Check for updates

Received: 17 February 2022 | Revised: 18 January 2023 | Accepted: 14 February 2023

DOI: 10.1002/nop2.1694

NursingOpen Open Access WILEY

SYSTEMATIC REVIEW

Nursing managers' experiences of facing the COVID-19 pandemic in their work: A systematic review

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Abstract

Aim: There is far little evidence available on nursing managers' experiences during this global crisis. This systematic review aimed to provide the first comprehensive summary of the findings of published studies describing data concerning nursing managers' experiences of the COVID-19 outbreak.

Design: Studies published between January 2019 and the end of December 2021 were retrieved from CINAHL, Medline and PubMed databases. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement was used to guide the search methodology.

Methods: In total, 14 relevant articles were assessed using the Joanna Briggs Institute Critical Appraisal Tools and subjected to thematic content analysis.

Results: Our findings revealed five main themes describing nursing managers' experiences: an expanding and changing role, ensuring the well-being of staff, communication, support received, development and learning. Nursing managers found the task of operational management confusing, as objectives have been constantly changing as the pandemic has progressed. The results should be used in preparation for future crises similar to the COVID-19 pandemic.

KEYWORDS
COVID-19, experience, nursing manager, systematic review

1 | INTRODUCTION

Coronavirus disease 2019 (COVID-19) was declared a global pandemic in March 2020 by the World Health Organization (WHO) and the virus continues to spread worldwide (WHO, 2020). At the same time, the crisis caused by the pandemic has put tremendous pressure on the healthcare workforce and ensuring adequate healthcare capacity (Adams & Walls, 2020; Trentini et al., 2021). Ensuring the adequacy of the capacity has required the reorganization of operations and the assignment of staff from other wards to care for COVID patients (Mattila et al., 2021; Specht et al., 2021).

Many studies have mentioned adverse effects on healthcare workers as consequences of persevering pressure and working in a challenging and uncertain situation (e.g. Billings et al., 2021; Catania et al., 2021; Fernandez et al., 2020; Gordon et al., 2021; Joo & Liu, 2021; Li et al., 2021; Mattila et al., 2021; Xu et al., 2021). Intensive care unit nurses have experienced intense psychological effects such as anxiety, stress, fear, helplessness and physical effects such as sleep disturbances, headaches and discomfort as a result of caring for patients diagnosed with COVID-19 in a challenging care environment (Gordon et al., 2021; Li et al., 2021). For example, front-line nurses have been found to have a significantly higher risk of developing post-traumatic stress disorder compared to nurses

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working in other COVID-19-related units (Li et al., 2021). Further, during the pandemic, workers have struggled with high workloads and long shifts, and expressed a desire for adequate rest and recovery (Billings et al., 2021). Moreover, Joo and Liu (2021) identified five barriers to overcome to improve nurse's experiences and, as a result, the quality of patient care: limited information about COVID-19, unpredictable tasks and challenging practices, insufficient support, concerns related to family and emotional and psychological stress'.

In a crisis such as the COVID-19 pandemic, mid-level healthcare managers are suddenly forced to take measures to protect the health of their employees and ensure the smooth operation of their organization to the extent possible (Jankelová et al., 2021). At the same time, the managers must be able to find a solution to how to strengthen their healthcare teams to manage the pandemic. This makes it important to describe nursing managers' experiences of the COVID-19 outbreak to develop measures to manage the future crisis.

2 | BACKGROUND

A study by Jankelová et al. (2021) showed that the important factors for crisis management, especially in an acute crisis stage, include effective internal communication, selection of a suitable management style, flexibility of decision-making, creation of an effective crisis team and sharing of information in it. The role of the nursing manager during the severe acute respiratory syndrome (SARS) crisis has been previously studied (Lau & Chan, 2005). The results showed that the promotion of nurses' safety and emotional stability were the main goals of managing the crisis. To pursue these aims, several strategies were employed, including information sharing, provision of personal protective equipment and emotional support. At the same time, the nursing managers felt overwhelmed due to uncertainties related to SARS. Around 16 years after the SARS outbreak, roughly three-quarters of the studied nursing managers were found to experience high levels of anxiety during the first wave of the COVID-19 pandemic due to, among other things, a lack of predictability. Two-fifths of the managers also considered leaving their job (Middleton et al., 2021).

During the COVID-19 pandemic, the important role of sensitive and effective management has been highlighted (Catania et al., 2021; Fernandez et al., 2020). Fernandez et al. (2020) concluded that, without support, both during and following a pandemic, nurses are likely to experience psychological effects that can lead to burnout and leaving the nursing workforce. Despite support and personal protective equipment issues, there is a need to adopt leadership models to manage the emergency (Catania et al., 2021). For example, Raman (2020) has proposed the following practices for nursing leaders to support front-line engagement while navigating and leading teams through a crisis: considering the communication structures and forums, continuing to role model and promoting a culture of evidence-based practice, understanding the risks to their own safety and the safety of their team members and their family members, creating work environments that provide psychological safety, involving front-line staff in the change and in designing the solution and putting the joy in work (staff support through employee wellness and spiritual care services).

We can conclude that the different impacts of COVID-19 on front-line nurses and their experiences are well-documented. By contrast, there is thus far little evidence available on nursing managers' experiences during this global crisis.

3 | METHODS

3.1 | Aim

This systematic review aimed to provide the first comprehensive summary of the findings of published studies describing data on nursing managers' experiences during the COVID-19 outbreak. The following research question guided this review: How have nursing managers experienced facing the COVID-19 pandemic in their work?

3.2 | Design

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher et al., 2009) was used to guide the search methodology. The research data, which consisted of evidence-based studies, were subjected to thematic content analysis by generating common themes (Dixon-Woods et al., 2005).

3.3 | Search strategy

A systematic literature search was performed using the CINAHL, Medline and PubMed databases to look for relevant articles published from 2019 to the end of December 2021. MeSH (Medical Subject Headings) terms (PubMed) & Medline (Ovid) with text words (tw) and Subject Headings (CINAHL) were used. The Boolean operators "OR" and "AND" were used to combine key wards into search phrases. CINAHL Database: S1 (MH "Nursing Management+") OR (MH "Nurse Managers+") OR (MH "Personnel Management+"); S2 (MM "Work Experiences") OR (MM "Job Experience"); S3 (MM "Professional Role"); S4 (MH "COVID-19+"); S5 S2 OR S3; S6 (S2 OR S3) AND (S1 AND S5); S7 S4 AND S6.

A manual search via net with the following phrases: "nursing leadership during COVID-19 pandemic," "nursing management during COVID-19 pandemic," was also performed to identify other potential articles. One potential article was found. Moreover, three other applicable articles were identified based on the reference lists of included articles. The results of the literature search were saved in an Excel file. Two independent reviewers (EM and MK) examined each article title and abstract for appropriateness. A full-text review was performed on those articles that met the following inclusion criteria: the publications were peer-reviewed articles with full text available,

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published in English and focused on nursing managers' experiences during the COVID-19 pandemic. Studies were excluded if they were editorials, commentaries, guidelines, theoretical operating models, focused on the experiences of nursing staff or patients, and their language was other than English. Final decisions on whether to include the papers in the review were made in a collective discussion between all authors (EM, MK, & TL). Figure 1, PRISMA flow diagram (Moher et al., 2009) demonstrates how many articles were reviewed at each phase of the search process.

3.4 | Data extraction and quality assessment

The articles selected for this review were extracted into a summary table by one author (TL). Data were checked by the two other reviewers (EM and MK) independently. The following items have been extracted from each study: country and year of publication, aim of the study, sample size of the study, setting, method used and key results (see Table 1).

Two reviewers (EM and MK) conducted an independent evaluation of the methodological quality of the studies. Any disagreements were resolved by discussion. The methodological quality of the studies was assessed using relevant tools from the Joanna Briggs Institute Critical Appraisal Tool Catalogue (Joanna Briggs Institute, 2020). Qualitative studies were rated on a scale of 0–10. A mixed methods study was evaluated according to qualitative criteria. This is because the qualitative analysis was considered to be the main method. Two quantitative studies were rated using the criteria of a cross-sectional study on a scale of 0–8. The studies were mainly of good quality, that is, each study scored between 65%–85% of the total points (see Table 1).

4 | RESULTS

4.1 | Characteristics of the studies

Thirty-six studies were considered to meet the inclusion criteria; 14 were selected for this review (Figure 1). These studies had been carried out in eight countries: Brazil (n = 1), Canada (n = 3), Iran (n = 2), Denmark (n = 2), Egypt (n = 1), Israel (n = 1), Spain (n = 1), Switzerland (n = 1) and the United States (n = 2); the studies used various study designs. Of the articles, 11 were qualitative studies (Bianchi et al., 2021; Bookey-Bassett et al., 2020; Deldar et al., 2021; Freitas et al., 2021; Freysteinson et al., 2021; Hølge-Hazelton, Kjerholt, et al., 2021; Jackson & Nowell, 2021; Jeffs et al., 2020; Poortaghi et al., 2021; Vázquez-Calatayud et al., 2021; White, 2021), two were quantitative studies (Gab Alla, 2021; Hølge-Hazeltonet, Zacho Borre, et al., 2021) and one mixed methods study (Kagan et al., 2021). Research data had been collected in most of the studies using a semi-structured interview (Bianchi et al., 2021; Deldar et al., 2021; Freysteinson et al., 2021; Jackson & Nowell, 2021; Jeffs et al., 2020; Poortaghi et al., 2021; Vázquez-Calatayud et al., 2021; White, 2021). The data from the 14 studies had been collected between the end of March 2020 (Bianchi et al., 2021) and November 2020 (White, 2021). The exact time of data collection was not mentioned in the two studies (Jeffs et al., 2020; Poortaghi et al., 2021). These studies had been

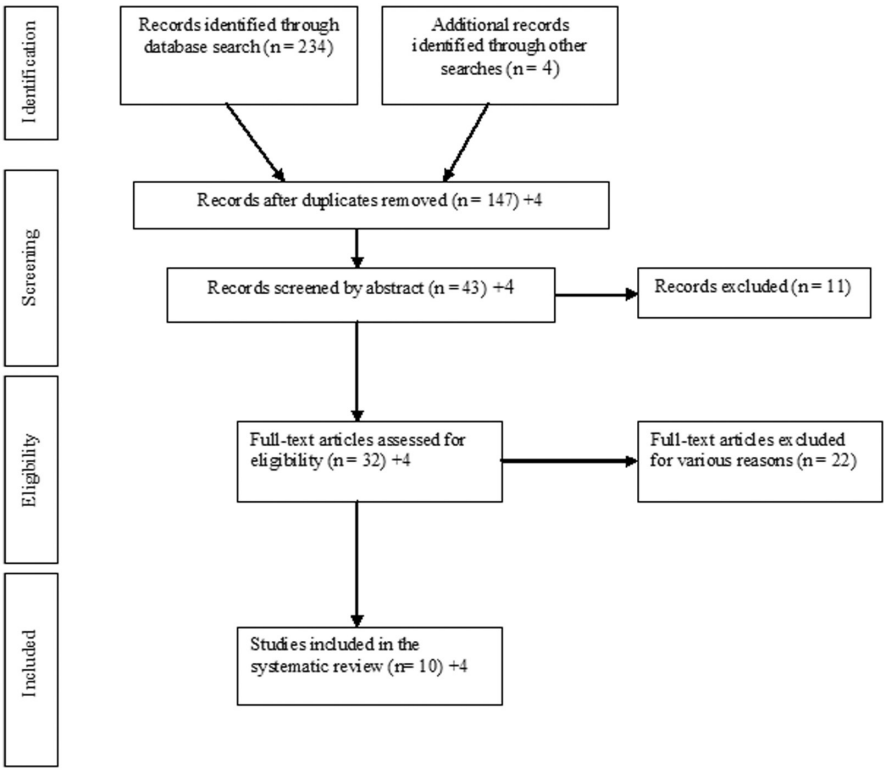

FIGURE 1 The paper selection process according to the PRISM flow diagram.

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TABLE 1 Studies included in the systematic review.

Study/country/year	Aim	Sample and setting	Methods	Key results	Quality scores (JBI)
1. Bianchi et al. (2021) Switzerland	To explore the experiences of middle management nurses during the COVID-19 pandemic in Switzerland	12 middle managers (purposive convenience sampling) representing different healthcare institutions	A qualitative study. A face-to-face interview with semi-structured questions Data were analysed by means of thematic analysis	Data analysis identified four macro-themes: changes, conflicting emotions, relation, role and 20 sub-themes	5/10
2. Bookey-Bassett et al. (2020) Canada	To describe nursing manager's enacted and experienced transformational and complex leadership during the COVID-19 outbreak	13 nursing managers working at one multi-site, academic health sciences center representing various medical, surgical and specialty patient care units	A series of conversations with groups of nursing managers working at an inpatient unit Content analysis was used to identify key themes	Results revealed the dual roles assumed by nurse managers during the COVID-19 crisis: leader-staff relationship, role changes, personal impacts, strategies to navigate organizational and patient care challenges and key learning content and recommendations	7/10
3. Deldar et al. (2021) Iran	To elaborate on the nursing managers' experiences facing the Coronavirus pandemic	18 nursing managers working at university hospitals	Semi-structured interviews were conducted and qualitative content analysis was performed	Participants described their experiences, which could be divided into three categories: 'facing the personnel's mental health,' 'managerial and equipment provision challenges,' and 'adaptability and exultation process,' with 13 sub-categories	7/10
4. Freitas et al. (2021) Brazil	To describe the challenges of nursing leaders and the solutions implemented to face the Coronavirus pandemic in a Brazilian hospital	Six tactical nursing leaders working in a high-complexity philanthropic hospital were recruited by convenience sampling	The managers responded via audio recordings to two open-ended questions; inductive content analysis was used to create categories	Two main categories of challenges were found: the changes and challenges in the face of an unknown disease, and an evaluation of the experiences of the nursing leaders. Further, numerous solutions were implemented in response to the challenging situation	6/10
5. Freysteinson et al. (2021) USA	To understand nursing leaders' experiences during the pandemic	28 leaders (purposeful sampling) in a large healthcare system	Data were collected via semi-structured audiotaped interviews and results were analysed using hermeneutic phenomenology	Five phenomenological themes were as follows: embodied leadership, navigating differently, trusting and earning trust, being the voice of reason and envisioning the future	8/10
6. Gab Allah, (2021) Egypt	To explore challenges facing nursing managers during and beyond the coronavirus disease 2019 (COVID-19) pandemic and its relation to perceived organizational support	214 nursing managers (convenience sampling) at different healthcare settings (primary, secondary and tertiary) across Egypt	Descriptive correlational design. Two instruments were used: a questionnaire on the challenges faced by nursing managers and a survey of perceived organizational support Descriptive (mean, SD, range), and analytical statistics (non-parametric test, Spearman's correlation and binary logistic regression analysis) were used	96.7% of nursing managers reported that COVID-19 has placed additional challenges on them. Staff's safety and risk for infection, stress, fear and anxiety and excessive workloads were the three highly reported challenges (97.2%, 99.1%, and 92.1%) There were statistically significant negative correlations between current and future challenges faced by nursing managers ($p < 0.001$; $p < 0.009$)	6/8

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TABLE 1 (Continued)

Study/country/year	Aim	Sample and setting	Methods	Key results	Quality scores (JBI)
7. Hølge-Hazeltonet, Kjerholt, et al. (2021) Denmark	To reflect and learn how person-centered nursing leadership may be strengthened in crisis situations similar to the COVID-19 pandemic	13 ward managers from a Danish university hospital	Telephone interviews were conducted 3 months after the first national COVID-19 case was confirmed A qualitative-directed content analysis was chosen	The ward managers often experienced a lack of timely, relevant information, involvement in decision-making and acknowledgement from the head nurse of the department and the executive management	9/10
8. Hølge-Hazelton, Zacho Borre, et al. (2021) Denmark	To identify the differences in experiences during wave I and II of the COVID-19 pandemic among healthcare leaders	89 healthcare leaders, of whom 53 ward managers (clinical and para clinical) worked at a regional acute hospital complex with 19 clinical departments including medicine, surgery, and intensive care	A cross-sectional descriptive and comparative study using questionnaires	Statistically significant differences were found in the entire group of leaders across the key characteristics: they felt more prepared for each stage of the situation (i.e. being better informed, having an overview of their task or more ability to work in line with their own beliefs and values, though they felt more overload) they had more influence on the decisions made, and they felt more concerned about the quality of treatment and care and their own health. Moreover, leaders without a formal management education felt more supported by staff. Leaders with more than 5 years of experience felt more prepared and informed, had more influence over decision-making, and were more worried about their own health	9/10
9. Jackson & Nowell, 2021 Canada	To understand the experiences of nursing managers during the COVID-19 pandemic	Eight nursing managers from acute care and outpatient settings	A qualitative study. Semi-structured interviews were conducted and thematic analysis was used	Nursing managers had to coordinate care in a context involving uncertainty and guidance that changed frequently Their roles and responsibilities either expanded to include more duties, or they were asked to take on a completely new role, with no orientation or training Nursing managers were expected to provide support to their staff and patients but did not necessarily receive support for themselves	7/10
10. Jeffs et al. (2020) Canada	To determine how chief nurse executives are navigating the balancing act of organizational (internal) and system-level (regional and/or provincial) accountabilities amid the coronavirus disease 2019 (COVID-19) pandemic	Four chief nurse executives in an urban regional hospital network	Semi-structured interviews were conducted and thematic analysis was used	Three key themes (staying resilient and evidence-informed amid the intensity and accelerated decision-making, ensuring staff resiliency through leadership visibility and building trust, balancing new accountabilities and valuing regional collaboration) and seven subthemes were identified	8/10

(Continues)

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TABLE 1 (Continued)

Study/country/year	Aim	Sample and setting	Methods	Key results	Quality scores (JBI)
11. Kagan et al. (2021) Israel	To examine the managerial and clinical challenges of nursing managers in mental health centers during the ongoing COVID-19 pandemic	25 nursing managers from two mental health centers	A mixed-methods study The quantitative phase: a structured self-administered questionnaire was completed and descriptive analysis was used to determine the distribution of the items and variables The qualitative phase: three weekly sessions of focus groups lasting 90 min The qualitative methodology was performed using constant comparative analysis	Quantitative findings: The most important challenges were related to a need to protect patients from infection (*M* score = 4.55, SD = 0.2), communication with families and primary caregivers (*M* score = 4.50, SD = 9.60) and impaired communication between patients and their family and relatives (*M* score = 4.36, SD = 0.95) Three themes and nine categories were identified: (1) 'management complexity'; (2) 'challenging communication' included communication with patients through glass walls and communication with staff through screens; and (3) 'bright spots' referred to staff cohesion and the provision of respectful care	6/10
12. Poortaghi et al. (2021) Iran	To explore the nursing managers' perception of nursing workforce management during the outbreak of COVID-19	15 nursing managers (purposeful sampling) from various hospitals in different cities	In-depth semi-structured interviews and conventional content analysis was performed	Three categories and seven sub-categories were identified from the data analysis: (1) management of workforce recruitment (volunteer workforce, non-volunteer workforce); (2) management of workforce arrangement (flexible work schedule, rearrangement of the workforce); and (3) management of workforce retention (preventive measures, motivational measures and psychological support	8/10
13. Vázquez-Calatayud et al. (2021) Spain	To explore the experiences of frontline nurse managers during COVID-19	10 frontline nurse managers at a highly specialized university hospital	Semi-structured interviews and systematic analysis of the transcripts were conducted by applying the methods proposed by Burnard (1996)	Six themes were identified: constant adaptation to change, participation in decision-making, management of uncertainty, prioritization of the biopsychosocial well-being of the staff, preservation of humanized care and a 'one for all' mindset	7/10
14. White (2021) USA	To understand the experiences of hospital nurse managers and assistant nurse managers during the COVID-19 pandemic in the United States	13 managers, seven nurse managers, and six assistant nurse managers (purposeful sampling) working in three major hospitals	Phenomenological qualitative study Interviews using audio-video teleconferencing and a semi-structured interview guide Iterative analysis	Four major themes were identified: being there for everyone, leadership challenges, struggles, support and coping and strengthening one's role	9/10

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conducted "during the outbreak of COVID-19" or "in the first phase of pandemic."

The 14 selected studies included a total of 432 participants. The number of respondents ranged from four (Jeffs et al., 2020) to 214 (Gab Allah 2021). Female participants represented the majority in seven studies (Bianchi et al., 2021; Freitas et al., 2021; Gab Allah, 2021; Hølge-Hazelton, Kjerholt, et al., 2021; Hølge-Hazelton, Zacho Borre, et al., 2021; Poortaghi et al., 2021; Vázquez-Calatayud et al., 2021; White, 2021), while in one study, the share of men was higher (Deldar et al., 2021). Four studies did not report this information (Bookey-Bassett et al., 2020; Freysteinson et al., 2021; Jeffs et al., 2020; Kagan et al., 2021).

Participants' positions or titles in their organizations varied from one study to another. They represented various organizational levels and different types of healthcare units. The term "nurse manager" might refer to a head nurse, supervisor or clinical supervisor (Deldar et al., 2021; Gab Allah, 2021; Poortaghi et al., 2021). Other titles were also mentioned, including a "nurse in charge" and "matron" (Deldar et al., 2021), nursing director, quality manager and infection control manager (Gab Allah, 2021) and nursing service manager (Poortaghi et al., 2021). The participants also were called ward managers (Hølge-Hazelton, Kjerholt, et al., 2021; Hølge-Hazelton, Zacho Borre, et al., 2021; Kagan et al., 2021), middle-manager nurses (i.e. either nurse director or head of the institute) (Bianchi et al., 2021), nurse managers (Bookey-Bassett et al., 2020; Jackson & Nowell, 2021), chief nurse executives (Jeffs et al., 2020), frontline nurse managers (Vázquez-Calatayud et al., 2021), managers and assistant nurse managers (White, 2021), tactical-level nursing leaders (Freitas et al., 2021) and nursing leaders (Freysteinson et al., 2021). For clarity, the present authors will hereinafter use the term "nursing manager" to refer to managers in different positions.

The duration of work experience in the current position expressed in years was mentioned in 10 studies (Bianchi et al., 2021; Deldar et al., 2021; Freitas et al., 2021; Gab Allah, 2021; Hølge-Hazelton, Kjerholt, et al., 2021; Hølge-Hazelton, Zacho Borre, et al., 2021; Jackson & Nowell, 2021; Poortaghi et al., 2021; Vázquez-Calatayud et al., 2021; White, 2021), ranging from 3.2 years (White, 2021) to 16.6 years (Deldar et al., 2021).

4.2 | Data synthesis

The thematic synthesis identified five themes, or challenges, concerning nursing managers' experiences during the COVID-19 pandemic: their expanding and changing role, ensuring the well-being of staff, communication, support received and development and learning. In this context, the review matrix was used to thematically analyse the contents of the various sources in relation to the problem under review (Klopper et al., 2007) (see Table 2).

4.2.1 | Theme 1

The first theme, the expanding and changing role of nursing managers could be detected in 11 studies (Bianchi et al., 2021; Bookey-Bassett et al., 2020; Freysteinson et al., 2021; Gab Allah, 2021; Hølge-Hazelton, Kjerholt, et al., 2021; Jackson & Nowell, 2021; Jeffs et al., 2020; Kagan et al., 2021; Poortaghi et al., 2021; Vázquez-Calatayud et al., 2021; White, 2021). The leadership role was perceived as complex (Bookey-Bassett et al., 2020; Poortaghi et al., 2021; Vázquez-Calatayud et al., 2021). Management was characterized by adaptation to rapid changes (Bianchi et al., 2021; Vázquez-Calatayud et al., 2021), working in a context involving uncertainty (Jackson & Nowell, 2021; Vázquez-Calatayud et al., 2021), quickly obtaining and sharing new information (Bianchi et al., 2021; Bookey-Bassett et al., 2020; Vázquez-Calatayud et al., 2021). The focus was moved from advanced or careful planning to responding to daily problems (Freysteinson et al., 2021; Gab Allah, 2021; Jackson & Nowell, 2021; Jeffs et al., 2020). The nursing managers' leadership style became situational according to White (2021). The nursing managers had not had enough time to sufficiently prepare for decision-making, for example, in the absence of clear evidence (Gab Allah, 2021; Jeffs et al., 2020). As a result, some nursing managers' leadership values were put under pressure (Hølge-Hazelton, Kjerholt, et al., 2021) and the managers felt moral distress related to making critical decisions related to scarce resource allocation (e.g. staff redeployment) (Jeffs et al., 2020).

4.2.2 | Theme 2

The second theme, ensuring the well-being of staff, was apparent in nine studies (Bookey-Bassett et al., 2020; Deldar et al., 2021; Freitas et al., 2021; Freysteinson et al., 2021; Hølge-Hazelton, Kjerholt, et al., 2021; Jeffs et al., 2020; Poortaghi et al., 2021; Vázquez-Calatayud et al., 2021; White, 2021). The support received from nursing managers included both concrete measures, such as the provision of medical devices or preparedness supplies (Deldar et al., 2021; Freitas et al., 2021), personal protective equipment (Deldar et al., 2021; Freitas et al., 2021) and psychosocial services (Deldar et al., 2021; Vázquez-Calatayud et al., 2021). The nursing managers expressed that they found it essential to be "visible" or "present" for many reasons, and this was accomplished by speaking directly with staff (Bookey-Bassett et al., 2020; Poortaghi et al., 2021), acknowledging the fear, anxiety and stress experienced by staff and building their trust, that is, ensuring staff resilience (Jeffs et al., 2020) or calming anxious personnel (Poortaghi et al., 2021). Human resource policies played a critical role and were mentioned by Bookey-Bassett et al. (2020), Freitas et al. (2021) and Poortaghi et al. (2021). For example, staff shortages were alleviated using volunteers from other wards and hospitals (Poortaghi et al., 2021).

4.2.3 | Theme 3

Communication emerged as the third theme and was found in seven studies (Bookey-Bassett et al., 2020; Freitas et al., 2021; Freysteinson et al., 2021; Hølge-Hazeltonet, Kjerholt, et al., 2021;

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TABLE 2 Summary matrix of thematic analysis.

References	Themes				
	Expanding and changing role	Safeguarding the well-being of staff	Communication	Support received from staff and co-workers	Development and learning
Bianchi et al. (2021)	✓			✓	✓
Bookey-Bassett et al. (2020)	✓	✓	✓	✓	✓
Deldar et al. (2021)		✓	✓		✓
Freitas et al. (2021)		✓	✓		✓
Freysteinson et al. (2021)	✓	✓		✓	✓
Gab Allah (2021)	✓		✓	✓	
Hølge-Hazelton, Kjerholt, et al. (2021)	✓	✓		✓	✓
Hølge-Hazelton, Zacho Borre, et al. (2021)					✓
Jackson & Nowell (2021)	✓			✓	✓
Jeffs et al. (2020)	✓	✓	✓	✓	✓
Kagan et al. (2021)	✓		✓		✓
Poortaghi et al. (2021)	✓	✓	✓		
Vázquez-Calatayud et al. (2021)	✓	✓		✓	✓
White (2021)	✓	✓		✓	✓

Jeffs et al., 2020; Kagan et al., 2021; Poortaghi et al., 2021). Transparency was regarded as a value (Freysteinson et al., 2021) or a moral duty (Kagan et al., 2021). The nursing managers felt that transparency increased trust (Freysteinson et al., 2021) and authenticity increased reliability (Kagan et al., 2021). Managers aimed to keep their team well-informed by providing concise and relevant information, for example, by updating. guidelines (Freitas et al., 2021). On the other hand, managers had to dispel myths and clarify misunderstandings (Bookey-Bassett et al., 2020). Moreover, decisions had to be made and communicated to staff in the absence of evidence and information (Hølge-Hazeltonet, Kjerholt, et al., 2021; Jeffs et al., 2020). Issues and measures were routinely shared with frontline staff (Freysteinson et al., 2021). Meanwhile, according to a Danish study (Hølge-Hazelton, Kjerholt, et al., 2021), frontline nurse ward managers working during the first COVID-19 pandemic often experienced a lack of relevant information from the head nurse of the department and the executive management. Nursing managers used multiple models of communication (e.g. phone calls, emails, and WhatsApp) to handle matters concerning their staff or patients (Bookey-Bassett et al., 2020; Kagan et al., 2021; Poortaghi et al., 2021) to avoid unnecessary contacts.

4.2.4 | Theme 4

Support received from the staff and other co-workers emerged as the fourth theme and could be drawn from nine studies (Bianchi et al., 2021; Bookey-Bassett et al., 2020; Freysteinson et al., 2021; Gab Allah, 2021; Hølge-Hazelton, Kjerholt, et al., 2021; Jackson & Nowell, 2021; Jeffs et al., 2020; Vázquez-Calatayud et al., 2021; White, 2021). Uncertainty and a high workload contributed to making the pandemic a stressful experience (Jackson & Nowell, 2021; White, 2021). Moreover, a lack of preparedness during the crisis, the absence of protocols relevant to pandemic control and management issues may have contributed to feelings of fear, anxiety and feeling unprepared to make difficult decisions (Gab Allah, 2021). Moreover, personal issues were involved: nursing managers were worried about their own and their families' health (Freitas et al., 2021; Hølge-Hazelton, Zacho Borre, et al., 2021). Consequently, nursing managers also needed support for themselves to be able to continue working in stressful situations (Jackson & Nowell, 2021).

Nursing managers received support from their colleagues (Bianchi et al., 2021; Bookey-Bassett et al., 2020; Freysteinson et al., 2021; Jeffs et al., 2020; White, 2021) and their superiors (e.g. chief executive officers) (Jeffs et al., 2020). Peer support from other nursing unit managers was identified as the main source of support by Bookey-Bassett et al. (2020), and collaboration with peers in other institutions was regarded as beneficial and refreshing (Freysteinson et al., 2021). Some managers felt completely isolated and abandoned (Hølge-Hazelton, Kjerholt, et al., 2021). They expressed that they felt they were at the bottom of the hospital management hierarchy and that their communication with the executive management was sparse. However, there is evidence that a higher perception of organizational support minimizes managers' challenges during a pandemic (Gab Allah, 2021). The received support forms including, for example, individual counselling (White, 2021), clear communication, conversations, guidelines (Bookey-Bassett et al., 2020; Jackson & Nowell, 2021), task forces helping managers to interpret and communicate their many and sometimes contradictory decisions

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(Hølge-Hazelton, Kjerholt, et al., 2021), and teamwork and collaboration, that is, a "one for all" mindset (Vázquez-Calatayud et al., 2021).

4.2.5 | Theme 5

Development and learning emerged as the fifth theme from 11 studies (Bianchi et al., 2021; Bookey-Bassett et al., 2020; Deldar et al., 2021; Freysteinson et al., 2021; Hølge-Hazelton, Kjerholt, et al., 2021; Hølge-Hazelton, Zacho Borre, et al., 2021; Jackson & Nowell, 2021; Jeffs et al., 2020; Kagan et al., 2021; Vázquez-Calatayud et al., 2021; White, 2021). Even though nursing managers were often overworked and stressed, some of them demonstrated satisfaction with their managerial performance (Kagan et al., 2021) or felt empowered by recognizing their capabilities which were put to test during the crisis (Freitas et al., 2021). They noticed that they were adopting new skills and knowledge, such as that related to information technology, got to know new partners and learned about new forms of interpersonal relationships (Freitas et al., 2021) and making decisions and identifying organizational and management models (Bianchi et al., 2021). Further, the nursing managers showed great capacity for adaptability, creativity and innovation in designing and implementing solutions (Vázquez-Calatayud et al., 2021). Indeed, the above-mentioned researchers considered an adaptation to change to be a key capability that must be developed continuously. Some nursing managers had acknowledged the need for the "human side of leadership and being person-centered" (Bookey-Bassett et al., 2020; Hølge-Hazeltonet, Kjerholt, et al., 2021). Moreover, some nursing managers felt that having experienced the pandemic would ultimately make them "stronger and more resilient" (Freysteinson et al., 2021), strengthening their professional role in the future (e.g. learning to delegate more) (White, 2021) and having the ability to work more in alignment with their own beliefs and values, though they felt more overloaded (Hølge-Hazelton, Zacho Borre, et al., 2021).

Maintaining the quality of patient care did not emerge as its own theme (challenge). In the reviewed articles, there were some mentioned related to this topic, such as the "preservation of humanized care." What these really mean or contain remains unclear.

5 | DISCUSSION

Nursing managers from across the world participated extensively in the studies included in this review. They represented different healthcare organizations and their positions and the duration of their work experience in their current position varied. However, some common themes independent of the managers' status or geographical location can be observed in describing nursing managers' experiences after the outbreak of COVID-19.

Several studies indicated that nursing managers were concerned about the safety of their staff, and took related measures such as arranging protective equipment and providing psychosocial support. In this respect, the results are line with earlier studies (Catania et al., 2021; Lau & Chan, 2005). Appropriate management style has also been emphasized (Jankelová et al., 2021). In some studies, the nursing managers demonstrated transformational, authentic or person-centered leadership styles. On the other hand, "a conflict of values" can render it impossible, for example, to operate as a person-centered leader in an organizational context that is hierarchical and in which decision-making is not ethical.

Further, Jankelová et al. (2021) showed that effective internal communication is one of the key factors of crisis management, especially at an acute stage. This was not realized in all organizations. Managers had to dispel myths and clarify misunderstandings, and decisions had to be made and communicated to staff in the absence of evidence. Insufficient and inadequately effective communication is a major challenge in staff management. In crisis situations, employees want clear instructions from their superiors.

The nursing managers had shown adaptability and flexibility in their work and had also been under excessive pressure. Nursing managers—from top to down—identified the same emotional states as front-line employees: fear, stress and anxiety; this finding is in line with earlier studies (Lau & Chan, 2005; Middleton et al., 2021). Some reasons for this could include an absence of protocols and the nursing managers' own uncertainty to make decisions in difficult situations. A positive finding was that many received support from their colleagues or superiors. The aftermath of the crisis will continue for years to come. Thus, it is important to support nursing managers in different ways (e.g. counselling and mentoring) also following the pandemic to ensure that they will be retained in the workforce.

The COVID-19 pandemic has been characterized by a lack of foreknowledge of how the disaster will progress. Managers had to shift their focus from advanced planning to responding to daily problems. According to several studies, they had to coordinate care or ensure that patients received adequate care in an uncertain and unpredictable situation. It is important to note that there was little reference to the quality of patients' care in the studies. Instead, the emphasis was on more practical problem-solving related to the rapidly changing circumstances rather than theoretical thinking; that is, value-based leadership concerning all management activities and including advance care planning and implementation.

Despite facing many challenges, the nursing managers had their sights set on the future. During the COVID-19 crisis, the nursing managers learned new skills related to information technology, decision-making and identifying organizational and managerial models and, above all, were left with a feeling that they had grown as managers.

There were some limitations about this review. The participants' positions or titles in their organizations varied from one study to another; the studies had been conducted in different healthcare settings where the role of the nursing managers may vary in terms of job content; and participation in the studies was voluntary, which may mean that the experiences of other nursing managers in the same organizations may be different. Further, the review was limited to articles published in English. There is a risk

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that not all relevant articles are included in this review. Moreover, the examined studies were mostly conducted in the early stages of the COVID-19 pandemic and studies carried out later could produce different results.

However, the same themes were identified in nearly all the studies conducted around the world and described the initial state of crisis management. Thus, the results can be generalized more widely. Moreover, using the PRISMA statement protocol (Moher et al., 2015) for minimizing biases was a strength of this study. The results are also reported both in a figure and a table. Final decisions relating to keywords, inclusion of papers for review, quality scores and thematic synthesis were made based on collective discussions between all authors. The researchers held online meetings approximately once every 2 weeks throughout the writing process.

6 | CONCLUSIONS

The roles of nursing managers were not always clear and were subject to rapid changes. There were problems in setting operational goals and communicating these to employees; targets kept changing as the pandemic progressed and communications were inconsistent from time to time; there was no guidance or strategy in the crisis situation. Of the elements of leadership, supporting staff was achieved the best, as nursing managers were available and present. Practical problem-solving was highlighted more than value-based leadership and also included preparing careful care plans for patients and their implementation as a basic task.

6.1 | Implications for nursing management

The experiences of nursing managers should be used in education and planning related to preparation for future crises similar to the COVID-19 pandemic. Future procedures must be based on a deeper value basis for nursing management apparent in all activities, involving careful care planning and its implementation including quality assessment, ethical decision-making and ensuring the well-being of staff. It is important to carry out a wider review of patient-focused leadership and examine how the quality of care has been ensured during the COVID-19 outbreak.

ACKNOWLEDGEMENTS

This study did not receive a specific grant from any public, commercial or non-profit sector funding agency.

CONFLICT OF INTEREST STATEMENT

The authors have no conflict of interest to declare.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study, are available from the corresponding author upon reasonable request.

ETHICAL APPROVAL

No Research Ethics Committee approval was sought as this is a literature review paper.

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How to cite this article: Leppäkoski, T., Mattila, E., & Kaunonen, M. (2023). Nursing managers' experiences of facing the COVID-19 pandemic in their work: A systematic review. *Nursing Open*, *00*, 1–11. https://doi.org/10.1002/nop2.1694

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