



(REVIEW ARTICLE)



A scoping review protocol of adequate staff allocation for new nurses in the critical care unit in an Arab country

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Abstract

Introduction: This review delves into the perspectives and attitudes of new nurses regarding patient safety as they transition to another country and professional practice. Offering valuable insights into their learning experiences within intensive care environments. It emphasizes the essential need for robust training programs that effectively prepare nurses transitioning into intensive care units (ICUs). This is to address the issues of insufficient staff allocation for new nurses in an organization by concurrently conducting a database search, a grey literature search, and a key informant survey.

Methods: The goal is to address the issues associated with insufficient staff allocation for new nurses in an organization by conducting a simultaneous search of databases, grey literature, and key informant interviews. The Preferred Reporting Items for Systematic Reviews and Meta-analysis extension for scoping reviews (PRISMA-ScR) will be used to assist with reporting in this scoping review procedure.

Results: Data will be analyzed systematically and will be presented in a descriptive narrative format.

Conclusion: The proposed scoping review is to identify, understand, and map the literature on inadequate staff allocation for new nurses in the critical care unit. It is anticipated that the results of a scoping review will inform policymakers of healthcare facilities. And will be a basis that could help nursing management in transitioning nurses to ensure standard high-quality, and patient-safety care.

Keywords: Inadequate Staff Allocation; New Nurses; Critical Care Unit; Patient Safety; Nursing Management

1. Introduction

Countless nurses are graduating and having the license of registered nurses from different countries. They were embedded with knowledge and skills from their undergraduate level. They were exposed to the clinical settings under the supervision of their clinical instructors. However, Stewart, stated that new nurses were overwhelmed, biopsychosocial fatigued, and tended to forget things easily (Stewart, 2021). According to the study, critical care is a field that provides the needs of individuals with serious health conditions that are real or possibly fatal organ dysfunction. These are patients that require multiple treatments, medications such as inotropes and sedation, needs of mechanical ventilator or artificial life support. Complicated environments and the lack of ability to manage equipment add to stress for healthcare workers who render advanced care. Next, as such, critical care nurses are required to have adequate knowledge and skills to meet the needs of handling critically ill patients (Alhussin, et al., 2022) Stewart emphasized in her study that, novice nurses found that working in the acute care unit was a difficult experience considering they were mandated to learn different skills and to be familiar with the working environment in a short period of time (Stewart,

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2021). Lack of experience in clinical settings and exposure could result in a high risk of becoming subclinical and being unable to properly assess the patient such as deterioration, time management, and finishing tasks over standard care and safety of the patient (Murray, Sundin, & Cope, 2019). Nurses who were forced to relocate their units and specialty to different units such as the COVID-19 unit were mixed with undesirable feelings in the beginning, a two faced state while working. However, in the end, the sense of development as an individual, as a team, and as a nurse is priceless. (Danielis, et al., 2021). Because they lack patient safety expertise, recently graduated nurses experience patient safety problems. Intensive care unit nurses, in particular, tend to patients who are in severe condition, which makes it challenging for new nurses to retain patient security. As a result, new nurses working in the intensive care unit need to have their patient safety competencies improved (Jung, et al., 2023).) After finishing the preceptor shift and working alone without the support of a more experienced nurse they were committed to delivering standard care but they were honest and aware that they sometimes compromise the care that they provide for the patient (Kaldal, et al., 2023). In contrast to the statement, Daniel reported that dealing with a new experience for new nurses will provide a great opportunity to excel in clinical practice. Nevertheless, nurse leaders should consider the lack of knowledge and skills in handling critically ill patients (Danielis, et al., 2021). Jung together with her research team strongly stated the need for improvement in safety competency for new nurses especially those working in critical care units. Increasing number of occurrences of patient safety incidents specifically in acute care units new nurses found it difficult to sustain standard care and patient safety (Jung, et al., 2023).

The main objective for the proposed scoping review is to identify, understand, and map the literature on inadequate staff allocation for new nurses in the critical care unit. It is anticipated that the results of a scoping review will inform policymakers of healthcare facilities. And will be a basis that could help nursing management in transitioning nurses to ensure standard high-quality, and patient-safety care.

1.1. Aims

- To determine which level of patients in the ICU should be assigned to new nurses.
- To identify the effect of Inadequate staff allocation for new nurses in the critical care unit.
- To understand the experiences of new nurses during the transition phase in handling a high-acuity patient.

2. Methodology

A scoping review method was chosen because it aims to outline various types of evidence on the area of interest and the gaps for ongoing research. This protocol is a scoping review of literature reporting on inadequate staff allocation for new nurses working in the critical care unit in an Arab country. The suggested scoping review will be carried out using the six-step methodology described in Arksey & O'Malley. This strategy will outline the goals, procedures, and distribution schedule for the review. The sources of evidence, data extraction, and presentation methods, as well as the inclusion and exclusion criteria that will be used. Identify the research question in developing the protocol review question, the Population, Concept, and Context "PCC" mnemonic will be used as a guide to ensure that the question is clear and that the topic of the scoping review was efficiently addressed. The main research question is "How does inadequate staff allocation for new nurses in critical care unit affect standard care and patient safety?" The research sub-questions are: Which patient is significant for new nurses to handle in the critical care unit? What are the experiences of new nurses handling high-acuity patients in the critical care unit?

2.1. Identify relevant studies

To find relevant material, many databases will be searched, including EBSCO Host, EMBASE, Cumulative Index to Nursing and Allied Health material (CINAHL), Medline (Ovid), Google Scholar, Cochrane Library, and PubMed. The search method that will use the following keywords and phrases singly and then in combination: "*Inadequate Staff Allocation*" Or "*New Nurses*" Or "*Critical Care*" Or "*Arab Country*", Or "*Experiences*" or "*Inadequate*", or "*Adequate*" or "*ratio*" "*Nurse-patient ratio*". The title and abstract of the identified papers will be analyzed to provide a list of keywords and phrases from this search. Lastly, a manual search of the article bibliographies and reference lists will be conducted to find more pertinent research.

2.2. Selection of Eligible Studies

Title and abstract screening will be guided by the PEO framework. Further eligibility criteria will ensure that the content of the included studies is relevant to the research question.

Table 1 A PEO framework for eligibility of Studies

Criteria	Determinants
P- Population	New nurses, ICU nurses
E- Exposure	Arab country, intensive care unit
O- Outcomes	Perspective, Views, Opinions, experiences, attitude

2.2.1. Inclusion Criteria

For studies to be included, they must meet the following criteria:

- New nurses working in critical care unit
- Articles that were published prior 2019
- Qualitative and Quantitative studies
- Nursing management for staff allocation
- Nurses in an Arab country

2.2.2. Exclusion Criteria

Studies will be excluded if they have any of the following characteristics:

- Studies that do not include participants
- Participants have done their experience outside the Arab country
- Studies where full-text articles cannot be obtained.
- Studies that are not written in the English language.

The quantity of records retrieved from each database will be recorded, and all records retrieved will be exported to an online bibliographic manager, such the most recent version of EndNote, if possible. As an alternative, records will be filtered as they are retrieved, choosing abstracts and titles that support the goals of the review to be exported to EndNote in order to streamline deduplication across all sources. The titles and abstracts of the remaining records will be separately checked by two review writers. Any disagreements that arise during the research selection process will be settled by discussion or, if necessary, by consulting a third review author. As stated in the PRISMA extension for Scoping Reviews recommendations, a Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram will be used to document and demonstrate the number of data eliminated and the reasons for their exclusion.

2.3. Charting the data

To guide the extraction of relevant data from the listed sources, a specifically created data charting form that was approved by all review authors will be used. The following fields will be included in the extracted data.

Table 2 Data charting form

Author, Date and Country	Aim of the study	Setting and Sample	Design and data collection	Results

3. Collating, Summarizing and Reporting the Results

Data will be analyzed systematically and will be presented in descriptive narrative format.

4. Conclusion

Nurses lack experience in clinical settings and exposure is high risk of being subclinical and being unable to properly assess the patient. The results of this study may use to serve as a knowledge and guidance for staff nurses and the management of patients' assignment for new nurses.

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