

## FACTORS AFFECTING NURSE WORKLOAD IN PROVIDING NURSING CARE IN INPATIENT WARDS; A LITERATURE REVIEW

*Faktor-Faktor Yang Memengaruhi Beban Kerja Perawat Dalam Memberikan  
Asuhan Keperawatan Di Ruang Rawat Inap: Tinjauan Pustaka*

**Gustian Satria Pratama<sup>1,2\*</sup>, Elsy Maria Rosa<sup>1,3</sup>**

<sup>1</sup>Master Program of Hospital Administration, Universitas Muhammadiyah Yogyakarta,  
Yogyakarta, Indonesia

<sup>2</sup>RS Seto Hasbadi, Bekasi, Indonesia

<sup>3</sup>Master of Nursing Program, Indonesia University, Jakarta, Indonesia

\*Email: gustians07@gmail.com

### ABSTRAK

*Beban kerja perawat yang tinggi menjadi faktor penurunan kinerja unit keperawatan. Penelitian ini menggunakan metode kualitatif dengan tinjauan pustaka berdasarkan Arksey dan O'Malley. Tujuannya adalah menganalisis faktor yang memengaruhi beban kerja perawat di ruang rawat inap. Data diperoleh dari 1404 dokumen literatur Scopus (2020-2024), menggunakan kata kunci "beban kerja perawat," dan dianalisis dengan VOSViewer. Hasil menunjukkan adanya faktor internal dan eksternal. Faktor internal mencakup jumlah pasien yang meningkat, jam kerja panjang, kerja shift, infrastruktur tidak memadai, serta kekurangan staf, yang terkait dengan manajemen rumah sakit dan sumber daya manusia. Faktor eksternal meliputi kendala anggaran dan kebijakan kesehatan nasional yang berdampak pada rumah sakit. Beban kerja fisik terlihat dari ketidakseimbangan rasio perawat-pasien dan tugas tambahan. Beban kerja mental muncul dari perbedaan volume pekerjaan antar shift, dengan shift pagi lebih berat dibanding shift lainnya. Beban kerja sosial berkaitan dengan konflik rekan kerja di satu ruangan. Penggunaan teknologi menjadi kunci untuk mengurangi beban kerja perawat. Implikasi penelitian ini menyoroti pentingnya pendekatan strategis untuk meningkatkan kualitas pelayanan, mengoptimalkan kinerja, dan memastikan kepuasan pasien terhadap asuhan keperawatan.*

**Kata kunci:** asuhan keperawatan, beban kerja perawat, faktor beban kerja

### ABSTRACT

The high workload of nurses is a factor in reducing the performance of nursing units. This research uses qualitative methods with a literature review based on Arksey and O'Malley. The aim is to analyze the factors that influence the workload of nurses in inpatient rooms. Data was obtained from 1404 Scopus literature documents (2020-2024) using the keyword "nurse workload" and analyzed with VOSViewer. The results show the existence of internal and external factors. Internal factors include increasing patient numbers, long working hours, shift work, inadequate infrastructure, and staff shortages, which are related to hospital management and human resources. External factors include budget constraints and national health policies that impact hospitals. Physical workload can be seen from an imbalance in the nurse-patient ratio and additional tasks. Mental workload arises from differences in work volume between shifts, with the morning shift being heavier than other shifts. Social workload is related to co-worker conflicts in one room. The use of technology is the key to reducing nurses' workload. The implications of this research highlight the importance of a strategic approach to improving service quality, optimizing performance, and ensuring patient satisfaction with nursing care.

**Keywords:** nursing care, nurses' workload, workload factor

## INTRODUCTION

Nurse workload is the number of tasks carried out by a nurse in one month's working time, based on the national/ideal workload standard, namely 120-150 hours per month [1]. There are two types of workload, namely quantitative workload, namely the amount of work a person must do, and qualitative workload, namely the level of difficulty or complexity in doing work [2]. Several factors, especially work motivation, can influence nurses' workload. This condition can be influenced by two main factors: internal factors, including job satisfaction, personal recognition, challenging tasks, the desire to achieve, career advancement, and the desire to enjoy work. Meanwhile, external factors include relationships with colleagues, work environment, and job security. If these aspects are less than optimal, they can have an impact on work performance, causing a decrease in job satisfaction and patient satisfaction with the health services they receive [3].

Tilley et al. (2008) explain that workload in nursing is the number of requests or job demands experienced by a nurse, which can be influenced by the number of patients, the severity of the patient's condition, and work environmental factors [4]. Similar to Gillies (1994), the workload is the amount of time and effort required to complete a number of tasks. In the context of nursing, this includes the clinical, administrative, educational, and emotional tasks that nurses must carry out within a given time [5]. Widodo (2015) interprets workload as the amount of activity or work that someone must do during a certain time. Nurses' workload is more specific to tasks related to health services, including nursing actions, time management, and completing administrative tasks [6]. As confirmed by Nursalam (2008), a nurse's workload is a number of activities that must be completed in a certain period, including physical, mental, and social aspects that influence performance and quality of service [7].

Thus, nurses' workload can be assessed as important from various aspects, including tasks carried out based on main functions and additional functions; the number of patients treated per day can reach 20 to 30 people per day, even per month can reach an average of 250 to 300 patients depending on the patient's condition, average patient care load, direct and indirect actions required for each patient, frequency each activity required, and the average nursing service time [5]. PPNI (Indonesian National Nurses Association) revealed that in 2017, factors that influence workload could be defined as: 1) External factors, which include burdens originating physically and mentally outside the human body; work organization factors, including working hours, rest time, work shifts, night shifts, wage systems, organizational structure models, delegation of tasks and authority, as well as aspects of the work environment (physics, chemistry, biology and psychology). 2) Internal factors such as somatic and psychological factors [6]. So, the excessive workload experienced by nurses can be detrimental to the quality of patient service and the welfare of the nurses themselves [8].

The workload of nurses is greatly influenced by non-nursing tasks, which are one of the main causes of the excessive workload of nurses in Southeast Asia, including Indonesia. Additional tasks such as administration and linen changes divert nurses' attention from patient care, increasing stress and fatigue [2]. Meanwhile, in the United States, the problem of nursing workload, the influencing factors are more focused on the imbalance in the nurse-patient ratio and labor shortages compared to Asian countries. America emphasizes more advanced health systems and technology, such as Electronic Medical Records, reducing non-nursing tasks. However, in Southeast Asia, limited infrastructure and resources mean that nurses have to handle more additional tasks, so these differences indicate that the factors influencing nurses' workload differ between the two regions [9].

Therefore, it is important to highlight the problem of nurses' workload to provide insightful education to academics and practitioners so that they can better understand the important factors of nurse workload. Based on the explanation stated above, the

author is interested in conducting a more in-depth analysis of the factors that influence workload in nursing services in inpatient rooms. The novelty of this research itself lies in the analysis method using bibliometrics and big data visualization with the help of the VOSViewer tool to map research findings and new things related to workload in hospital inpatient rooms. Seriousness and precision are required in processing data and mapping data to explain the relationship between one theme and another [10]. The research aims to analyze the factors that influence the workload of nurses in providing nursing care in inpatient rooms.

## METHODS

This research uses a qualitative approach with a literature review based on the Arksey and O'Malley framework, which provides systematic steps for identifying and analyzing data. The literature review was selected to understand the workload of nurses comprehensively. The data sample consists of 1404 documents from Scopus with a publication period of 2020-2024 to ensure relevance and current trends. The keyword "nursing workload" was used to focus on related articles and journals, with the English language restricted for consistency. Only relevant articles that met the criteria were analyzed based on title and abstract selection for efficiency. This approach ensures focused, relevant, and quality research results [11]. This systematic review identifies a broad spectrum of data, uncovers gaps in the literature, evaluates studies in this area, and increases understanding of nurses' use of technology to reduce workload in hospitals, particularly nurses in inpatient wards. Research analysis uses VOSViewer software to process and visualize findings because it is capable of processing large data automatically [12].

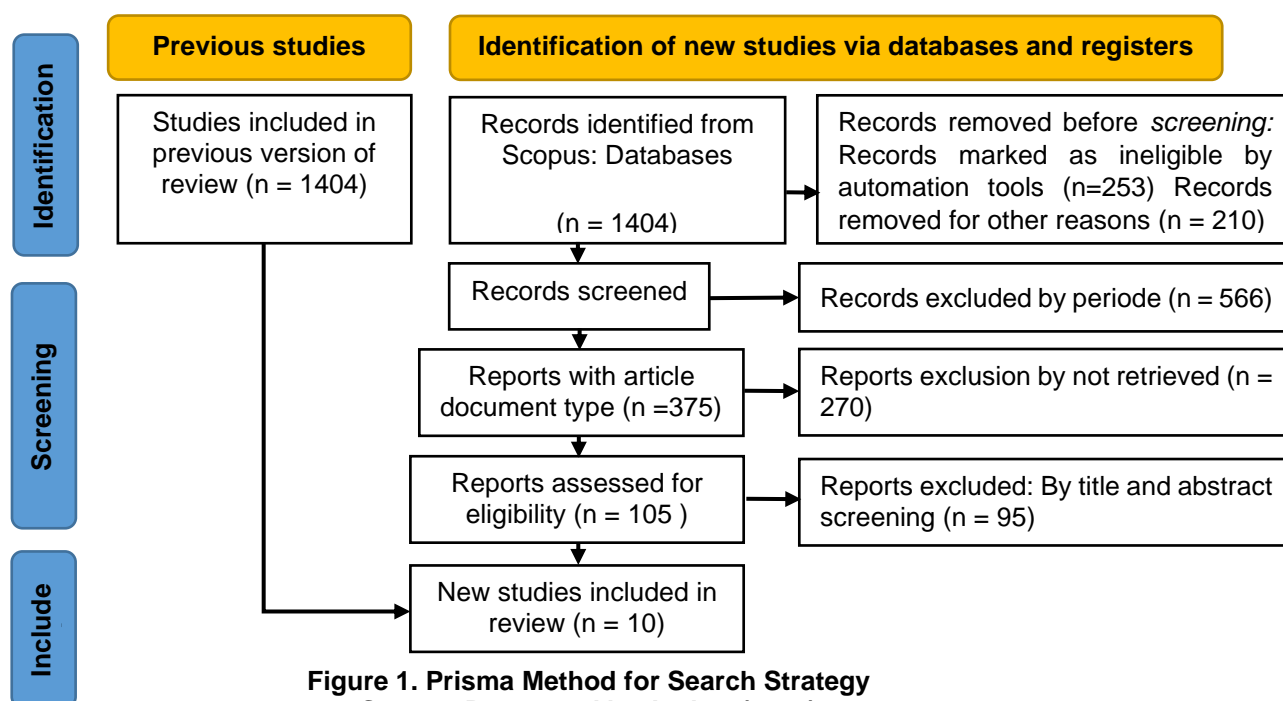
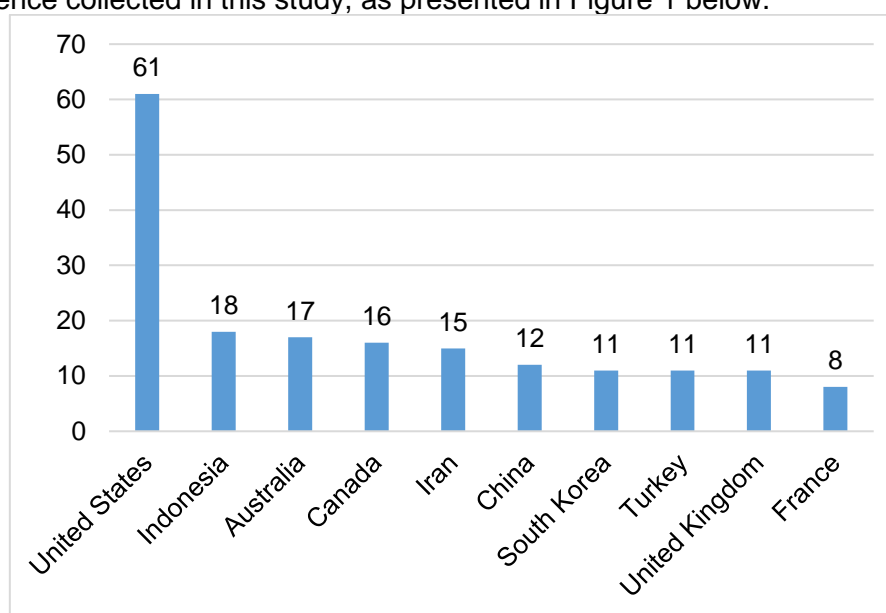


Figure 1. Prisma Method for Search Strategy  
Source. Processed by Author (2024)

## RESULT

According to the study, healthcare workers in public hospitals on inpatient wards face poor working conditions, which is consistent with the conclusions of the Department of Public Services and Administration (2006) [13]. Various factors influence the working conditions of health workers in public hospitals, which can be divided into internal and

external factors. Internal factors include increasing patient loads, long work days, shift work, inadequate infrastructure, and staff shortages, all directly related to hospital and human resource management. On the other hand, external factors include financial constraints related to budgets and funding from the government or other external resources and policies that may affect hospitals, such as national health policies. To improve working conditions, solutions are needed that involve improvements at the hospital level and support from broader external policies. The following are several countries that have the highest workload experienced by nurses, as presented in Figure 1 below. This information comes from experience gathered through a literature review of 1404 documents obtained from the Scopus database, including articles published in 2020-2024. The data shows trends in nursing workload in various countries based on the evidence collected in this study, as presented in Figure 1 below.

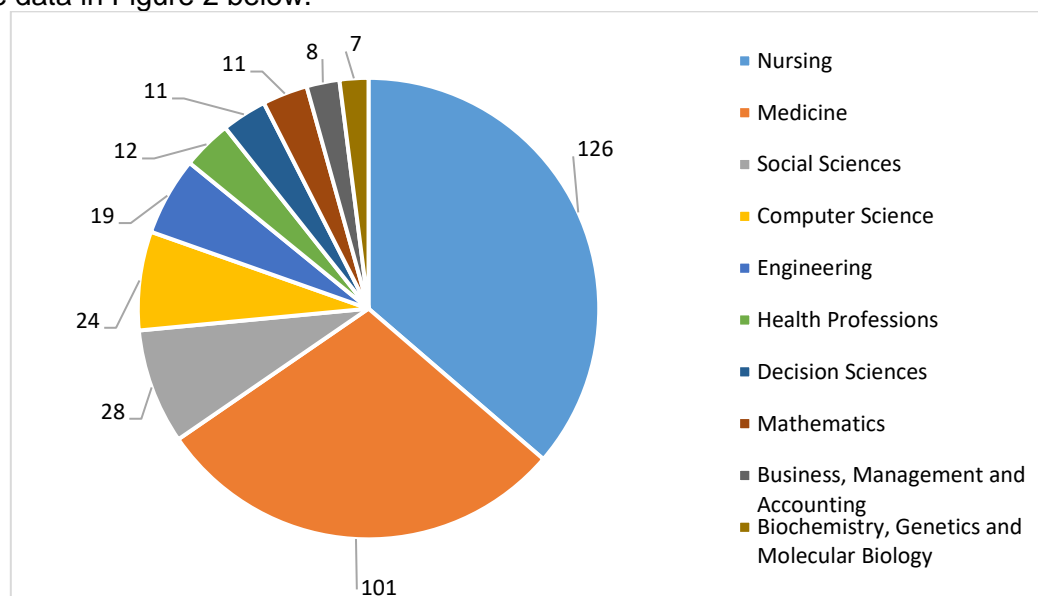


**Figure 1. Ten Countries with the Highest Nursing Workload**

Figure 1 shows ten countries with the highest hospital workloads, especially inpatient wards. The United States dominated the top results with 61 articles focusing on nursing workload. It should be noted that the figure 61 articles refers to the number of articles found in the literature review, not the number of people or respondents. As part of this literature review, researchers analyzed 1404 documents in total. However, only several relevant articles focusing on nursing workload were included in the analysis, so the reported numbers are part of the total reviewed documents. According to Phillips (2020), more than 50% of those surveyed said they planned to leave their current job due to the heavy workload [14]. The sample's overall burnout level ranged from mild to high. Workload perception and intent to quit ( $r = 0.513$ ,  $P < 0.0001$ ), burnout and intent to leave ( $r = -0.435$ ,  $P < 0.0006$ ), and workload perception and burnout ( $r = -0.588$ ,  $P < 0.0001$ ) all showed moderate -to-strong intercorrelations. The intention to quit a present position was strongly influenced by medical-surgical nurses' perceptions of their workload and exhaustion ( $P < 0.05$ ) [14]. These results were obtained from an analysis of 61 articles that focused on the workload and burnout of medical-surgical nurses, obtained through a literature review from the Scopus database and published from 2020 to 2024.

Meanwhile, Indonesia is in second place in terms of workload, which is also felt significantly by nurses. Utomo et al. (2022) explained that the condition of nurses in Indonesia is the largest factor in the NICU nurse's overall workload, which is effort [15]. Providing emotional support to the patient's parents and family was the nursing care that was most commonly overlooked [16]. The most common issue that resulted in missing

nursing care was labour resources. Nevertheless, there is no statistically significant relationship between the frequency of missed nursing care and the overall workload. Thus, it is important to pay attention to the condition of nurses in hospitals so that they stay energized and can work well [17]. These results are also supported by the mapping of the dominant subject area highlighted in the workload, namely nursing, as shown in the data in Figure 2 below.



**Figure 2. Dominant Subject Area in Workload**

Figure 2 above shows that the data processing results found that the subject area in this research dominates the field of nursing (126 documents), most of which discuss the importance of nursing in workload in inpatient rooms. This condition aligns with the problems nurses often face, including fatigue, relatively small human resources, and the fact that supporting facilities are critical in maintaining excessive workloads. Of the 1404 documents found during the literature search, filtering and selecting relevant articles resulted in 126 being analyzed in this research. This process involves selecting articles based on topic relevance, quality, and research focus that match the study objectives [18]. Although there is no evidence that the tool makes better use of specific staff resources, the benefits of staffing levels determined by the tool are related to increased personnel. Different systems produce very different estimates of staffing needs, although there is evidence that staff assessments conducted with the tools can be correlated with other assessments. While it is known that demand varies from different sources, the extent to which the system can provide labour levels to meet these needs is still being determined. It needs to be more proven and perhaps more accurate to assume that the best way to respond to fluctuating demand is to staff according to average needs [19]. Meanwhile, techniques cared for by nurses refer to the medical skills and procedures carried out by nurses to care for patients, including administering medication, monitoring the patient's condition, treating wounds, and providing physical and emotional support for patients. Nurses also play a role in managing medical equipment, carrying out diagnostic procedures, and educating patients and families regarding health care. Nurses often work in multidisciplinary teams to ensure holistic and effective care, tailoring medical interventions based on a patient's condition. Even more interesting in this finding, the author presents ten supporting literature articles to show the novelty of this research, as presented in Table 1 below. These 10 articles began with a search of the Scopus database that yielded 1404 documents, but after a rigorous screening process, only 10 articles were selected for analysis. Filtering is carried out based on topic



relevance, focus on the Indonesian context, and publication period (2020-2024). The selected articles also meet specific quality standards, such as being published in indexed journals and using valid research methods. As a result, 10 relevant articles were grouped based on central themes to compile a literature review.

**Table 1. Comparison of Findings**

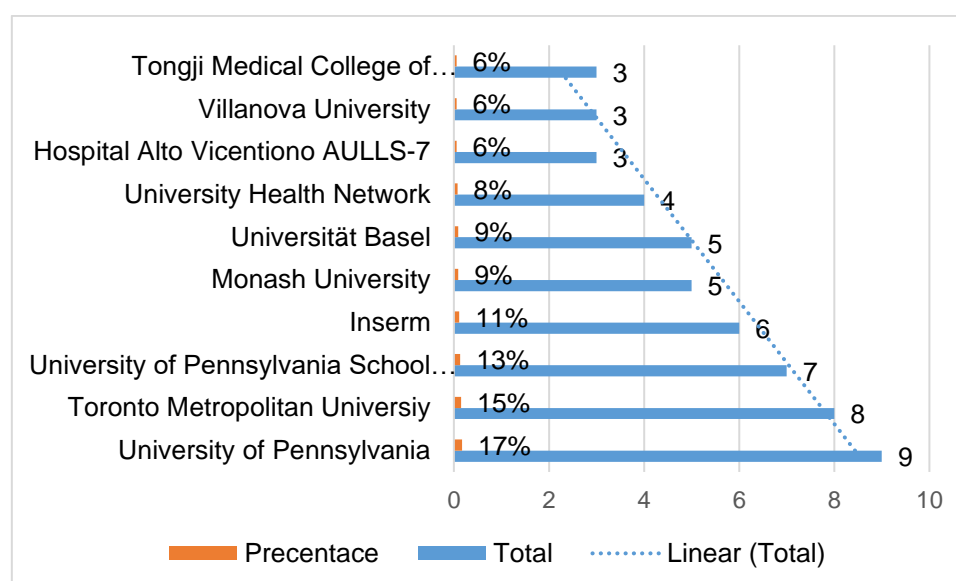
No	Title	Author / Publish	Method	Result
1	Relationship Between Workload and Work Motivation of Nurses with the Completeness of Nursing Care Documentation in the Surgical and Internal Wards at Dr. H. Andi Abdurrahman Noor Regional General Hospital in Tanah Bumbu Regency.	Faisal Reza Ramadani, Rani Fitriani Arifin, Aries Abiyoga / 2018 [1].	Cross Sectional. The study's sample consisted of 44 respondents using total sampling techniques. The data were analyzed using the <i>Spearman Rank Correlation</i> test with a significance level of 0.05.	There is a relationship between nurses' workload and the completeness of nursing care documentation in the Surgical and Internal Wards at Dr. H. Andi Abdurrahman Noor Regional General Hospital in Tanah Bumbu Regency. These findings show that workload nurses are influenced by work motivation. Nurses with high motivation tend to manage heavy workloads better because they feel more involved and committed. Conversely, low motivation can worsen perceptions of workload, causing fatigue, stress, and intentions to quit.
2	Relationship Between Workload and Performance of Staff Nurses in the Hospital's Inpatient Ward.	Rezi prima, Sisca Oktaini, Silvia Adi Putri / 2020 [2].	Cross Sectional. The sampling technique uses total sampling, namely, taking the entire population as a sample with a sample size of 44 people.	A relationship exists between workload and staff nurses' performance in the Harapan Ibunda Batusangkar General Hospital inpatient ward. The sampling technique uses total sampling, namely, taking the entire population as a sample with a sample size of 44 people. This finding shows that Workload is influenced by nurse performance.
3	Analysis of Nurse Workload in the Inpatient Installation of Kendari City Regional General Hospital (RSUD) in the Year 2016	Sitti Nurjanah, Ambo Sakka, Paridah / 2019 [9].	Work sampling and Workload Indicator Staff Need (WISN). The sample observed was 18 nurses, using work sampling techniques and document review.	There is a significant relationship between workload and the number of nursing staff in the inpatient ward of Kendari Regional General Hospital (RSUD Kendari). This finding shows that the lack of nursing staff influences the Workload.

No	Title	Author / Publish	Method	Result
4	Nurse performance in the inpatient ward of Bhayangkara Level II Hospital in Medan was reviewed regarding competence, motivation, and workload.	Danar Michael Halawa, Thomson Parluhutan Nadapdap, Mangatas Silaen / 2020 [3].	Cross sectional with SurveyAnalytic. The sample consisted of 45 executive nurses in inpatient rooms, using total sampling techniques.	
5	Relationship Between Workload and Job Satisfaction of Nurses in the Adult Care Ward at GMIM Pancaran Kasih Hospital in Manado	Kifly Franco Barahama, Mario Katuuk, Wenda M. Oroh / 2019 [20].	Cross Sectional. Sample with a total sampling technique of 58 respondents.	There is a significant relationship between workload and job satisfaction of nurses in the Adult Care Ward at GMIM Pancaran Kasih Hospital in Manado. These findings show that Workload is influenced by job satisfaction.
6	Factors Influencing the Workload of Nurses at GMIM Tonsea Airmadidi Hospital in the Era of the Covid-19 Pandemic	Worang, Anggi Kardia. A. J. M. Rattu, Theresia Kaunang / 2022 [21].	Mixed Method. Quantitative using a sample of 40 respondents and qualitative interview results obtained from 4 informants.	There is a relationship between the completeness of roles, the additional task role, and the workload of nurses, while there is no relationship between the environmental working conditions and the workload of nurses. These findings show that the completeness of facilities and additional tasks influences Workload.
7	Workload of Nurses and its Impact on the Implementation of Patient Safety in Inpatient Wards	Dwi Retnaningsih, Diah Fatmawati / 2016 [8].	Cross Sectional. A sample of 155 nurses was involved, and a total sampling technique was applied.	There is a significant relationship between the workload of nurses and the implementation of patient safety in the inpatient ward of Tugurejo Regional General Hospital, Semarang. These findings show that Workload is influenced by implementing patient safety measures in the inpatient room.
8	Factors affecting intensive care units nursing workload	M. Bahadori, R. Ravangard, M. Raadabadi, S. Mosavi, M. G. Fesharaki, and F. Mehrabia / 2014 [22].	This study is a cross-sectional and analytical descriptive study. A sample of 400 nurses was selected.	The study highlights a relationship between nurses' workload and structure, process, and activity. Key factors include unclear responsibilities and unnecessary tasks (0.709), ward-patient capacity mismatch (0.639), and assisting students and new staff (0.589).

No	Title	Author / Publish	Method	Result
9	Relationship Between Workload and Job Stress of Nurses in the Emergency Department of Semarang Regional General Hospital	Haryanti, Faridah Aini, Puji Purwaningsih / 2013 [23].	Deskriptif Korelasi. The samples were taken from 22 nurses using a purposive sampling technique.	There is a relationship between workload and job stress among nurses Semarang District Regional General Hospital. These findings show that Workload is influenced by work stress level.
10	Influence of Workload on the Performance of Nurses in the Inpatient Installation of Labuang Baji Regional General Hospital, Makassar.	Erlina, Alwy Arifin, Andi Ummu Salmah / 2018 [24].	Cross Sectional. Sample 130 respondents using the Exhaustive Sampling sampling technique.	There is an influence of workload on direct activities (active nursing care) and indirect activities on the performance of nurses in the inpatient installation at Labuang Baji Regional General Hospital, Makassar. These findings show that the quality of service performance of nurses influences Workload.

Table 1 above shows that it provides a supporting comparison regarding the workload of nurses in Indonesia Hospital. This is also supported by institutions that are concerned with studying the perceived workload of nurses, placing the University of Pennsylvania in the highest achievement position with nine publications presented [25]. The findings were from surveys conducted involving 1,652 hospital nurses across 40 hospitals (34 public and six private), satisfaction assessments from 2,013 patients, and discharge data for 761,948 inpatients. [26]. The reason for citing this literature is related to research on *nurse workload* because the literature directly addresses the structural, process, and activity factors that influence workload. These three elements are relevant in understanding how conditions in the work environment, such as a lack of clear responsibilities, carrying out unnecessary tasks, mismatching room capacity with the number of patients, as well as the need to guide new staff, contribute to an increase in nurses' workload. The research results showing the loading coefficients of each factor provide a quantitative basis to support a more in-depth analysis of the specific causes and their impact on nurse performance, quality of nursing care, and workforce welfare. This literacy is also an important reference in designing strategic solutions to manage nurses' workloads effectively. In addition, workplace was associated with patient experience and nurse quality assessment. The addition of each patient to nurses' workload was associated with increased mortality (odds ratio 1.04, 95% CI 1.01–1.07,  $p < 0.01$ ), readmissions (1.02, 95% CI 1.01–1.03,  $p < 0.01$ ), and length of stay (incident rate ratio 1.04, 95% CI 1.01–1.06,  $p < 0.05$ ) [27]. Nurse workloads in hospitals range from six to 24 patients per nurse. Patients in hospitals with a nurse-patient ratio of 18:1 per month had a 41% increased chance of death, 20% increased chance of readmission, 41% increased chance of prolonged hospital stay, and 68% increased chance of giving a high satisfaction rating compared to those in hospitals with a ratio of 8:1 per person [28]. More details of the ten institutions can be seen in Figure 3 below.



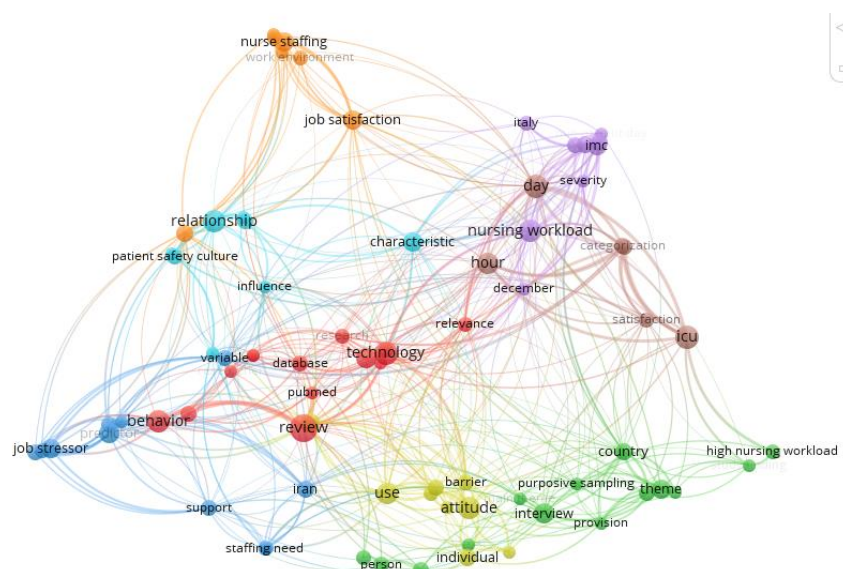


**Figure 3. Supreme Board Reviewing Nursing Workload**

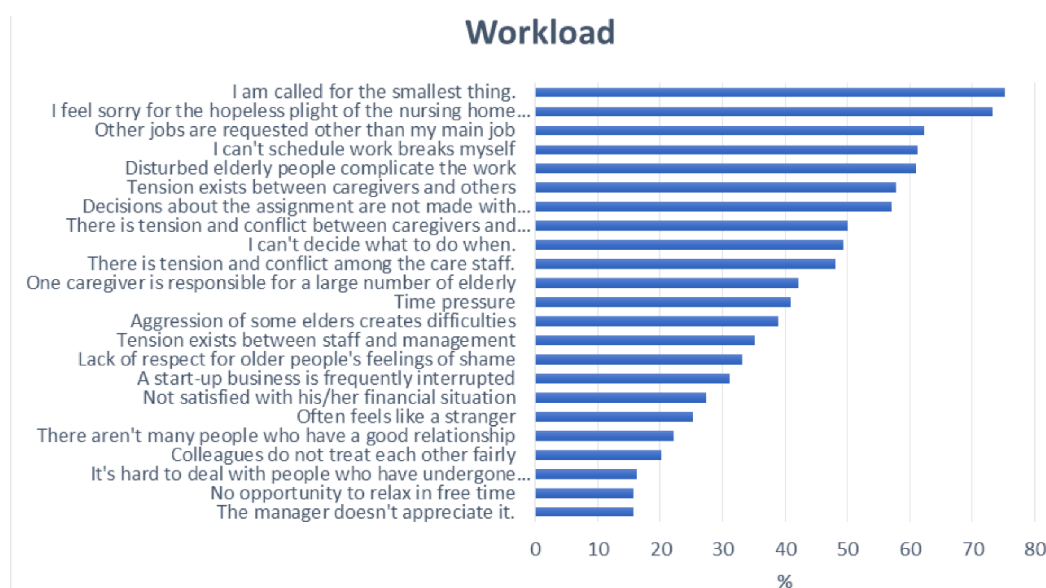
Figure 3 above shows the top ten institutions that focus on research themes related to nursing workload. However, there is still little research that highlights the problem of nurse workload in hospital inpatient rooms. Tongji Medical College of Huazhong University of Science and Technology ranked tenth with three articles relevant to this topic. Research from these institutions highlights the importance of digital information solutions, including telecommunications and electronic applications in health systems, such as intra-organizational email, that provide access to patient information technologies, such as Electronic Medical Records (RME) and Electronic Prescriptions (e-Rx). Although its contribution is limited, this research provides insight into the application of technology to support nurses' workload management [29]. Digital education includes digital electronic tools and media, increasing learning opportunities 23 for healthcare workers and patients (e.g., video conferencing, video consultations, telemedicine, and live streaming technologies) [30]. Mobile applications are "medical and public health practices supported by mobile devices, such as cell phones, patient monitoring devices, personal digital assistants, and other wireless devices" World Health Organization (2023) [31]. Mobile Application Interventions include advanced care provided by doctors, nurses, and medical staff, patient follow-up visits to medical centres to check their test results, electronic prescriptions for medications, the timing of examinations, and other tasks performed via telecommunications. Assistive devices to assist nursing staff, virtual communication that uses electronic media to send information or messages using computers, email, telephone, video calls and FAX machines [32]. Disease diagnostic technologies such as Automated Medical Examination (AME) devices support earlier diagnosis and can also improve the accuracy and timeliness of diagnosis meanwhile, Villanova University (3) and Hospital Alto Vicentino AULSS (3).

Figure 4 above shows that the findings from VOSViewer data processing place the use of technology as an important and dominant supporting aspect. Encouraging technology can minimize the hospital workload in terms of services, especially facilities and infrastructure for inpatient room nurses. On the other hand, patient behaviour, characteristics, and attitudes can also influence the workload of nurses who carry out care duties in the inpatient room. Thus, it is very important to pay attention to nurses' job satisfaction so that hospital services in inpatient rooms can run well. One of them is paying attention to human resource needs, especially the workload of nurses, which is the main factor in maximizing services to hospital patients, especially inpatient room nursing staff and, of course, encouraging new technology in developing hospital services

[32]. On the other hand, it was found that the most important problems were related to work organization, the emotional stress of work, and relationships between personnel. As presented in Figure 5, the problems that occur most and least are as follows:



**Figure 4. Updated Research Themes 2020-2024**



**Figure 5. Factors Affecting Workload.**  
Source. Manyazewal & Matlakala,, (2017)[33]

Figure 5 above shows a horizontal bar diagram which depicts the percentage of various factors that influence workload. This chart, entitled "Workload," illustrates the elements contributing to stress or challenges experienced in the workplace, particularly in aged care or nursing. The horizontal axis (%) shows the percentage of respondents or the perceived frequency associated with each factor influencing nurses' workload. Based on findings drawn from analyzed documents, this chart highlights key factors that exacerbate workload, such as fatigue, patient numbers, staff shortages, inadequate infrastructure, and lack of technological support. The data obtained revealed that excessive workload is often associated with high levels of stress, which can ultimately

affect the quality of patient care and the well-being of nurses. This chart provides a quantitative picture of how frequently these factors are perceived by nurses in the field, providing insight that is important for identifying areas that need improvement. Meanwhile, the Vertical axis (factors) Contains a list of challenges or reasons that influence workload. Key findings "I am called for the smallest thing" (~80%): Many workers feel they are often asked for small, non-essential things, which increases workload. "I feel sorry for the hopeless plight of the nursing home" (~70%): Empathy for the poor conditions in the nursing home also becomes emotional distress. "Other jobs are requested other than my main job" (~65%): Additional work outside of the main job is a source of stress. Medium factors (40%-60%): Problems such as conflicts between staff, inflexible work schedules, and responsibility for many older adults. Factors with the lowest percentages (<20%): "The manager does not appreciate it" and "No opportunity to relax in free time", indicating that although important, these factors are less reported than others.

The findings in Figure 5 indicate that most workers feel small, unimportant tasks, emotional stress, and additional tasks outside the main job description influence workload [34]. Interpersonal conflict, poor time management, and lack of appreciation exacerbate nurses' challenges. Conflicts between nurses and colleagues or patients increase stress, while poor time management exacerbates burnout. Lack of appreciation for nurses' work reduces motivation and job satisfaction, ultimately impacting patient care quality [35]. Of course, these findings can be used to understand workers' needs and find solutions that can improve their well-being, such as providing stress management training, reviewing work policies, and creating a more supportive work environment [36].

## DISCUSSION

Findings from the documents that have been analyzed reveal that internal and external factors influence nurses' workload. As found in research by Nora & Sopiah, (2023), internal factors show that age, gender, and length of service play a role in influencing nurses' workload. In their productive years, individuals tend to be more enthusiastic and able to optimize their abilities to cope with workloads, which can result in better performance [22],[31]. Meanwhile, in external factors the workload of nurses, as stated by Nurjanah (2017), the imbalance in the number of patients versus the number of nurses is an external factor that influences the workload of nurses in each room, so it can cause the tasks of each nurse to pile up in the inpatient room. Apart from that, there are many indirect activities outside of providing nursing care that must be carried out, which cannot be avoided because they are still related to the needs and interests of patients, resulting in a perception of workload for n.urses [9].

However, according to Kifly (2019), factors influencing nurses' workload include situational demands, external influences, and indirect nursing activities. This is caused by activities that include reporting to the head of the ward regarding the number of patients, patient conditions, and nursing care [20]. Meanwhile, according to Erlina (2018), workload. An increase will occur if the number of nurses cannot meet the demand for patient care [14]. Duffield et al., (2011) also revealed that external factors considered in nurses' workload include an imbalance in the ratio of nurses to patients in direct and indirect nursing services, the average duration, and the frequency of patient interventions required [37]. In addition, nurses often have many tasks outside their primary duties in providing nursing care, such as cleaning (changing patient linens), which is not their primary responsibility. However, with these additional duties, nurses may have many additional responsibilities, potentially leading to neglect of their primary duties [38]. A limitation of this research is that the literature used in this review may be limited to the journals available in certain databases, so it is possible that some relevant research was not included due to limited access.

The advantage of this research is that it can gain in-depth insight into various factors that influence the workload of nurses in inpatient rooms by referring to previous data and research findings. Coupled with integrating the results of various previous studies, a literature review provides a broad picture of the issue being researched. This can help identify research gaps or topics that have not been covered in depth, thereby guiding further research in the future. Thus, the results of the literature review can serve as a solid and valid theoretical framework to support understanding of issues related to nurse workload. Meanwhile, the weakness of this research is that it relies entirely on secondary data from Scopus literature without any primary data, so it does not reflect actual conditions in the field. Plus, this research does not involve direct interviews or surveys with nurses, so it does not provide subjective views from direct actors regarding workload.

## CONCLUSION

This research concludes that nurses' workload is influenced by various factors, such as work motivation, job satisfaction, availability of facilities, hospital management policies, and working environmental conditions. Nurse workload has a significant impact on various aspects, including performance, documentation of nursing care, patient safety, and work stress levels. Structural factors (e.g., unclear responsibilities), processes (e.g., additional tasks), and activities (e.g., room-inpatient capacity mismatch) also contribute to workload. These findings emphasize the important role of management in optimizing resources and providing support to lighten nurses' workload in order to improve the quality of health services. This research identifies factors influencing nurses' workload in providing nursing care in inpatient wards. Two factors affect nurses' workload, including internal and external factors. Internal workload comes from within the individual, such as age, mainly in the range of 20-30 years, gender, predominantly female, and education level, with a majority having a nursing D3 degree.

External workload is derived from outside the worker's body, such as physical, mental, and social aspects. Physical workload includes an imbalance in the number of nurses per patient, with the morning shift having more work compared to the afternoon and evening shifts, and social workload related to problems with colleagues in the same room, such as nurses being unable to attend, which leads to exchanges, shifts, and changes to duty schedules. This research recommendation requires conducting longitudinal studies to analyze the long-term impact of workload factors on nurse health, service quality, and patient outcomes. Meanwhile, the novelty in this research lies in the direct impact of workload on patient performance and safety, as well as indirect impacts, such as motivation, stress, and nurse job satisfaction.

## REFERENCES

- [1] F. R. Ramadani, R. F. Arifin, and A. Abiyoga, "Hubungan Beban Kerja dan Motivasi Kerja Perawat dengan Kelengkapan Pendokumentasi Asuhan Keperawatan di Ruang Bedah dan Interna RSUD dr. H. Andi Abdurrahman Noor Kabupaten Tanah Bumbu," *Dinamika Kesehatan: Jurnal Kebidanan Dan Keperawatan*, vol. 9, no. 2, pp. 313–327, 2018.
- [2] R. Prima, S. Oktaini, and S. A. Putri, "Hubungan Beban Kerja Dengan Kinerja Perawat Pelaksana Di Ruang Rawat Inap Rumah Sakit," *Media Bina Ilmiah*, vol. 15, no. 4, pp. 4319–4326, 2020.
- [3] D. M. Halawa, T. P. Nadapdap, and M. Silaen, "Kinerja perawat di ruangan rawat inap Rumah Sakit Bhayangkara Tingkat II Medan ditinjau dari kompetensi, motivasi dan beban kerja," *Jurnal Prima Medika Sains*, vol. 2, no. 2, pp. 42–51, 2020.
- [4] A. N. Tilley, "Registered Nurses and The Culture of Nursing Burnout in a Canadian Surgical Burn Unit," Calgary, 2019.
- [5] I. Gillis, "Cognitive workload of train drivers," in *People and Rail Systems*, London: CRC



- Press, 2016, pp. 115–126.
- [6] U. L. Safitri, B. Widagdo, and K. R. Novianti, “The Influence of Work Motivation and Workload on Employee Performance with Job Satisfaction as a Mediation Variable,” *Jurnal Manajemen Bisnis dan Kewirausahaan*, vol. 2, no. 02, pp. 120–128, 2022, doi: <https://doi.org/10.22219/jamanika.v2i02.21964>.
  - [7] T. I. Pujiyanto, S. Suprihati, N. Nursalam, and A. Ediyati, “Improving nursing work services through development model of quality of nursing work life,” *Jurnal Ners*, vol. 12, no. 2, p. 212, 2017.
  - [8] D. Retnaningsih and D. Fatmawati, “Beban kerja perawat terhadap implementasi patient safety di ruang rawat inap,” *Jurnal Keperawatan Soedirman (The Soedirman Journal of Nursing)*, vol. 11, no. 1, p. 44â, 2016.
  - [9] S. Nurjanah, “Analisis Beban Kerja Tenaga Perawat di Instalasi Rawat Inap Rumah Sakit Umum Daerah (RSUD) Kota Kendari Tahun 2016,” *Jurnal Ilmiah Mahasiswa Kesehatan Masyarakat Unsyiah*, vol. 2, no. 5, pp. 1–11, 2017.
  - [10] I. Hariyadi and Q. Aini, “Global Trends in Key Hospital Performance Indicators: A Decade of Research Insights (2014-2023),” *Journal of Angiotherapy*, vol. 8, no. 7, pp. 1–13, 2024, doi: <https://doi.org/10.25163/angiotherapy.879701>.
  - [11] E. Nora and S. Sopiah, “Review Of The Scoping: The Value Of Diversity Management In Preventing Deviant Behavior At Work,” *International Journal of Education, Language, Literature, Arts, Culture, and Social Humanities*, vol. 1, no. 2, pp. 1–13, 2023.
  - [12] C. Ye, “Bibliometrical analysis of international big data research: Based on citespace and vosviewer,” in *2018 14th International Conference on Natural Computation, Fuzzy Systems and Knowledge Discovery (ICNC-FSKD)*, 2018, pp. 927–932.
  - [13] S. Hamid, A. U. Malik, I. Kamran, and M. Ramzan, “Job satisfaction among nurses working in the private and public sectors: a qualitative study in tertiary care hospitals in Pakistan,” *Journal of multidisciplinary healthcare*, vol. 7, no. 1, pp. 25–35, 2013.
  - [14] C. Phillips, “Relationships between workload perception, burnout, and intent to leave among medical–surgical nurses,” *JBHI Evidence Implementation*, vol. 18, no. 2, pp. 265–273, 2020, doi: 10.1097/XEB.0000000000000220.
  - [15] M. T. Utomo *et al.*, “Nurse workload, missed nursing care, and the contributing factors in the Neonatal Intensive Care Unit in a limited resource setting: A case from Indonesia,” *F1000Research*, vol. 11, p. 468, 2022.
  - [16] T. L. Jones, P. Hamilton, and N. Murry, “Unfinished nursing care, missed care, and implicitly rationed care: State of the science review,” *International journal of nursing studies*, vol. 52, no. 6, pp. 1121–1137, 2015.
  - [17] C. Ahlstedt, C. E. Lindvall, I. K. Holmström, and Å. M. Athlin, “What makes registered nurses remain in work? An ethnographic study,” *International journal of nursing studies*, vol. 89, no. 4, pp. 32–38, 2019.
  - [18] V. Todaro-Franceschi, *Compassion fatigue and burnout in nursing: Enhancing professional quality of life*. New York: Springer Publishing Company, 2024.
  - [19] P. Griffiths *et al.*, “Nursing workload, nurse staffing methodologies and tools: A systematic scoping review and discussion,” *International journal of nursing studies*, vol. 103, no. 1, p. 103487, 2020.
  - [20] K. F. Barahama, M. Katuuk, and W. M. Oroh, “Hubungan beban kerja dengan kepuasan kerja perawat di ruangan perawatan dewasa rsu gmim pancaran kasih manado,” *Jurnal Keperawatan*, vol. 7, no. 1, 2019.
  - [21] A. K. Worang, A. J. M. Rattu, and T. Kaunang, “Faktor-Faktor Yang Berperan Terhadap Beban Kerja Perawat Di RSUD GMIM Tonsea Airmadidi Di Era Pandemi Covid 19,” *Jurnal Kesehatan Medika Saintika*, vol. 13, no. 1, pp. 244–258, 2022.
  - [22] M. Bahadori, R. Ravangard, M. Raadabadi, S. M. Mosavi, M. G. Fesharaki, and F. Mehrabian, “Factors affecting intensive care units nursing workload,” *Iranian Red Crescent Medical Journal*, vol. 16, no. 8, pp. 1–7, 2014, doi: 10.5812/ircmj.20072.



- [23] P. R. Kusumaningrum, E. Rusminingsih, and R. N. Jayadi, "Hubungan Beban Kerja Dengan Tingkat Stres Kerja Perawat Di Instalasi Gawat Darurat," *Jurnal Kepemimpinan Dan Manajemen Keperawatan*, vol. 5, no. 1, pp. 31–37, 2022.
- [24] E. Erlina, A. Arifin, and A. U. Salamah, "Pengaruh beban kerja terhadap kinerja perawat di instalasi rawat inap RSUD Labuang Baji Makassar," *Jurnal Kesehatan Masyarakat Maritim*, vol. 1, no. 3, 2018.
- [25] H. Wei, K. A. Sewell, G. Woody, and M. A. Rose, "The state of the science of nurse work environments in the United States: A systematic review," *International journal of nursing sciences*, vol. 5, no. 3, pp. 287–300, 2018.
- [26] E. Cho *et al.*, "Effects of nurse staffing, work environments, and education on patient mortality: an observational study," *International journal of nursing studies*, vol. 52, no. 2, pp. 535–542, 2015.
- [27] A. Driscoll *et al.*, "The effect of nurse-to-patient ratios on nurse-sensitive patient outcomes in acute specialist units: a systematic review and meta-analysis," *European journal of cardiovascular nursing*, vol. 17, no. 1, pp. 6–22, 2018, doi: <https://doi.org/10.1177/1474515117721561>.
- [28] A. M. Aldosari *et al.*, "The Impact Of Nurse-To-Patient Ratios On Patient Outcomes," *Journal of Namibian Studies: History Politics Culture*, vol. 31, no. 3, pp. 453–463, 2022, doi: <https://doi.org/10.59670/enda0f05>.
- [29] W. H. Organization, *Digital health platform handbook: building a digital information infrastructure (infostructure) for health*. New York: World Health Organization, 2020.
- [30] M. Senbekov *et al.*, "The recent progress and applications of digital technologies in healthcare: a review," *International journal of telemedicine and applications*, vol. 2020, no. 1, p. 8830200, 2020.
- [31] R. A. Alshehri and A. T. Alanazi, "Asthma Patients' Use of Cell Phone Features and Their Willingness to Use Them for Self-Management," *Cureus*, vol. 14, no. 3, 2022.
- [32] D. L. McBride and S. A. LeVasseur, "Personal communication device use by nurses providing in-patient care: Survey of prevalence, patterns, and distraction potential," *JMIR human factors*, vol. 4, no. 2, p. e5110, 2017.
- [33] T. Manyazewal and M. C. Matlakala, "Beyond patient care: The impact of healthcare reform on job satisfaction in the Ethiopian public healthcare sector," *Human Resources for Health*, vol. 15, no. 1, 2017, doi: 10.1186/s12960-017-0188-1.
- [34] H. Inegbedion, E. Inegbedion, A. Peter, and L. Harry, "Perception of workload balance and employee job satisfaction in work organisations," *Heliyon*, vol. 6, no. 1, 2020.
- [35] A. Miller, M. Balapuria, and M. M. M. Sesay, "Facilitating project success by eliminating interpersonal conflicts," *Journal of Information Technology and Economic Development*, vol. 6, no. 1, p. 41, 2015.
- [36] D. E. Guest, "Human resource management and employee well-being: towards a new analytic framework," *Human Resource Management Journal*, vol. 27, no. 1. pp. 22–38, 2017, doi: 10.1111/1748-8583.12139.
- [37] C. Duffield *et al.*, "Nursing staffing, nursing workload, the work environment and patient outcomes," *Applied nursing research*, vol. 24, no. 4, pp. 244–255, 2011.
- [38] L. E. Lines, A. E. Hutton, and J. Grant, "Integrative review: nurses' roles and experiences in keeping children safe," *Journal of advanced nursing*, vol. 73, no. 2, pp. 302–322, 2017.