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Strategies to Improve the Wellbeing of Nurses at the Work-Place

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Abstract

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Nurses face ethical, mental, emotional and physical difficulties during their work. These frequently lead to them experiencing burnout, lack of time and energy to look after them. It is for this reason that concerns about the wellbeing of nurses is increasingly becoming a pressing issue that needs immediate attention. However, there are limited conclusive findings on the most pertinent work environment strategies directed towards improving nurses' wellbeing.

The purpose of the study was to describe the different strategies that were utilized to improve the wellbeing of nurses and prevent burnout at the work-place. The aim was to produce new knowledge about strategies which could be utilized when aiming to promote wellbeing of nurses and preventing their burnout at the work-place. The results of the study might be utilized by nursing management when developing strategies for nurses' wellbeing. A narrative literature review method was employed while inductive content analysis was used when analyzing. In this research, 21 articles which have been peer reviewed and published between 2014 and 2024 were extracted. Findings from the present study were categorized as work-related strategies and perceptions of nurses. The work-related strategies including work policies, staff growth initiatives, psychosocial support, collaboration, recognition mechanisms, comprehensive health and wellness initiatives, as well as the establishment of supportive infrastructure, are crucial strategies for bolstering wellbeing of nurses. Nurses perceive effective well-being strategies as those that demonstrate genuine organizational care through sustained, systemic and multi-level interventions.

The research recommends for promotion of flexible working arrangements, strengthening work-life balance, investing in staff development, fostering psychosocial relationships, cultivating empowerment and recognition as well as improving workplace safety and infrastructure as means of improving the wellbeing of nurses to prevent burnout.

Keywords: burnouts, improve, perceptions of nurses, wellbeing of nurses, work-related strategies

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Sairaanhoitajat kohtaavat työssään eettisiä, henkisiä, emotionaalisia ja fyysisiä haasteita. Nämä johtavat usein heidän työuupumukseensa, ajan ja energian puutteeseen huolehtia heistä. Tästä syystä sairaanhoitajien hyvinvointi on nousemassa yhä kiireellisemmäksi asiaksi, joka vaatii välitöntä huomiota. Kuitenkin on olemassa vain rajallisesti yksiselitteisiä tutkimustuloksia siitä, mitkä työympäristöstrategiat ovat tehokkaimpia tukemaan sairaanhoitajien hyvinvointia. Tutkimuksen tarkoituksena oli kuvata erilaisia työympäristöstrategioita, joita on käytetty sairaanhoitajien hyvinvoinnin edistämiseksi ja työuupumuksen ehkäisemiseksi. Tavoitteena oli tuottaa uutta tietoa työympäristökijöistä, joita hyödynnetään pyrittäessä edistämään sairaanhoitajien hyvinvointia ja ehkäisemään uupumusta. Tutkimuksen tuloksia voitaisiin hyödyntää hoitotyön johtamisessa hyvinvointia edistävien strategioiden kehittämiseksi.

Tutkimuksessa käytettiin narratiivista kirjallisuuskatsausmentelmää, ja aineisto analysoitiin induktiivisella sisällönanalyysillä. Aineisto koostui 21 vertaisarvioidusta artikkelista, jotka oli julkaistu vuosina 2014-2024. Tulokset jaettiin kahteen pääluokkaan: Työhön liittyviin strategiahin ja sairaanhoitajien käsityksiin. Työhön liittyvät strategiat – kuten työpolitiikat, koulutus ja ammatillinen kehittäminen, pyskososiaalinen tuki ja tiimiyhteistö, johon osallistuminen, tunnustus- ja palkitsemisjärjestelmät, kattavat terveys- ja hyvinvointiohjelmat sekä tukevan infrastruktuurin luominen – ovat ratkaisevia sairaanhoitajien hyvinvoinnin parantamisessa. Sairaanhoitajat kokevat kaikkien tehokkaimmiksi hyvinvointia edistäviksi strategioksi ne, jotka osoittavat organisaation aitoa välittämistä pitkäjänteisten, järjestelmällisten ja monitasoisten toimenpiteiden kautta.

Tutkimus suosttelee joustavien työjärjeslyjen edistämistä, työn ja yksityiselämän tasapainon vahvistamista, henkilöstön kehittämiseen panostamista, psykososiaalisen hyvinvoinnin tukemista, voimaannuttamisen ja tunnustuksen kulttuurin edistämistä sekä työpaikan turvallisuuden ja infrastruktuurin parantamista keinoina sairaanhoitajat hyvinvoinnin parantamista ja työuupumusta ehkäistä.

Avainsanat: Työuupumus, hyvinvoinnin edistäminen, sairaanhoitajien käsitykset, sairaanhoitajien hyvinvointi, työhön liittyvät strategiat.

Tämän opinnäytetyön alkuperä on tarkastettu Turnitin Originality Check-ohjelmalla

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1 Introduction

1.1 Overview

A strong health workforce, characterised by adequate staff, ideal physical and mental health and a nurturing atmosphere, is necessary for providing high-quality healthcare (Shah et al. 2021). This is evident among nurses, who are enthusiastic when offering competent and compassionate care to individuals with complex healthcare needs. It is in light of this that nurses remain an essential workforce component, frequently working directly with patients to provide them with the frontline and most important services at the hospital (Ali, Shah and Talib 2021).

Nonetheless, nurses are stressed up by several factors including; increased workloads, lack of staff, lack of retention, working long hours and staff absence due to sickness. These have impact on nurses' wellbeing and lead to burnout and stress. While many hospitals have made progress in addressing the issues that the nurses face, Berlin et al. (2023) suggest for more efforts increase well-being and minimise burnout. In order to address these persistent levels of burnout, Berlin et al. (2023) is championing for unwavering stakeholders support towards wellbeing of nurses. Moreover, there need to address structural issues that burnout to being the root of burnout among nurses. In addressing burnout among nurses, it would be very important to reduce workload demands while at the same time increasing resources to meet the demands.

1.2 Problem identification

Nurses face ethical, mental, emotional and physical difficulties during their work. As a result, they frequently experience burnout and lack the time and energy to look after themselves. Specifically, the pressures and demands associated with the nursing profession have direct impact on their wellbeing. This in turn raises the possibility of errors in health service delivery, which might jeopardize safety

as well as care of the patient (Burns, Hanley, Herbig, Judge and Murphy 2023; Melnyk et al. 2020). It is often difficult for nurses to talk about their well-being and ask for support since such avenues are not available in many health facilities. It is for this reason that the well-being of nurses is becoming an increasingly pressing issue that needs immediate attention. Therefore, healthy work environment strategies, which would help improve the nurses' wellbeing, may eventually mean patients receiving excellent service in a conducive working atmosphere cannot be underestimated (Moloney, Fieldes and Jacobs 2020; Kleine, Rudolph and Zacher 2019). However, there are limited conclusive findings on the most pertinent work environment strategies for supporting nurses' well-being. This motivated the need for this study.

2 Background

It is fundamental to understand that to improve a care delivery system does not involve just organisational improvements but also to optimize human resources (Tomaszewska, Kowalczyk & Majchrowicz 2024). In science and policy discussions, psychological health of the nurses is regarded decisive sign of their health, representing an individual's total evaluation of their level of happiness, contentment and quality of life. It significantly determines an individual's productivity in the workplace and in society. Lower physical or mental well-being take to emanate from being unsatisfied with work.

Notably, setting in which nurses practice their profession has a significant impact on nursing outcomes as well as how well care is seen to be provided and how safe it is for patients (Almeida, Figueiredo & Lucas 2024). Adverse nursing practice settings have an adverse effect on how well nurses use their skills and expertise, which can lead to professional unhappiness, difficulty hiring new staff, burnout and turnover, negatively impact on health institutions. Core skills of nurses in health care delivery is to understand the work environment while personalized care for every user requires nurses to take the surroundings into

account when making care interventions. The nursing practice environment is critical to nurses' wellbeing.

Scholars posit that in an inadequate nursing practice environment, integrating skills and expertise to deliver nursing care is challenging (Dissanayake, Dharmasena & Warnakulasuriya 2024). This is because it causes burnout, staff turnover, professional unhappiness and difficulties in recruiting. The aforementioned aspects adversely affect health institutions. On the other hand, a proper environment for nursing practice significantly influences the quality and safety standards, professional wellbeing, motivation of nurses, their dedication and their effectiveness in addition to overall productivity of the health system as a whole. It is, therefore, very important to carefully assess the work environment and establish the critical factors that define nurses' health and have more general significance for nursing practice. Furthermore, what is needed is an approach to nursing that is integrated, holistic. Such an approach should take into consideration the human condition itself as well as the physical and social settings in which care is provided, as well as the challenges that are emerging within these environments.

2.1 Wellbeing of nurses

Based on definition, well-being denotes the state of holistic physical and mental health underpinning overall happiness and life satisfaction. Wellbeing denotes the ability of individuals and communities to live meaningful lives, contribute positively to the world and enjoy a high quality of life. Placing emphasis on nurses' wellbeing helps to monitor equitable resource distribution, general flourishing and sustainability. Wellbeing is the good state that is felt by both individuals and civilizations (Almeida et al. 2024). Well-being service as a vital resource for daily living, shaped; profoundly by social and economic milieu as well as physical surroundings.

The concept itself is multi-dimensional by nature. According to Jarden et al. (2020), wellbeing is individuals' evaluation about whether they have the physical,

social and psychological resources to meet demands. Social determinants shape this concept, including workplaces. Occupational safety and health are among the core components of workplace wellbeing. Thus, employee wellbeing is crucial to enhance productive and healthy workplaces.

In the health environment, wellbeing directly affects health of nurses, their sense of fulfilment, professional satisfaction and level of engagement with work (Foster, Roche, Giandinoto, & Furness, 2020). It is also believed that fulfilling the desires of workers contributes to their wellbeing at work. A person's degree of wellbeing increases with their sense of worth, acceptance and autonomy; growth expectations; financial resources; support they get from the working environment; and satisfaction from being a part of the organisation.

A significant body of literature suggests that high levels of workplace wellbeing heighten nurses' enthusiasm and productivity and generally enhance their satisfaction with their job. On the other hand, low levels of workplace well-being are strongly related to burnout (McClelland, Gabriel, & DePuccio, 2018; Melnyk et al., 2020). Working hours, job satisfaction, managerial and peer support, appreciation, respect, and opportunities for sustaining a healthy work–life balance are also considered key determinants of nurses' well-being (Dall'Ora, Ball, Reinius, & Griffiths, 2020).

Aforementioned are organisational cultural aspects comprising; psychological strain from work, lack of variety in tasks and relationship conflicts. These conditions expose nurses to excessive stress and emotional burden, which in turn serve as impeding factors for both their wellbeing and their motivation to work (Muñoz-Rubilar et al. 2022). Hence, wellbeing of nurses is not a choice; it is an imperative. It is a critical determinant for health, performance capacity and resilience. So as to reduce stressful situations, organisations can adapt a positive change in work atmosphere and prioritise the promotion of employee wellbeing (Cseh, Zorga, Sipos, Fináncz and Csima 2021.). Therefore, in order to support employee motivation, wellbeing and higher productivity, health institutions must foster a sense of belonging. Many businesses adopt techniques to emphasise

how much they appreciate their workers, which boosts wellbeing and job satisfaction. Averting burnout and increasing workplace commitment serve as controls against nurses leaving the profession. Employers need to address workplace conditions and develop suitable support mechanisms for nursing staff in order to successfully diminish burnout as it helps protect their workforce wellbeing (Konttila, Holopainen, Kyngäs, & Pesonen, 2021). The quantitative and qualitative performances are always stronger, along with the levels of patient and employee satisfaction and the general health and wellbeing of the staff, where health facilities employ nursing staff who express organizational commitment.

2.2 Challenges facing the wellbeing of nurses

Personal issues and several healthcare issues contribute to stress and burnout among nurses (Lee, Tzeng and Chiang 2019.) Examples of these issues include; increased workload, a sense of being devalued and inadequate staffing (Melnyk et al. 2020). Nurses who are in good mental health have, better physical and psychological health, higher levels of creativity, more productive employment and better relationships (Ersin, Havlioglu and Gur 2021). On contrary, meagre nurses' wellbeing initiatives may hurt the medical care ideals (Melnyk et al. 2020). Poor wellbeing of nurses has been demonstrated to have detrimental effects on patient safety as well as the likelihood of errors and near misses (Carciente 2022).

Moreover burnout, poor patient quality, stress and compassion fatigue are all progressively exacerbated by a lack of wellbeing (O'Connor, Prebble and Watterworth 2023). The majority of nurses can typically relate to the emotional, physical and behavioral reactions that cause stress. While pressure is a natural part of life and can be useful for inspiring others and finishing tasks, persistent panic attacks, anxiety attacks and other stress-related symptoms are not good for one's health. Regarding work-related stress, healthcare workers worldwide experience higher rates of absenteeism, illness and burnout at work than professionals in other industries (Brand et al. 2017).

The heavy workload of nurses, working with insufficient nursing staff and many nurses staying on the job longer than necessary, could lead to severe panic attacks (Ellis 2022; Havaei et al. 2021). Furthermore, the work of health professionals in all health systems and specialties often involves significant stress, extreme pressure and heavy mental health burdens for a number of workers (Søvold et al. 2021). Among the groups with specific high risk are those who are first-line responders in public health emergencies or who work in low-resource, disadvantaged, or highly stigmatized settings (Shanafelt et al. 2022). Among all occupational groups, nurses have one of the highest risks for burnout.

2.3 Work related strategies and wellbeing of nurses

Given that nurses spend a significant amount of their daily activities at the workplace, their daily lives are suggestively impacted by their work (Lorber, 2018). This includes the physical environment's quality and safety. So, healthcare organizations have clear and specific duty to create a healthy and nurturing working atmosphere. A truly healthy workplace actively promotes wellbeing of the staff members while ensuring best health and safety measures. The working environment quality decisively influences employee morale and importantly their health. A reasonably good healthy work environment allows staff to meet patients' needs o while concurrently fulfilling the goals of their unit, department, or organization Chung et al. 2020). It is also an environment that empowers employees to experience personal fulfilment beyond the workplace as they execute their professional responsibilities.

Evidence on the efficacy of interventions pointed to improving the work environments of nurses indicates that stress and heavy workloads, amongst many other pressures, significantly undermine service quality (Eva et al. 2024). Nursing professionals' health and wellness depends workplace environment, which is why initiatives to enhance the workplace are created. According to study results, cooperation was the quality that was most valued. On this basis, guidelines on best practice in developing a healthy work environment for nurses identify a number of key elements: the requirement for professional autonomy;

the pivotal function of effective communication; the key part played by strong and supportive nursing leadership; and the importance of cohesive teamwork in building a workplace that is both productive and safe (Mabona et al. 2022).

Thus, central features of a healthy nursing work environment include professional autonomy, effective teamwork, competent leadership and clear and meaningful communication. Furthermore, effective leadership is one tactic utilized to improve nurses' well-being while also raising awareness that every nurse employee has the potential to be a leader (Lorber, 2018). A healthy workplace encourages the development of leadership skills in staff members and acknowledges the value and skill of the medical staff. Efforts ought to be directed toward promoting people's personal growth. Additionally, leaders should work on enhancing nurses' overall health and safety.

Good health and job satisfaction can have a number of beneficial consequences on workers, including less employee erratic behavior, lower absence rates and increased productivity and motivation. Also, maintaining and enhancing employee health and safety ought to be the primary responsibility of a socially conscious nursing management team, as this will only benefit workers, employers and society at large when all parties collaborate to uphold and improve the state of health.

This render leaders' connectivity, an enabling atmosphere, teamwork among coworkers, individual and team behaviors and empowerment important strategies for fostering wellbeing of nurse (Moloney et al. 2020). In other words, nurse's wellbeing at work influences their physical health, productivity and professional success. According to Rushton and Pappas (2020), creating wellbeing for all clinicians requires addressing both individual-level and system-level barriers that exist within the work environment. Therefore, well-being initiatives need to be paired with institutional changes that mitigate barriers to ethical practice, reclaim the sense of purpose that is inherent in healing practices and deliberately cultivate resilience and overall wellbeing.

Moreover, studies show that approach-oriented coping is related to greater psychological wellbeing among nurses (Lee et al. 2019). Safety attitudes and quality environment at workplace are positively related to nurses' well-being. Taken together, safe, and well-organized environment are essential for maintaining nursing staff's mental health and professional capability. A fulfilled psychological state, a conducive practice and a safety-focused mindset were all substantially predicted by the application of approach-oriented coping mechanisms.

3 Purpose, aims and research questions

The purpose of the study was to describe the different strategies that were utilized to improve the wellbeing of nurses and prevent burnout at the work-place. The aim was to produce new knowledge about strategies which could be utilized when aiming to promote nurses' wellbeing and preventing burnout among them at the work-place. The results of the study might be utilized by nursing management when developing strategies for nurses' wellbeing.

The research questions were:

1. What are the different strategies used for improving the wellbeing of nurses at the work-place?
2. How do nurses perceive the different strategies used to support the wellbeing of nurses at the work- place?

4 Methodology and methods

4.1 Data collection method

Data were collected using qualitative research approach (Pilcher & Cortazzi 2024). Qualitative data analysis refers to an organized way of condensing and

interpreting non-numerical observations to uncover underlying patterns, themes, and meanings. (Lönn et al. 2024). This approach attempts to develop insights that could explain events in their natural settings rather than artificial, contrived, or experimental ones and therefore brought into fore experiences of participants, their views and interpretation.

In this study, narrative review method was adopted since was helpful in providing a inclusive review of literature obtained. The primary intention of using it was to identify and summarize a selection of studies that either explored a given topic of interest or addressed a particular problem (Sukhera 2022). It was also characterized by a broader, more flexible review of relevant literature, guided solely by the selected topic of interest. Besides, narrative reviews provided a flexible yet rigorous approach to the analysis and interpretation of the identified literature. Using this approach, the researcher was able to craft a systematic summary of the findings, which helped arrive at appropriate conclusions. Even as narrative reviews made provision for knowledge synthesis on a particular topic, it also allowed the researcher to subjectively undertake a broad review of the literature. Finally, the approach enabled exploration of key themes, trends and gaps and therefore developed a deep understanding of the research relating to the subject matter.

4.2 Data search and selection

4.2.1 Search strategy

Search for the articles was guided by; search terms, Boolean operators, truncation as well as subject headings were employed to formulate the search strategy (Dhollande, Taylor, Meyer and Scott 2021; Wilandika, Pandin and Yusuf 2023). In this context, the research established systematic search strategy (Sevy & Warsawsky, 2020). The literature review included articles published between 2014 and March 2024. The databases deemed worthy of consideration encompassed: Europe PMC., Excerpta Medica Database (EMBASE), Potential

databases PubMed Central (PMC), PsycINFO, Scopus, Web of Science, EBSCOHost® platform, Emerald Insight, SpringerLink and Science Direct. The search terms used included; Work environment strategies, support, wellbeing, perceptions and nursing.

A systematic summarization of a defined procedure helped in the identification of the research topic. This structured approach, as posited by Sevy and Warshawsky (2020), ensured that the research topic was explored in detail on a systematic basis. A number of crucial steps were involved in approaching that process in a structured manner. First of all, was the ask phase which involved formulating an appropriate question to guide the process. The acquire stage then involved collecting relevant evidence from the literature on the basis of which a case would have been developed. Next, the appraisal process required the analysis of the strength and credibility of evidence gathered to ensure it met the criteria for reliability. The aggregate phase then comprised synthesizing the gathered evidence to enable patterns and insights emerging from the data to be identified. Then apply step was used for comparing alternative solutions/ perspectives based on the synthesized evidence; which enabled deeper understanding of the research topic. Finally, the process concluded with the assess stage where outcomes were evaluated to determine their effectiveness and to appreciate their implications for the findings.

The research questions to be answered include;

“What are the different strategies used for improving the wellbeing of nurses at the work-place?”

“How do nurses perceive the different strategies used to support their wellbeing at the workplace?”

The Search query for the first research question was;

Nurse AND (Work related) AND strategies AND Improve AND wellbeing AND Burnout.

In this case, PEO framework was created; which considered; Population (P) as nurses; exposure (E) as Work related strategies and; outcomes (O) as improved wellbeing (Ong et al. 2021).

Table 1: PEO framework (Researcher, 2025)

PEO Element	Evidence
Population	Nurses: without restriction on age, gender, at exposure or outcome assessment
Exposure	Exposure to Work related strategies
Outcomes	improved wellbeing:

The Search query for the Second research question was;

Nurse AND (Work related) AND strategies AND wellbeing AND Perception.

4.2.2 Inclusion and exclusion criteria

Specificity of literature searches was improved when nursing researchers articulated and subsequently refined their search parameters using well-defined inclusion and exclusion criteria (Dhollande et al. 2021). Very narrow searches may lead to the exclusion of important results, whereas very broad searches are likely to return inconsistent or irrelevant information. Application of the inclusion and exclusion principles judiciously assisted retrieval of relevant and good quality information (Ong et al. 2021). Thus, the developed search criteria for the selected databases and the associated search terms were considered sufficient and appropriate to identify articles that could answer the question at hand.

Table 2: Criteria for Exclusion and Inclusion (Researcher, 2025)

Inclusion	Exclusion
Assessing interventions that use work environment strategies at healthcare organizations with the goal of achieving the well-being of nurses.	Research assessing interventions that report on existing work environment strategies in organization that are not healthcare organizations.
All publication types and study types.	Articles that are not journal articles.
Studies that provide work environment strategies in healthcare facilities.	Studies evaluating well-being on an individual provider - level.
Studies published in English or Finnish.	Reviews, meta-analysis studies, protocols and letters to editors.
Studies with two participants or more.	Studies with sample size less than two.
Studies which were published between 2014 and 2024.	Articles over ten years.

4.3 Selection process

This study was guided by the Preferred Reporting Items for Systematic Reviews and Meta-Analyses [PRISMA) flow diagram to guide the selection process; based on the steps

1. Identification: 957 records were initially identified through database.
2. Screening: After removing 258 duplicates, 699 unique records remained.
3. Titles and abstracts were screened against inclusion criteria, leading to exclusion of 510 irrelevant records to remain with 189 articles.
4. The full texts of 189 articles were retrieved and assessed for eligibility. Of these, 76 were excluded due to insufficient focus on work related strategies and improved wellbeing, or inadequate methodological quality.
5. Full Text accessed for Inclusion criteria and quality where 92 were removed.
6. Finally, 21 studies met all inclusion criteria and were included for detailed qualitative synthesis.

In the systematic review, a PRISMA diagram was used to visually present how the evidence (usually in the form of records or studies) moved through different phases of the review process. This was typically done using the PRISMA flow diagrams summarized in Figure 1.

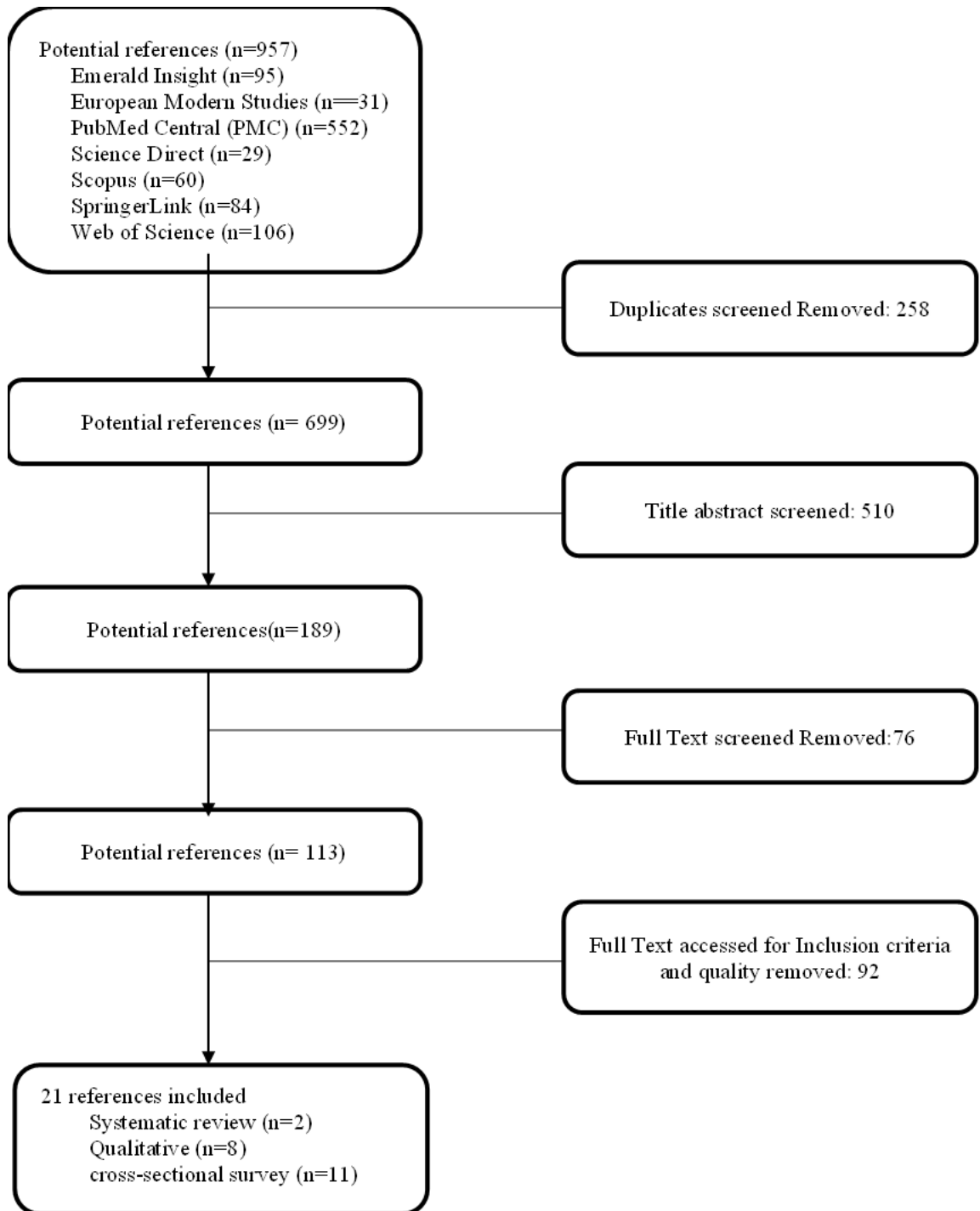


Figure 1: Prisma Flowchart (Researcher, 2025)

4.4 Analysis

Data extraction involved collecting key information from each selected study including the authors and year, study purpose and study location, research design, approaches used in work-environment studies and link with nurses' wellbeing. A theme analysis was then conducted to identify shared inclinations and themes across different studies, such as how different work-related approaches improved wellbeing, as well as setbacks and circumstances that affected the impact of these approaches.

Content analysis in this study was accomplished using an inductive approach, which was among the qualitative content analysis that is considered particularly feasible in health-related investigations (Lovrić et al.2020). An inductive approach allowed the identification of patterns, themes and categories, emerging organically from the articles. Such enabled insights and understanding to be built upward from the raw data. In line with such a data-driven philosophy, inductive content analysis emphasizes theory or conceptual development grounded directly in participants' experiences. The key characteristics of inductive content analysis are that, it is: data-driven, where it allows the data to dictate the categories, themes and patterns that emerge. It is exploratory, where the goal is often to explore new phenomena or gain deep insights into a topic that has not been extensively studied. It is a process that is directed by certain goals, while analysing qualitative data. Inductive content analysis is ideal when exploring complex or under-researched topics, as it allows researchers to uncover patterns and themes that may not have been anticipated at the onset.

Inductive content analysis was adopted for critical assessment as well as reading and comprehension. In this case, each journal was read multiple times to fully understand the content and methodology of the chosen articles. Furthermore, there were identification of key points where the study identified the main ideas, arguments, conclusions and synthesis in which case the study paraphrased the keywords into own words. Lastly, there was editing and refinement, where the study summarized the findings and verified them using the original data.

This process began with familiarization (reading and re-reading article to immerse self into content of the article). This was aimed at developing an overall feel for the articles, making preliminary observations and noting down any patterns or ideas that were found of interest. This encompassed full reading of the contents of the article; taking notes or marking initial impressions so as to gain clarity of the overall context. Then was the generation of initial codes, where the researcher broke down the data into smaller, meaningful units, with each unit representing a segment of text relating to a particular concept in the area of interest. This is done so as to identify and label the meaningful units of data, which are later categorized or grouped. The creation of initial units is based upon the meaning of each segment without applying pre-existing labels or categories.

Subsequent to coding, broader patterns and themes across the codes were sought for. Related codes were grouped together into preliminary themes aimed at identifying patterns and categories. The exercise involved re-viewing the codes, organizing them into clusters of similar ideas, developing preliminary themes summarizing the content of the code clusters and checking that the themes reflected the research question and were grounded in the data.

The study then refined the themes by reviewing them to make sure they were consistent and accurate. The themes were reassessed to ensure they were representative of the data while providing meaningful insights. This was to ensure that all themes were coherent, distinct and precisely captured. Each theme was then defined and assigned a clear label or name that encapsulated its essence. This helped in understanding the specific aspects of the data that each theme represents. Lastly, the study interpreted and wrote up the findings. The report presented the themes and explained the relationships between themes and how they answered the research questions.

Table 3: Thematic Analysis Process (Researcher, 2025)

Stage	Description	Purpose
Familiarization	Read and read the journals to familiarize yourself with the material, writing down impressions and noting first impressions or patterns.	To gain a general idea and understanding of the data
Generation of Initial Codes	Broke down analysis of data into smaller, meaningful segments without the use of preconceived labels.	To identify and label prominent characteristics in the data that relate to the improved wellbeing and work-related strategies
Theme Searching	Grouped near codes together into broader patterns and categories to form preliminary themes	To identify prominent patterns that captured the essence of the data
Theme Reviewing	Revised themes for coherence, clarity and consistency with the data	Ensure themes were precise, distinct and data-supported
Defining and Naming Themes	Named themes clearly with descriptive short titles that encapsulate their essence.	To provide clarity and enable the reporting of findings
Interpretation and Write-Up	Wrote a formal report summarizing the themes, examining relations between them and relating findings to the research question.	Presented insights and conclusions as a result of the thematic analysis

5 Results

5.1 Summary of the data

During analysis, 21 articles were extracted as summarised in Appendix 1. These articles were from different author and various countries. In terms of the

methodology used; 9 adopted cross sectional, 7 utilised descriptive, 1 used descriptive cross-sectional as 1 used descriptive-exploratory, 1 longitudinal (cohort) and 2 scoping review. With regards to the method used, 11 used quantitative, 8 qualitative as 1 used mixed and 1 employed PRISMA. In data collection, 13 used questionnaire, 6 used interviews and 2 data extraction form. The study reviewed used a broad range of participants with varying sizes. While one study used 795 professionals, of which 372 were nurses, another study targeted 67 emergency healthcare workers, of which 27 were nurses and another 66 hospital-based doctors. Another study used 338 health workers with 50 nurses; 750 registered nurses; 206 nurses and 188 physicians, of which 44 were nurses; and 366 nurse managers. Further research included 51 inter-professional clinicians, including 24 nurses; another included 20 nurses; and a study included 526 nurses. Other sizes of participants were reported in research with one having 30 nurses; another 200 healthcare workers, including 94 nurses; 290 nurses; 655 registered nurses; and 290 physicians and cleaning staff, including 180 nurses. While one had 12 registered nurses, the number of participants in another was 400 nurses, the other 10 occupational health nurses and the other had 579 participants. In the systematic reviewed articles one reviewed 33 studies.

The analysis was twofold: first, to identify the various work-related strategies used with the aim of enhancing nurses' wellbeing; and, second, to comprehend nurses' perceptions regarding these strategies and their effects on their professional and personal wellbeing.

5.2 Work-related strategies

The key themes identified during the analysis included: work policies, training and professional development, fostering team collaboration and social support, leadership involvement in employee wellbeing, recognition and reward mechanisms, health and wellness initiatives and supportive infrastructure as captured in Appendix 3.

5.2.1 Work policies

Work policies that emphasized flexible work arrangements (Buchbinder et al. 2023), effective workload management (Li et al. 2024) and work-life balance promotion (Zhang et al. 2024.) were found to be essential in improving the well-being and productivity of nurses. Such policies were put in place to meet the physical, emotional and mental demands that nurses encountered in their daily practices. That was through creating supportive environments that address both their duties and personal lives.

5.2.1.1 Work arrangements

Providing for flexible hours of work and consenting for autonomy in the scheduling of work was indicated as crucial in improving work-life balance, especially for shift work settings for nurses (Yeter et al. 2024; Buchbinder et al. 2023; Zare et al. 2021 Berlanda, de Cordova, Fraizzoli and Pedrazza 2020). Job satisfaction through dimensions of; job autonomy, motivation by leadership and provision of facilities also emerged as a critical aspect in boosting the health (Chung et al. 2020). In addition, fostering support and cooperation cultures in the workplace greatly helped the nurses in blunting the effects of stress on them and pointedly improving their health (Zaghini et al. 2020).

5.2.1.2 Workload management strategies

Workload management prevented nurses from receiving an excessive number of duties or responsibilities. Workload management prevented overloading of responsibilities among nurses (Dantis et al. 2024; Hult and Terkamo-Moisio 2023; Zare et al. 2021). One of the most important aspects was managing appropriate shift ratios, hereby considered to have eased the pressure on nurses significantly (Li et al. 2024; Buchbinder et al. 2023; Blanchard et al, 2022; Cezar-Vaz et al. 2022). In this regard, addressing excessive workloads by developing appropriate and reasonable distribution policies, such as managing patient-to-nurse ratios and maintaining decent hours of operation, contributed directly to improved physical and mental well-being. Fair distribution of workload was important in reducing physical and emotional burdens on individual nurses, consequently

minimizing the chances of burnout. An important aspect which was discovered in most studies is that excessive workload reduction, either through hiring more staff or distribution of workload, played a significant role in minimizing stress.

In addition, the smooth running of administrative duties, such as documentation processes, further freed work-related stress off the nurses, enabling them to have adequate time with patients while diminishing the burden of non-clinical work (Escribe et al.2022). Workload management policies that are comprehensive in nature. that is, ensure manageable workloads and prevent overworking-proved instrumental in protecting nurses from burnout (Zaghini et al. 2020). Furthermore, encouraging an active role of nurses in job crafting, through intentional job task adjustments, interpersonal interaction adjustments and changes in work-related perceptions, has been found to greatly enhance both occupational satisfaction and overall well-being (Zhang et al. 2024).

5.2.1.3 Promoting work-life balance

Flexible work structures encompassing shift rotation and time-off policies that offer adequate time away from work were of greatest significance in helping nurses achieve work-life balance and importantly reduced stress while they enhanced well-being (Zhang et al. 2024; Li et al. 2024; Tomaszewska, Kowalczyk and Majchrowicz 2024). Staff rotation was also found to enhance job satisfaction as it included provided option to re-energize nurses in their professional lives (Li et al. 2024).

With the flexibility to use part-time and telework spaces, or with the flexibility to adjust working hours to fit family and personal requirements, nurses achieved acceptable work-life environment (Cezar-Vaz et al. 2022). This type of flexibility was less susceptible to burnout as it improved retention (Li et al. 2024). This granted adequate time, preventing nurses from being overpowered by the volume of work. This then prevented fatigue and emotional exhaustion, which were some among the primary causes of burnout (Blanchard et al. 2022).

Moreover, sufficient staffing kept the nurses from receiving long, gruelling shifts or consecutive shifts with no possibility of rest. Consequently, it reduced the risk of physical and mental burnout (Buchbinder et al. 2023). Additionally, providing quiet places to rest between shifts where the nurses would rest was proposed as a universal solution for allowing physical recovery time and then preventing emotional burnout. (Zhang et al. 2024).

5.2.2 Training and professional development

These articles emphasize the paramount importance of target-oriented training and personal advancement opportunities as part of the core elements of nurses' well-being (Tomaszewska et al. 2024; Buchbinder et al. 2023; Escribe et al., 2022; Berlanda et al. 2020; Chung et al. 2020). Providing continuous training empowered nurses as it made them capable of doing their work effectively. As much as highly specialized training programs promoted team working and communications between teams, it also enabled nurses to be psychologically resilient in the healthcare career that is prone to stress.

The study also suggested that educating nurses to enhance knowledge and ability had positive influence on confidence and resilience, which improved overall mental wellbeing (Cezar-Vaz et al. 2022). This allowed nurses to be informed with evidence-based practice, strengthen the sense of competence and resilience in dealing with the dynamism of healthcare problems. Furthermore, offering formal avenues of professional development, such as skills training and stress management, helped nurses develop the image of experts in their field (Li et al. 2024). Crisis management strategies as well as coping and crisis communication skills training give nurses more empowerment, reducing the stress levels and maximally enabling them to cope with uncertain situations (Zare et al. 2021; Zhang et al. 2024).

5.2.3 Fostering psychosocial support and team collaboration

The research works reviewed heightened the pressing need to create a positive and supportive as well as collaborative milieu at the workplace (Zhang et al. 2024; Berlanda et al. 2020;). Such interventions reduced loneliness and stress among nurses (Dantis et al. 2024). While healthy interpersonal relationship building was paramount in building a resilient workforce, peer support and mentoring programs were extremely effective in averting the stress level as they promoted emotional pliability (Zhang et al. 2024). Caring relationships building among the nurses and between the nursing staff and others was shown to be paramount, attentive relationships were critical in building a healthy environment and psychological health (Berlanda et al. 2020). These shared practices were capable of advancing satisfaction among nurses and ultimately improved patient care outcomes (Buchbinder et al. 2023).

5.2.3.1 Psychosocial support and peer relationship

Psychosocial support encompassed emotional, informational and practical assistance that nurses received from their peers as well as broader work atmosphere (Zare et al. 2021). The need for adequate psychological support within the settings of healthcare is now much more demonstrable, a foundation upon which well-being rests (Berlanda et al. 2020; Chung et al. 2020; Buchbinder et al. 2023; Zhang et al. 2024). In this respect, continuous provision of thorough psychological health amenities combined with developing a robust and trustworthy peer-support network, formed a vital shield against the many stressors of clinical practice. Access to these resources placed nurses in a better position to navigate the psychological demands of their work, hence minimizing the risk of burnout, anxiety, and other emotional consequences.

According to Chung et al. (2020), solid peer relationships provided the basis for stress mitigation and the development of resilience among nurses. Such relationships facilitated experience sharing, coping strategies and emotional support (Yeter et al. 2024; Buchbinder et al. 2023). The principle behind this was that the design of formal peer support groups enabled nurses to conduct

meaningful discussions, share coping mechanisms and develop resilience against workplace-related stressor (Jelen et al. 2024; Tomaszewska et al. 2024).

5.2.3.2 Team cohesion and social support

Teamwork and collaboration fostered job satisfaction in that it reduced feelings of isolation as it also reduced stress for the nurses (Chung et al. 2020). Therefore, a supportive working environment where individuals get to relate well with one another helped them share their experiences and ways of overcoming conditions and so improved their psychological resilience. Team cohesion can be defined as the effectiveness and extent to which team members cooperate and work together to attain common goals. In nursing, high levels of team cohesion are important to ensure a positive performance of teams. Teamwork was also instrumental in promoting collective experiences and ways of mitigating some of the workplace stressors that enhanced shared resilience (Li et al., 2024).

Furthermore, the social support within the team promoted collaboration and mutual trust, as well as friendship, which became a collective source of strength. An emotionally supportive work environment, formed by mutual support among nurses themselves was essential in developing emotional resilience (Dantis et al. 2024; Buchbinder et al. 2023; Berlanda et al. 2020). Encouraging working environments that allow nurses to rely on their colleagues and work cohesively together, as one united team lessened individual stress and distributed the emotional burdens inherent in caregiving (Berlanda et al. 2020). Improved communication within multidisciplinary teams furthered collaborative problem-solving and cooperation, further lessening the sentiments of loneliness and offering emotional support within the workplace setting (Cezar-Vaz et al. 2022). In this context, nurses were equipped to better manage both emotional and professional challenges (Escribe et al. 2022). Involving nurses design of well-being plans ensured that initiatives were tailored to their specific needs, thereby maximizing relevance and impact (Jelen et al. 2024).

5.2.4 Leadership involvement in employee wellbeing

It was imperative for the healthcare leadership to recognize the dedication and hard work of the nurses as the central aspect well-being sustainability (Blanchard et al. 2022; Zaghini et al. 2020). This rendered leadership backing critical in resolving wellbeing problems facing the nurses (Jelen et al. 2024). Energizing leadership was been proven as translating into good workplace culture of reducing isolation and abandonment among the nurses (Yeter et al. 2024). Using open and compassionate communication by leadership to solve nurses' problems was seen as very important in reducing occupational stress and creating a more positive atmosphere at the workplace (Zare et al. 2021). More so, leaders needed to demonstrate good leadership practice through directly addressing staff issues and ensuring proper availability and access to institutional resources (Li et al. 2024).

Other than this, nurse supervisors needed adequate leadership training for helping them serving the nurses and give them the opportunity to create cordial working environment (Hult and Terkamo-Moisio, 2023). Presence of supportive leadership strengthened the nurses more, which empowered them more to solve problems that affected their general wellbeing (Li et al. 2024). This kind of vision-driven leadership was vital for development of a workplace supportive (Zaghini et al. 2020).

Moreover, allowing nurses to be directly involved in decision-making was essential for building their job satisfaction and autonomy (Cezar-Vaz et al. 2022). Furthermore, prompt feedback on work productivity and workload allocation improved wellbeing of nurses (Escribe et al. 2022). Whenever nurses felt secure and safe in their workplace, their anxiety level reduced significantly, which was beneficial for their mental well-being.

5.2.5 Recognition and reward mechanisms

The articles emphasised on the specific importance of recognition initiatives that needed to set with a purpose of bringing into light individual and teamwork efforts among the nurses (Chung et al. 2020; Buchbinder et al. 2023). Along with formal recognition, spontaneous recognition such as unplanned celebration of team achievement was also critical in creating an appreciation culture in healthcare organizations (Berlanda et al. 2020). This, in turn, promoted the overall well-being of the nurses, granting them a regained sense of meaning and passion (Dantis et al. 2024; Blanchard et al. 2022).

Ongoing demonstration of appreciation of nurses' effort and work accomplished through formal and informal reward systems significantly increase job satisfaction and morale. Through reward structures nurses were able to receive recognition following their diligence and commitment. Rewarding the work of nurses through such reward programs was especially relevant in periods of hardship when the emotional toll on nurses was especially significant. Besides boosting the morale of staff, formal awards also increased job satisfaction, thereby capable of reversing burnout that would have been prevalent among nurses during unprecedented times (Blanchard et al. 2022).

In addition, rewards programs helped develop an organizational culture that valued contribution of the nurses and encouraged sense of togetherness and belongingness among the nurses. Through an attitude of gratitude that is both freely expressed and repeatedly reinforced, healthcare organizations could counteract burnout feelings and enhance emotional resilience in employees. The summative effect of the appreciation and acknowledgment of nurses' work, by public official recognition and simply the thank you, has been seen to heighten perceived achievement and job satisfaction, which consequently results in a healthier workplace (Berlanda et al. 2020).

5.2.6 Health and wellness initiatives

The enactment of firm and all-inclusive health and well-being regimes maximised nurses' well-being (Tomaszewska et al. 2024). One of the standout features of such interventions was the promotion of exercise and the provision of health-related facilities such as physical exercise facilities or wellness programs also benefited nurses' for their well-being (Dantis et al. 2024). Cultivating the habit of healthy behaviour, including exercise habit, healthy diet and health management of stress was found to increase well-being (Chung et al. 2020).

Also vital in minimizing burnout and emotional distress and coping with the unexpected difficulties of the pandemic, was access to mental health interventions like counselling (Blanchard et al. 2022). Also needed was continuous debriefing after critical events, which gave nurses an appropriate platform to manage emotions and therefore avoid exhaustion and stress ((Zhang et al. 2024). Rest breaks and recovery breaks within shifts was also vital in preventing undesirable consequences of extensive working hours, leading to burnout and exhaustion. Formulating good quality health and safety procedures to protect nurses acted to restrict phobias of infection or transmission by infectious diseases (Zare et al. 2021).

The articles supported embracing healthy life styles and provision of holistic avenues of self-management, such as availability of gymnasium space and regular check-ups (Hult and Terkamo-Moisio, 2023; Buchbinder et al. 2023). Daily routine check-ups also helped in early detection of health problems, encouraging preventative care of health (Zhang et al. 2024).

5.2.7 Supportive infrastructure

The formation of an enabling infrastructure, with the aim of enhancing nurses' well-being encompassed, adequacy of resources, higher organizational support and facilitative working environment (Jelen et al. 2024; Zhang et al. 2024; Blanchard et al. 2022; Zare et al. 2021; Berlanda et al. 2020).

5.2.7.1 Adequate resources and infrastructure

One of the essential aspects of supportive infrastructure was access to appropriate resources for the nurses such as physical resources and human resources (Zhang et al. 2024). Equipping nurses with essential tools, equipment, instructional material and technology, supported professional development and quality patient care as it increased job satisfaction and confidence (Blanchard et al. 2022). Offering essential equipment and support systems enabled nurse to perform their roles optimally, thereby improving their own well-being (Hult and Terkamo-Moisio, 2023; Cezar-Vaz et al. 2022). For instance, availability of Personal Protective Equipment (PPE) is crucial in an attempt to cut down on anxiety created by fear of infection. If nurses are safeguarded and protected by their institutions, they attain an overwhelmingly enhanced well-being (Zare et al. 2021; Blanchard et al. 2022).

5.2.7.2 Improving organizational support

Organizational support culture also emerged necessary in a bid to improve wellbeing (Jelen et al. 2024). Management should offer support that is technical and emotional to the nurses to buffer them against needs and anxieties as found by Jelen et al., 2024; Zare et al. 2021; Berlanda et al. 2020. Provided appropriate organizational support is related to well-being of nurses through appropriately required resources for activities of work and mental health intervention as found by Dantis et al. 2024; Hult and Terkamo-Moisio, 2023; Zaghini et al. 2020. The articles suggested that the frequent changes, suggestions and feedback for the

nurses are resulting in quality work culture as found by Tomaszewska et al. 2024; Jelen et al. 2022; Buchbinder et al. 2023; Escribe et al. 2022.

Team-level psychological safety was found to alleviate detrimental impacts of stressful work factors (Tomaszewska et al. 2024). If nurses were made to feel that the working place is accommodative and secure, they were also more likely to report incidents and seek assistance when necessary, calling for solidarity and team resilience. Clearly defined roles also facilitate responsibility and allow facilitation of cooperation and these all lead to a better workplace.

General working conditions were also seen as a good sign of nurses' health. An effective working environment comprises safety working environments, ergonomics practice and availability of mental health units. Work areas ergonomically designed and the proper protection of nurses against harm make them physically fit and reduce fatigue and possibilities of injury (Jelen et al 2024).

5.3 Perceptions of nurses

Among the empirically reviewed studies herein, nurses in general identified how they perceived each work-related strategy as they affected their well-being and thus offering unique insights for every work-related strategy. The perceptions were aligned the Appendix 2 themes.

5.3.1 Flexible work arrangements

Articles showed that flexible scheduling was highly desirable in general, especially when there were unstable or stressful conditions. According to Pellikka, Junttila, Laukkala and Haapa (2024) and Almeida et al. (2024) studies, nurses indicated that inelastic scheduling was a cause of burnout, while flexibility in shift times and independence in scheduling were viewed as a buffer against burnout. Nurses consistently cited flexibility in work schedules as a means of protecting their well-being. According to Pellikka et al. (2024) nurses reported that rigid shift patterns heightened exhaustion and reduced their ability to cope with

enduring stress. Flexibility in scheduling and shift trading were also anticipated to be among the key strategies in recovering personal equilibrium and managing caregiving duties. Similarly, Almeida et al. (2024) study established that nurses would have desired more independence over their schedules to enable a better balance of work duties and personal life. Non-flexible pre-scheduled shifts led to burnout, particularly in the high-stress hospital environments.

5.3.2 Workload management policies

Workload was a common stressor across the literature. Overwork was considered to be a major threat to well-being. Hussein, Abou Hashish, and Younes, B.M. (2024) and Almeida et al. (2024) described studies which revealed that nurses had reported excessive numbers of patients and insufficient recovery time as major stressors, emotional exhaustion and impairment in performance. Lack of protective policies to deal with workload was felt negatively. In one study by Hussein et al. (2024), nurses self-linked high workload with psychological distress and lower productivity. They found that repeated overloading of patients and insufficient staff was responsible for chronic fatigue and demotivation. The study Almeida et al. (2024) supported the same and they found uncontrolled workload to be a source of root cause dissatisfaction and turnover intent.

Nurses reported that they were overwhelmed with not only clinical work but also with administrative tasks encroaching on patient care. Sirkka, Suhonen, Liira and Stolt (2025) study supplemented an intervention strategy, indicating that from the occupational health perspective, inadequate workload management in the context of no structured risk analysis was a contributing factor to the risk of long-term disability. Nurses required fairer task distributions, fairer patient-to-nurse ratios and support in dealing with added demand.

5.3.3 Training and development

Professional training as well as staff development was viewed favorably, particularly when it was for resilience, being mindful, or learning skill. Programs

for training and development, particularly emotional resilience and coping training, would be well received by nurses.

Cohen et al. (2023) recognized through their research that formal trainings were deemed effective when made available on an ongoing basis and by the initiative of the leadership. Nurses appreciated such programs not just for skill gain but for exhibiting that the organization valued their own wellbeing. They were wary, however, of piecemeal or single training sessions that were not followed up or which did not address root causes of distress.

5.3.4 Psychosocial support and peer relationships

Psychosocial support, including counselling and peer support, was also an area where nurses had strong preferences. Based on articles by Pellikka et al. (2024) and Cohen et al. (2023) peer dialogues in a formal manner and emotional support were highly valued. Access to peer and psychological support was found to be an important work-based buffer to stress. Cohen et al. (2023) found that debriefing, mentoring and counselling interventions by peers were seen as essential to emotional stability by nurses. These interventions provide for the nurses to have safe and supportive spaces in which to articulate their experiences. Pellikka et al. (2024) further identified that during the pandemic, formal and informal psychological support was crucial in maintaining resilience levels. Without such support from peers, nurses often felt isolated and exposed, underscoring the very important role of structured support in safeguarding their mental wellbeing.

5.3.5 Team cohesion and social support

Social support and team solidarity were viewed as central to emotional wellbeing. Communication, respect and empathy within teams were viewed by nurses to reduce emotional exhaustion and improve feelings of belongingness. Incongruent team solidarity was linked to isolation and low morale. Positive interpersonal relationships were viewed to be central to nurses' well-being in research. Pellikka et al. (2024) research concluded cohesive teams in crisis because solidarity

among staff was an emotional coping mechanism. Open communication, assertiveness and addressing problems as a team were also appreciated by nurses. Team cohesion was also part of job satisfaction in Almeida et al. (2024) research. Nurses clarified that because other people in the staff were taking care of them, Himalayan workloads were doable. Conversely, poor team functioning increased stress and decreased job performance.

5.3.6 Leadership involvement in employee wellbeing

Leadership role was the most critical of the areas studied (Almeida et al. 2024). Pellikka et al. (2024) and Sirkka et al. (2025) explained about good leadership in the sense of being at the forefront of wellbeing. They wished for communicative, responsive and accessible leaders to them who listened to them as much as they wished and their problems required. Those were the habits that led them to trust others and be loyal Nurses in all the studies maintained that leadership behaviour and attitude contributed a great deal to the healthiness of the workplace. Almeida et al. (2024) established supportive leadership-communicative transparency, emotional intelligence and availability as positively related with improved wellbeing.

Pellikka et al. (2024) concluded empathetic and effective leadership were most needed during the pandemic. Nurses were disappointed when managers failed to reassure or communicate to them. Sirkka et al. (2025) further clarified that occupational health leadership needed to shift from crisis management, preventive action for risk avoidance and workplace safety. Nurses required leaders who were equally interested in morale improvement but in interventions towards long-term wellbeing.

5.3.7 Recognition and reward mechanisms

The reward and appreciation mechanisms functioned only when they were tangible and genuine. Bonuses, public recognition and other symbolic actions were enjoyed by nurses, especially during periods of peak pressure (Pellikka et

al. 2024; Sirkka et al.2025). Not being valued, however, was more or less what not valuing was. Formal and informal recognition seemed to be an incredibly significant but commonly neglected predictor of workplace wellbeing. Pellikaa et al. (2024) discovered in their research that symbolic appreciation and thank-you letters and more concrete forms of raises and additional days off were responded to positively by the nurses. Omission or inconsistency of recognition, especially in difficult situations, communicated other messages of invisibility and demotivation. Sirkka et al. (2025) research emphasized how much everyday appreciation and gratitude meant the world to nurses as evidence of work that resulted in motivation and organizational commitment.

5.3.8 Building work-life balance

Among over-riding themes, was work-life balance. Nurses highlighted the need for adjustments due to long hours or shifts outside traditional hours and described these demands as significant emotional challenges (Hussein et al, 2024; Almeida et al. 2024). The demand for work-life segmentation and away-from-work policies outside the workplace was necessitated by the majority. The highest desire that nurses had was concerned with optimal work-life balance (Hussein et al. 2024). What the nurses were looking for was greater work-home distinction, secure leave and just schedules. Almeida et al. (2024), while conducting their research, agreed but went further to assert that, the reason for chronic stress was not being able to do the domestic work and having irremovable schedules. Organizational work-life balanced policies were advocated by participants through designing in a collective approach, rational periods of rest and keeping family matters locked away.

5.3.9 Health and wellness initiatives

Nurses looked at health and wellness initiatives like wellness programs or complementary therapies but did not make the fullest use of them. Melissa, Wright and Holly (2016) and Cohen et al. (2023) found nurses favoured such programs as mindfulness or aromatherapy. Workplace wellness programs open

their arms to welcome nurses. In Melissa et al. (2016) intervention, participants valued intervention like aromatherapy, massage therapy and mindfulness but accessed them mostly delayed by time, stigma, or administrative non-support. Nurses also perceived being judged or guilty for engaging in wellness activities while they are working. Organizational culture and leadership support came out in Cohen et al. (2023) study as being most effective when wellbeing intervention was most effective. Others who were not cut off from the daily operations of business were emotionally well-positioned otherwise window dressing.

5.3.10 Adequate resources and infrastructure

The need for adequate resources and infrastructure also came to the forefront. Nurses were genuinely concerned with equipment; PPE and outdated system supplies shortage in Pellikka et al. (2024) and Sirkka et al. (2025). There were unsafe and created tension and job dissatisfaction occasioned by poor resources which cause physical and mental health challenges, particularly during crisis periods. Nurses in Pellikka et al. (2024) research were experiencing issues with PPE, staffing shortages and poorly equipped environments, all of which led to unnecessary exposure and anxiety. They wanted their employers to invest in offering safe and properly equipped environments. Sirkka et al.'s (2025) survey study also found that availability of health surveillance system, ergonomics environment and medical equipment were of most concern in securing work ability over the long term.

5.3.11 Improving organizational support

Organizational support strengthening was always depicted to be of most concern. Through a series of articles (Cohen et al. 2023; Almeida et al. 2024; Sirkka et al. 2025), nurses demanded responsiveness at organizational levels, ranging from open communication to participatory decision-making and policy change. The nurses demanded institutions that made their wellbeing initiatives a reality. Overall, the tone within a series of papers was one of insistence that well-being would be part of mainstream organizational policy and practice. Cohen et al.'s

(2023) study had predicted that well-being interventions must be multi-level in that they must be sociocentric, individual-level and system-level interventions.

The nurses wanted work places that were open with communication, valued feedback and where care of mental health was on their agenda. In their study, Almeida et al. (2024) found that support had to be proactive and holistic and not symbolic or reactive support. Sirkka et al. (2025) also pointed out that work health activities such as risk assessment, return-to-work planning and individual work planning were all part of a healthy organizational support system. Thus, the attitudes of nurses indicate a liking for support for concrete, sensitive and effectively executed support arrangements that deal with professional and personal concerns

6 Discussions

6.1 Discussions of the results

The wellbeing of nurses is promoted by workplace policies, where the studies emphasize the need for basic transformation of the workplace to reduce stress and mental illness, Central to this are policies on flexible work which -quality of the nursing staff and general well-being (Dousin et al., 2021; Khatatbeh et al., 2022; Mustajab 2024). Additional vibrant determinant is workload management. Maintaining appropriate patient-to-nurse ratios, work reorganization and adequate staffing averts excess work expectations and physical-emotional burnout (Lovern, Quinlan, Brogdon Rabe and Bonanno, 2024; Ditlopo, Rispel, Van Bogaert and Blaauw 2024). Complementary work-life balance practices that minimize chronic stress and facilitate recovery include rest breaks, staff rotation and fair patient loads, which enhance job satisfaction and reduce (Dousin et al. 2021; Zhang et al. 2024).

Professional training together with development also contributes to nurse well-being by enhancing competence, resilience and psychological stability.

Mindfulness training, stress management, crisis intervention and skill training programs have been reported to reduce burnout, improve self-efficacy and enhance career satisfaction (Wang et al. 2023; Tomaszewska et al. 2024; Cezar-Vaz et al. 2022; Berlanda et al; 2020 Vázquez-Calatayud et al. 2021).

Teamwork as well as psychosocial support are core to establishing a healthy and sustainable work environment. Team-building interventions, peer support and mentorship help build emotional resilience, mutual responsibility in high-stress clinical settings and loneliness reduction (Browne and Tie, 2024; Li, 2025; Hussein et al. 2024; Flaubert et al. 2021; Mubarak et al. 2024).

Organizational and leadership support go hand in hand. Nurses who were trained in emotional care and leadership provide psychological safety, trust and engagement among staff (Hult and Terkamo-Moisio, 2023; Li et al. 2024; Yeter et al. 2024; Zare et al. 2021; Cezar-Vaz et al. 2022; Escribe et al. 2022). Involving nurses in scheduling plans improves autonomy and empowerment, leading to job satisfaction and wellbeing. Formal and informal reward and recognition systems, external and internal acknowledge effort, boost morale and reduce emotional exhaustion (Dantis et al. 2024; Berlanda et al. 2020; Jelen et al. 2024; Blanchard et al. 2022).

Moreover, an encouraging infrastructure underpins all interventions. Effective staffing, provision of up-to-date medical technology, mental health care, protective personal equipment and health promotion lifestyle programs remove stress and promote physical and psychologic wellbeing (Zhang et al. 2024; Blanchard et al. 2022; Hult and Terkamo-Moisio, 2023; Berlanda et al. 2020). Offering the possibility of stress management, counselling and resilience training keeps nurses balanced, creating loyalty, motivation and overall wellbeing. Autonomy, clear boundaries of their role and psychological safety allow nurses to work comfortably within their scope, also improving well-being (Berlanda et al. 2020). Thus, integrating flexible work policies, workload management, professional development, psychosocial support, powerful leadership and adequate infrastructure leads to a setting conducive to the nurses' wellbeing.

The synthesis of six empirical studies presents nurses' perceptions of workplace interventions that support wellbeing (Melissa et al. 2016; Hussein et al. 2024; Pellikka et al. 2024; Almeida et al. 2024 et al.; Cohen et al. 2023; Sirkka et al. 2025). Nurses preferred interventions that were consistently practical, accessible and responsive. They emphasized the paramount importance of organizational support, leadership, team cohesion and resources for interventions. Comprehensive packages of interventions were valued. Key among these were; flexibilities in scheduling and shift trading, control over workload, professional development, psychosocial support, leadership involvement, rewards, work-life balance, wellness initiatives and sufficient resources.

Unsustainable workloads and lack of time to recover were major stressors and therefore fair distribution of tasks, safe ratios of patients to nurses and policies on workload were required (Hussein et al. 2024; Almeida et al. 2024 et al. 2024; Sirkka et al. 2025). The ongoing professional development of resilience, mindfulness and stress management was highly appreciated as both a means of developing skills and an indication of organizational investment in the employees (Cohen et al. 2023). The availability of counselling, mentoring and support from colleagues was necessary for maintaining emotional stability, while strong cohesion among team members eased exhaustion and facilitated collaboration (Pellikka et al. 2024; Cohen et al. 2023; Almeida et al. 2024 et al., 2024). Leadership was a central factor, with nurses valuing leaders who were communicative, empathetic and approachable and created trust, morale (Almeida et al., 2024 et al.; Pellikka et al. 2024; Sirkka et al. 2025).

Tangible and frequent praise, bonuses, public acclaim, or informal appreciation, boosted motivation, while neglect demotivated (Pellikka et al. 2024; Sirkka et al. 2025). Extensive organization-wide support systems, including participatory decision-making and whole-person wellness policies, were needed to fulfil professional and personal needs with success (Cohen et al. 2023; Almeida et al. 2024 et al. 2024; Sirkka et al. 2025). Work-life balance was a priority for nurses, requesting leave, rest breaks and boundaries between work and home responsibilities (Hussein et al. 2024; Almeida et al. 2024 et al. 2024). Wellness

programs and complementary therapies were appreciated but underutilized without organizational support (Melissa et al., 2016; Cohen et al. 2023). Adequate equipment, PPE and infrastructure were imperative for safety, reducing stress and preserving well-being (Pellikka et al. 2024; Sirkka et al. 2025).

6.2 Validity and ethics

6.2.1 Validity of the results and limitations

The validity depended on how accurately it synthesized and reflected the topic under study (Mandasini, 2022). The key validity aspects were; comprehensive search and selection, transparency and replicability, critical appraisal of sources, minimization of bias, balanced presentation of findings and recognition of limitations. This research entailed a systematic and all-inclusive search as well as selection of the literature, which included very clearly defining search terms, multiple databases also the inclusion and exclusion criteria. Also, this study presented the search strategies, databases to be used, selection criteria and synthesis techniques. Transparency allowed others, such as the supervisor, to replicate the review and verify the findings, thereby enhancing the credibility and reliability. To ensure its validity, the study had to critically evaluate each methodology, participants, reliability and biases. This helped in avoiding over-inclusion of low-quality or biased studies, therefore reducing the risk of drawing erroneous conclusions, uniformity in terms of wording and conceptualization (Schweinsberg, Thau and Pillutla 2023).

The findings were analysed and synthesized while the analysis clarified terms and conceptual frameworks, trying to align different perspectives where possible, this ensured that the findings are consistent in their use of terminology and concepts ((Schweinsberg et al.2023). This reduced misunderstandings and adds coherence to the findings. More importantly, the study had balanced conflicting evidence which reduces overgeneralization, making a more distinctive view of the research landscape. Lastly, the limitations of the study were acknowledged,

which provided for a realistic interpretation of findings and enhanced the credibility of the conclusions.

Like any other study, there are various limitations that were faced by this study, such as a lack of original data. The study synthesized existing research rather than collecting new data and therefore did not provide new empirical insights. This inherently restricted the ability of this review to address research questions that necessitate use of original data. The study was limited because it depended on authors' interpretations: The study was informed by previous authors' interpretation and standpoints. Thus, any biases from previous studies regarding interpretation were conveyed in the review, potentially distorting the conclusions made from the synthesis.

6.2.2 Ethical considerations

It is important for the researcher, as much as possible, to ensure that the conduct of the study was ethical (Okorie, Udeh, Adaga, DaraOjimba and Oriekhoe 2024.). The researcher adhered to the ethical policies and guidelines on the conduct of research as stipulated by the Finnish Advisory Board on Research Integrity. In this case, all the materials produced were credible, accurate and verifiable. In ensuring reliability, the expertise of the information retrieval specialist at Metropolia University was consulted on several occasions during the data collection process. Consequently, academic integrity and ethical honesty were upheld for this thesis through strict standards of accuracy regarding the avoidance of fabrication of data, honesty throughout and absence of plagiarism, respectively (Davis 2023).

Therefore, the study was submitted with full adherence to academic integrity, taking into consideration accurate citation practices, paraphrasing conservatively and verified plagiarism detection software for originality and transparency. Further, dependable sources were utilized in generating information and source materials. This study was also objective in the sense that the analysis would not be done solely based on a single angle. All stages of this literature review, with

emphasis on the phases involving data analysis, were accurately recorded to underscore the validity of the entire research study (Padmapriya and Parthasarathy 2021).

7 Conclusions and recommendations

7.1 Conclusions

In conclusion, integrative and continuous approach to well-being addresses both the nurses' professional roles and personal needs. Flexible schedules, with workable loads, reduce stress and prevent burnout, allowing a healthier lifestyle. Formal education and professional development enhance not only the competence and self-assurance of nurses but also their mental wellbeing and working satisfaction. Another imperative is that psychosocial support should be provided, such as peer networks, mentorship schemes and effective team working, to help nurses cope with pressure and reduce feelings of loneliness, especially in high-stress working conditions.

The key to creating a culture of support is through leadership. When the leaders are perceived as having feelings and responsive to the concerns of the staff, nurses feel safe, valued and invested. Building trust through open communication, emotional support and nurse involvement in decision-making cements the interaction. Reward and recognition systems, formal and informal, also support positive work culture through the valuing of contributions, boosting morale and building emotional strength. Also, necessary health and wellbeing programs help in promoting emotional and physical wellbeing.

Adequate infrastructure, in terms of; sufficient staffing, availability of equipment and continuing education opportunities, forms the context within which quality care may be delivered with a mentally healthy staff. One message which comes loud and clear from nurses is that the support needs to be real and it needs to be specific. They want regular rostering, protection of personal time, openness in

communication and active involvement in setting workplace policy. Of most importance, the most effective approaches to improving nurse well-being are those which are most embedded in organisational culture, spearheaded by leaders and implemented through systemic, multi-level interventions that evidence a prolonged commitment to staff welfare as well as patient care.

7.2 Recommendations

Subsequent to findings of the study, the following is recommended to maximize nurses' wellbeing, reduce burnout and facilitate general quality patient care.

- Support adaptable and fair work arrangements through shift-swapping, flexible schedules and performance-based advancement, along with maintaining safe nurse-to-patient ratios and equitable distribution of workload to prevent burnout and fatigue.
- Provide work-life balance and wellbeing through rest rooms, rotation between high- and low-stress areas and family-friendly policies accommodating personal requirements and recovery.
- Make an investment in continuous professional and resilience development through ensuring ongoing education, stress management, emotional intelligence and crisis intervention.
- Create functional psychosocial and leadership support systems by creating mentoring and peer support systems, offering counselling services and educating nurse leaders in empathetic communication, open communication and participatory decision-making.
- Create an empowerment and appreciation culture with recognition programs, clinical autonomy in decision-making and well-defined professional roles that enhance ownership, morale and motivation.
- Improve workplace safety and infrastructure through access to proper equipment, wellness programs, protective gear and psychologically safe policies that allow for open communication and trust-between.

References

Ali, S.K., Shah, J. and Talib, Z., 2021. COVID-19 and mental well-being of nurses in a tertiary facility in Kenya. *PLoS ONE*, 16 (7), 1-10.

Almeida, D., Figueiredo, A.R. & Lucas, P., 2024. Nurses' well-being at work in a hospital setting: a scoping review. *Healthcare*, 12(2), 173.

Berlanda, S., de Cordova, F., Fraizzoli, M. and Pedrazza, M., 2020. Risk and protective factors of well-being among healthcare staff: A thematic analysis. *International Journal of Environmental Research and Public Health*, 17(18), 6651.

Berlin, G., Burns, F., Hanley, A., Herbig, B., Judge, K. and Murphy, M., 2023. Understanding and prioritizing nurses' mental health and well-being. McKinsey and Company. < <https://www.nursingworld.org/...> > Accessed 15 August 2024.

Blanchard, J., Li, Y., Bentley, S.K., Lall, M.D., Messman, A.M., Liu, Y.T. and McCarthy, M., 2022. The perceived work environment and well-being: A survey of emergency health care workers during the COVID-19 pandemic. *Academic Emergency Medicine*, 29(7),

Brand, S.L., Thompson Coon, J., Fleming, L.E., Carroll, L., Bethel, A. and Wyatt, K., 2017. Whole system approaches to improving the health and wellbeing of healthcare workers: A systematic review. *PLoS ONE*, 12(12), 1-26.

Browne, C. and Tie, Y.C., 2024. Promoting well-being: A scoping review of strategies implemented during the COVID-19 pandemic to enhance the well-being of the nursing workforce. *International Journal of Nursing Studies Advances*, 6.

Buchbinder, M., Jenkins, T., Staley, J., Berlinger, N., Buchbinder, L. and Goldberg, L., 2023. Multidimensional stressors and protective factors shaping physicians' work environments and work-related well-being in two large US cities during COVID-19. *American Journal of Industrial Medicine*, 66(10).

Carciente, Z., 2022. Calling time on overworking. <<https://www.rcn.org.uk/magazines/Wellbeing/2022/June/Calling-time-on-overworkin>> Accessed 15 August 2024.

Cezar-Vaz, M.R., Xavier, D.M., Bonow, C.A., Vaz, J.C., Cardoso, L.S., Sant'Anna, C.F., Costa V.Z.D., Nery C.H.C., Loureiro H.M.A.M. 2022. Occupational well-being of multidisciplinary PHC teams: barriers/facilitators and negotiations to improve working conditions. *International Journal of Environmental Research and Public Health*, 19(23), 15943.

Chari, R., Chang, C.C., Sauter, S., Petrun Sayers, E., Cerully, J., Schulte, P., Schill, A. and Uscher-Pines, L. 2018. Expanding the paradigm of occupational

safety and health: A new framework for worker well-being. *Journal of Occupational and Environmental Medicine*, 60(7).

Chung, H.C., Chen, Y.C., Chang, S.C., Hsu, W.L. and Hsieh, T.C., 2020. Nurses' well-being, health-promoting lifestyle and work environment satisfaction correlation: A psychometric study for development of nursing health and job satisfaction model and scale. *International Journal of Environmental Research and Public Health*, 17(10), 3582.

Cohen, C., Pignata, S., Bezak, E., Tie M. and Childs J. 2023. Workplace interventions to improve wellbeing and reduce burnout for nurses, physicians and allied healthcare professionals: a systematic review. *BMJ Open*, 13, 1-23.

Cseh, S., Zorga, B., Sipos, D., Fináncz, J. and Csima, M., 2021. Professional well-being of nurses in Southwest Hungarian hospitals. *Kontakt: Journal of Nursing and Social Sciences Related to Health and Illness*, 23(2).

Dall'Ora, C., Ball, J., Reinius, M. and Griffiths, P., 2020. Burnout in nursing: A theoretical review. *Human Resources for Health*, 18, 1–17.

Dantis, J.M., Calibara, M.F., Bulawit, A., Garcia, H.K.M.D., Ervite, A.M., Foronda, A., Diaz, J., Congzon, M. & Loilo, E. 2024. Work-related stressors and coping strategies of nurses in a selected tertiary hospital in a city in the Philippines. *European Modern Studies Journal*, 8(1), 77–100.

Davis, A. (2023) Academic integrity in the time of contradictions. *Cogent Education*, 10(2).

Dhollande, S., Taylor, A., Meyer, S and Scott, M. 2021. Conducting integrative reviews: a guide for novice nursing researchers. *Journal of research in nursing: JRN*, 26(5), 427–438.

Dissanayake, D.M.A.P., Dharmasena, K.P. and Warnakulasuriya, S.S.P., 2024. Challenges of integrating patient safety into nursing curricula: An integrative literature review. *Journal of Patient Safety and Risk Management*, 29(1), 8–35.

Ditlopo, P., Rispel, L.C., Van Bogaert, P. and Blaauw, D., 2024. The impact of the nurse practice environment, workload and professional support on job outcomes and standards of care at primary health care clinics in South Africa: a structural equation model approach. *International journal of nursing studies advances*, 7, 100241.

Dousin, O., Collins, N., Bartram, T. and Stanton, P., 2021. The relationship between work-life balance, the need for achievement and intention to leave: Mixed-method study. *Journal of advanced nursing*, 77(3), 1478-1489

Dousin, O., Wei, C.X., Balakrishnan, B.K. and Lee, M.C.C., 2021. Exploring the mediating role of flexible working hours in the relationship of supervisor support, job and life satisfaction: A study of female nurses in China. *Nursing Open*, 8(6), pp.2962-2972.

Dyrbye, L.N., Shanafelt, T.D. and Sinsky, C.A., 2019. Burnout among health care professionals: a call to explore and address this underrecognized threat to safe, high-quality care. *NAM Perspectives*, 9(1).

Ellis, J., 2022. Five ways to combat compassion fatigue. [online]. <https://www.rcn.org.uk/magazines/Wellbeing/2022/May/Five-ways-to-combat-compassion-fatigue>. Accessed 4 Oct. 2025.

Ersin, F., Havlioglu, S. and Gur, S.C., 2021. Mental well-being and social support perceptions of nurses working in a Covid-19 pandemic hospital. *Perspectives in Psychiatric Care*. doi:10.1111/ppc.12833.

Escribe, C., Eisenstat, S. A., Palamara, K., O'Donnell, W. J., Wasfy, J. H., Del Carmen, M. G. and Levi, R. (2022). Understanding physician work and well-being through social network modelling using electronic health record data: A cohort study. *Journal of general internal medicine*, 37(15).

Eva, G. F., Amo-Setién, F., César, L. C., Concepción, S. S., Roberto, M. M., Jesús, M. M. and Carmen, O.M. (2024). Effectiveness of intervention programs aimed at improving the nursing work environment: a systematic review. *International nursing review*, 71(1), 148-159.

Figueiredo, K.C., Nunes, E., Cruchinho, P. and Lucas, P. 2024. Mapping strategies for strengthening safety culture: A scoping review. *Healthcare*, 12, 1194.

Foster, K., Roche, M., Giandinoto, J.A. and Furness, T. 2020. Workplace stressors, psychological well-being, resilience and caring behaviours of mental health nurses: A descriptive correlational study. *International Journal of Mental Health Nursing*, 29(1),

Havaei, F., Ma, A., Staempfli, S. and MacPhee, M. 2021. Nurses' workplace conditions impacting their mental health during COVID-19: A cross-sectional survey study. *Healthcare*, 9, 84.

Hult, M. and Terkamo-Moisio, A. 2023. Mental well-being, work engagement and work-related and personal resources among nurse managers: a structural equation model. *International Journal of Nursing Studies Advances*, 5, 10014.

Hussein, A.H.M., Abou Hashish, E.A. & Younes, B.M. 2024. The relationship between nurses' psychological well-being and their work productivity loss: a descriptive correlational study. *SAGE Open Nursing*, 10.

Jarden, R.J., Sandham, M., Siegert, R.J. and Koziol-McLain, J. 2020. Intensive care nurses' well-being: A systematic review. *Australian Critical Care*, 33(1), 106–111.

Jelen, A., Goldfarb, R., Rosart, J., Graham, L. and Rubin, B. B. 2024. A qualitative co-design-based approach to identify sources of workplace-related distress and develop well-being strategies for cardiovascular nurses, allied health professionals and physicians. *BMC Health Services Research*, 24(1).

Khatatbeh, H., Pakai, A., Al-Dwaikat, T., Onchonga, D., Amer, F., Prémusz, V. and Oláh, A. 2022. Nurses' burnout and quality of life: A systematic review and critical analysis of measures used. *Nursing Open*, 9(3), 1564-1574.

Kleine, A. K., Rudolph, C. W., & Zacher, H. 2019. Thriving at work: A meta-analysis. *Journal of organizational behaviour*, 40(9-10), 973-999.

Konttila, J., Holopainen, A., Kyngäs, H. and Pesonen, H.M. 2021. Background characteristics and exposure to violence predict well-being at work among psychiatric outpatient nurses. *Archives of Psychiatric Nursing*, 35(2), 223–231.

Lee, T.S., Tzeng, W. and Chiang, H. 2019. Impact of coping strategies on nurses' well-being and practice. *Journal of Nursing Scholarship*, 51(2), 195–204.

Li, M., Zhao, R., Wei, J., Zhou, L., Yang, S., Tian, Y., Wang, L, Zhang, W, Xiong, X., Huang, C., Pan, Z. and Song, R. 2024. Nurses' perspectives on workplace environment needs associated to resilience: a qualitative descriptive study. *Frontiers in Psychiatry*, 15, 1345713.

Li, Q. (2025). Examining social support, psychological resilience and general wellbeing of newly employed nurses at quezon city general hospital. *World Journal of Advanced Research and Reviews*, 25(01), 1329-1341.

Lönn, B.B., Hornsten, Å., Styrke, J. and Hajdarevic, S. 2024. Clinical research nurses perceive their role as being like the hub of a wheel without real power: Empirical qualitative research', *Nursing Open*, 11(5).

Lorber, M. 2018. A healthy work environment: care for the well-being and health of employees in nursing. *Obzornik zdravstvene nege*, 52(3), 148–154.

Lovern, A., Quinlan, L., Brogdon, S., Rabe, C. and Bonanno, L.S. 2024. Strategies to promote nurse educator well-being and prevent burnout: An integrative review. *Teaching and Learning in Nursing*, 19(2), 185-191.

Mabona, J.F., van Rooyen, D.R. and ten Ham-Baloyi, W. 2022. Best practice recommendations for healthy work environments for nurses: An integrative literature review. *Health SA Gesondheid*, 27(1).

Mandasini, A.A. 2022. Improving the validity of scientific research results through research methodology management. *Kontigensi Jurnal Ilmiah Manajemen*, 10(2), 439–447.

McClelland, L.E., Gabriel, A.S. and DePuccio, M.J. 2018. Compassion practices, nurse well-being and ambulatory patient experience rating. *Medical Care*, 56(1), 4–10.

Melissa, Z., Wright, N. and Holly, B. 2016. Nurses' views on workplace wellbeing programmes. *British Journal of Nursing*, 25(21), 1208–1212.

Melnyk, B.M., Kelly, S.A., Stephens, J., Dhakal, K., McGovern, C., Tucker, S., Hoying, J., McRae, K., Ault, S., Spurlock, E. and Bird, S.B. 2020. Interventions to improve mental health, well-being, physical health and lifestyle behaviors in physicians and nurses: A systematic review. *American Journal of Health Promotion*, 34(8), 929–941.

Moloney, W., Fieldes, J. and Jacobs, S. 2020. An integrative review of how healthcare organizations can support hospital nurses to thrive at work. *International Journal of Environmental Research and Public Health*, 17(23), 8757.

Mubarok, M.W.S.U., Yogandini, R., Kartini, E. and Drew, A.J. 2024. The National Battery Research Institute: Energizing Indonesia's Battery Revolution on Skills Development. *Journal of Batteries for Renewable Energy and Electric Vehicles*, 2(01), 35–43.

Muñoz-Rubilar, C.A., Carrillos, C.P., Mundal, I.P., Cuevas, C.D.L. and Lara-Cabrera, M.L. 2022. The duty to care and nurses' well-being during a pandemic. *Nursing Ethics*, 29(3), 527–539.

Mustajab, D. 2024. Exploring the Effectiveness of Remote and Hybrid Work Policies: A Literature Review on Workforce Management Practices. *Jurnal Manajemen Bisnis*, 11(2), 891-908.

O'Connor, E., Prebble, K. and Waterworth, S. 2023. Organisational factors to optimise mental health nurses' well-being in the workplace: An integrative literature review. *International Journal of Mental Health Nursing*, 1–13.

Okorie, G.N., Udeh, C.A., Adaga, E.M., DaraOjimba, O.D. and Oriekhoe, O.I. 2024. Ethical considerations in data collection and analysis: A review – Investigating ethical practices and challenges in modern data collection and analysis. *International Journal of Applied Research in Social Sciences*, 6(1), 1–22.

Ong, M.F., Soh, K.L., Saimon, R., Wai, M.W., Mortell, M. and Soh, K.G. 2021. Fall prevention education to reduce fall risk among community-dwelling older persons: A systematic review. *Journal of Nursing Management*, 29(8), 2674–2688.

Padmapriya, S.T. and Parthasarathy, S. 2021. Ethical data collection for medical image analysis: A structured approach. *Asian Bioethics Review*, 1–14.

Pellikka, A., Juntila, K., Laukkala, T., Haapa, T. 2024. Nurses' perceptions of desired support from their employer during the COVID-19 pandemic: A qualitative survey study. *BMC Nursing*, 23, 128.

Pilcher, N. and Cortazzi, M. 2024. 'Qualitative' and 'quantitative' methods and approaches across subject fields: Implications for research values, assumptions and practices. *Quality and Quantity*, 58(3), 2357–2387.

Rushton, C.H. and Pappas, S. 2020. Systems to address burnout and support well-being: Implications for intensive care unit nurses. *AACN Advanced Critical Care*, 31(2), 141–145.

Schweinsberg, M., Thau, S. and Pillutla, M. 2023. Research-problem validity in primary research: Precision and transparency in characterizing past knowledge. *Perspectives on Psychological Science*, 18(5), 1230–1243.

Sevy, M.J. and Warshawsky, N. 2020. Evidence-based decision-making for nurse leaders. *Nurse Leader*, 18(5), 471–475;

Shah, J., Monroe-Wise, A., Talib, Z. Nabiswa, A., Said, M., Abeid, A., Mohamed, M. A., Mohamed, S., & Ali, S. K. 2021. Mental health disorders among healthcare workers during the COVID-19 pandemic: A cross-sectional survey from three major hospitals in Kenya. *BMJ Open*, 11(6), 1-9..

Shanafelt, T. D., West, C. P., Dyrbye, L. N., Trockel, M., Tutty, M., Wang, H., Carlasare, L. E., & Sinsky, C. 2022. Changes in burnout and satisfaction with work-life integration in physicians and the general US working population between 2011 and 2017. *Mayo Clinic Proceedings*, 97(12), 2248–2258..

Sirkka, J., Suhonen, R., Liira, J. and Stolt, M. 2025. Occupational health nurses' perceptions in work ability risk management and analysis. *Journal of Occupational Rehabilitation*, 35,423–433.

Søvold, L.E., Naslund, J.A., Kousoulis, A.A., Saxena, S., Qoronfleh, M.W., Grobler, C. and Münter, L. 2021. Prioritizing the mental health and well-being of healthcare workers: An urgent global public health priority. *Frontiers in Public Health*, 9, p.679397.

Sukhera, J. 2022. Narrative reviews: Flexible, rigorous and practical. *Journal of Graduate Medical Education*, 14(4), 414–417.

The World Health Organisation (WHO). 2023. Promoting well-being: <<https://www.who.int/activities/promoting-well-being>> Accessed 24 Sept. 2025.

Tomaszewska, K., Kowalczyk, K. and Majchrowicz, B. 2024. Correlations between well-being of nurses and psychosocial working conditions: A descriptive cross-sectional study. *Frontiers in Public Health*, 12, 1443015.

Vázquez-Calatayud, M., Errasti-Ibarrondo, B. and Choperena, A. 2021. Nurses' continuing professional development: A systematic literature review. *Nurse Education in Practice*, 50, 102963.

Wang, Q., Wang, F., Zhang, S., Liu, C., Feng, Y. and Chen, J. 2023. Effects of mindfulness-based interventions on stress and burnout in nurses: A systematic review and meta-analysis. *Frontiers in Psychiatry*, 14. 1218340.

Wilandika, A., Pandin, M.G.R. and Yusuf, A. 2023. The roles of nurses in supporting health literacy: A scoping review. *Frontiers in Public Health*, 11, 1022803.

Yeter, E., Bhamra, H., Butcher, I., Morrison, R., Donnelly, P. and Shaw, R. 2024. Managing well-being in paediatric critical care: A multiperspective qualitative study of nurses' and allied health professionals' experiences. *BMJ Open*, 14(5), 1-9

Zaghini, F., Vellone, E., Maurici, M., Sestili, C., Mannocci, A., Ercoli, E., Magnavita, N., La Torre, G., Alvaro, R. and Sili, A. 2020. The influence of work context and organisational well-being on psychophysical health of healthcare providers. *La Medicina del Lavoro*, 111(4), 306–320.

Zare, S., Mohammadi Dameneh, M., Esmaili, R., Kazemi, R., Naseri, S. and Panahi, D. 2021. Occupational stress assessment of healthcare workers (HCWs) facing COVID-19 patients in Kerman province hospitals in Iran. *Heliyon*, 7(9), 1-8.

Zhang, X., Zhang, C., Gou, J. and Lee, S.Y., 2024. The influence of psychosocial work environment, personal perceived health and job crafting on nurses' well-being: A cross-sectional survey study. *BMC Nursing*, 23(1), 373.

Appendices

Appendix 1: Extracted articles

Table 4: Summary of Key findings

N	Authors	Country	Year	Purpose	Methodology	Method	Participants	Setting	Data Collection	Data Analysis	Key Findings	Critical Review
1	Berlanda et al.	Italy	2020	To determine the physical and psychosocial work conditions that enhance healthcare staff well-being	Cross-sectional	qualitative	795 professionals (372 nurses)	Healthcare facility	questionnaire	Thematic analysis	Identified strategies such as mindfulness, counselling and teamwork as key to enhancing well-being	Strengths: In-depth analysis; rich qualitative data. Limitations: Cross-sectional; convenience sample; limited generalizability.
2	Blanchard et al.	United States	2022	To assess the association between mental health and perceived work environment during COVID-19	Cross-sectional	quantitative	67 emergency healthcare workers (27 nurses)	Academic sites	questionnaire	Quantitative statistical analysis	Strong association between poor work environments and poor mental health; highlights need for organizational culture change	Strengths: Diverse sample; detailed survey. Limitations: Self-reported data; cross-sectional; limited generalizability.

N	Authors	Country	Year	Purpose	Methodology	Methods	Participants	Setting	Data Collection	Data Analysis	Key Findings	Critical Review
3	Buchbinder et al.	United States	2023	To identify protective variables and stressors affecting well-being of frontline physicians	Descriptive	qualitative	66 physicians (no nurses)	Hospitals	interviews	Qualitative data analysis	Identified leadership support, communication and institutional care as protective factors	Strengths: Diverse hospital types; consistent findings. Limitations: Excluded outpatient physicians; selection bias.
4	Cezar-Vaz et al.	Brazil	2022	To determine barriers and facilitators to improving working conditions	Cross-sectional	quantitative	338 health workers (50 nurses)	Primary Health Care	questionnaire	Descriptive and multivariate regression	Negotiation improved job commitment and satisfaction	Strengths: Multiple associations; detailed analysis. Limitations: Cross-sectional; intentional sampling; limited to two cities.
5	Chung et al.	Taiwan	2020	To establish and evaluate tools for assessing nurses' work satisfaction and well-being	Cross-sectional	quantitative	750 registered nurses	Medical centre	questionnaire	Independent samples t-test	Respect from colleagues was the strongest predictor of well-being	Strengths: Conceptual model validated; practical insights. Limitations: Single hospital; convenience sampling; cross-sectional.
6	Dantis et al.	Philippines	2024	To determine relationships between nurses' stressors and coping mechanisms	Descriptive	quantitative	206 nurses	Tertiary hospital	questionnaire	Statistical procedures	Nurses used problem-focused coping more than emotion-focused	Strengths: Detailed analysis; causal associations. Limitations: Limited to one setting; excluded other professions.

N	Authors	Country	Year	Purpose	Methodology	Methods	Participants	Setting	Data Collection	Data Analysis	Key Findings	Critical Review
7	Escribe et al.	United States	2022	To simulate and measure factors influencing team dynamics and well-being	longitudinal (cohort)	quantitative	188 physicians (44 nurses)	Academic health centre	questionnaire	Logistic regression	Team structure and leadership behaviors influenced well-being	Strengths: Complex modelling; causal insights. Limitations: Small sample; omitted some predictors; missing full team data.
8	Hult et al.	Finland	2023	To explore work-related and personal resources of nurse managers	Cross-sectional	quantitative	366 nurse managers	Health and social care trade union	questionnaire	Structural equation modelling	Leadership skills and work resources support well-being	Strengths: Robust SEM analysis; clear relationships. Limitations: Trade-union sample; cross-sectional; self-report bias.
9	Jelen et al.	Canada	2024	To identify workplace distress sources and develop well-being strategies	Descriptive	qualitative	51 clinicians (24 nurses)	Cardiovascular care	interviews	Thematic qualitative analysis	Collaboration in designing interventions mitigates distress	Strengths: Deep exploration; participatory approach. Limitations: Single setting; small diverse sample.
10	Li et al.	China	2024	To examine nurses' needs for psychological resilience	Descriptive	qualitative	20 nurses	Tertiary hospital	interviews	Qualitative thematic analysis	Nursing administrators should address professional and personal resilience needs	Strengths: Rich qualitative data; in-depth interviews. Limitations: Small sample; single hospital.

N	Authors	Country	Year	Purpose	Methodology	Methods	Participants	Setting	Data Collection	Data Analysis	Key Findings	Critical Review
11	Tomaszewska et al.	Poland	2024	To evaluate nurses' well-being and psychosocial conditions	Cross-sectional	quantitative	526 nurses	Public clinical hospital	questionnaire	Descriptive statistics, Pearson correlation	Well-being linked with job control and social support	Strengths: Detailed statistical analysis; comparative insight. Limitations: Single site; cross-sectional.
12	Yeter et al.	United Kingdom	2024	To explore well-being experiences among paediatric nurses	descriptive-exploratory	qualitative	30 nurses	Paediatric critical care	interviews	Interpretative phenomenological analysis	Work-life balance and control enhanced well-being	Strengths: Large qualitative sample; multi-researcher analysis. Limitations: UK-only; female participants.
13	Zaghini et al.	Rome	2020	To examine links between healthcare practitioners' health, well-being and environment	Cross-sectional	quantitative	200 providers (94 nurses)	Healthcare institutions	questionnaire	Statistical analyses	Managers should prioritize providers' mental and physical health	Strengths: Multicentre data; comparative insight. Limitations: Limited sites; convenience sample; cross-sectional.
14	Zare et al.	Iran	2021	To evaluate occupational stress among healthcare workers during COVID-19	Cross-sectional	quantitative	290 workers (180 nurses)	Hospitals	questionnaire	Descriptive stats, t-test, ANOVA	Communication and managerial support reduced stress	Strengths: Strong statistical basis; practical implications. Limitations: Regional focus; small sample.
15	Zhang et al.	Beijing	2024	To examine the relationship between psychosocial	Cross-sectional	quantitative	655 registered nurses	Teaching hospital	questionnaire	Descriptive statistics, Pearson	Good psychosocial environment enhanced job	Strengths: Robust SEM; large sample. Limitations: Self-

N	Authors	Country	Year	Purpose	Methodology	Methods	Participants	Setting	Data Collection	Data Analysis	Key Findings	Critical Review
				work environment and nurses' well-being						correlation, SEM	well-being via job crafting	reported; single data point; selection bias.
16	Melissa, Z., Wright, N., & Holly, B.	United Kingdom	2016	To explore nurses' views and experiences of accessing workplace wellbeing programmes, particularly those including complementary and alternative therapies (CATs).	descriptive cross-sectional	qualitative	12 registered nurses	Healthcare facility (UK)	interviews	Thematic analysis	Nurses appreciated wellness interventions such as aromatherapy and massage but faced barriers like stigma, time constraints and guilt for leaving duties.	Strengths: Rich, real-world qualitative insights. Limitations: Small sample; findings not generalizable.
17	Hussein, A.H.M., Abou Hashish, E.A., & Younes, B.M.	Egypt	2024	To examine the relationship between nurses' psychological well-being and work productivity loss.	Descriptive	quantitative	400 nurses	Hospital setting (Egypt)	questionnaire	Pearson correlation and regression analysis	Found a significant negative correlation between psychological well-being and productivity loss. Poor well-being increased absenteeism	Strengths: Large sample; validated instruments. Limitations: Single-center study; correlation does not infer causation.

N	Authors	Country	Year	Purpose	Methodology	Methods	Participants	Setting	Data Collection	Data Analysis	Key Findings	Critical Review
											and presenteeism	
18	Pellikka, A., Junttila, K., Laukkala, T., et al.	Finland	2024	To understand nurses' perceptions of employer support during the COVID-19 pandemic.	Descriptive	qualitative	579 nurses	Finnish healthcare organizations	questionnaire	Inductive content analysis	Nurses emphasized appreciation, safety, psychological support and communication from employers as critical during crises.	Strengths: Large qualitative dataset; relevant pandemic context. Limitations: Single open-ended item limited depth; COVID-specific context.
19	Almeida, D., Figueiredo, A.R., & Lucas, P.	Not specified (Global)	2024	To review literature on nurses' well-being at work and identify influencing factors.	Scoping review	PRISMA	Not applicable	Global literature	data extraction form	Descriptive synthesis (PRISMA-ScR framework)	Leadership, work demands, interpersonal relations and culture significantly affected well-being.	Strengths: Comprehensive synthesis. Limitations: Contextual variability and uneven study quality.

N	Authors	Country	Year	Purpose	Methodology	Method	Participants	Setting	Data Collection	Data Analysis	Key Findings	Critical Review
20	Cohen, C., Pignata, S., Bezak, E., et al.	Multiple (Systematic Review)	2023	To assess effectiveness of workplace interventions to reduce burnout and improve well-being among healthcare professionals	Scoping review	mixed	33 studies	Global	data extraction form	Narrative and descriptive synthesis	Multimodal interventions (mindfulness, organizational changes) were most effective; leadership was key.	Strengths: Integrative synthesis; multi-professional scope. Limitations: Study heterogeneity; limited to published data.
21	Sirkka, J., Suhonen, R., Liira, J., et al.	Finland	2025	To explore occupational health nurses' perceptions of managing work ability risks.	Descriptive	qualitative	10 occupational health nurses	Finnish occupational health units	Interview guide	Thematic analysis	Emphasized tools, collaboration and time as vital to managing work ability; time pressure was a major barrier.	Strengths: Practical relevance to occupational health. Limitations: Small sample; limited generalizability.

Appendix 2: Themes Extraction

Table 5: Summary of Data Extraction

Authors /country	Flexible Work Arrangements	Workload Management policies	Training and Professional Development	Psychosocial Support and Peer Relationships	Team Cohesion and Social Support	Leadership Involvement in Employee Well-Being	Recognition and Reward Mechanisms	Promoting Work-Life Balance	Health and Wellness Initiatives	Adequate Resources and Infrastructure	Improving Organizational Support
Work-Related Strategies Used for Improving Wellbeing of Nurses											
Berland a et al. (2020) Italy,	✓		✓	✓	✓		✓	✓			✓
Blanchard et al. (2022). United States		✓				✓	✓	✓	✓	✓	
Buchbin der et al.. (2023). United States	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cezar-Vaz et al.. (2022) Brazil		✓	✓		✓	✓		✓	✓	✓	

Chung et al. (2020). Taiwan	✓		✓	✓			✓		✓		
Dantis et al. (2024) Philippines		✓			✓		✓		✓		✓
Escribe et al. (2022). United States		✓	✓		✓	✓					✓
Hult and Terkam o-Moisio (2023) Finland		✓				✓		✓		✓	✓
Jelen et al. (2024). Canada		✓		✓	✓	✓			✓		✓
Li et al. (2024) China		✓	✓		✓	✓		✓	✓		
Tomaszewska et al. (2024) Poland.			✓	✓				✓	✓		✓

Yeter et al. (2024)	✓				✓	✓			✓	✓	
United Kingdom											
Zaghini et al. (2020).	✓	✓				✓			✓	✓	✓
Rome											
Zare et al. (2021).	✓	✓	✓	✓		✓			✓	✓	
Iran.											
Zhang et al. (2024)		✓	✓	✓				✓	✓	✓	
Beijing											
How Nurses Perceive Work-Related Strategies Used to Support Wellbeing of Nurses											
Authors/ country	Flexible Work Arrange ments	Worklo ad Manag ement policie s	Training and Profession al Developm ent	Psychos ocial Support and Peer Relations hips	Team Cohesio n and Social Support	Leaders hip Involve ment in Employ ee Well- Being	Recogn ition and Reward Mecha nisms	Prom oting Work- Life Balan ce	Health and Wellne ss Initiati ves	Ade quat e Res ourc es and Infra struc ture	Impr ovin g Org aniz atio nal Sup port
Almeida et al., 2024 et al. (2024)	✓	✓			✓	✓		✓			✓

