurses	What do nurses expect from doctors' leadership?	Team leadership as leading by example in a team environment that fosters collaborative goal-oriented work, while promoting a high-performance culture.	Leading by example, conflict resolution, fostering a healthy work environment, task delegation, motivating others, cooperation, ability to empower, management skills, organisational skills.	—	Contextual
dos Santos et al. [26]	Nurses	What are the leadership challenges of nurses?	—	—	—	—
Estevam et al. [27]	Nurses	What do nurses expect from their nurse leaders?	—	Problem solving, direct and coordinate the activities of other team members.	—	Contextual
Gartland et al. [28]	Physicians	What do team leadership skills do junior doctors need to lead resuscitation?	—	Situational awareness, problem solving, communication, team management.	Crisis resource management	Contextual
Grover et al. [29]	Nurses	What do nurses expect from their team leaders?	—	Delegating tasks, supporting team members to perform unfamiliar tasks, communicate team priorities, inquire into and support team members.	—	Contextual
Hai-ping et al. [30]	Interprofessional	How do doctors and nurses communicate effectively together?	—	Communication, mutual support.	—	Individualist
Härgestam et al. [31]	Interprofessional	What leadership styles help 'speak up' behaviours in trauma team training?	Authoritarian leadership styles are directive and coercive, whereas egalitarian styles are participative.	—	Styles theory	Individualist
Hjertstrøm et al. [32]	Nurses	What are the leadership actions of nurse leaders?	—	Facilitating trust and resource mobilization, facilitating procedures and cooperation, facilitating adjustment of professional competence.	—	Complexity
Holmgren et al. [33]	Nurses	What are the leadership challenges of nurse leaders?	—	Oversee the quality of patient care, direct work, allocation of resources, role modelling, prioritize and to coordinate patient flow while maintaining patient safety.	—	Early relational
Hosseini et al. [34]	Interprofessional	What makes for effective team leader behaviours in resus teams?	—	Communication, mutual support, time management, resource allocation, task management.	—	Early relational
Husebø & Olsen [35]	Interprofessional	How does clinical leadership differ between nurses and doctors?	Clinical leadership involves taking responsibility for clinical decision-making with a patient-centred perspective addressing four key	Receiving an overview of the team and patients and planning the shift; ensuring resources; monitoring and ensuring appropriate patient flow;	—	—

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Table 4 (*continued*)

Author, date	Study focus	Core question	Definition of leadership	General management and leadership skills and practices	Cited leadership theory	Leadership discourse
			values: trust, quality, responsiveness, and efficiency.	monitoring and securing information flow; securing patient care and treatment; securing and assuring the quality of diagnosis and treatment of patient; and securing the prioritization of patients.		
Keshmiri & Mohradi [36]	Interprofessional	How to effectively lead an inter-professional team?	—	Supportive management and collaborative leadership competencies such as effective communication and giving feedback were identified for effective interprofessional team leaders.	—	Current Relational
Khrais & Nashwan [37]	Nurses	What are the clinical leadership practices of nurses?	Leadership is the practice and process of influencing others to achieve specific goals.	Questioning the process, inspiring a shared vision, empowering people to act, leading by example, and encouraging the heart.	Kouzes and Posner Leadership Model	Current Relational
Lahiri et al. [38]	Interprofessional	What kind of leadership improves patient flow in the ED?	Leadership approaches are contingent on the satisfaction, motivation and performance of subordinates, complementing their abilities and compensating for their deficiencies.	Managing patient flow and effective leadership actions.	Path-Goal Leadership Theory	Contextual
Leonard-Roberts et al. [39]	Nurses	What is the role of nurse leaders in patient care?	—	Confirmation of patient deterioration, collaboration with other clinicians and clinical interventions.	—	Individualist
Leonard-Roberts et al. [40]	Nurses	What is the impact of nurse leaders on care?	—	Clinical risk management and resource management.	—	Individualist
Linden et al. [41]	Physicians	How does gender impact resus leadership skills for EM residents?	—	Use of directive leadership styles, facilitating collaboration with nursing staff, team relationship building (trust and respect).	—	Individualist
Loch et al. [42]	Physicians	What role does ED physician leadership play in addressing over-crowding?	—	Initiation of investigations and treatments, liaising with charge/ triage RN and consulting services, serving as resource to junior staff.	—	Individualist
Milton et al. [43]	Interprofessional	How do leaders aid interprofessional teamwork?	—	Enabling communication for interprofessional teamwork and collaboration, supporting colleagues.	—	—
Nurmeksela et al. [44]	Nurses	What leadership is required of nurse managers?	Leadership concerns the general influence process and is about adaptation and constructive change.	Supporting, motivating and coaching staff and enabling them to grow in their profession.	—	—
Patiño et al. [45]	Physicians	What are the leadership challenges in EM?	—	—	—	—
Phillips et al. [46]	Physicians	What is the experience of leadership among EM physicians?	Leadership in EM involves clinical leadership (informal team leadership in clinical activities) and medical leadership (formal, management, administrative work).	Professional identity and style, nurturing relationships and building solidarity, growth through experience, education and challenge.	—	Current relational
Rixon et al. [47]	Physicians	What are the leadership challenges for Directors of EM?	—	—	Paradox theory	Complexity
Sinclair et al. [48]	Physicians	What leadership is needed in EM?	Leadership is about vision, strategy, and inspiring people.	Lead self, engage others, achieve results, develop coalitions, and systems transformation.	—	—
Tanner et al. [49]	Physicians	What leadership learnings emerge for pediatric emergency medicine physicians from COVID?	—	Communication, leadership and planning, clinical practice, and personal adaptations	—	—
Thoma et al. [50]	Physicians	What are the leadership competencies needed to be effective?	—	Communication, collaboration, management, scholarship, health advocacy, professionalism.	—	—
Trisyani et al. [51]	Nurses	What leadership competencies do nurses need?	Leadership is concerned with the awareness of understanding and learning regarding both knowledge and skills for personal and professional development at both individual and group levels.	Shifting the nursing practice, caring for acute patients, communicating and coordinating, covering disaster nursing roles, reflecting on ethical and legal standards.	—	Individualist

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Table 4 (*continued*)

Author, date	Study focus	Core question	Definition of leadership	General management and leadership skills and practices	Cited leadership theory	Leadership discourse
Tupesis et al. [52]	Physicians	What is needed for administrative leadership?	—	Negotiation skills, financial analysis, quality improvement, media and media relations, healthcare policy, vision goals and strategy, emotional intelligence.	—	Individualist
Van Osch et al. [53]	Nurses	What are motivating leadership behaviours for nurses by nurse leaders?	—	Engagement, visibility and presence, consistency, fairness, providing regular feedback and strong communication skills articulating clear expectations.	Trait theory	Individualist
Wilson et al. [54]	Physicians	How do ED physicians enable interprofessional collaborative practice?	—	Shaping system collaborative activities and other quality improvement initiatives.	—	Individualist
Wise et al. [55]	Nurses	How do nurse coordinators facilitate interprofessional teamwork?	—	Task co-ordination and oversight, taking action to maintain patient flow, negotiating ambiguous roles.	—	—

ED = emergency department; EM = emergency medicine; RN = Registered Nurse.

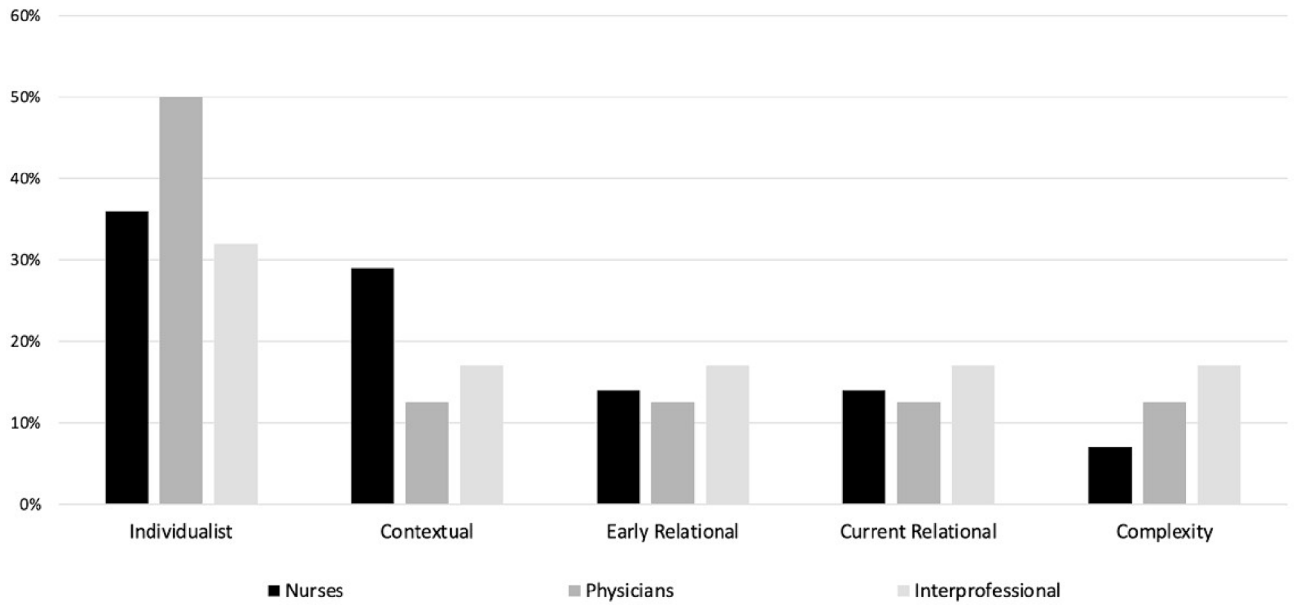

Fig. 2. Prevalence of leadership discourses in studies of leadership in emergency departments.

6. Scoping review limitations

Although a comprehensive approach was used to guide our review, it is possible that some articles were missed. Further, given that only English literature was included, it is possible that articles on this topic have been published in languages other than English and are thus not represented in our findings. Finally, the studies included were heterogenous in nature in terms of aspects such as study design; sample size; team dynamics; setting; and study focus area.

7. Conclusion

This scoping review revealed similarities and differences in the leadership conceptions of nurses and physicians in ED settings. Future directions for research into ED nurse and physician leadership and leadership development warrant focus on clarifying definitions, enhancing leadership literacy, integrating interdisciplinary learning opportunities and deepening application and development of theory.

Ethical statement

Not applicable

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CRediT authorship contribution statement

Andrew Rixon: Writing – review & editing, Writing – original draft, Methodology, Conceptualization. **Elizabeth Elder:** Writing – review & editing, Writing – original draft, Methodology, Conceptualization. **Claudia Bull:** Writing – review & editing, Writing – original draft, Methodology. **Julia Crilly OAM:** Writing – review & editing, Writing – original draft, Methodology, Conceptualization. **Christina Østervan:** Writing – review & editing, Methodology. **Hayley Frieslich:** Writing – review & editing. **Shaun Robertson:** Writing – review & editing. **Ed**

Pink: Writing – review & editing. **Samuel Wilson:** Writing – review & editing, Writing – original draft, Methodology, Conceptualization.

Declaration of Competing Interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: [JC is an International Advisory Board Member for International Emergency Nursing].

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