## Safe Staffing in Nursing: A Concept Analysis

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### ABSTRACT

**Background**: The concept of safe staffing in nursing has been ubiquitous in the profession since the history of time; and it is deemed pivotal in providing safe, quality and evidence-based Care to healthcare consumers. A plethora of nursing groups' definitions of "safe staffing" vary widely, suggested safe nurse-patient ratio, policies, and regulations. Staffing pattern greatly impacts the capability of nurses to provide quality, safe, and holistic Care in all practice settings. Therefore, safe staffing must be well defined to cater for the multifaceted process of nursing care.

**Aim**: This concept analysis seeks to standardize the definitions of the concept safe staffing out of gathered evidence-based studies, research, and scholarly articles and journals. In addition, the researchers also seek to clear the meaning of the concept and its usage within the field of nursing profession.

**Method:** This concept analysis utilized the concept analysis of Walker and Avant's (2019). The 8-steps which was modified from the classic concept analysis by Wilson's (1963) was used to investigate how the concept safe staffing is defined in the current bodies of knowledge.

**Conclusions:** Safe staffing among nurses is a critical health policy issue about which there is broad agreement on an abstract level (that nurses are an important component of the healthcare delivery system and that nurse staffing influences and affects safety), but little agreement on what research data has established and what research data has not established, and active disagreement about the best policy directions to protect public safety.

**Keywords**: safe staffing, optimal staffing, concept analysis, Avant and Walker, appropriate nurse staffing, adequate staffing, staffing effectiveness

## Introduction

The concept of safe staffing in nursing has been ubiquitous in the profession since the history of time; the plethora of nursing institutions'definitions of safe staffing varies widely; safe nurse-patient ratio, policies, and regulations. The International Council of Nurses (2018) defined "safe staffing" by having a suitable number of available nurses throughout the continuum of Care.

Safe staffing in nursing is crucial in delivering safe, quality care, which massively impacts care outcomes to healthcare customers. The role of nurses is imperative in the healthcare continuum; they attend to the clients from admission up to discharge. The staffing pattern greatly impacts the capability of nurses to provide quality, safe, and holistic Care in all practice settings. Therefore, safe staffing must be well defined to cater to nursing care's multifaceted process.

Right staffing of nurses is thought to improve nursing intervention in ascertaining, hence hindering medical errors and detrimental events from occurring in nursing practice. As a result, this increases bedside hours and direct patient care. Conversely, according to Haegdorens, et al., (2019) scarcity of nurses on the floors, which in return, has a significant influence on missed nursing care.

Furthermore, The National Health Service England (2016) developed 10 commitments to narrow 3 gaps: optimum health, high care standards, and efficient financing. Consequently, NHS aims to make the available workforce at the right circumstances. Moreover, NHS emphasized that staffing in nursing midwifery should be at a level that can deliver high-quality nursing and compassionate Care to health consumers.

However, the staffing issue is a complex problem not impossible to solve. Hospital administrations and nurse managers must consider safe staffing an asset in the ever-changing healthcare system. According to Clarke & Donaldson (2008), current studies have concluded that nursing care has significant and immediate implications to the service-satisfactions of healthcare customers; there is an inverse relationship between the number of hospital workforce and adverse events in the wards. This only demands the nursing profession to utilize dynamic solutions to cater to the ever-changing healthcare system.

The researchers recognized the need to properly define the concept of safe staffing as it will be a vital building block in providing quality nursing care to healthcare customers. Furthermore, this concept analysis aimed to make available definitions regarding the concept of safe staffing out of gathered evidence-based studies, research, and scholarly articles and journals. In addition, the researchers also seek to clarify the meaning of the concept and its usage within the field of the nursing profession.

**Definitions and Uses of Concept**

The words safe and staffing are often used independently, with definitions that stand alone on their own. According to Merriam-Webster (n.d.), the term safe may be defined as ""ree from risk or harm; secured from threat of danger, harm, or loss"" Staffing, on the other hand, is defined as the process of deciphering and employing qualified people for specific positions within an organization or company through evaluation of oone'sskills and knowledge (Toppr, n.d.). Nevertheless, when used together, these two words create a whole new definition, especially in the field and practice of nursing.

Safe staffing is defined as always having an appropriate number of available nurses across the care continuum (ICN, 2018). With this, they further explained that a suitable fusion of nursing education, skills, as well as experience, all make up the vital qualifications needed by staff nurses to be able to ensure that in the process of attending to the different needs of their patients, quality nursing care is being provided. Furthermore, apart from the qualifications mentioned above, factors such as working conditions and nature of staffing also influence the quality of nursing intervention provided and the nnurses'capacity to accommodate and attend to their ppatients'needs safely and accordingly. Likewise, the idea of safe staffing is perceived to strengthen the health care system, which as a result, leads to improved patient outcomes (CNA, n.d.). Consequently, it is therefore stated that there is a need for both employers and nurse leaders to address staffing issues and promote appropriate employment of nurses based on the healthcare environment or setting.

In the position statement made by the Nursing and Midwifery Council (2016), the concept of safe staffing in nursing is perceived as an integral part of safe and effective healthcare delivery, which must be in tune with meeting ppatients'needs. With this, the headcount and the skills and capability of each available member of staff are significant and consider ancillary staff members apart from nurses and the healthcare setting. Similarly, according to ANA (n.d.), safe staffing is essential to nurses and the entirety of the healthcare system. With this, comes AANA'sbest efforts in providing evidence-based practice policies that can help assure that better health care is provided

for all.  Furthermore, the New York State Nurses Association (2019), safe staffing is achieved when a reasonable nurse-to-patient ratio is implemented (less than the most common 1:8 hospital staffing), leading to lives being saved and, as a result, can help the healthcare system save money or maximize the use of its resources better.  For National Nurses United (2021), the concept of safe staffing is believed to acknowledge the need for setting the least workforce of nurses catering to a particular number of healthcare customers to provide nursing care safely while delivering adjustments to nurse staffing based on patient acuity.

Comparable to this, safe staffing was defined by the National Institute of Correction (2012) as an "Important mandate in providing safety for staff, the public, and the inmates."According to Miller & Wetzel (2012), an effective and efficient approach to staffing effectively increases a jail's ability to provide programs and services, reduces potential liability, and ensures that expensive staff resources are spent wisely.  The NIC is conducting staffing analysis to reveal if the jail staffing is deficient in the following: (1) Number of employees, (2) Wrong type of employee is hired or retained, (3) Ineffective delegation of tasks, (4) Employees are not properly trained, (5) Inefficient schedule of duties.

## Safe Staffing in Nursing Before the COVID-19 Pandemic

Safe staffing in nursing and its use as a concept have been related and linked to many other topics that ultimately express a common goal or endpoint: obtaining and upholding safety for both patients and nurses alike.  Most of these studies focus on defining the relationship or linkage between the nature of staffing and patient outcomes and its effect on the nnurses'end.  The shortage of staffing among nurses has long been an issue discussed without sufficient action being taken to attain resolution.  Prior COVID-19 pandemic, awareness needed to practice safe staffing in nursing have been present as evidenced by a discussion of several implications that have resulted from lack of safe staffing in various studies, one of which is the occurrence of fall among patients which was mentioned in the study of Choi & Boyle (2013) wherein work satisfaction among nurses was revealed to be significantly and inversely related to patient falls.  Similarly, according to Kalisch et al. (2012), nurse staffing affects the rates of fall incidences in that critical Care is not completed when staffing is not appropriate, leading to occurrences of missed care nursing which is one reason why fall among patients happen even though it is a completely avoidable circumstance.  Apart from this, several studies have also discussed nurse staffing. Its implication to the quality of nursing care and patient safety such as that of research by Brooks Carthon et al., (2019) stating of positive integration amid nurse staffing and patient safety wherein the level of staffing greatly influences nurse engagements that likewise affect their capacity to perform timely and accurate assessments which are essential in determining the appropriate nursing care needed by the patient to achieve positive health outcomes.  According to Clendon & Gibbons (2015), long working hours such as 12-hour shifts among nurses can potentially directly affect the occurrence rate of lapses in nursing care.  Approaching this matter on a positive note, numerous researches have discussed the positive effect of safe staffing on patient outcomes and the quality of nursing care being provided, the study by Duffin (2014) states that with the increased number of nurses available to render Care particularly to critically ill patients, more time is spent bedside that enables nurses to perform timely and accurate assessments that enables prompt resolution of signs of health deterioration, therefore resulting into higher survival rates of patients.  Similarly, according to Spetz et al. (2013), among patients with medical-surgical complications, patient mortality

significantly improved alongside with the reduced length of hospital stay, which was observed following an increase in nurse staffing. In the same fashion, the study by West et al. (2014) further solidifies these claims. It states that the survival of critically ill patients has been associated with the increase in availability of medical staff and nurses alike. Undeniably, the call for re-evaluation and re-organization of our present healthcare system and practices particularly in the nursing field to ensure safe staffing have been present long before and with the Covid-19 pandemic happening and putting greater affliction to the already faulty staffing practices, the emphasis on such need has become even more loud and clear.

**Safe Staffing in Nursing in the Course the COVID-19 Pandemic**

The tribulation that the COVID-19 pandemic brought about has immensely highlighted the role and importance of nurses in the healthcare system. Being the ones that spend the greatest number of hours involved with patient engagements through bedside nursing, nurses truly play an indispensable part in healthcare provision, particularly even more so during the time of pandemic. With the increased workload affecting staffing shortages among nurses even further, there is greater emphasis surrounding safe staffing as a concept to be practiced and promoted. There are limited studies pertaining to safe staffing in nursing during the time of COVID-19, however, a few such as the study of Andel et al. (2021) discusses how consideration for the cognitive load among nurses as well as each sstaff'scapacity for stress and coping mechanisms all play an important role promoting safe staffing conditions despite the major workload that tests the strength of healthcare systems and its personnel alike during the time of pandemic. Moreover, according to Griffiths (2021), providing nurses with the necessary tools needed to be able to execute their roles such as sufficient healthcare assistants apart from registered nurses, can help ensure that the workload is not excessive in as much as careful and thoughtful consideration of team dynamics and interpersonal relationships among staff can provide psychological support that aid in the promotion of safe staffing during these trying times. As for the study by Lasater et al. (2021), it is mentioned that the impact of the pandemic has further highlighted a public health representation of the value of healthcare system resources adequacy in addition to the capacity to look after and foster the healthcare wworkers'well-being (i.e., prevention of nurse burnout) to achieve delivery of quality health care. To be able to attain this, proactive measures must be done such as changes in the staffing levels not only within different hospital systems, but through a more substantial approach parallel to legislative modifications that can provide more unified and governing protection geared towards the healthcare system, its workers, and the patients they provide service to similar to the nursing mandates passed in California.

Recent research by Bourgeault et al. (2020), on a more positive note, expresses how the COVID-19 pandemic has become an eye-opener that created opportunities to further enhance and develop our present healthcare system into a more sustainable one through the different approaches used to respond and adapt to the heightened workload. Factors such as task shifting and safe skill-mixing wherein some of the nnurses'tasks are delegated under the rightful supervision to other healthcare workers such as nurse aids and midwives, recalling inactive healthcare workers, access and provision of adequate and standardized personal protective equipment (PPE), along with

expansion of virtual healthcare are some of the ways that can assure a working environment that promotes the safety of not only its clients but healthcare providers such as nurses.

Lastly, to elucidate the concept of safe staffing during the pandemic, a position statement made by ANA (n.d.) states that during such a period where there is a need for nurses to continuously care for the critically ill patients that can cause both physical and mental exhaustion, nurses should have the right to declare or express their capacity and limitations as to how much care they can provide in such a manner that they can take care of themselves as well. Therefore, it is safe to assume that the sustainability and safety of staffing during the pandemic lies within the security of our care providers and health practitioners' health and well-being.

**Methods**

Concept analysis was used due to its specified purpose which entails synthesis of current views of a concept and outlining the differences and similarities of the concept usage across all disciplines. As a result, this will bridge the gaps among the bodies of knowledge or discrepancies amongst disciplines.

This study utilized the method of Walker & Avant (2019) concept analysis. This is an 8-step model specifically formed for the benefit of the nursing field, which was based on Wilson's work. Walker and Avant's steps in conducting concept analysis are not absolute sequential, but rather iterative, and require revisions in prior steps due to the data arising from a later one. The repetition of the sequence is to be expected, hence will result in more exact and detailed analysis.

Methodology from Walker & Avant (2019) has 8 steps that includes namely: (1) select the concept for analysis; (2) determine the aims of analysis; (3) the review of related literature and bodies of knowledge; (4) determine defining attributes based on the literature review; (5) construct or identify a model case; (6) identify the contrary, borderline, related, invented, and/or illegitimate cases; (7) identify antecedents and consequences related to the concept; and (8) define empirical referents.

The researchers preferred the concepts of safe staffing and scrutinized every detail that surrounded these concepts; thus, accomplishing the first step. Second was to define the intended study purposes, to generate a standardized definition of the concept of safe staffing. Myriads of areas in the safe staffing literature are relatively undefined and unstandardized. Third, identification of the usage of the concept.

The succeeding steps (step 4 through 8) demanded the researchers arrange multiple online meetings to categorize the concepts gathered into the following classes of delineating attributes, antecedents, and consequences. Lastly, in formulating the empirical referents- measurable ways demonstrate safe staffing, literature was further examined.

## Data Collection

The data collection in this concept analysis utilized the method of Avant and Walker (2019), which relies on the gathered scholastic studies and documents that will support the concept. The heart of the study was initially defining attributes, then the related cases, case studies, model cases, contrary cases, and borderline cases. It also includes the cconcept'santecedents, consequences, and empirical referents.

At first, the researchers had trouble finding existing literature about the study. There was also no existing concept analysis prior to this study focusing on safe staffing. Therefore, the researchers utilized words and phrases that are synonymous with the concepts of safe staffing. These words are optimal staffing, appropriate nurse staffing, adequate staffing and staffing effectiveness. After which, the researchers do an in-depth review which includes journals, journal articles, and dictionaries.

Then, conducted searches via online platforms such as PubMed/ Medline, CINAHL, the Google Scholar, EBSCOhost, and ResearchGate using terms such as optimal staffing, appropriate nurse staffing, adequate staffing and staffing effectiveness. The initial search yielded 2,348 articles that were abstracted for topics of safe staffing. This resulted in 27 scholastic articles as a final sample. After which, title and abstract screen were facilitated, 2,321 articles and studies were excluded due to the following reasons: duplication, not in full text, English is not the main language used in the study, not relevant to the study of safe staffing in nursing.

## Defining Attributes

Defining the attributes of a concept is the highlight of its analysis. The properties of a thought set it apart from other conceptions of a similar nature. According to Avant and Walker (2019), The defining attributes, which list clusters of attributes that are regularly related with the concept being researched, are at the heart of concept analysis.

The defining attributes of safe staffing (6 defining attributes) are *nurse competency*, *nurse-sensitive quality outcomes, nnurse'sactive role in staffing decision, complexity and stability of the patient, workload, and available resources* and *technology*.

Nurse competency is the first defining attribute of safe staffing. According to ANA (2012), staffing in nursing must be grounded on the extent of competencies of nurses that will be part of a care situation. Further, the organization must be specific and require credentials, qualifications, and training of registered nursing staff. The experience and skills of nurses vary depending on the education level, length of experience, specialization on the unit, and the capability of performing skills. This individuality significantly affects the nnurse'samount of work with the whole unit; therefore, it must be considered in staffing decisions and patient assignments (Paulsen, 2018).

Focusing on nurse-sensitive quality outcomes, measurable variables capture Care or are most affected by nursing care (ANA, 1996). As an elucidation, these are variables dependent on nnurses'presence or absence, which directly links to the client's outcomes (Campbell & Foley, n.d.).

Nurses' active role in staffing decisions must also be considered an essential attribute in the concept of safe staffing in nursing. As nurses embody several roles with every work that they engage in, decision-making is also a requisite that is often being brushed off or set aside. Nurses' role in decision-making is not limited to that which involves patients, but with staffing and workplace conditions as well. According to ANA (2019), Nurse staffing principles state that at any level, all nurses are entitled and must play an active role in nurse staffing decisions. Through this, it is made known that nurses' decisions matter and are being considered, which leads to satisfaction and aids in creating a better and safe working environment.

Patient acuity is an important attribute of safe staffing in nursing where the nature of staffing is also dependent on the needs of the clients being cared for. The workload and demand for nursing care rely heavily on the patients' stability and/or complexity in a particular unit or care setting. According to the study of Juvé-Udina et al. (2020), missed care nursing may be linked to patient acuity and staffing. In contrast, changes in the healthcare model must be dependent on patient understanding to determine the needs of each nursing unit and be able to supplement it with an appropriate number of staff nurses that helps reduce instances of missed care reports or other similar consequences.

According to Alghamdi M. G. (2016), the word "nursing workload" is frequently used in medical literature, however it is rarely defined precisely. Nursing workload is further subdivided into 5 primary characteristics, duration of nursing intervention, competency of nurses, the weight of physical labor, the severity of the direct patient care, and complicatedness of nursing care needed. Nurse managers must address workload challenges in light of the true nature of nursing jobs to boost nurse productivity, satisfaction, turnover, and work stress and provide adequate staffing to meet patient care demands.

While technology can improve Care, it also has the potential to cause harm. Technology has been described as both a component of the problem and a part of the solution for safer health care. Some observers warn that the adoption of new technologies could lead to the introduction of yet-to-be-discovered faults. Time-sensitive data that tracks ppatients'needs for nursing care and nnurses'responsiveness to these needs may be accessible to support evidence-based nurse staffing decisions as health care organizations increasingly implement health information technology. In hospitals and nursing units, care information technologies may provide rich data sources that can be converted into usable data.

With the following attributes as mentioned earlier present, ideal staffing is attained whose primary goal is to ensure the safety and well-being of nurses. In doing so, nurses can embody the various roles they need to provide quality care to their clients that can bring about positive healthcare outcomes as evidenced by minimal occurrences of missed care nursing and timely restoration of the patients they are caring for. With these attributes, sustainability of the healthcare workforce may be achieved, and in doing so, we are creating limitless possibilities for potential developments and evolution in the way health care may be provided, resulting in a healthier society.

**Case Studies**

There is minimal literature and case studies that focus on safe staffing in nursing. Most common related cases are those wherein staffing is linked to patient morbidity, mortality, and omissions in health care provision. In doing so, such research aims to provide awareness that in situations where limited resources particularly in manpower are observed, healthcare provision is being compromised, leading to unfortunate patient outcomes. It is also through such studies whose very nature focuses on the limited staffing among nurses that the people are made aware of the reality being faced by nurses in the workforce, and as to how there is a visibly strong need to call upon actions that can bring about change and ensure safety not only for patients, but for nurses as well.

According to Griffiths et al. (2018), the limited number of registered nurses on board may be linked to missed nursing care in the hospital setting, highlighting the importance of nurse staffing adequacy. Similarly, in the study of Glendon & Gibbons (2015), it is shown that ppatients'survival rate among those needing critical Care significantly improves as the number of nurses increases. Through cases such as those previously mentioned, among others with similarity in focus and nature, it has greatly contributed to the establishment of the concept of safe staffing in nursing in this paper.

**Model Case**

Model cases pertain to the embodiment of the concept being analyzed. Through such a case, the application of the defining attributes is presented through situations that embody the meaning of the concept being discussed. An example is exhibited below. It is an example of the concept's application that exemplifies its distinguishing characteristics (Walker & Avant, 2019).

*Nurse Katrina works as a head nurse in Hospital ABC's Post Anesthesia Care Unit. It is a 9-bed capacity unit that caters to all patients undergoing anesthesia induction, regardless of medical or surgical procedure, minor or significant case classification. One morning, during the shift endorsement, she learned that the night shift staff had to accommodate 7 patients, 2 of which were emergency trauma cases, with one being epileptic and the other hooked to a mechanical ventilator. The rest of the cases for the night were patients post-emergency appendectomy and cesarean section. Despite the bulk of patients being unexpected for the said shift, a workflow was smooth and uneventful as more experienced (senior tenure) nurses are always expected to be part of the graveyard shift schedule.*

*Furthermore, Nurse Katrina always makes sure that all equipment should always be readily available and functional as it dramatically helps alleviate the work demand. There are also support services staff that help the nurses with every shift by ensuring that the medications and other supplies needed are being provided immediately. The workplace maintains its cleanliness and sterility. Consequently, they could turn over their patients safely to their respective rooms following emergence and recovery from anesthesia. One of the more complicated cases was safely transferred to the ICU for further monitoring. The head anesthesiologist applauded their efforts during the busy shift and expressed gratitude for working with such a skilled and efficient team. Every monthly performance audit, their unit gets commended for notable staff performance showing a very minimal rate of nurse errors and incident reports and a proper implementation of the hhospital'sinfection control policies, not to*

*mention the positive feedback they receive their patients and their respective relatives. Such acclaim positively affects their unit staff and motivate them to work even better. This is also why all of their staff members have been around for more than five years, not seeking to leave for a different workplace anytime soon.*

*Analysis:* In this model case, it is evident that safe staffing includes nnurses'capability and work experience in as much as giving focus on the number of staff nurses on duty at a specific shift or period. Apart from this, available resources and support staff also play an essential role in ensuring safe staffing that benefits the nurses and leads to a positive patient outcome.

## Related Case

Related cases are examples of concepts similar to the one being analyzed but do not possess the entirety of the distinguishing characteristics that define the concept (Walker & Avant, 2019). Such cases exhibit similarity in the sequelae following the use of the given concept but do not contain identical defining attributes. An example is presented below.

*Hospital XYZ is relatively new in the healthcare industry. Since its establishment and start of operations, it has been made clear that a part of their main focus is ensuring that their facility is recognized for its top-tier healthcare services. Because of this, they made it a point to provide a part of their budget for their staff development and improvement of facilities and hospital technology. Hospital XYZ believes that their most significant asset lies in the workforce, which is why they provide continuing education opportunities for senior tenure nurses interested in acquiring their masters or doctorate. For their other staff, seminars and continuing professional development lectures are free. Aside from this, the management came up with quarterly recognition for the best performing units of the hospital while incentives are being given to exemplary employees during every year-end. Hospital XYZ understands that running a hospital is leaning more on the business side. It will not perform as expected if it is not equipped with a supportive, dedicated, and loyal workforce that makes hospital operations run as smooth as possible, bringing about contentment in their clients that will, in turn, provide good feedback and make referrals to the institution.*

*Analysis:* The above scenario is a related case because in the same manner that the concept of safe staffing in nursing aims to bring about safety for both patients and nurses, the marketing strategy of Hospital XYZ similarly reaches an endpoint that is beneficial for both patients and nurses. What sets it apart from the model case is that while the main focus of safe staffing's defining attributes is the health and welfare of nurses and patients, in this related case, the driving force of Hospital XYZ is profit gain and seamless business operations obtained through ensuring that their workforce will remain contented with working well for their company which in turn, results to a positive patient outcome as well.

## Borderline Case

Borderline cases are examples or instances that have most but not all of the defining characteristics that the concept embodies. They may have most or even all of the distinguishing qualities, but one of them may be significantly different, such as the length of time or intensity of occurrence. (Walker & Avant, 2019).

*Nurse Pedro had recently acquired his nurse license just before the pandemic started. Because the demand for staff nurses became heightened during the COVID-19 pandemic, Nurse Jacob decided to apply for a position as a staff nurse at a secondary government hospital. His application was accepted, and he was assigned as a staff nurse in the municipal hhospital'scovid facility where they cater to around 80 patients at a time, with only 2 nurses on duty per shift. Despite the challenging nurse-patient ratio, the head nurse makes sure that a senior tenure nurse is always on board every shift to facilitate an organized workflow for the unit. Likewise, a nursing aid is also on duty during the morning and afternoon shifts which is a big help to the staff nurses.*

*Furthermore, all of the monitoring equipment beneficial to patient care is present in the work area for their use, which has undoubtedly decreased their workload. Despite the high work volume and demand, and staff shortage, they can cater to all their patients properly, ensuring that each patient's needs are met and are thoroughly assessed. Overall, despite having no other job experience before this employment, Nurse Jacob is very much satisfied with his working environment and feels fulfilled with the duty that he can perform.*

*Analysis:* In this case, it was shown how safe staffing is being promoted and adhered to, despite the lack of manpower and equipment through mindful staffing, ensuring that a senior nurse is present in every work shift. The work experience and the knowledge gained from years of working are significant factors in promoting safe staffing. The senior nurse can guide the other staff nurses who may lack experience as to how patients can be managed efficiently. Working efficiently and developing a clinical eye is a huge advantage that makes up for the other flaws within the work environment, such as staffing shortage and lack of equipment. The circumstances provided in this case show, to a substantial degree, some of defining attributes of the concept of safe staffing. However, discrepancies are still present, which makes it not entirely ideal or adherent to the concept despite achieving a positive patient outcome.

**Contrary Case**
Contrary cases are clear examples of "not the concept" (Walker & Avant, 2019). Through such cases, the defining attributes established are missing in their entirety and is the obverse of the model case. An example is presented below.

*Nurse Ana has been working as an operating room nurse in a private tertiary hospital for three years. Despite having a permanent position in a designated unit, whenever other wards experience staff shortages, OR nurses like Ana are being "pulled out" to temporarily fill in the missing positions in the ward. As work in the said area is entirely different, Nurse Ana finds herself doubtful of the tasks that she can carry out. Working with a ward nurse who has less experience than her, being in the position for only nine months, they struggled during the entire work shift as some of their monitoring equipment were still waiting to be repaired, on top of the fact that the nurse aid for their shift did not report for duty as well. Eventually, their shift ended with them having to provide a written incident report as a patient who was for surgery late in the afternoon ate his lunch, claiming that he was not informed beforehand of the fasting time. The surgery was postponed even though it was supposedly an urgent procedure.*

*Analysis:* In this case, it was shown how safe staffing was not practiced altogether. A ward was left to be managed under the supervision of a nurse with limited work experience and another one

who has more work experience, but in a different area of nursing which has led to the delay of an urgent operation which puts additional risk to the health of the patient. Apart from this, the nursing unit also lacked essential equipment as these are still waiting to be repaired, which has caused an additional workload for the staff nurses on top of the lack of ancillary staff support brought about by the absence of the area's nurse aid. All the circumstances shown in this model are contrary to the ideals and factors being upheld by the concept of safe staffing.

## Antecedents

According to Avant & Walker (2019), antecedents are events or incidents that must occur or be in place prior to the occurrence of the concept. Several studies involved nurse staffing, both as a subject of focus or as part of the variables being studied. For the concept of safe staffing in nursing, before its occurrence, both nurses and patients have dealt with several factors leading to an uprising to call for change and improvement in the welfare status of both parties. A study by Aiken et al. (2002) concluded that high nurse-to-patient ratios, deemed to be an unsafe staffing measure, have led to patients susceptible to a higher risk of mortality as well as increased failure-to-rescue rates while nurses have increased the likelihood to experience fatigue and burnout leading to poor job satisfaction and consequently, a higher staff turnover rate. Similarly, in the study by Griffiths et al. (2018), it has been shown that low levels of nurse staffing have led to the omission of nursing care, which can be the cause of poor patient outcomes and satisfaction. These untoward events for both the nurses and their patients that occurred due to the lack of safe staffing implementation have become a wake-up call leading to the realization that a need for change in the system is made, hence the emergence of safe staffing in nursing.

## Consequences

Consequences are occurrences or situations that occur due to the concepts' occurrence, or, to put it another way, the concept's outcomes (Walker & Avant, 2019). The positive consequences for safe staffing among nurses are exactly the opposite of those as mentioned earlier in the antecedents. Safe staffing decreases the patient's risk of mortality and poor health outcomes and improves their satisfaction with their care. Consequently, on the nurses' end, safe staffing can induce a healthier workspace environment that brings about positivity, confidence, and work satisfaction, reducing fatigue and anxiety and slowing down the staff turnover rate. In California, when a law was passed on to implement a maximum limit to the nurse-patient ratio in 1999, research within the state had shown quantifiably improved patient outcomes (i.e., decline in the number of surgical mortality rate and a reduction of in-patient deaths occurring within 30 days of admission) as nurses can have more direct time engaging with their patients' bedside and properly performing assessments as necessary in promoting more appropriate and relevant nursing care plans (Barrows, 2020).

On the other hand, as a negative consequence of this concept, safe staffing measures have been deemed to be a costly approach from the hospital industry's perspective as implementing this concept entails hiring additional nurses and support services staff likewise, as well as acquiring additional medical equipment necessary in performing patient monitoring and Care. However, this perspective has been debunked through most research and related journals such as that of

Everhart et al. (2013), which showed that among hospitals within the competitive market, positive nurse staffing levels were linked to positive financial performance as registered nurses are regarded as valuable resources that impact a hospital's financial performance. Likewise connecting this to the implementation of safe staffing law in California, it has been known that hospital income heightened significantly after the implementation of the said concept as there were no hospitals recorded to have closed or affected negatively in terms of finances following the concept implementation (Furillo, n.d.).

**Figure 1. Conceptual Framework of Safe Staffing in Nursing**
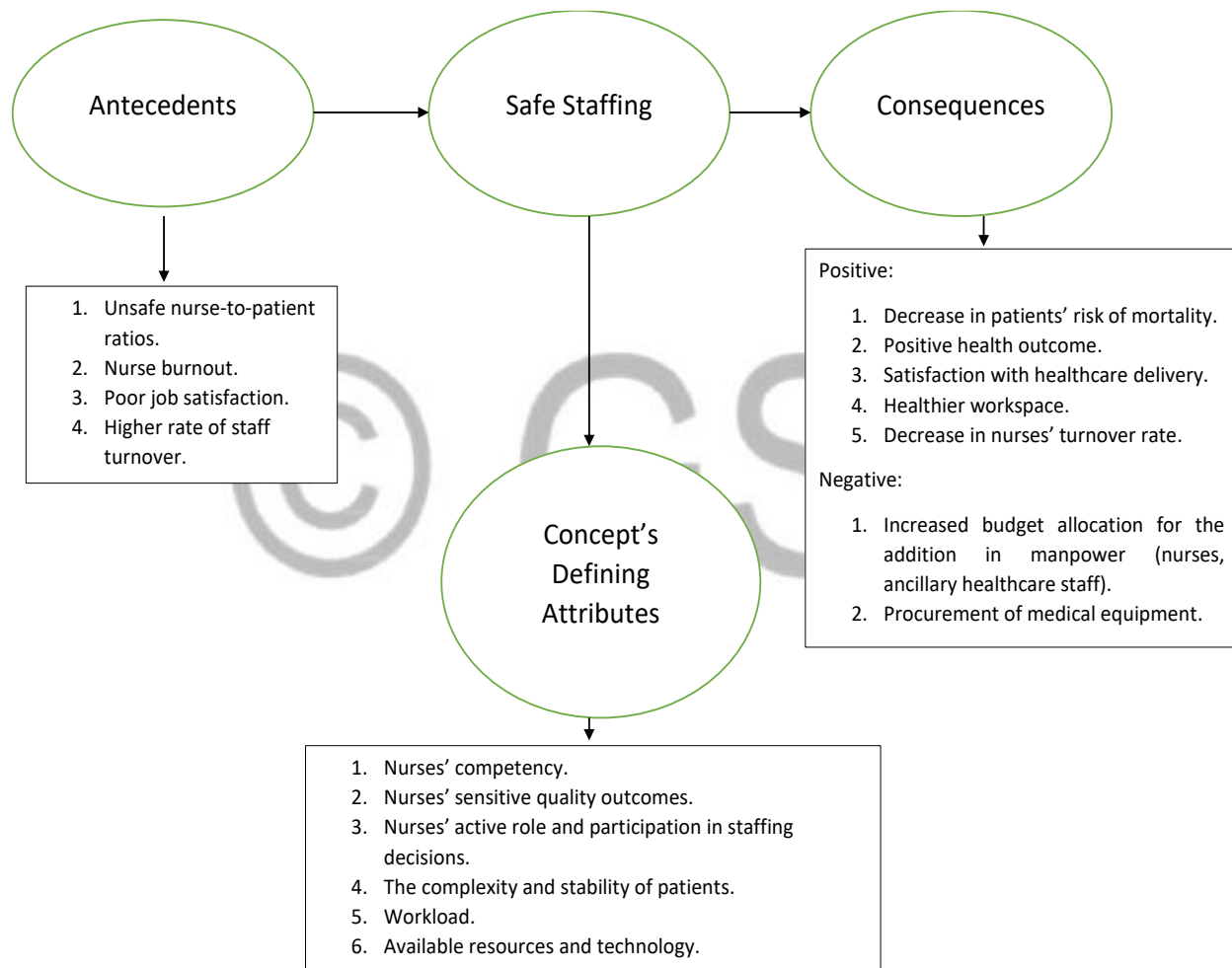


**Empirical Referents**

The penultimate phase in concept analysis is to determine the empirical referents, which are classifications of the presence of certain circumstances and situations that can be linked with the occurrence of the concept itself (Walker and Avant, 2019). Therefore, empirical referents are pivotal in assisting and justifying the concepts in terms of acceptability and correctness by giving

methods to quantify not the existence of the entire concept but rather the defining attributes (Walker and Avant, 2019).

Staffing issues in nursing can bring harmful effects in healthcare. As a result, various accredited nursing organizations formulated ways to solve the issue by digging into its root cause. One of which is the American Nurses Association (2012), which devised the core staffing components in nurses. First, for any healthcare institution to provide optimum and cost-efficient services, administrators must realize the pivotal factor- appropriate staff nurses. Hospital administrators, nurse managers, and leaders are expected to formulate and utilize staffing guidelines with measurable nurse-sensitive outcomes.

Furthermore, RNs are not just the "workforce" of the institution, they must be seen and treated as full partners collaborating with the healthcare team. In line with this, nurses shall have substantive decisions in a staffing pattern of the area. A staffing pattern is identified based on the severity of health needs of the healthcare customers. The cost effectiveness is also considered in providing optimum care services. Aside from that, ANA (2012) also gave 5 principles for nurse staffing, and these are: consumers of healthcare, nurses and the interprofessional team, culture and customs in the workplace, practice environment, and evaluation of the staffing patterns.

Musua, P. et al, (2008) captured the activities of a team in order to define safe staffing levels, in addition found an objective tool that has the capacity in finance allocation and proper staffing decisions. The Workload Indicators Staffing Need (WISN) is a WHO-recommended method that includes the following steps: (1) identifying priority cadres and health facility types, (2) estimating available working time, (3) defining workload components, (4) setting activity standards, (5) establishing standard workloads, (6) calculating allowance factors, (7) determining staff requirements based on WISN results, and (8) analyzing and interpreting WISN results. In addition, Bullo and Ronis of Federal General Hospital (FGH) in Pakistan also utilized the WISN method and led them to conclude that FGH lacked nurses in different areas of the hospitals to fully handle the workload pressure in the hospital.

In the descriptive study of Dantas, et al (2018), they unveil the perception of primary health nurses regarding safe staffing and the analysis resulted in seven thematic categories: (1) The safety of Care, (2) Workload, (3) Training and Professional Development, (4) The quality of Care, (5) Client Characteristic, (6) Organizational environment, (7) Outcomes.

Furthermore, amidst the COVID-19 pandemic, according to CDC (2021), strategies that can assist in the mitigation of healthcare staffing shortages include (1) limiting non-essential procedures and visitations/travel for healthcare providers whose nature of work involves transfer from one facility to another to limit their exposure, (2) addressing the social hindrances that discourage or disables healthcare providers from reporting for duty such as lack of transportation or housing for those who live with family members who are at risk of developing serious complications upon exposure to the virus, (3) provide psychological support to personnel who may experience a physical and mental breakdown from the constant pressure of holding the responsibility of taking Care of people with serious illness with the need to impose isolation. Such strategies are subject to changes and adjustments as the nature of work differs with every setting. These guidelines are to be of help as a guide to ensure that when the nurses and other healthcare

providers carry the heaviest burden and responsibility because of the pandemic, there are still ways to improve and lessen the burden to be able to provide safe and effective Care.

National Quality Board (2018) stated that to guarantee an optimum healthcare service, institutions must provide adequate staff with competent skills. Inversely, NQB specified that at present, the nursing knowledge lacks evidence-based studies which can provide detailed and definite nurse-patient ratio.

As an alternative, creating staffing patterns should be made considering the intensity of Care the patient needs and the competencies and length of experiences of the multidisciplinary team. The National Quality Board devised an operating process on having the right staff. (1) Evidence-based workforce planning, (2) Workforce planning tools, (3) Allowing for uplift, (4) Professional judgment for specific local needs, (5) Benchmarking/ peer review.

## Discussion

Nurses play an important role in ensuring patient safety while delivering direct Care to patients. Safe staffing is critical to the nursing profession and the healthcare system as a whole. Staffing has a significant impact on nurses' ability to provide safe, high-quality Care in all practice settings. Through safe staffing, patient outcomes are improved alongside the provision of a healthier work environment that is considerate of its employees' physical and psychological welfare. For nurses to promote health effectively, they must be the embodiment of good health as well. These can be achieved through actions such as changes in legislature and nurse staffing mandates that can turn this vision into a reality.

The role and contribution of nurses to the healthcare industry are unparalleled, most especially when it comes to bedside care. The amount of time they spend interacting with and assessing the patients makes them a key figure in providing prompt and critical Care through coordination and referrals, being an active communicator that keeps every member of the healthcare team, including the allied services, be updated with the patient's status and other relevant matters pertinent to proving quality health care. Nurses' responsibilities in patient safety include monitoring patients for clinical deterioration, recognizing errors and near misses, comprehending care protocols and recognizing system imperfections and initiating actions to resolve them, identifying and communicating changes in patient condition, and a variety of other tasks. Above all, amidst all the things and responsibilities that nurses act upon, they are also patient advocates – assisting patients in making informed and ethical decisions and protecting the patients' rights essential in facilitating holistic Care.

Contending on diversity in the quality of patient care provided by nurses is at the center of attempts to improve patient care outcomes and maybe at the heart of interpreting conflicts in the nurse staffing literature. To address the enervation within the nursing practice, future research must reflect the involution of nursing assessment, planning, intervention, and evaluation. Finally, future research should examine the relationships between framework, the process, and outcome in nursing practice and patient care.

## Limitations

While there is minimal research directly about and focusing on safe staffing among nurses, concomitant related literature was predominantly used for this analysis. Consequently, it has led to a sample of diverse case studies to conclude. While studies were rigorously validated and conducted, the results are limited by study sample size. As a result, the fundamentals of safe staffing identified in the research are based on descriptive studies that are currently available. It is possible that additional safe staffing may develop in the future as the healthcare industry becomes more comfortable with alternative health care delivery methods and that is more comfortable with patients and the health care team for providing quality of Care. The development of additional safe staffing fundamentals indicates that the healthcare industry is embracing not only alternative safe staffing, quality methods, and management but also developing trusting relationships with other allied healthcare professionals and a willingness to delegate time and consideration to understand the complexity of staffing as a concept on its own, and how it can be applied to promoted health and safety among nurses and their patients.

While there is historical data on safe staffing, there is a lack of data and consistent quality assurance standards connected to staffing in health care. It is possible that the healthcare business is focusing on "how to adopt alternative quality systems" rather than examining the effectiveness of providing quality, safe staffing at this time. Future research will focus on the establishment of safe staffing measures among nurses.

## Implication for Nursing Practice

To function correctly and give Care securely and efficiently, healthcare institutions require an adequate workforce, hence, improving the quality of Care given to healthcare customers while declining nurse fatigue.

In this field, there are still a lot of questions that haven't been answered. As a result, there is an immediate need to investigate nursing-specific care processes linked to safer patient care and more effective interdisciplinary teamwork. Data challenges (the deficiency of metrics and data sources) are a paramount roadblock to effective care delivery. Research hereafter must acknowledge the complexity of the entirety of nurses' roles and responsibilities such as assessment, planning, intervention, evaluation, and advocacy to name a few – all of which influence the elaborateness of staffing and making it a safe practice for both nurses and their patients. Addressing diversity in the quality of patient care provided by nurses is at the center of attempts to improve patient care outcomes and may be at the heart of interpreting conflicts in the nurse staffing literature.

In this contemporary era, intense cost-cutting, adequate staffing levels are necessary to ensure the safety of patients and nurses. Inadequate nurse staffing puts patients at danger and drives nurses away from the field, whereas proper nurse staffing improves nurse retention and patient care. Unfortunately, as the world's population ages and the demand for healthcare services grows, staffing shortages will only worsen, with the need for work escalating, posing a growing threat to nurses and patients alike.

Safe staffing may be an effective strategy to keep experienced nurses on the job, entice those who have left the field back, and recruit new nurses. Nurse performance and patient death rates improve due to safe staffing regulations, which also minimize turnover, staffing costs, and liability.

## Conclusion

Safe staffing in nursing is a critical issue in health policymaking, such that there is a broad agreement on an abstract level (that in a healthcare delivery system, nurses hold an integral part that influences patient outcomes) but little agreement as to what research data has already been established as well as those that have not been laid out and explored.

Focusing on the other paradigms aside from research, in which safe staffing parameters were a minor variable, the study of safe staffing and healthcare customer outcomes has evolved as a valid and pivotal topic of investigation. The results have been uneven, despite a significant rise in research in response to the demand of the data from policymakers and healthcare providers. Staffing levels can be computed or reported for a whole health care organization or for a specific operational level within one (a specific unit, department, or division). To establish shared meaning among data collectors, analysts, and those attempting to comprehend the findings of analyses, certain time frames (at the shift level and as a daily, weekly, or monthly average) must be identified.

In the face of various pressures to take a position for or against mandatory nurse-to-patient ratios, the state of the developing research does not allow precision in prescribing safe ratios. Indeed, further research may be needed to unravel the complexities of the staffing outcomes equation. Future studies must replicate, extend, and refine the current body of knowledge, demonstrating how, in addition to the nurse's capabilities and expertise, and other workforce characteristics (i.e., years of experience or professional certification) that are linked to processes of Care that ultimately result in clinical outcomes (both desirable and adverse). Until then, improved practices have been identified that can contribute to practical efforts in transforming and improving the quality of patient care, and the safety of the ones that initiate the provision of Care.

Finally, future research should focus on elucidating the connections between structure, a process, and an outcome in nursing practice and patient care. As the complexities of the nursing process perplex the process of staffing, we remain hopeful that evidence-based studies may be further developed and utilized in revolutionizing safe and quality healthcare for all.

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