



Promoting Well-being: A Scoping Review of Strategies Implemented During the COVID-19 Pandemic to Enhance the Well-being of the Nursing Workforce

Caroline Browne^{a,c,*}, Ylona Chun Tie^{b,c}

^a School of Nursing, College of Health and Education, Murdoch University

^b College of Healthcare Sciences, James Cook University, Australia

^c Global Nursing Faculty, Australian College of Nursing

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ABSTRACT

Background: The nursing workforce faces significant stressors every day that can lead to exhaustion and burnout. The unprecedented challenges that were faced during the Covid-19 pandemic, placed an added burden on nurses who were already under pressure. Nurses were at the frontline of care provision, and nursing leaders had to rapidly implement strategies to support and maintain staff safety, short and long-term well-being.

Objective: A scoping review of strategies nurse leaders and organisations initiated to enhance the well-being of their colleagues during the Covid-19 pandemic was undertaken. Experiences from around the globe have been collated to provide an insight into well-being initiatives that can inform future practice to sustain and retain the nursing workforce.

Design: A scoping review of strategies nurse leaders and organisations initiated to enhance the well-being of their colleagues during the Covid-19 pandemic was undertaken.

Method: A search of key electronic databases identified articles published between January 2020 and February 2023. 21 pieces of original research that met the inclusion criteria were reviewed.

Results: Well-being interventions evaluated in the literature included: dedicated well-being spaces, peer debriefing, psychological support, online resources and education, introduction of well-being strategies and resources, and meditations. There were six broad themes identified that enhanced the success of well-being strategies including: Education and Communication, Tailored or Adaptable Strategies, Support from Leadership, Sharing Experiences and Peer Support, and Feeling appreciated and heard. There were also barriers to accessing well-being interventions that have been identified.

Conclusion: The Covid 19 pandemic highlighted how imperative strong nursing leadership is for supporting nurses at every level. Practical strategies provided psychological support essential for maintaining the health and well-being of the nursing workforce. The strategies identified demonstrate the creativity and adaptability of nursing leadership to look after colleagues to maintain and sustain our nursing workforce.

Tweetable: Strategies implemented during the COVID-19 pandemic can be used to guide ongoing initiatives to enhance wellbeing for the nursing workforce.

* Corresponding author at: Caroline Browne, School of Nursing, Murdoch University, 90 South Street, Murdoch, Western Australia, 6150.

E-mail addresses: c.browne@murdoch.edu.au (C. Browne), Ylona.chuntie@jcu.edu.au (Y. Chun Tie).

What is already known:

- The well-being of nurses is essential to ensuring patient safety and maintaining a strong nursing workforce into the future.
- The COVID-19 pandemic placed considerable additional pressure on an already depleted nursing workforce.
- Nurse leaders are instrumental in identifying issues and implementing solutions to promote well-being and retain their nursing workforce.

What this paper adds:

- Nurse leadership plays a key role in developing, implementing, and evaluating well-being strategies to manage the professional and personal challenges nurses experienced.
- Well-being strategies should be adaptable, flexible and respond to the contextual needs of the nursing workforce in that organisation.
- Nurse well-being is dependent on organisational supports.
- Well-being strategies and initiatives implemented in response to the COVID-19 pandemic can inform future strategies to protect the well-being of the nursing workforce.

1. Introduction

The COVID-19 (SARS-CoV-2) pandemic highlighted several key issues relevant to the global healthcare workforce. Firstly, healthcare systems were already under strain due to widespread global nurse shortages (Berlin et al., 2021, International Council of Nurses (ICN) 2021). Healthcare organisations needed to rally quickly to adapt to a changing landscape of healthcare delivery and make necessary critical adjustments in response to the COVID-19 pandemic (Ferguson et al., 2022). Secondly, the pressure and stressors on frontline healthcare professionals to deliver high quality, safe, person-centred care, often without appropriate resources or timely information during the early phase of the pandemic, affected their well-being and led to psychological and moral distress (Maben et al., 2022).

Nurses were placed in a position where their professional values were at odds with the nursing care they were able to provide. Values incongruence can have a negative impact on nurse well-being leading to poorer perceived patient care with implications for patient safety, and job satisfaction (Dunning et al., 2021). When this occurs, nurses are prone to suffering from compassion fatigue, moral distress, and potential for burnout (King's Fund, 2020).

The COVID-19 pandemic highlighted that workplace well-being strategies are critical to sustain and maintain the nursing and health workforce. Research in the early stages of the pandemic suggested that nurses and midwives reported more severe symptoms of stress and anxiety than those experienced by doctors and allied health staff (Holten et al., 2021). Nurses were at the coalface of delivering person-centred care in dynamic and constantly evolving landscapes. Nurse leaders were called upon to make rapid changes to known processes and make decisive decisions in response to medical advice and evidence, while responding to and acknowledging staff concerns. Failure to see the connection between well-being and nurses' professional values, sense of belonging, purpose and autonomy puts nurses in jeopardy and increases the risk of experiencing anxiety, compassion fatigue, psychological and moral distress, and the potential for burnout (King's Fund, 2020).

Burnout, fatigue, and nursing staff attrition were global healthcare workforce challenges exacerbated by the COVID-19 pandemic and affect the retention and sustainability of the nursing workforce (Nantsupawat et al., 2023, Raso et al., 2022). In response, nurse leaders had to be innovative to find ways to best support the well-being of their nursing colleagues.

Globally, well-being is acknowledged as a significant issue to address for the wellness of the current, and future, nursing workforce. Strategies that can best support the nursing workforce, in the context within which they practice, can be utilised by nurse leaders and healthcare organisations to maintain, and improve wellness and staff satisfaction. Yet few studies to date have been conducted on the implementation and evaluation of well-being interventions to address the various physical and psychological issues affecting nurses (Nourian et al., 2021).

2. Definition of well-being

Well-being is a multidimensional construct including emotional well-being, physical well-being, psychological well-being, social well-being, and workplace well-being (King et al., 2022). Well-being is described as "enabling people to develop their potential, work productively and creatively, form positive relationships with others and meaningfully contribute to the community" (Foresight Mental Capital and Well-being Project, 2008). Healthcare professionals' psychological well-being at work, is an increasing area of interest in research since the COVID-19 pandemic. However, the term well-being in relation to healthcare professionals does not have a universally accepted definition (Bamforth et al., 2023) and differs from the general population (Bosanquet, 2023). Patrician et al. [(Patrician et al., 2022), p. 645] posit 'nurse well-being at work should be defined as a nurse's positive evaluation of oneself and one's contributions to the work of nursing, allowing for the nurse to be the best possible at any given point in time with the ability to adapt to

and overcome adversity to the extent possible. Nurses' well-being requires that basic and higher-level needs are met, at both the individual and organizational/community levels.' The International Society for Professional Identity in Nursing ([International Society for Professional Identity in Nursing \(ISPI\) 2021](#)) state it is the nursing profession's ability to work in accordance with the principles of our professional identity, encompassing ethics and values, knowledge, professional conduct, and leadership, which underpins nurse well-being.

3. Background

The impact of the COVID-19 pandemic on nursing staff has been well described, with studies identifying increased levels of emotional exhaustion or burnout, increased absenteeism, and increased turnover of frontline nursing staff ([Drexler et al., 2023](#)). The daily uncertainty that resulted from the pandemic became a source of stress for healthcare professionals ([Sawyer et al., 2022](#)). Nursing staff were confronted with a number of stressors exacerbated by the pandemic such as: the introduction of new technology and workplace practices, higher patient loads and higher patient acuity, changes to roles and responsibilities, as well as moral distress ([Blake et al., 2021](#), [Drexler et al., 2023](#), [Sawyer et al., 2022](#)). As the impact of the pandemic became clearer, strategies were introduced to help build the resilience and enhance the well-being of the nursing workforce ([Blake et al., 2021](#)). As nurse well-being became an increasingly critical issue to address, research on strategies implemented during the COVID-19 pandemic by nurse leaders and healthcare management to improve staff well-being, that have been formally evaluated, were lacking ([Badu et al., 2020](#), [King et al., 2022](#)).

Therefore, the aim of this scoping review was to provide an overview of the nurse well-being strategies that were implemented and have been evaluated during the COVID-19 pandemic. Through exploring these strategies, areas for success can be identified that will enable nurse leaders to continue to support and improve staff well-being, informing future practice, which will contribute to maintaining and sustaining our healthcare workforce.

4. Methodology

To inform this scoping review a broad literature search was undertaken on the topic of well-being to establish what types of published literature was available that included well-being strategies or nurse-led interventions implemented during the COVID-19 pandemic and subsequently evaluated.

4.1. Search strategy

The aim of this scoping review specifically focused on well-being strategies or interventions implemented and evaluated during the COVID-19 pandemic. Inclusion criteria included all articles published after January 2020 which outlined primary research evaluating a well-being intervention. Exclusion criteria included articles published prior to January 2020, not available in English language, not related to nurses or the nursing workforce, or described well-being strategies or interventions implemented prior to COVID-19.

A search of online electronic databases CINAHL, Medline, Scopus, and PsychInfo was undertaken in July 2022. In consultation with a faculty librarian a search strategy for each database was developed with database-specific syntax, subject headings, and keywords and combined with Boolean operators AND and OR. The terms included: well-being, pandemic, COVID-19, nursing, strategies, or interventions, with truncation* that reflected the focus of the review. An updated search was conducted in February 2023, including hand searching references and citation scanning which identified twelve further studies that met the inclusion criteria.

Eligible studies were screened using the Covidence© platform independently by two researchers (YCT & CB). Covidence is a web-based collaboration software platform that streamlines the production of systematic and other literature reviews ([Covidence, 2023](#)). Where there was lack of consensus, discussion occurred until agreement was reached. 438 references were located and imported into Covidence for screening during the initial search in July 2022. Duplicates were removed before the remaining publications were screened against title and abstract for relevance, a detailed overview is provided in [Fig. 1](#). Prisma Flow Chart. This resulted in 9 articles which met the inclusion criteria. The updated search in February 2023 resulted in an additional 12 studies which met the inclusion criteria, resulting in a total of 21 articles for inclusion within the review.

5. Findings

During our initial search of the literature in June 2022, a large number of articles were located focused on descriptive accounts of interventions or strategies, however only 9 studies evaluated an intervention or strategy and met our inclusion criteria. The updated search, in February 2023, found a higher proportion of original research that formally evaluating well-being or psychological support programs initiated during the COVID-19 pandemic. This finding is most likely reflective of the time it takes to implement a strategy, formally evaluate it, and publish those findings. [Table 1](#). provides an overview of the 21 studies, including research methodology, methods, and key findings.

The literature came from a broad range of countries and from a diverse range of healthcare settings. Included studies were from USA (n=9), Italy (n=2), UK (n=2), Australia (n=2), Taiwan (n=2), Jordan (n=1), Spain (n=1), Iran (n=1), and China (n=1). 17 of the included studies were conducted in acute hospital settings or services: with 6 focusing on broad health districts ([Blake et al., 2020](#), [2021](#); [Holton et al., 2022](#); [Olcoñ et al., 2022](#); [Sawyer et al., 2022](#); [Sawyer et al., 2022](#)), 5 focusing on single or multiple hospital sites ([Castillo-Sánchez et al., 2022](#), [Carter and Turner, 2021](#), [Hsieh et al., 2022](#), [Muir et al., 2022](#), [Zaghini et al., 2021](#))) and 6 focusing on

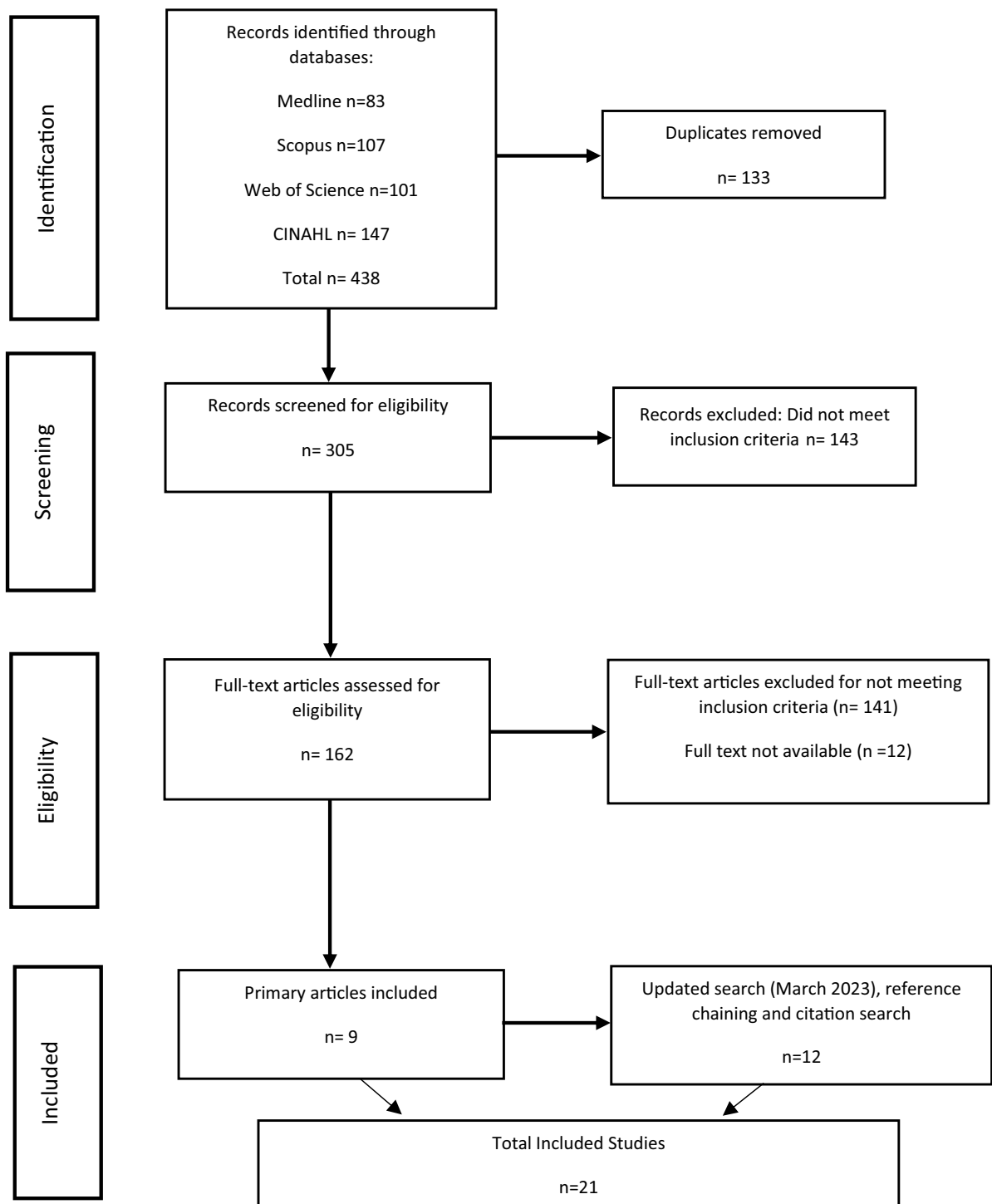


Fig. 1. PRISMA Flow diagram of search, screening, and selection process.

Table 1

Summary of studies included in scoping review.

Author/Year/ Country	Aim	Study population and setting	Method	Key Findings	Limitations	Recommendations
Alkhawaldeh, (Alkhawaldeh, 2023) Jordan	To test the alternative hypothesis that a psychoeducational programme may effectively reduce Occupational Stress (OS) and improve Coping Strategies (CS) among nurses working in PHCCs during the COVID-19 pandemic.	80 PHN nurses working full time from two public health-care centres	Cluster RCT. Quantitative – Pre/Post self-reported questionnaires measuring Occupational stress (OS) and coping strategies (CS)	Statistically significant differences in overall mean OS and CS scores between the experimental and control groups immediately after and 1 month after the intervention ($p < 0.05$). In the experimental group OS scores reduced and CS scores improved across data collection points.	Small sample size, only examined the psychoeducational interventional programme's influence on self-reported measures of stress and coping.	Nursing educators can develop an efficient clinical education plan that addresses needs of nurses to manage OS and build CS. Educators could plan sessions for newly recruited nurses to deal with potential stressors.
Blake et al., (Blake et al., 2020) UK	To determine facility usage and gather insight into employee wellbeing and the views of employees towards this provision.	819 hospital employees. Supported wellbeing centres in UK Hospital trusts	Quantitative: online survey. Service use monitoring data collected over a 17-week period.	14,934 facility visits recorded, peak weekly attendance 2605 visits. 53 staff sought help for emotional concerns. 94% of survey respondents aware of centres, 55% had accessed a centre.	Data limited to participant's recruited during and shortly after first surge of COVID-19 in UK which may under-estimate impacts of the pandemic on healthcare workers	Offer multiple dedicated wellbeing areas near clinical areas. Embrace a culture of wellbeing. Provide multiple support options.
Blake et al., (Blake et al., 2021) UK	To explore staff and service provider views towards supported wellbeing centres as an early intervention designed to mitigate the psychological impact of the COVID-19 pandemic in an acute hospital setting.	24 participants who accessed wellbeing centres in an acute hospital trust in the UK	Qualitative – individual semi-structured interviews	Theme related to wellbeing centre included 6 subthemes: Centres as a workplace void-19 response, usability and engagement, the wellbeing buddies, individual and team impacts, organisational impacts, future provisions, and support.	The views of Black, Asian, or Ethnic Minority (BAME) staff are under-represented due to a low response rate.	Investment in wellbeing should continue after the pandemic, with support from leadership and managers for promoting wellbeing initiatives. Greater inclusivity and communication around initiatives to reduce barriers or reach marginalised groups.
Castillo-Sánchez (Castillo-Sánchez et al., 2022) Spain	To assess the degree of satisfaction and results to a first approach to an online mindfulness intervention.	339 health care workers participated mostly from two hospitals. 140 completed online survey	Quantitative - Post intervention online survey.	97% of survey respondents were satisfied with the course	Online program only	Online programs may be convenient to meet need of healthcare workforce.
Chen et al., (Chen et al., 2021) China	To develop and implement a targeted psychological support scheme for front-line nurses involved in the management COVID-19.	Convenience sample of frontline nurses from 24 provinces participating in WeChat group (n=1496)	Action Research. Data collected from Wechat records - messages, documents, videos, pictures, and web links.	107 nurses received one-to-one psychological support, 27 group counselling session. Participants felt a sense of belonging, professional value, pride, confident & sense of being protected. Peer referral worked.	Small sample size in one country.	Provide targeted psychological support to enhance confidence and resilience. Multi-disciplinary teams can provide different perspectives. The delivery of interventions must be timely.
Carter & Turner, (Carter and Turner, 2021) USA	The goal is to increase self-reported resilience in a group of NMs using an automated web-based Implementation of the Science of Enhancing Resilience (WISER) tool over a 6-month period	17 nurse managers from 3 regional hospitals	Quantitative - Online questionnaire pre/post intervention. Included the Emotional Thriving (ET) and Emotional Recovery (ER) Questionnaires and the Work Life Balance (WLB) Scale.	Improvement in overall mean scores for all 3 scales, with overall favourable support for recommending the tool.	Small number of NMs made statistical analysis a challenge	Promotion of resilience-building strategies to keep staff. Nurse leaders support frontline staff via role modelling self-care practices, build resilience, and promote self-care.

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Table 1 (continued)

Author/Year/ Country	Aim	Study population and setting	Method	Key Findings	Limitations	Recommendations
Drexler et al., (Drexler et al., 2023) USA	Determine if offering structured emotional support for future unprecedented clinical experiences is a valuable tool for staff. Determine what improvements and/or changes should be made in emotional support offerings to better serve those seeking support.	24 CCU nurses. 28 bed critical care unit in southern California	Quantitative: Cross sectional online survey	Significant correlation between attendance at support session and years as an RN ($p < .001$), staff benefits of sharing experiences. Participants want leadership to acknowledge difficult situations and continue weekly sessions	Small sample size	Many other benefits could be realized from this model, such as improved nursing practice and processes, reduced clinician burnout, improved nurse satisfaction, and improved recruitment and retention.
Giordano et al., (Giordano et al., 2022)Italy	This pilot study evaluated the impact of the R2 resilience program tailored for healthcare leaders working in a highly affected COVID-19 area in Italy.	17 healthcare leaders who participated in R2 program, and 62 members of their staff. Homecare and day care assistance, social housing services and residential centres province of Bergamo	Quantitative - quasi-experimental pre/post-design	Leaders showed decrease in general stress. ($p = 0.026$), and burnout symptoms ($p = 0.020$). Their staff showed decrease in general stress ($p = 0.00$) and work-related stress ($p = 0.028$)	Small sample size and shortage of time during Covid with supervisors may have accounted for the non-significant results.	Programs should be tailored to the needs of healthcare workers. Leaders can support mental health and wellbeing through mentorship. A resilience framework can form the basis of well-being programs.
Green et al., (Green et al., 2022)USA	To assess whether positive reinforcement and integrating a language of support among co-workers, sent via a messaging tool, could enhance resiliency, and decrease burnout.	Convenience sample of 24 frontline healthcare providers (physicians, nurses, and respiratory therapists) working in the Medical Intensive Care Unit (MICU).	Mixed Methods – Pre/post intervention validated questionnaires.	Post intervention trends towards greater teamwork attitude and higher resilience. No change in level of burnout. Themes of sense of gratitude, inspiration and sense of belonging was generated.	Completed in a single-center hospital setting and had a small sample size. There was a drop-out rate (54%). There may be self-selection bias in those who completed the study and both questionnaires.	Routine use of deliberate positivity may represent a scalable, low-cost initiative to enhance wellness. A messaging interface to exchange mutual positivity can provide an effective peer-to-peer support system
Haugland et al., (Haugland et al., 2023)USA	Evaluation of an evidence-based practice implementation to increase resilience levels of emergency nurses.	120 nurses Emergency Department of a Trauma centre Baseline survey ($n = 47$, 51% response rate), Week 6 post intervention survey ($n = 26$, 30% response rate), Week 15 post intervention survey ($n = 23$, 29% response rate).	Evidence-based practice project. Quantitative - Pre/post intervention survey, including Connor-Davidson Resilience Scale 10 (CD-RISC-10) and the Perceived Stress Scale 4	Statistically significant increase in resilience from baseline to 6 weeks post intervention. Qualitative comments suggest some challenges engaging with interventions.	Relatively small sample size due to Covid surge at sample site. Nurse turnover rate for project varied 30-46%. Inability to measure scores for same individuals across multiple surveys limited ability to determine individual's response to interventions.	Resilience and wellbeing initiatives must be supported by organisation support such as adequate staffing and support from leadership.
Holton et al., (Holton et al., 2022) Australia	To evaluate the wellbeing and support initiatives implemented at an Australian health service during the Covid-19 pandemic from the perspective of employees (both user and non-user) and key stakeholders.	10 employees took part in interviews; 907 employees completed survey. A large metropolitan health service in Melbourne	Mixed-method design using surveys, interviews, and data audits.	86% respondents were aware of initiatives, 43% had used the interventions. Most used intervention were daily staff briefings. Barriers to access were workload and accessibility.	Participants recruited from one health service. Low response rate. Unable to generalise findings.	Individual and organisations level initiatives were important. Ongoing need for wellbeing and support during infections disease outbreaks.
(Hsieh et al., 2022) Taiwan	Explore the effectiveness of gong meditation on the perceived stress and occupational burnout of nurses during the Covid-19 pandemic	79 nurses from a medical centre	Quantitative Experimental study. The Occupational Burnout Inventory and Perceived Stress Scale questionnaires and physiological measurements via smartwatch were	Significant reduction in physiological index of stress during the gong meditation sessions. In comparison with control group significant improvement	Post-test data was administered at completion of program, no longer term follow-up.	Important to offer psychological interventions to prevent or relieve stress and burnout.

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Table 1 (continued)

Author/Year/ Country	Aim	Study population and setting	Method	Key Findings	Limitations	Recommendations
King et al., (King et al., 2022)USA	Aim of this quality improvement project was to implement a program guiding a nurse manager on how to improve nursing staff wellbeing.	60 nursing staff from single surgical nursing care unit at a small community hospital	measured pre and post intervention. QI projects. Work Culture Survey assessed: wellbeing, safety, management, leadership skills and workplace security. Benchmarking absenteeism	in both PSS and physiological stress levels after intervention. Wellbeing survey scores increased 2.4 to 2.9, peaking at 3.1 across 5 time points but below goal of 3.5. Absenteeism reduced by 39%	Change in QI NUM, staffing changes and absenteeism due to Covid	Covid waves impacted on the ability to implement wellbeing strategies. Invest in a wellbeing manager.
Muir et al., (Muir et al., 2022) USA	Assess resilience, program feasibility, accessibility, and effectiveness among RNs after using a mobile toolbox and pocket guide as on the job well-being resources.	57 RNs across 7 units within inpatient, outpatient pre-operative and post-operative settings in an academic medical centre	Quantitative - Pre/post-test design. Pre-interventions questionnaire Connor Davidson Resilience Scale (CD-RISC 10). Post intervention questionnaire CD-RISC 10 and evaluation of R2R feasibility, accessibility, and effectiveness.	No statistically significant increase in resilience. Majority of participants accessed tools 1-5 times over 3-month period. Most common barrier to access was lack of time. Participants found Pocket Guide most useful resource	Lack of control group. The study experienced a high number of dropouts from pre- to post-intervention period. A potential source of bias was inclusion of RN leaders as a secondary sample	Integration of mobile technology into well-being initiatives. Further evaluation of cost effectiveness of well-being strategies is needed.
Nourian et al., (Nourian et al., 2021) Iran	To determine the effect of an online mindfulness-based stress reduction (MBSR) program on improving the sleep quality of nurses working in the COVID19 care units	44 nurses randomly assigned to an intervention and a control group in 2 COVID-19 care wards in a hospital in Tehran	Randomised Control Trial. Online questionnaire including the Pittsburgh Sleep Quality Index	2 sleep quality subscales sleep latency ($P = .020$) and subjective sleep quality ($P = .000$) showed statistically significant difference between intervention and control group. No significant change in overall sleep quality between groups.	No follow-up measure, uncertainty of long-term positive effects of program. Small participant number and escalation of COVID-19 during intervention program	Recommend nurse managers use psychological methods such as mindfulness-based stress reduction (MBSR) to promote the mental health of nurses working in high-stress wards dealing with COVID-19 patients
(Olcon et al., 2022) Australia	To identify and describe SEED wellness practices that supported healthcare staff.	33 Health care workers including nurses, nurse educators, allied health, and administrators from Illawarra Shoalhaven Local Health District	Qualitative: Participatory narrative inquiry guided by practice theory through focus groups and semi-structured individual or group interviews.	Eight core practices supported participants' wellbeing: responsive and compassionate leading, co-designing wellness activities with staff, listening to understand, creating a safe and healing space, connecting with others, collective caring, diversifying and localising wellness activities, and striving for sustainability.	The study, limited to one local health district and focused on the unique features of that district. Focused only on HCW who took part in the SEED Wellness Program. The study did not formally evaluate the outcomes of the SEED program.	Workplace wellness initiatives are optimised when they are place-based and grounded in local knowledge, needs, and resources incorporating a collective and supportive team approach. Both bottom-up and top-down commitment is needed.
Sawyer et al., (Sawyer et al., 2022) USA	Evaluation of an initiative to enable nurse leaders to gain knowledge and skills related to well-being and self-care that may benefit their teams and themselves.	500 Nurse leaders. 52 took part in questionnaire. Large multicampus healthcare system	Quantitative: Questionnaires were administered at 2 timepoints (end of session 1 and the end of session 6).	Comparisons of coping, psychological empowerment, burnout, and quality of life scores showed maintenance during the 6 weeks, no statistically significant changes.	Self-reporting of survey data may have led to bias, persistently heavy workloads may have limited participation	Education alone was not sufficient to improve measures. Education could be combined with psychological support, therapeutic process, and environmental changes.
Sawyer, McManus & Bailey (Sawyer et al., 2022)USA	To measure the feasibility and acceptability of a psychoeducational group programme and determine its impact on mental well-being.	19 participants Multi-campus healthcare system	Mixed methods Quantitative: Eight instruments measuring reliance, self-compassion, psychological empowerment, stress, burnout and job	Following intervention: mean score on Posttraumatic Growth Inventory significantly higher, along with personal strength, relating to others, and	Self-reported data collection may lead to social desirability bias. At follow-up data collection time point, the hospital census of COVID-19 positive patients was	Sustainability of individual level strategies requires broader system wide interventions such as adequate staffing, leadership support, effective

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Table 1 (continued)

Author/Year/ Country	Aim	Study population and setting	Method	Key Findings	Limitations	Recommendations
			satisfaction. Qualitative: Semi structured Interviews.	appreciation of life. Empowerment measure significantly higher, as well as domains: competence and impact. Qualitative: participants perceived positive effects from program, applicability of learning, and peer support	persistently high, and workloads of nurse managers at this time may have affected their responses to the survey package.	communication, and shared governance.
Unger (Unger, 2022) USA	To improve resiliency and decrease burnout in HHC nurses through a resiliency bundle intervention.	Ten paediatric HHC registered nurses (RNs) A large hospital-based paediatric Home Care Nurses (HHC) agency.	Quantitative: Quasi experimental, one-group pre- test and post-test intervention. Online survey including questions on resiliency, burnout, and intervention feedback.	Results show some improvement in resiliency and burnout after implementation; however, the change was not statistically significant. Participants wanted to continue using the bundle pieces, especially the gratitude strategies, wellness committee and sharing stories.	Small sample size and short implementation period (2 weeks prior to post intervention survey) may have limited ability to see meaningful change in resiliency and burnout. Participants had limited opportunity to utilize and evaluate this resource.	Leadership should take burnout risk in HHC nurses seriously and look for innovative ways to promote resiliency.
Yang et al., (Yang et al., 2022) Taiwan	To examine the effect of an emergency nurse-led stress- reduction project on reducing stress levels during the Covid-19 pandemic	N=169 Nurses in an emergency department of a major university teaching hospital.	Action Research using online group brainstorming strategies. An online survey evaluated nurses stress levels, causes of stress, and needs at 3 time points.	Emotional and social distress peaked in survey two, higher than initial survey. Most effective stress-reduction methods were access to high- quality PPE, and updated covid information.	Anonymous survey limited follow up. Participants included ED nurses only, Generalizability of findings may be limited	Actively listening to nurses' experiences of Covid-19 key factor in effective interventions. Multiple communication channels developed between staff and managers.
Zaghini et al., (Zaghini et al., 2021) Italy	Verify whether a proactive organisations approach can limit nurses' work-related stress and help preserve their job satisfaction and quality of life during a health emergency	Nurses directly caring for SARS-coV-2 positive patients. 322 completed questionnaires, 48 nurses in 6 focus groups. University hospital	Quantitative: Self-report questionnaire for levels of work-related stress, job satisfaction and quality of life before and after intervention.	Levels of job-related stress, job satisfaction and quality of life improved, with nurses reporting greater safety, preparation and support from colleagues and managers.	Sample from one centre may limit transferability. Limits related to 4-month time period	Restructuring organisations to make them more flexible, dynamic and passes on proactive mentality can prepare healthcare professionals face changes and unforeseen events.

individual units or wards, including a range of specialty areas such as Intensive Care Units (Drexler et al., 2023, Green et al., 2022), Emergency (Haugland et al., 2023, Yang et al., 2022), Surgical (King et al., 2022), and COVID-19 care wards (Nourian et al., 2021). One study conducted by Chen et al. (Chen et al., 2021) had participants from across China involved in the intervention, not necessarily linked to any particular site or setting. Four were conducted in public health or home healthcare settings (Alkhawaldeh, 2023, Giordano et al., 2022, Unger, 2022).

During our initial search and review of the findings it became clear that nursing leadership played a key role in developing, implementing, and evaluating well-being strategies at both a ward level and a broader hospital or health system level. Four of the included studies evaluated interventions targeting nurse leaders and managers specifically (Carter and Turner, 2021, Giordano et al., 2022, Sawyer et al., 2022, Sawyer et al., 2022).

There were a broad range of well-being strategies and interventions evaluated within the included study. Table 2. provides an overview of each of the studies and the interventions they were evaluating as part of their well-being program. Ten of the published studies used a range of strategies to enhance well-being, with 13 involving at least one online component. The more common strategies included: an element of peer debriefing or social support (n=8), the introduction of well-being tools, practices or resources (n=7), psychological support provided by a trained professional (n=6), meditation or mindfulness activities (n=6), messages of gratitude or positive affirmations (n=5), and a well-being room or dedicated space for relaxation or to undertake well-being activities (n=4). Early in the pandemic well-being interventions also focused on providing clear communication and updates (n=4), and educational elements (n=6) to reduce stress and anxiety through the provision of relevant and up to date clinical updates.

There were commonalities between the well-being strategies and interventions evaluated, reflecting the multifaceted nature of well-being. Individually many of the studies included in this scoping review: had small sample sizes; were introduced in one clinical location or amongst one clinical team; or were being reported as Quality Improvement projects so lacked methodological rigour. It was therefore difficult to determine transferability of individual studies to other settings (the limitations of each study are included in Table 1). By looking for consistency and commonalities across the included studies' findings, we hope to provide suggestions and considerations that may contribute to developing successful well-being interventions. Following a thorough review of the interventions evaluated in the literature six themes emerged which were consistent across multiple well-being initiatives: Education and communication; Tailored and adaptable strategies; Support from leadership; Shared experience and peer support; Feeling appreciated and feeling heard; and Barriers to accessing interventions.

5.1. Education and communication

In the early stages of the pandemic, there was a rapidly changing understanding of COVID-19 which led to anxiety amongst frontline nursing staff seeking information on which to base their practice. There was also the need to redeploy staff to unfamiliar clinical areas quickly, which required upskilling and educational resources. Feelings of inadequacy or lack of knowledge around COVID-19 treatment and care protocols were identified as a source of apprehension in some studies (Blake et al., 2021). Well-being interventions which were implemented early in the pandemic often focused on education and communication to ensure staff were aware of the most recent clinical updates, were able to work safely, and help to minimize anxiety. Leaders who provided clear and timely communication helped to minimise stress, anxiety, and uncertainty amongst their nursing staff. Using diverse communication methods, such as rounding, huddles, weekly webinars, weekly virtual town halls, posting on social media, and daily written updates, allowed for transparency and authenticity that reflected the vulnerability staff felt during the first few months of the pandemic (Brodrick et al., 2020)

As more became known about the nature of the pandemic treatment plans and clinical guidelines changed rapidly. Finding a way to ensure all frontline nursing staff had access to updated resources in a timely manner became a critical component of the educational and communication strategies implemented for staff well-being. WeChat was used as a platform to provide frontline nursing staff in Wuhan, China with information about COVID-19 through a Question-and-Answer manual, education lectures and a daily newsletter that included latest news and developments (Chen et al., 2021). Almost 1500 nurses across China participated in the WeChat group. The evaluation of the tailored interventions within this action research project noted that participants felt they were motivated and developed increased clinical confidence through attending education sessions, accessing resources, and sharing experiences with their peers.

Similar educational strategies were introduced in a health service in Italy including training on personal protective equipment (PPE), access to online resources on COVID-19, lectures and workshops were held both online and in person. Whilst initially the confusion around conflicting and rapidly changing information caused shock and stress, evaluation of education interventions, alongside psychological support, adequate staffing and resourcing and surveillance measures, by Zaghini et al. (Zaghini et al., 2021) found that staff reported reduced work-related stress and improved job satisfaction. Whilst this study had a small sample size and was limited to one health service in Italy, it does show that by providing relevant education and effective communication well-being can be maintained if not improved.

Initially a strong link between stress levels and reliable access to PPE and other resources, to enable healthcare workers to practice safely protecting both themselves, their colleagues, and their families, was noted. Therefore, well-being-strategies implemented early in the pandemic also included strategies for ensuring an adequate supply of PPE. A nurse led stress reduction program was introduced in an emergency department in Taiwan targeting three key areas: protection against infection through education and access to high quality PPE; workload reduction through increasing support staff and encouraging interdisciplinary practice; and reducing body-mind-social distress through meal deliveries, group meetings and peer support through sharing notes and cards with colleagues (Yang et al., 2022). Evaluation of these interventions were conducted at three time points following each bundle of interventions, with stress

Table 2
Summary of wellbeing strategies.

Study Author/s	Intervention	Multiple Elements	Online Component	Education/ Curriculum Elements	Wellbeing/ Resilience strategies introduced	Communication/ Updates	Exercise/ Yoga	Wellbeing Room/ Designated Space	Psychological Support	Peer Debriefing / Social Support	Positive Affirmations/ Messages/ Gratitude	Meditation/ Music/ Mindfulness
Alkhawaldeh, (Alkhawaldeh, 2023)	Psychoeducational intervention program			x	x							x
Blake et al., (Blake et al., 2020); Blake et al., (Blake et al., 2021)	Wellbeing centres; wellbeing buddies	x						x	x	x		
Castillo-Sanchez et al., (2022)	Online mindfulness course on Zoom		x									
Chen et al., (Chen et al., 2021)	WeChat Group	x	x	x		x			x	x	x	
Carter & Turner (Carter and Turner, 2021)	WISER (Web-based Implementation of the Science of Enhancing Resilience) Tool		x		x							
Drexler et al., (Drexler et al., 2023)	Structured Support Group		x						x	x		
Giodano et al., (2022)	R2 for Leaders		x	x								
Green et al., (Green et al., 2022)	Positive Reinforcement via messaging app.		x								x	
Haugland et al., (Haugland et al., 2023)	Resilience Bundle	x						x		x		x
Holton et al., (Holton et al., 2022)	Range of wellbeing and support initiatives within a local health service	x	x			x		x	x	x		
Hsieh et al., (Hsieh et al., 2022)	Gong Meditation											x
King et al., (King et al., 2022)	Wellbeing strategies guided by Maslow's Hierarchy of Needs	x			x	x				x	x	
Muir et al., (Muir et al., 2022)	Mobile workforce Intervention 'Room to Reflect'	x	x		x		x					x

(continued on next page)

Table 2 (continued)

Study Author/s	Intervention	Multiple Elements	Online Component	Education/ Curriculum Elements	Wellbeing/ Resilience strategies introduced	Communication/ Updates	Exercise/ Yoga	Wellbeing Room/ Designated Space	Psychological Support	Peer Debriefing / Social Support	Positive Affirmations/ Messages/ Gratitude	Meditation/ Music/ Mindfulness
Nourian et al., (Nourian et al., 2021)	Online Mindfulness Based Stress Reduction Program		x				x					x
Olcon et al., (2022)	SEED (Stability, Encompassing, Endurance and Direction	x			x			x		x		
Sawyer et al., (Sawyer et al., 2022)	The Clinical Leaders Series		x	x	x							
Sawyer, McManus & Bailey, (Sawyer et al., 2022)	Psychoeducational group programme – RISE (Resilience, insight, self-compassion and empowerment) for Nurse Managers		x	x	x				x			x
Unger (Unger, 2022)	Resiliency Bundle	x	x							x	x	
Yang et al., (Yang et al., 2022)	Strategies focused on 3 areas: protection against infection, reducing heavy workload, and reducing body-mind-social distress	x				x					x	
Zaghini et al., (Zaghini et al., 2021)	Proactive Management Interventions: improved nurse-patient ratio, access to education and clinical updates, psychological held desks	x	x	x					x			

related to insufficient PPE reducing significantly by the third survey. Stress related to lack of knowledge or uncertainty around COVID-19 also reduced with each survey.

5.2. Tailored or adaptable strategies

Developing interventions that were able to provide tailored, varied, or adaptable strategies to suit staff, and focus on the multi-dimensional nature of well-being, was found to be essential in a number of studies. A resilience bundle was introduced for emergency nurses working at a large trauma centre in the USA, which included the development of a serenity room, structured debriefing following stressful events including patient deaths, and the introduction of mindfulness or relaxation techniques during the daily huddle (Haughland et al., 2023). Staff in the Emergency Department were surveyed at three time points, pre intervention (n= 47, response rate 51%), 6 weeks (n=26, response rate 30%) and 15 weeks (n=23, response rate 29%) post intervention, to evaluate resilience and perceived stress. There was a decreasing response rate with each survey, with the post intervention survey data collection coinciding with a large COVID-19 surge at the hospital, and more than a quarter of the hospital staff sick themselves, highlighting the challenges of implementing and evaluating interventions during the pandemic. The intervention findings, from one clinical setting with a small sample size, did show an increase in resilience following implementation, although staff turnover remained high at 30% during the project (Haughland et al., 2023). This may suggest that whilst well-being strategies can be effective, they need to be supported with broader workplace interventions, such as adequate safe staffing, resourcing, and consideration of patient acuity.

A quality improvement program in the USA used Maslow's Hierarchy of Needs as a framework to guide the design of various strategies for nurse managers to implement to address staff well-being (King et al., 2022). This included ensuring staff took their full 30-minute lunch break, rounding with staff each day to facilitate communication, celebrating staff milestones such as birthdays, writing letters of gratitude to staff, and providing mentoring and professional development opportunities and introducing resilience boosting tools during staff meetings. Evaluation of the project showed an increase in well-being, and a reduction in absenteeism following the intervention, however the success of the program was contingent on an engaged nurse leader to drive the strategies (King et al., 2022). This program was implemented within one inpatient unit of a larger acute care facility, the findings were also limited due to a COVID-19 surge during the implementation phase with increased absenteeism and an overall reduction in staffing levels to below 50% of normal levels.

Providing interventions online supplied one flexible option to allow more staff, including those working from home, or on weekend or night shift, to participate in well-being interventions. From Iran, a 7-week online mindfulness-based stress reduction program integrated meditation techniques, mindfulness, and yoga exercises via WhatsApp. Nurses were provided with audio meditations, video of yoga exercises, resources, and education on mindfulness (Nourian et al., 2021). Evaluation of the intervention showed mixed results. While there was a statistically significant difference in sleep latency and subjective sleep quality between the intervention and the control group, there was no significant difference in overall sleep scores.

The ability to adapt interventions and strategies to the online environment enabled some programs to continue when they may have otherwise folded during the pandemic, with increased workloads, physical distancing and isolation requirements making meeting in person impractical. A psychoeducational group program for Nurse Managers in the USA, called RISE© (Resilience, Insight, Self-compassion, and Empowerment), shifted to virtual sessions using Microsoft Teams during the pandemic (Sawyer et al., 2022). Activities were adapted for an online synchronous group format, and workbooks were mailed to participants. Participants discussed the convenience of meeting online, and no one felt the virtual space was a barrier to connection.

There was also evidence of the ability to adapt entire programs to accommodate the new workplace challenges created by the COVID-19 pandemic. The SEED (Stability, Encompassing, Endurance and Direction) program was initially developed to provide well-being support for staff following the 2019-2020 black summer bushfire crisis in New South Wales, Australia (Olcon et al., 2022). Immediately following the bushfire crisis in early 2020, COVID-19 restrictions began to escalate, and the SEED program was adapted to meet the new challenges to staff well-being brought on by the pandemic. Strategies introduced included a quiet room, coffee vouchers, yoga, wellness Wednesdays and wellness warriors. The program incorporated a codesign approach to ensure that it was meeting the needs of staff, and wellness activities were responsive to the changing needs of staff over time. Teams therefore felt ownership for the program, and it was able to adapt to local workplace needs and incorporate local knowledge and resources (Olcon et al., 2022).

5.3. Support from leadership

Nurse managers were placed under enormous daily pressure at the height of the pandemic to deliver safe nursing care while experiencing increased concern for front line staff well-being and resiliency. A group of nurse managers in a healthcare system in the USA 'engaged in a resilience-building tool to strengthen their emotional well-being and work-life balance' to positively role model self-care practices and optimize their support of their clinical teams (Carter and Turner, 2021). The individualized Web-based Implementation of the Science of Enhancing Resilience (WISER) tool provided daily text messages that linked to various resilience enhancing tools providing individualized resilience coaching. Following completion of the intervention participants showed improvement across the three scales evaluated, Emotional Thriving, Emotional Recovery, and Work Life Balance, however participants expressed challenges with prioritizing time for the resilience tools when clinical demands were heavy. The nurse managers having support from their own managers and directors was influential in completing the intervention, with managers prioritizing the needs of their staff over their own well-being (Carter and Turner, 2021).

Whilst research suggested that nurses in managerial or leadership roles expressed an increased emotional burden, they felt they needed to be reassuring staff (Blake et al., 2021). Implementing programs that focused on providing nurse managers with the strategies

and skills to not only look after their own well-being but also promote well-being amongst their staff was a focus of two interventions in the United States. The Clinical Leaders Series (Sawyer et al., 2022) and RISE© for Nurse Managers program (Sawyer et al., 2022) were both implemented during the pandemic to assist nursing managers and leaders to identify stress and burnout in their staff and provide tools for self-care and team-care.

Similar programs were implemented in Italy to provide healthcare leaders with the knowledge and resources to support the well-being of their staff. Healthcare leaders were enrolled in the 'R2 for Leaders' program where they attend 12 online sessions focusing on 10 resilience factors: gratitude and positive outlook, self-confidence, flexibility, meaning making, mindfulness and self-care, structure, accountability, supportive relationships, a powerful identity, and culture (Giordano et al., 2021). The pilot program showed increases in positive factors such as rugged resilience, resources resilience, and self-efficacy, and decreases in general stress and burnout symptoms amongst the leaders who participated. Some of these outcomes flowed onto the staff managed by the leaders with increases in rugged resilience and self-efficacy, and reductions in general stress and work-related stress noted in all staff.

Well-being interventions that were designed for individuals to access, still required the support of strong leadership to promote and encourage staff to take the time and space to use the interventions effectively. The 'Room to Reflect' mobile toolbox was an intervention designed to enhance the resiliency and well-being of nurses. The toolbox comprised a range of strategies including a sound machine, a VR headset, and a pocket guide of restorative mindful practices (Muir et al., 2022). The majority of participants felt supported, by leadership on their clinical units, to use the toolbox and pocket guide although time and space may still limit accessibility to well-being initiatives at a ward level.

If nurse managers feel empowered and satisfied within their roles to encourage and promote self-care within their teams, this provides a positive and safe environment for their staff to prioritize their own well-being. Building trust between leaders and staff is a vital component of any well-being strategy, which can include nurse managers setting the tone by prioritizing their own well-being which can then promote staff buy-in to the program (Heuston et al., 2021). A study of a health service in Victoria, Australia supports the importance of support from leadership and management, with respondents who felt that their organization responded appropriately to the pandemic and provided sufficient staff support reporting better mental health (Holten et al., 2021).

When the leadership of a critical care unit in the USA observed continued signs of fatigue and moral distress, despite early interventions such as well-being rooms, and regular debriefing, they implemented a structured support group for nursing staff (Drexler et al., 2023). The weekly online meetings were conducted by a clinical psychologist, and participants felt that sharing their experiences with peers was helpful and reduced their sense of isolation. This demonstrates that interventions must be tailored to the setting, and constant evaluation needs to be undertaken to ensure they are effective. This ensures that support strategies put in place are specific and appropriate for the nursing staff accessing them. Asking staff what they need to perform their roles safely and effectively allows teams to work towards solutions together.

5.4. Shared experiences and peer support

Sharing stories and communicating with peers, whether in person or online, was seen to be a valuable component of many well-being initiatives introduced. By talking about their experiences with other frontline nurses and healthcare workers, participants in the well-being strategies realized they were not alone (Orcon et al., 2022; (Sawyer et al., 2022)). The importance of strong collaboration and an interdisciplinary approach not just improves patient care but can also enhance staff well-being. The increased interdisciplinary collaboration was seen as a positive aspect to the workplace changes during COVID-19 (Blake et al., 2021).

There were examples of structured programs for sharing experiences with the support of a mental health counsellor, such as the nine-week RISE© psychoeducational group program which provided education, therapeutic process, skill development and social support for 19 nurse managers. Communicating with others facing similar problems allowed participants a sense of relief, provided a source of strength and enabled participants to look forward with a sense of hope. Debriefing with peers helped participants to reduce the sense of isolation felt by nurses during the pandemic (Sawyer et al., 2022). Whilst there were no statistically significant differences noted in resilience, perceived stress, insight or self-compassion on the self-reported surveys, there was significantly higher scores reported for psychological empowerment and post-traumatic growth amongst participants following the 9-week program.

There were also examples of less formal opportunities to share stories and experiences embedded into well-being initiatives. Opportunities for connection were integrated within the SEED program, in NSW, Australia through an activity referred to as Coffee Buddies, where staff were randomly assigned into pairs and went off site to have a coffee and chat (Orcon et al., 2022). Similarly in China, the WeChat group established in Wuhan encouraged peer to peer communication through sharing stories, experiences, and tips, facilitated nursing staff to write letters to loved ones as an avenue for reflection, and included messages of support from the public (Chen et al., 2021).

5.5. Feeling appreciated and feeling heard

The importance of feeling valued in the workplace was highlighted in several studies, not just from healthcare executive leadership, managers, and nurse leaders, but also the broader community. There were examples of spontaneous and collective expressions of gratitude by the community, for example #ClappingfortheCarers in the UK and Europe, which helped to lift spirits (Maben and Bridges, 2020). Well-being strategies in five of the studies focused on providing nursing staff with positive affirmations or messages of support as a way of boosting mental health and well-being (Chen et al., 2021, Green et al., 2022, King et al., 2022, Unger, 2022).

Messages from the public were shared with nursing and healthcare staff in some interventions. A study from Iran described several strategies that nursing managers used to help motivate staff including financial incentives such as a COVID-19 allowance and

additional leave, as well as messages from the public such as flowers and cards distributed across wards, and messages of appreciation from management to staff (Poortaghi et al., 2021).

The introduction of well-being centres in a large hospital trust in the UK, was seen by participants as being critical to workforce functioning, with hospital leadership being praised for rapidly mobilizing resources and investing in staff well-being (Blake et al., 2021). The rooms were designed to furnish a space where staff could relax, rest or access support services. Well-being buddies were located within each centre, trained in psychological first aid, participants felt they provided social contact, made them feel cared for and not alone. An evaluation was undertaken by Blake et al. (Blake et al., 2020) following the introduction of the centres, for those who attended, they felt valued by their employer through the hospitals efforts to protect the well-being of staff, and that the provision of patient care would not have been possible without providing this support for the healthcare workforce.

The introduction of well-being centres is a large-scale and costly intervention that requires significant investment by the organization. However, an evaluation of a small pilot study in the USA demonstrated that simple low-cost interventions focusing on positive reinforcement may also be effective at enhancing well-being (Green et al., 2023). A messenger service was used to convey positive feedback and messages between colleagues in a Medical Intensive Care Unit, leading to an enhanced attitude towards teamwork with participants noting a sense of belonging, inspiration, and gratitude. Whilst the pilot was limited to one site, with a high dropout rate (54% of 24 initial participants), it does demonstrate that the integration of strategies that focus on positive reinforcement can enhance team unity and have a positive impact on participants (Green et al., 2023).

5.6. Barriers to accessing interventions

Numerous studies mentioned the challenges associated with nurses having time to access some interventions, particularly physical spaces such as serenity or well-being rooms (Haughland et al., 2023; (Holton et al., 2022, Muir et al., 2022)). Even when initiatives were designed to be mobile and used at the bedside, time and space were still identified as a barrier to utilization by ward-based nurses (Muir et al., 2022). Staffing levels and patient acuity made it challenging for well-being strategies to be implemented effectively and impacted on staff engagement with the strategies (King et al., 2022).

During the initial stages of the pandemic in the UK, the National Health Service (NHS) implemented well-being centres at two hospitals. An online survey of employees across the health service where the well-being centres were implemented, reported that for those employees who did not attend, the main reasons for non-attendance were not having long enough breaks (27.8%), the centre was not located near their workplace (26.4%), and they were unable to take a break to attend (21%) (Blake et al., 2020).

There was evidence of interventions, such as a trial of gong meditation in Taiwan, which while successful at reducing stress may require adaptation to be feasible as a long-term strategy (Hsieh et al., 2022). The intervention required participants to undertake 7 one-hour gong meditation sessions over the course of two days, and post intervention evaluation demonstrated a significant reduction in stress and burnout in the experimental group, however the feasibility of such an extensive time commitment, would make this unachievable in most clinical settings.

6. Discussion

The factors outlined in these themes is consistent with the broader literature on promoting and supporting well-being amongst nurses and other healthcare professionals, and the growing body of evidence surrounding the impact the COVID-19 pandemic had on the wellbeing of the nursing workforce (Ball et al., 2023, Cornish et al., 2021, Doleman et al., 2023, Holton et al., 2021, Nantsupawat et al., 2023, Vogt et al., 2023)). The themes provide insight into developing well-being interventions that are effective and adaptable for any future crisis that requires rapid action by nursing leaders and managers. The findings from this scoping review have implications for future research, practice and policy development to ensure the ongoing well-being of the nursing workforce.

6.1. Practice Implications

The COVID-19 pandemic has highlighted the importance of well-being to ensure nurses have the resilience and psychological resources to continue to care for themselves and their patients in a demanding clinical environment. Whilst staff felt valued by their employer during the pandemic, concerns were raised about support being reduced in the future (Blake et al., 2021). The workforce issues associated with burnout have not diminished since the peak of the COVID-19 pandemic, and the importance of wellness initiatives remains. Key changes to meet the workplace needs of nurses are critical to promote wellbeing and the ability of nurses to safely complete clinical roles (Ball et al., 2022; (Bentham et al., 2021)).

Nurses face inherent stresses and take on an emotional load as part of their day-to-day activities, so well-being needs to remain a focus to ensure a healthy nursing workforce into the future. The barriers identified to accessing well-being interventions highlight that the introduction of wellness interventions in isolation will not reduce nurse burnout or turnover but must be accompanied by organizational interventions to address staffing levels, patient acuity, and lack of resources. Well-being initiatives that enhance resilience and psychological safety are an important step in healthcare settings recognizing the importance of supporting the mental health of their staff, but leaders and managers must also ensure a safe working environment through adequate staffing and resources, flexible scheduling, and access to mentoring and clinical supervision to maintain a culture of safety ((Doleman et al., 2023); Haughland et al., 2023; (Vogt et al., 2023).

There are significant benefits of well-being initiatives for patient care, such as greater compassion and care towards patients and colleagues, and a reduced risk of errors from stress and fatigue (Blake et al., 2021). Evaluations of strategies designed to improve

resilience and well-being were often given a lower priority to operational needs, clinical concerns, or the well-being of other staff, or that whilst staff were aware of the initiatives, they did not access them (Holten et al, 2022). Therefore, wellbeing interventions introduced by healthcare organizations should be well targeted, but also regularly evaluated to ensure they are effectively supporting their workforce (Vogt et al., 2023).

Practical well-being strategies provide psychological support essential for maintaining the health and well-being of the nursing workforce. Yet a study of a large healthcare system in the south-eastern United States found that whilst 43.9% of participants' (n=2459) well-being was considered at risk only 21.5% had accessed well-being or resilience resources since the start of the pandemic (Thompson Munn et al., 2021)). Interestingly this study found that those who did access resources were at higher risk of poor well-being, perhaps indicating that these staff members were already at heightened levels of stress and in need of support. Well-being strategies that are proactive rather than reactive in the face of a crisis, can lead to a stronger, healthier nursing workforce.

6.2. Policy Implications

Given the emphasis placed on authentic and effective leadership to many of the well-being strategies evaluated in this scoping review, enhancing the resilience of nurse leaders could be a crucial element of preparedness for healthcare services for future pandemics (Brodrick et al., 2020). There was widespread recognition of the nursing workforce during the COVID-19 pandemic, however this has not translated to nurses routinely advising on healthcare policy. A call for nurses' voices to be amplified following the pandemic, to recognize the unique healthcare expertise and patient advocacy role that nurses have in a variety of health care settings, has been growing globally (Rasmussen et al., 2022).

Empowering nursing leaders to represent, and advocate, for their patients, their workforce, and their profession could have significant future policy implications as we move forward from COVID-Nurse leaders know the capability within their own teams, and often see the consequences of increased stress firsthand. It is therefore imperative that nurse leaders respond when they see signs of burnout, such as increased absenteeism, increased staff turnover, and listen when nursing staff report feelings of anxiety, stress, and sleep disturbances. Nurse leadership requires courage and vulnerability to build trust with co-workers. This requires leaders to be authentic and honest when communicating with other staff members, by openly acknowledging the reality of the present situation, and the problems that are currently being faced (Hofmeyer and Taylor, 2021). Effective nurse leaders can have a positive effect on the well-being of their nursing staff through initiating conversations that ensure front-line staff needs and concerns are heard, understood, and addressed. For many of the studies included in this review, having engagement from leaders and managers, at both a local ward level and a broader organizational level were critical to success (King et al., 2022; Olcon et al., 2022).

There is a call for more attention to be paid to the well-being of the nursing workforce (Bosanquet, 2021) with a greater understanding required by governments, organisations and the public of the unique stressors inherent in nursing. Studies in this scoping review highlighted the benefits that could be achieved with a co-design approach to well-being initiatives (Olcon et al., 2022), this suggests that organisational leadership, who work with nursing teams to design and implement well-being initiatives, develop that strategies are more adaptable, more relevant to local needs and ultimately more effective.

While not explored in this scoping review, it is important to acknowledge Indigenous and Non-Indigenous theories of well-being when implementing policy (Mackean et al., 2022). There is also an identified gap in the available literature on the influence that gender may have on nursing well-being and therefore policy implementation (Badu et al., 2020, Vogt et al., 2023), supported by this review with most participants in the included studies being female.

6.3. Research Implications

As previously highlighted, it is challenging to determine the transferability of results from individual studies in this scoping review. Whilst more robust research is required to further develop the knowledge base on the important role of well-being within the nursing workforce, there is already a significant body of work exploring the causes of decreased well-being, burnout, and workplace retention challenges (Bosanquet, 2021, Vogt et al., 2023). If we know the causes, we now need to focus on understanding what can be done to mitigate, overcome or remove the underlying causes that threaten the well-being of the nursing workforce. Well-being is feasibly the most critical outcome measure of policies (Ruggeri et al., 2020).

There also needs to be further research into how we can effectively measure the well-being of our nursing workforce. The studies included in this scoping review used a range of quantitative measures to determine the effectiveness of their interventions including a range of self-reported questionnaires and scales to measure: perceived stress (Alkhawaldeh, 2023, Haugland et al., 2023, Hsieh et al., 2022, Sawyer et al., 2022); coping strategies (Alkhawaldeh, 2023, Hsieh et al., 2022) work life balance (Carter and Turner, 2021); resilience (Haugland et al., 2023, Muir et al., 2022, Sawyer et al., 2022), burnout (Ungar, 2022) and sleep quality (Nourian et al., 2021). Whilst this makes comparison between studies difficult, it also highlights a lack of consensus as to what constitutes well-being, and how poor well-being may manifest within the workforce. One suggestion for providing meaningful data around wellbeing interventions, is the need to incorporate data around actual and intended turnover of nursing staff to determine if interventions are making a meaningful difference to the workforce (Vogt et al., 2023). However, this also poses challenges in accessing data on actual turnover at a larger scale or reaching consensus on how to best measure intention to leave.

Whilst there were some qualitative or mixed methods studies included in this scoping review, it has previously been identified that this is an area where future research should focus to provide space for subjective personal and lived experiences of well-being to contribute to the knowledge base (Badu et al., 2020, Bosanquet, 2021).

7. Study Strengths and Limitations

The strengths of this scoping review include all articles being reviewed independently by two researchers to limit any potential bias. The studies were not formally evaluated using a CASP tool, as previously mentioned, the interventions were often only reported in smaller studies or as Quality Improvement activities or early findings. Publications in other data bases not searched may have been omitted. The review only included publications in English which may have excluded studies published in other languages where the COVID-19 Pandemic was widespread.

8. Conclusion

The COVID-19 pandemic required nursing and healthcare leaders to be creative and act quickly to implement strategies that supported the psychological safety and well-being of their nursing staff. Nurse leaders were empowered to support staff during the pandemic. Learnings from the interventions implemented and evaluated will ensure that healthcare settings can meet their staff's needs. This scoping review has included 21 studies evaluating well-being initiatives, and there were numerous other descriptive reports of well-being initiatives which, when formally evaluated, could provide additional insight into effective strategies. The strategies identified demonstrate the creativity and adaptability of nursing leadership to look after colleagues to maintain and sustain our nursing workforce.

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Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Supplementary materials

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