

Work Content of Nurse Managers Predicting Teamwork as Perceived by Nurses in a Government Hospital

John Frances B. Trinidad, Jake C. Napoles

College of Allied Health Sciences, University of the Visayas

DOI: <https://dx.doi.org/10.47772/IJRISS.2025.90700074>

Received: 18 June 2025; Accepted: 02 July 2025; Published: 30 July 2025

ABSTRACT

Nurse managers must promote teamwork for good patient outcomes, staff satisfaction, and a healthy workplace. However, there is limited studies where teamwork is being predicted by work content of nurse managers. This quantitative research utilized the descriptive, correlational (predictive) design to assess whether the dimensions of work content of the nurse managers predict the teamwork among nurses of a government hospital in Jagobiao, Mandaue City for the second quarter of 2025. Findings of the study revealed that work content of the nurse managers was very good. The dimensions of organizing, work well-being, work atmosphere, communication, clinical nursing, development of the unit, personnel development, development of nursing, financial management, planning and evaluation of activities, collaboration, and development with collaborating partners were very good while recruitment was good. The teamwork was good and the dimensions of trust, backup, shared mental model, and team leadership were good while team orientation was fair. The dimensions of developing of the unit and collaboration predicted teamwork. However, the dimensions of recruitment, organizing, work well-being, work atmosphere, communication, clinical nursing, personnel development, development of nursing, financial management, planning and evaluation of activities, and development with collaborating partners did not. In conclusion, teamwork is influenced by developing of the unit and collaboration. This means that as development of the unit and collaboration decreases, it increases teamwork. To address the findings of the study a teamwork enhancement plan is proposed.

Keywords: Descriptive, correlational (predictive design; Nurses; Teamwork; Work content of nurse managers.

INTRODUCTION

Better and quality care is achievable when there is good management and leadership. The provision of evidence-based, patient-centered services that are both safe and effective is the primary purpose of nursing management. This is accomplished by ensuring that the services provided are both safe and effective. Therefore, it is the responsibility of nurse managers to develop credentials for nursing care that is of high quality, cost-effective, and leverages fruitful collaboration among several professionals. Because of this, nurse managers are considered to be frontline managers in the complicated environment of the healthcare industry. The roles of planning, organizing, staffing, and controlling are typically the primary foci of management, whereas leadership places an emphasis on the process of general influence. Management has been defined as the process of establishing order and consistency, but leadership is characterized by the ability to adapt to new circumstances and make positive changes. Through this, they have strong influence over the staff and this may have influence as well with teamwork and collaboration.

According to American Nurses Association (2023a), among their many competing responsibilities, good nurse managers lead and integrate activities to ensure everything runs smoothly. As a leader, the nurse manager typically manage budgets, inventory, and quality improvement efforts. The nurse manager's duties expand beyond tasks — he or she is also responsible for patients and nursing staff. Successfully managing the nursing team begins with developing a trusting relationship with the staff through accessibility, honesty, and respect. Good nurse managers are often leaders, but these skills may take time to develop. Confidence as a leader grows through successfully navigating challenges and embracing increased responsibilities. To achieve all these, firstly, one has to look into their work content to know what are his or her roles and responsibilities.

It is crucial for nurses to work together as a team and collaborate in order to provide better care for patients and achieve better results. It is possible for nurses to cultivate a collaborative and supportive atmosphere by means of good communication, common objectives, delegation, empowerment, and ongoing development. This environment can result in increased patient satisfaction and enhance the morale of the team. The finest possible care for patients is provided by a nursing staff that works together and is cohesive. In the context of the whole multidisciplinary delivery process, the team is strengthened by strong internal communication and mutual respect. Those positive feelings are carried over into the experience of the patient. In the context of health care, the advantages of working together as a team extend beyond the individual patient. It is easier for nurses to have a positive attitude and maintain concentration when they are confronted with problems and exhaustion from their work when they are part of a team that is harmonious.

The findings of the study of Baek et al. (2023), indicated that enhancing nursing teamwork can serve as an effective strategy for promoting patient-centered care. Providing nurse education and training to equip nurses with the necessary knowledge and skills for effective teamwork is a crucial step. Additionally, fostering management commitment to create a supportive working environment, including adequate staffing, can facilitate improved nursing teamwork and, subsequently, patient-centered care. In the study nurses with a higher level of teamwork in their units tended to work fewer hours with more adequate staffing. There was a significant positive association between nursing teamwork and patient-centered care after controlling for personal and work-related characteristics. Compared with low teamwork, mid and high teamwork increased patient-centered care scores.

One of the researchers having worked as a nurse in the institution has observed that indeed there is teamwork among nurses. However, the level of teamwork exerted by nurses are not really measured objectively. It is not known if the teamwork is sufficient enough to effect good working relationships and better patient outcomes. At some points, nurse may seem to have issues with teamwork as they have little bickering which can also affect teamwork. Nurses tend to have unproductive arguments. There is a need to establish baseline information about teamwork. Similarly, the nurse managers are exerting effort to really have an effect on nurses which consequently has an effect to quality care. While it is again true that nurse managers follow their respective job descriptions but the extent to which they carry their roles and responsibilities are not well explored and established as well, especially on the perspectives of the staff that they manage and supervise. It is also undeniable that for some nurse managers, they tend to forget what is the core of their functions, they forget about their work content and some not even knowing. On top of establishing the individual data or information as separate variables, the study also delves on assessing whether the work content of the nurse managers predict overall teamwork. All these observations led to the knowledge as well as methodological gaps of the study.

At the end of the study, it will be able to address the gaps mentioned by producing a teamwork enhancement plan, which bring improvement in the level of teamwork in the nursing department as well as improvements in the execution of work content of the nurse managers. This output will not only benefit the nursing management or department but it will have an effect towards the patients or clients. With improved implementation of work content and higher levels of teamwork, this will bring quality care and better positive outcomes. Thus, this work will greatly benefit the patients achieving good health and well-being which will redound also to achieving the third sustainable developmental goal as well as the eight sustainable developmental goal of decent work and economic growth.

Research Objectives

The main purpose of the study was to assess whether the dimensions of work content of the nurse managers predict the teamwork among nurses of a government hospital in Jagobiao, Mandaue City for the second quarter of 2025.

Specifically, the study answered the following queries:

What was the work content of the nurse managers as perceived by the staff nurses in terms of:

1. recruitment;
2. organizing;
3. work well-being;
4. work atmosphere;
5. communication;
6. clinical nursing;
7. development of the unit;
8. personnel development;
9. development of nursing;
10. financial management;
11. planning and evaluation of activities;
12. collaboration; and
13. development with collaborating partners?

What was the teamwork as perceived by the nurses in terms of

- 1.1 trust;
- 1.2 team orientation;
- 1.3 backup;
- 1.4 shared mental model;
- 1.5 team leadership; and
- 1.6 overall teamwork?

Which dimension of work content of nurse managers predicted overall teamwork among nurses?

What teamwork enhancement plan was proposed based on the findings of the study?

Statement of Null Hypotheses

Ho1: The dimensions of work content of nurse managers did not predict overall teamwork of the nurses.

REVIEW OF RELATED LITERATURE AND STUDIES

Work Content of Nurse Managers. Nurse managers are licensed nurses in upper management positions. Because their roles are mainly administrative, they often work in an office environment versus a clinical setting. Typical responsibilities of a nurse manager vary by facility but generally include: (a) Handling staffing issues, such as hiring and setting or amending schedules; (b) Supervising nursing personnel, including training and disciplining; (c) Supporting other personnel in their unit, like social workers, therapists, and pharmacists; (d) Managing financial and human resources for their unit; (e) Overseeing the effectiveness of operations, including patient record maintenance; (f) Serving as a liaison between nurses, physicians, and upper management, such as a hospital's director of nursing or C-suite; and (g) Ensuring their unit aligns with the strategic goals of the hospital or workplace setting, including following best legal and safety practices. Besides having administrative and management savviness, nurse managers must demonstrate clinical excellence. Many health care facilities require at least five years of hands-on experience. Nurse managers fall under the fast-growing field of medical and health services managers (American Nurses Association, 2023b).

The findings in the study of Nurmeksela et al. (2021) suggested that nurse managers should focus on improving nursing practices by managing and organizing nurses' work in a way that makes their employees feel supported, motivated and secure. Furthermore, nurse managers should adopt a leadership style that emphasizes safe and patient-centered care. The results also suggest that the administration of today's health care organizations should actively evaluate nurse managers' share of work activities to ensure that their daily work is in line with the organizational goals.

The process of planning involves listing and organizing the activities required to achieve an organization's goals. Nurse managers are responsible for the strategic planning of their unit, which includes both operational

and financial planning (Omery et al., 2019). However, strategic activities may also comprise a limited portion of nurse managers' daily work (Bjerregård Madsen et al., 2016 as cited in Nurnmeksela, 2022). In addition, nurse managers must be adept at organizing, that is, allocating certain tasks and resources among departments and employees to achieve goals. Nurse managers must be competent at organizing because their daily work mainly consists of administrative routines and human resources management (Ericsson & Augustinsson, 2015 as cited in Nurnmeksela, 2022; Rankin et al., 2016 as cited in Nurnmeksela, 2022; Townsend et al., 2015 as cited in Nurnmeksela, 2022).

Staffing describes a process that begins with recruitment and selection and finishes with orientation and integration into an organization. Nurse managers influence the quality of care by recruiting competent staff (Aiken et al., 2017 as cited in Nurnmeksela, 2022; Gunawan et al., 2019) and ensuring their unit is adequately staffed (Squires et al., 2017 as cited in Nurnmeksela, 2022). While directing, managers instruct, guide, and counsel their staff in a way that will help achieve organizational goals. Nurse managers must be visible and accessible, provide regular feedback to their staff (Omery et al., 2019; Stevanin et al., 2020), and lead by example (Pegram et al., 2015 as cited in Nurnmeksela, 2022) to improve care.

Through good coordination, managers guarantee that available resources are efficiently used to meet specific goals. In recent years, nurse managers have taken on more administrative tasks in terms of being increasingly responsible for the hiring of temporary staff, participating in administrative meetings, and following financial, sick leave, and quality indicators (Kristiansen et al., 2016 as cited in Nurnmeksela, 2022). Clear reporting maintains effective and transparent communication throughout the entire organization. Therefore, nurse managers must be competent at communicating, as they need to discuss difficult issues, listen to different opinions, provide constructive feedback, and share and explain new information to their staff (Rouse & Al-Maqbali, 2014 as cited in Nurnmeksela, 2022).

Today's nurse managers are increasingly responsible for the management, expenditure, and control of their unit's budget (Townsend et al., 2015 as cited in Nurnmeksela, 2022). According to Gunawan et al. (2019), competence-based human resource management practices are directly and significantly related to financial outcomes. The work of nurse managers has been found to be reactive and to consist of fragmented activities because of numerous unplanned disruptions (Bjerregård Madsen et al., 2016 as cited in Nurnmeksela, 2022). Nurse managers also experience time constraints, excessive workloads, and necessary involvement in staffing issues (Rankin et al., 2016). Furthermore, nurse managers in various settings have reported lacking a clear job description (Bjerregård Madsen et al., 2016 as cited in Nurnmeksela, 2022; Rankin et al., 2016 as cited in Nurnmeksela, 2022; Sveinsdóttir et al., 2018 as cited in Nurnmeksela, 2022).

Nurse unit managers were clinically experienced, had limited postgraduate education, worked excessive hours, had high administrative loads, and enacted multiple leadership categories. Work engagement was characterized by absorption and dedication, nurse unit managers were ambivalent in their perceptions of organizational support. Nurse unit managers expressed aspirations for clinical leadership and wished to retain their positions in the organization (El Haddad et al., 2022).

The analysis found that nurse managers worked to positively influence staff performance through learning in three domains: orientating new staff, assessing staff performance and managing underperformance. This study purported that nurse managers influenced workplace learning in ways that are seldom recognised. A more conscious understanding of the impact of their role can enable nurse managers to more purposefully influence workplace learning. Such understanding also has implications for the professional preparation of nurse managers for their role in the context of workplace learning, facilitating learning for change and enabling the advancement of quality and safety in healthcare (Yen et al., 2015).

In terms of management functions, there are four primary functions that are essential to effective management in nursing: planning, organizing, leading, and controlling. Planning involves setting goals and objectives, identifying resources and potential obstacles, and developing a strategy for achieving those goals. Organizing involves determining how to allocate resources, delegating tasks, and creating a structure for achieving the desired outcomes. Leading involves motivating and inspiring employees to work towards a shared vision,

while controlling involves monitoring progress, adjusting strategies as needed, and ensuring that objectives are met (Dawes & Topp, 2022).

The results indicated a significant relationship exists between the role of the nurse unit manager and nursing work performance. To improve the management function of the nurse unit manager, it is necessary to conduct training for the nurse unit manager to allow them to better understand the functions and role of the nurse unit manager (Patarru et al., 2019).

The principles of management can be categorized into the four major functions of planning, organizing, leading and controlling (the P-O-L-C). The four functions are highly integrated when they are carried out in the day-to-day realities of running an organization. Planning is the function of management that involves setting objectives and determining a course of action for achieving those objectives. It is required that the managers are aware of the environmental conditions faced by their organization and that they are able to forecast future conditions. Organizing is the function of management that involves developing an organizational structure and allocating human resources to ensure the accomplishment of the objectives. Leading involves the social and informal sources of influence used to inspire the actions taken by others. If the managers are effective leaders, then they will inspire their subordinates to enthusiastically exert their efforts to achieve the common organizational objectives. Controlling involves ensuring that performance does not deviate from the standards set (Miri, Mansor et al., 2014 as cited in Paatarru et al., 2019).

According to Davis et al. (2023), nurse managers are valued for their ability to collaborate with other departments and organizational team members to improve processes and contribute to increased patient satisfaction. Also, volunteer organizations and local nursing schools and universities promote awareness for scope of work of the nurse managers, and public awards and recognition were mentioned as a way NMs are recognized in their community when unit and patient outcomes are achieved, and especially when NMs are actively engaged in community and educational endeavors.

Nurse managers work with their staff to coordinate all aspects of daily patient care on the unit. By ensuring that staff, patients, and patients' families are communicating, nurse managers help unit staff members deliver the safest possible care. Nurse managers embody both the nurse and executive roles, typically report to a supervising nursing leader, and are responsible for the function of their unit. Nurse managers see the big picture on the unit and work to ensure the unit's workflows and its activities are aligned with the hospital's strategic plans. Serving in this capacity, nurse managers are change agents on their unit. They work with staff to initiate new policies and procedures that help the unit team achieve their quality improvement goals and sustain their efforts. Nurse managers lead their unit staff in preventing patient harm in their unit, empowering nurses to be the first line of defense against patient harm. Nurse managers are responsible for managing human and financial resources; ensuring patient and staff satisfaction; maintaining a safe environment for staff, patients, and visitors; ensuring standards and quality of care are maintained; and aligning the unit's goals with the hospital's strategic goals (Agency for Healthcare Research and Quality, 2012).

Teamwork. Today's healthcare industry is built around a multidisciplinary approach to patient care. Nurses are part of the clinical team of physicians and specialists who collaborate on providing well-organized, comprehensive care to patients. Teamwork is crucial to facilitating effective communication and promoting positive patient outcomes. Teamwork, collaboration, and communication. These concepts are not just ideals — they play a critical role in patient outcomes and quality of care. As clinicians, nurses must rely on all these skills to ensure their patients get the care they need. This is because nurses are the front-line providers of patient care. They are the first clinicians to recognize how patients respond to care, such as whether their health is improving or deteriorating. As part of the multidisciplinary team treating a patient, nurses coordinate care by communicating vital information to doctors, specialists, and other providers and weigh in with their own evidence-based recommendations. It is important for nurses to hone their teamwork skill set because they are team members and team leaders when it comes to patient care (Maryville University, 2023).

Teamwork in nursing involves communicating and coordinating care with fellow nurses, other clinicians, administrators, and staff. Collaboration also involves including patients and their families in care decisions, which means communicating appropriately and empathetically with laypeople. Collaboration occurs across

departments and shifts. Communications may include texts, emails, notes in electronic health records (EHR), and stand-up huddles, ensuring everyone involved in a patient's care is on the same page at all times. In many ways, teamwork and collaboration in nursing are part of nursing ethics and ethical decision-making, because they respect patient autonomy (Maryville University, 2023).

Nursing is a profession that heavily relies on teamwork. Effective collaboration, communication, and decision-making among nursing team members can significantly impact patient outcomes and work culture. Teamwork plays a crucial role in nursing. As a nurse, he or she is part of a multidisciplinary team that includes not only other nurses but doctors, pharmacists, social workers, therapists, and administrative personnel. Working as a team allows us to collaborate and share our knowledge and experiences. When you work in isolation, you might miss key pieces of information that could benefit your patient. But when you work as a team, you have multiple sets of eyes and ears, increasing the likelihood that important changes in a patient's condition will not go unnoticed. A strong team can also make complex decisions more effectively. Patients often have diverse needs, so it is not unusual for a single patient to require the expertise of several team members. Fostering good teamwork also supports continuity of care. With organized and frequent handovers, patients receive consistent care across shift changes, helping to reduce the risk of medical errors and improve patient outcomes (Nursing Education Staff, 2024).

In the study of Bragadóttir et al. (2023) the logistic regression analysis indicated that work experience on current unit and perceived staffing adequacy contributes to job satisfaction and when controlling for unit type, role, experience on current unit and staffing adequacy, those reporting better teamwork are significantly more likely to be satisfied with their current position. With an additional unit for overall nursing teamwork, participants are almost five times likelier to be satisfied with their current position.

In the study of Wong et al. (2025), five themes were generated: (1) role clarity, (2) delegation, (3) communication, (4) ward culture and practice, and (5) interpersonal relationships. Challenges in registered nurses–unlicensed assistive teamwork include unclear roles and responsibilities, ineffective delegation, and communication barriers. Work culture that excludes unlicensed assistive personnel from shift handovers were found to hinder shared goals for patient care. The importance of interpersonal relationships between registered nurses and unlicensed assistive personnel was highlighted to aid in the power disparity between them.

The findings in the study of Costello et al. (2021) highlight areas for consolidation and improvement in teamwork. Introducing teambuilding strategies and acting on results of this survey may support enhanced communication and teamwork influencing nursing care and patient outcomes. Findings recommend that activities to improve teamwork and ensuring teambuilding strategies are implemented to improve effective communication in an acute medical care setting would have significant impacts on staff satisfaction.

In the study of Sanford et al. (2024), a typology was developed, consisting of five team types: structural, hybrid, satellite, responsive, and coordinating. Teams were challenged to varying degrees with staffing, membership instability, equipment shortages, and other elements of the healthcare environment. Teams varied in their ability to respond to these challenges depending on their characteristics, such as their teamworking style, location, and membership. The typology developed in this study can help healthcare organizations to better understand and design effective teams for different healthcare contexts. It can also guide future research on healthcare teams and provide a framework for comparing teams across settings. To improve teamwork, healthcare organizations should consider the unique needs of different team types and design effective training programs accordingly.

The analysis identified seven key attributes of effective nursing teamwork: communication, collaboration, trust, respect, shared decision-making, accountability, and flexibility. Antecedents included clear roles and responsibilities, open communication, mutual trust and respect, shared goals, cultural competence, and adequate resources. Positive consequences included improved patient outcomes, enhanced patient satisfaction, increased efficiency, and improved staff satisfaction. Negative consequences of poor teamwork included poor patient outcomes, reduced patient satisfaction, increased healthcare costs, and staff burnout. Empirical referents included teamwork assessment tools, patient outcomes, reduced healthcare costs, reduced medical errors, and improved quality of care (Bakht et al., 2024).

In the study of demonstrating a positive perception of teamwork less than 75 percent of the time. The highest evaluated subscale was the shared mental model. Differences were found in the evaluation of teamwork according to education, job position, working hours, total and current professional experience, intention to leave, and staffing adequacy. The correlation analysis revealed associations between teamwork and variables related to satisfaction and quality and safety evaluation. Several variables predicted the general evaluation of teamwork. The evaluation of teamwork may point to its different perception among members of nursing teams. It may also help to identify strengths and weaknesses of nursing teams and, consequently, to implement effective techniques focused on improving teamwork and, thus, the quality of nursing care in hospitals (Kohanova et al., 2024).

Thematic analysis revealed four themes. First, nurses perform teamwork and clinical leadership skills in various ways. Some nurses work in pairs and have common goals, while other nurses work individually. This influences teamwork. Second, nurses are informal teachers, visible in teaching and learning from each other, contributing in constructive teamwork. Third, senior nurses were seen as informal leaders, forming connection between nursing wards and formal leaders, resulting in awareness of each other and the progress of patientcare. Finally, environmental factors influence the performance of teamwork (Beiboer et al., 2023).

Nurses had a high perception level towards teamwork. Also, few of studied nurses had a moderate perception level towards teamwork. In addition, about two thirds of studied nurses had a high-performance level. Also, over one third of studied nurses had a moderate performance level. Conclusion: There was a positive highly statistically significant correlation between nurses' perception toward teamwork and their job performance (Gad et al., 2021).

Team orientation had an overall mean score of 3.04 ± 0.80 equating to 76 percent of the time. This indicated a positive culture of mentorship among nursing staff. Within the nursing profession there is a variation in levels of knowledge and experience. Having a mixed skill set in the team comprising of different levels of knowledge and experience is a positive, helping nursing staff to develop skills. Backup received a mean score of 2.96 ± 0.83 , 74 percent of participants believed that team members willingly aid and help one another when they recognized someone is busy. Due to the open aspects of the ward teams can visually see one another to gauge if their colleague is overworked. The manager on this ward encourages teams to work and support each other. The shift coordinator also takes a patient load if acuity on the ward is high and staff are overworked. Team leadership result resulted in a mean of 2.96 ± 0.83 , 74.1 percent of the time. Team leadership measures if senior nurses/managers adequately monitor, distribute and balance the workload of nurses. This result indicated the nurse manager and clinical nurse's engagement with ensuring appropriate workload and staffing levels (Costello et al., 2021).

Work Content of Nurse Managers and Teamwork. While teamwork emphasizes collective effort and shared responsibility toward a specific goal, collaboration thrives on diverse perspectives and exchanging ideas. Both concepts share the core elements of a common goal, effective communication, and trust, making them essential for organizational success. The benefits of fostering teamwork and collaboration are evident, from enhancing creativity and decision-making to boosting employee morale and productivity. Promoting open communication, inclusivity, clear goal-setting, interdependence, and efficient team coordination is vital to improving these aspects in the organization. Leadership plays a pivotal role in shaping the culture of teamwork and collaboration, ensuring that team members feel valued and motivated. Technology, especially in the hybrid workplace, also plays a significant role in facilitating communication, project management, brainstorming, and document sharing, ultimately maximizing the potential for effective collaboration (Yarooms, 2023). In the study of Meneses-La-Riva et al. (2025), a very strong positive correlation was observed between effective communication and teamwork among nurses. This indicates a highly significant relationship, highlighting that effective communication is strongly linked to teamwork among nursing professionals.

RESEARCH METHODOLOGY

Design. The quantitative research made use of the descriptive, correlational (predictive) research design. In application to the study, the descriptive design was used in determining the work content of the nurse managers from the perspectives of the staff nurses and the teamwork. The correlational (predictive) design was

used to assess whether the different dimensions of work content of the nurse managers predicted teamwork of the nurses.

Environment. The study was conducted in Eversley Childs Sanitarium and General Hospital. The Eversley Childs Sanitarium and General Hospital stands as a testament to the evolution of healthcare in the Philippines, transitioning from a specialized leprosy treatment center to a comprehensive general hospital that meets the diverse medical needs of the community.

Respondents. Respondents of the study were 169 staff nurses of the hospital. Currently, there were 178 staff nurses employed in the hospital and retrieval rate was at 95 percent considering that some were absent during the data gathering while others refused to participate in the study.

Sampling Design. There was no sampling as a complete enumeration was used in the study. By complete enumeration, this means that all those who qualified based on the inclusion and exclusion criteria were invited to participate.

Inclusion Criteria. Included in the study were staff nurses of the hospital regardless of profile. However, the nurses had to be at least 6 months employed in the hospital to be able to give unbiased responses to the work content and teamwork. Nurses had to be engaged in the care of patients. Lastly, they should be willing to participate and give voluntary consent.

Exclusion Criteria. Nurse who hold administrative functions such as Supervisors and Chief Nurse were excluded from the study. Also, excluded from the study were those nurses who had submitted their resignation and retirement intentions as they may provide biased responses.

Instruments. The study made use of a two-part instrument. Part one of the instrument was an adopted questionnaire named Nurse Managers' Work Content Questionnaire (NMWCQ) developed by Nurmeksela et al. (2020). It is an 87-item questionnaire composed of 13 dimensions namely: recruitment (five items); organizing (seven items); work well-being (five items); work atmosphere (three items); communication (five items); clinical nursing (nine items); development of the unit (12 items); personnel development (eight items); development of nursing (four items); financial management (seven items); planning and evaluation of activities (six items); collaboration (10 items) and development with collaborating partners (six items). It is answered using a six-point Likert scale where 1 is daily; 2 is weekly; 3 is monthly; 4 is 2–4 times a year; 5 is annual; and 6 is never.

Reliability. The construct validity and internal consistency of the questionnaire were at acceptable levels. Cronbach's alpha rates of the components were 0.554 - 0.890. Cronbach alpha for the specific dimensions are as follows: Organising is 0.702, Development of the unit is 0.890, Collaboration is 0.742, Development with collaborating partners is 0.623, Communication is 0.554, Work well-being is 0.756, Development of nursing is 0.721, Planning and evaluation of activities is 0.759, Work atmosphere is 0.700, Financial management is 0.793, Personnel development is 0.824, Recruitment 3.77 0.81 0.802, and Clinical nursing is 0.844.

Part two of the instrument was also an adopted questionnaire, the Nursing Teamwork Survey (NTS) developed by Kalisch et al. (2010). It is a 33-item questionnaire which is composed of composed of five dimensions namely: Trust (7 items), Team Orientation (9 items), Backup (6 items), Shared Mental Model (7 items), and Team Leadership (4 items). It is answered using a five-point Likert-type scale (1 = rarely, 2=25% of the time, 3=50% of the time, 4=75% of the time, and 5=always).

Reliability. Cronbach alpha for the different dimensions are as follows: Trust is .847, Team Orientation is .831, Backup is .841, Shared Mental Model is .834, and Team Leadership is .744.

Data Gathering Procedures. Transmittal letters were sent to the Dean of the College of Allied Health Sciences and the Chief of the Hospital. The study was subjected to a design hearing under the scrutiny of experts to assess technical and ethical soundness. Further, the study was submitted to the ethics committees of both institutions (university and hospital) to secure further ethical clearance. Data gathering started upon the

issuance of the notice to proceed. The method of recruitment was through a face-to-face intercept. Since the nurses were working in the hospital and the researcher was also working in the same institution, distribution of questionnaires was done either, before the shift, during break periods, or after their shifts whichever was preferable to the nurses. The researcher coordinated with the human resource office to secure the list of nurses and their area of assignments. They were also given an option to either submit the answered questionnaire right away or be retrieved on a later time. To facilitate full cooperation of the respondents, the approved transmittal letter from the Chief of the Hospital was also shown to the respondents. The researcher made sure that the questionnaire was completely and accurately filled-out. Incomplete questionnaires were returned for completion. This process was done repeatedly until all the nurses were recruited. After all the data had been gathered, data were collated through an excel format and this was submitted to a statistician for appropriate statistical treatment. Data were presented in tables with interpretations, implications, and supported by related literature and studies. At the end of the data analysis, answered questionnaires were shredded and soft copies of the data were permanently deleted.

Statistical Treatment of Data. The following descriptive and inferential statistics were used to treat the data: (a) Mean score and Standard Deviation were used to determine the work content of the nurse managers and teamwork as perceived by the nurses; (b) Multiple Linear Regression was used to assess whether the dimensions of work content of nurse managers predicted the overall teamwork.

Ethical Considerations. This study was both submitted to the ethics committees of the university and of the hospital where the study was conducted. It was important that ethical approval was sought prior to data gathering to make sure that the study was both technically and ethically sound to guarantee the safety and welfare of the participants.

Presentation, Analysis, And Interpretation Of Data

Table 1 Work Content of the Nurse Managers as Perceived by the Nurses

Dimensions	Mean score	SD	Interpretation
Recruitment	3.14	1.39	Good
Organizing	2.64	1.14	Very Good
Work Well-being	1.87	1.12	Very Good
Work Atmosphere	2.01	1.21	Very Good
Communication	2.44	1.18	Very Good
Clinical Nursing	2.54	1.43	Very Good
Development of the Unit	1.91	1.04	Very Good
Personnel Development	2.48	1.15	Very Good
Development of Nursing	2.12	0.99	Very Good
Financial Management	2.62	1.39	Very Good
Planning and Evaluation of Activities	2.25	1.18	Very Good
Collaboration	2.11	1.04	Very Good
Development with Collaborating Partners	1.99	1.06	Very Good
Grand mean	2.31	0.92	Very Good

Note: $n=169$.

Legend: A score of 1.00 – 1.83 excellent (daily), 1.84 – 2.66 is very good (weekly), 2.67 – 3.49 is good (monthly), 3.50 – 4.32 is fair (2-4 times a year), 4.33 – 5.15 is poor (annual), and 5.16 - 6.00 is very poor (never).

Overall, the work content of the nurse managers was very good. The dimension of recruitment was rated as good while the dimensions while organizing, work well-being, work Atmosphere, communication, clinical nursing, development of the unit, personnel development, development of nursing, financial management, planning and evaluation of activities, collaboration, development with collaborating partners. This implies that the nurse managers were able to carry out their jobs as outlines in their respective job descriptions more than expected. This further means that the nurse managers have been oriented with their jobs and that they are really qualified as their experience and educational qualification would support.

Nurse managers work with their staff to coordinate all aspects of daily patient care on the unit. By ensuring that staff, patients, and patients' families are communicating, nurse managers help unit staff members deliver the safest possible care. Nurse managers embody both the nurse and executive roles, typically report to a supervising nursing leader, and are responsible for the function of their unit. Nurse managers see the big picture on the unit and work to ensure the unit's workflows and its activities are aligned with the hospital's strategic plans. Serving in this capacity, nurse managers are change agents on their unit. They work with staff to initiate new policies and procedures that help the unit team achieve their quality improvement goals and sustain their efforts. Nurse managers lead their unit staff in preventing patient harm in their unit, empowering nurses to be the first line of defense against patient harm. Nurse managers are responsible for managing human and financial resources; ensuring patient and staff satisfaction; maintaining a safe environment for staff, patients, and visitors; ensuring standards and quality of care are maintained; and aligning the unit's goals with the hospital's strategic goals (Agency for Healthcare Research and Quality, 2012). In summary, nurse managers are extremely important in the healthcare industry because they are responsible for supervising nursing staff, ensuring that patients receive quality care, managing resources, and cultivating a positive work environment. Their responsibilities range from operational tasks to strategic leadership, and they have a significant impact on the outcomes for patients as well as the well-being of staff members (staff members).

Table 2 Teamwork as Perceived by the Nurses

Dimensions	Mean score	SD	Interpretation
Trust	3.69	1.09	Good
Team Orientation	2.79	0.98	Fair
Backup	3.57	0.95	Good
Shared Mental Model	3.82	1.02	Good
Team Leadership	3.86	0.94	Good
Grand mean	3.55	0.79	Good

Note: $n=169$.

Legend: A score of 1.00 – 1.80 is very poor (rarely), 1.81 – 2.60 is poor (25% of the time), 2.61 – 3.40 is fair (50% of the time), 3.41 – 4.20 is good (75% of the time), and 4.21 – 5.00 is very good (always).

The teamwork was good as rated by the respondents. Team Orientation was rated as fair while trust, back-up, shared mental model and team leadership were rated as good. In order to have good teamwork, a group of individuals must effectively collaborate in order to achieve a common objective, utilizing the strengths of each individual member, and cultivating an environment that is positive and supportive. It requires that there be open communication, mutual respect, and a commitment to the success of the group as a whole. Supporting the findings, nurses had a high perception level towards teamwork. Also, few of studied nurses had a moderate perception level towards teamwork (Gad et al., 2021).

The importance of teamwork among nurses cannot be overstated for a number of reasons: it enhances the quality of care and outcomes for patients, it improves the working environment, and it encourages professional growth. The ability to work together effectively ensures improved communication, the exchange of information, and coordinated care, which ultimately results in fewer medical errors and higher levels of patient satisfaction.

Table 3 Dimensions of Work Content Predicting Overall Teamwork

Variables	B	Std Error	Beta	t	p value	Decision	Interpretation
(Constant)	4.124	.152		27.212	.000		
Recruitment	.008	.058	.014	.133	.894	Failed to Reject Ho	Not significant
Organizing	.001	.062	.002	.017	.986	Failed to Reject Ho	Not significant
Work well-being	.099	.081	.141	1.232	.220	Failed to Reject Ho	Not significant
Work atmosphere	.062	.075	.095	.832	.407	Failed to Reject Ho	Not significant
Communication	.032	.085	.048	.380	.705	Failed to Reject Ho	Not significant
Clinical nursing	.018	.056	.033	.326	.745	Failed to Reject Ho	Not significant
Development of the unit	-.554	.135	-.734	-4.106	.000	Reject Ho	Significant
Personnel development	.060	.106	.087	.565	.573	Failed to Reject Ho	Not significant
Development of nursing	.122	.164	.154	.749	.455	Failed to Reject Ho	Not significant
Financial management	.127	.065	.224	1.940	.054	Failed to Reject Ho	Not significant
Planning and evaluation of activities	-.112	.092	-.167	-1.211	.228	Failed to Reject Ho	Not significant
Collaboration	-.365	.121	-.482	-3.005	.003	Reject Ho	Significant
Development with collaborating partners	.149	.105	.201	1.428	.155	Failed to Reject Ho	Not significant

Legend: Significant if p value is $\leq .05$. Dependent variable: Psychological empowerment. If R-squared value < 0.3 is None or Very weak effect size, if R-squared value $0.3 < r < 0.5$ is Weak or low effect size, if R-squared value $0.5 < r < 0.7$ is Moderate effect size, and if R-squared value $r > 0.7$ is Strong effect size.

The table shows that p values for the independent variables of developing of the unit and collaboration were lesser than the significant value of .05 which were interpreted as significant which further means that developing of the unit and collaboration predicted teamwork. Therefore, teamwork is influenced by developing of the unit and collaboration. Looking at the table, the t values for development of the unit and collaboration were negative. These findings indicated that the influence of development of the unit and collaboration on teamwork were negative. A negative influence means that as development of the unit and collaboration decreases, it results to a 4.106 and 3.005 increase in teamwork, respectively.

The findings seems to be unusual. It is indeed the duty of the nurse managers to develop their respective units. By developing their units this also means that the service will become better. In the end, it is the patients who will benefit the most and the nurses when the unit is being developed as this will also allow better

collaboration and teamwork. Similarly, better collaboration means better teamwork. This negative correlation could have been influenced by the number of respondents in the study. Had there been more respondents, it could be that the findings would become a positive correlation.

While teamwork emphasizes collective effort and shared responsibility toward a specific goal, collaboration thrives on diverse perspectives and exchanging ideas. Both concepts share the core elements of a common goal, effective communication, and trust, making them essential for organizational success. The benefits of fostering teamwork and collaboration are evident, from enhancing creativity and decision-making to boosting employee morale and productivity. Promoting open communication, inclusivity, clear goal-setting, interdependence, and efficient team coordination is vital to improving these aspects in the organization. Leadership plays a pivotal role in shaping the culture of teamwork and collaboration, ensuring that team members feel valued and motivated. Technology, especially in the hybrid workplace, also plays a significant role in facilitating communication, project management, brainstorming, and document sharing, ultimately maximizing the potential for effective collaboration (Yarooms, 2023). Also, one key attributes of effective nursing teamwork was collaboration. Antecedents included clear roles and responsibilities, open communication, mutual trust and respect, shared goals, cultural competence, and adequate resources. Positive consequences included improved patient outcomes, enhanced patient satisfaction, increased efficiency, and improved staff satisfaction (Bakht et al., 2024).

The model summary revealed the following values: $R = .603$, $R^2 = .363$, Adjusted $R^2 = .310$, Std. Error of Estimate = .65562, $F = 6.800$, $Sig. = .000$ Therefore, the regression model created is as follows:

Teamwork = 4.124 – 4.106 (development of the unit) - 3.005 (collaboration)

The equation reads that teamwork is the result of the constant value of 4.124 minus 4.106 of development of the unit minus 3.005 of collaboration. Based on the model summary, the r^2 value was .363 which indicates that the total variation in the teamwork can be explained by the independent variables of development of the unit and collaboration. In this case, 36.30 percent can be explained which is weak. This means that the variable of development of the unit and collaboration predicting teamwork has a low effect. Thus, the regression model was also weak. Based on the significant value of .000, the regression model predicts the dependent variable significantly. The value was equal to .000, and indicates that, overall, the regression model statistically significantly predicts the outcome variable (i.e., it is a good fit for the data).

However, the p values for the independent variables of recruitment, organizing, work well-being, work atmosphere, communication, clinical nursing, personnel development, development of nursing, financial management, planning and evaluation of activities, and development with collaborating partners were greater than the significant value of .05 which were interpreted as not significant which further means that they did not predict teamwork. Therefore, teamwork is not influenced by recruitment, organizing, work well-being, work atmosphere, communication, clinical nursing, personnel development, development of nursing, financial management, planning and evaluation of activities, and development with collaborating partners. Whether there is a high or low recruitment, organizing, work well-being, work atmosphere, communication, clinical nursing, personnel development, development of nursing, financial management, planning and evaluation of activities, and development with collaborating partners, there can still be a high level of teamwork.

There are several factors that influence teamwork, majority of the different factors in the study did not predict teamwork for one possible reason and that is the number of respondents were actually less. With this as a limitation, it is therefore recommended that a similar study be conducted where more nurses serve as respondents.

CONCLUSION AND RECOMMENDATIONS

Conclusion. In conclusion, teamwork is influenced by developing of the unit and collaboration. This means that as development of the unit and collaboration decreases, it increases teamwork. Indeed, the findings on the work content of the nurse managers as very good are reflective of the work of the nurse managers in terms of skill variety, task identity, task significant, autonomy, and feedback as explained by the Job Characteristics

Theory. Also, results of the study on having a good teamwork reflects the big five dimensions of teamwork: trust, team orientation, backup, shared mental model, and team leadership as explained in the Big Five of Teamwork Model. To address the findings of the study a teamwork enhancement plan is proposed.

Recommendations. The following recommendations are given based on the findings of the study:

Nursing Practice. To comply with research utilization, first the study findings will be presented to the nursing department of the hospital where it was conducted. Following the discussion is the recommendation of the teamwork enhancement plan for adoption in the hospital. This may call for the review and revision of the already established strategic, operation, and staff development plans of the hospital. Other healthcare institutions may also adopt the teamwork enhancement plan as they deem it appropriate in their respective organizations.

Nursing Education. The study findings can greatly contribute new knowledge in terms of work content of nurse managers and teamwork as separate and individual variables and as teamwork being predicted by work content of the nurse managers. The study will also contribute as reference in conducting studies related to such variables and in the conduct of research studied utilizing the same design. The study can also help as a guide in discussing research methodology, statistical treatment and ethics in research.

Nursing Policy. Policies relating to enhancing or strengthening the job descriptions or implementation of the job descriptions of nurse managers may be created to further the nursing profession. Internal policies may also be crafted to incorporate activities that enhances teamwork in the field of nursing.

Nursing Research. As part of the plan to gain research dissemination, the study will be submitted for either oral or poster presentation in any local or international research congress. It will also be submitted for publication in any local or international refereed journal. To address the recent gaps found in the study, the following research titles are recommended for future studies.

1. Work Content of Nurse Managers Predicting Teamwork among nurses (This time utilizing more respondents)
2. Validating the negative prediction of developing of the unit and collaboration on teamwork; and
3. Work Content of Nurse Managers Predicting Teamwork among nurses: An Explanatory Sequential Method.

Teamwork Enhancement Plan

Rationale

When it comes to fostering effective teamwork, nurse managers play a crucial role. This is essential for providing the best possible care to patients, ensuring that staff members are happy, and maintaining a healthy working environment. They are responsible for establishing the context for collaboration, fostering open communication, and resolving conflicts, which ultimately has an impact on the overall dynamics and performance of the team. Findings of the study revealed that work content of the nurse managers was very good with the dimension of recruitment being rated as good. Also, the teamwork was good as rated by the respondents where the dimensions of trust, backup, shared mental model, and team leadership were rated as good while team orientation was rated as fair. The dimensions of developing of the unit and collaboration predicted teamwork. To address these findings of the study, this teamwork enhancement plan was created.

General Objectives

The primary purpose of this teamwork enhancement plan is to provide enhancement in both the execution of the work content of the nurse manager and improve teamwork among nurses.

Specific Objectives

This teamwork enhancement plan seeks to achieve the following specific objectives:

1. To sustain or further improve the execution of the work content of the nurse managers to excellent;
2. To improve the execution of recruitment dimension of the work content of the nurse managers;
3. To improve teamwork from good to very good and all its dimensions among nurses; and
4. To appropriately engage nurse managers in developing the unit and collaboration to improve teamwork.

Areas of concern	Specific Objectives	Activities	Persons responsible	Resources	Time frame	Success indicators
Work content of the nurse managers was very good with the dimension of recruitment being rated as good.	<p>To sustain or further improve the execution of the work content of the nurse managers to excellent.</p> <p>To improve the execution of recruitment dimension of the work content of the nurse managers.</p>	<p>Personally-initiated activities:</p> <ul style="list-style-type: none"> • Read articles or view videos about job descriptions or work content of nurse managers. • Participate in webinars on how to become an effective nurse manager. <p>Hospital-initiated activities:</p> <ul style="list-style-type: none"> • Revise, review, and revise job descriptions of the nurse managers to align with the instrument used in the study. • Conduct a re-orientation of the job description of nurse managers. • Provide a copy of the job descriptions to the nurse managers. • Conduct also an assessment of the work content where the nurse managers serve as the respondents. 	<ul style="list-style-type: none"> • Nurse Managers or Nurse Supervisors • Head Nurses • Chief Nurse • Hospital Administrators • HR Director 	<ul style="list-style-type: none"> • Internet connectivity • Desktop, laptop, tablets or android phones. • Staff Development Plan • Scholarship program • Budget allocation for the different seminars and trainings (Php 10,000.00 per activity). • Job descriptions • Instrument to assess work content of the nurse managers. 	<ul style="list-style-type: none"> • 4th quarter of 2025 onwards 	<ul style="list-style-type: none"> • Saved articles and videos. • Certificates of attendance and participation in webinars, seminars, and trainings. • Saved articles and videos. • Certificates of attendance and participation in webinars, seminars, and trainings. • Minutes of meetings. • Results of the re-assessment – Excellent work content of the nurse managers and in all the dimensions. • Attendance to the Re-orientation • Distributed and received copies of the Job descriptions. • Survey results on the work content by the nurse managers themselves.

		<ul style="list-style-type: none"> • Re-orient involvement of nurse managers on the Recruitment process through the SOPP on recruitment. • For new nurse managers conduct training on work scheduling of staff nurses. • Conduct seminar on Work Well-being. • Conduct seminar of conflict management. • Training on utilization of online platforms for meetings. • Training s on power point presentation making. • Conduct nursing audit periodically. • Assist in the implementation of the Staff Development Plan in the Nursing Department. • Forge partnership with PNA and provide information to the staff of the different trainings and seminars to be conducted by the Accredited 				<ul style="list-style-type: none"> • Nursin g audit results or recommendati ons. • Schedu les of trainings and seminars from PNA • Minute s of meetings. • Results of the re-assessment – Excellent work content of the nurse managers and in all the dimensions.
--	--	--	--	--	--	---

		Professional Organization of Nurses (PNA). <ul style="list-style-type: none"> • Providing support for post-graduate studies among nurse managers (scholarship with return of service). • Re-orientation on conducting an evaluation on work performance of staff through familiarization with the evaluation form. • Conduct a seminar on Financial Management. • Conduct a training on Budgeting at the nursing department level. • Implement strict evaluation of the different activities spearheaded by the Nursing Department. • Conduct a seminar or training on teamwork and collaboration with other healthcare team members. • Conduct periodic departmental meetings to discuss issues related to work content of the 				
--	--	--	--	--	--	--

		<p>nurse managers.</p> <ul style="list-style-type: none"> • Re-assess the work content of the nurse manager using the same instrument size months following the implementation of this plan. 				
<p>Teamwork was good as rated by the respondents where the dimensions of trust, backup, shared mental model, and team leadership were rated as good while team orientation was rated as fair.</p>	<p>To improve teamwork from good to very good and all its dimensions among nurses.</p>	<p>Personally-initiated activities:</p> <ul style="list-style-type: none"> • Read articles or view videos about teamwork and collaboration. • Participate in webinars about increasing teamwork and collaboration. <p>Hospital-initiated activities:</p> <ul style="list-style-type: none"> • Conduct a teambuilding seminar and workshop for the different departments. • Utilize online collaboration platforms to facilitate communication, document sharing, and teamwork (like messenger or whatsapp). • Offer Recognition: Provide both formal and informal recognition for outstanding teamwork and 	<ul style="list-style-type: none"> • Nurse Managers or Nurse Supervisors • Head Nurses • Department Heads • Staff Nurses • Other Healthcare Team Members • Chief Nurse • Hospital Administrators • HR Director 	<ul style="list-style-type: none"> • Internet connectivity . • Desktop, laptop, tablets or android phones. • Budget allocation for the different seminars and trainings (Php 10,000.00 per activity). • Messenger or Whatsapp accounts. • Budget allocation for the Sports fest (Php 50,000.00). • Instrument to assess teamwork. 	<ul style="list-style-type: none"> • 4th quarter of 2025 onwards 	<ul style="list-style-type: none"> • Saved articles and videos. • Certificates of attendance and participation in webinars, seminars, and trainings. • Minutes of meetings. • Results of the re-assessment – Very good overall teamwork and in all the dimensions.

		<p>performance.</p> <ul style="list-style-type: none"> • Conduct a Sports fest. • Conduct Seminars and Trainings on the following: <ul style="list-style-type: none"> ○ <i>Building Trust among Healthcare Members</i> ○ <i>Interprofessional Collaboration and Teamwork</i> ○ <i>Effective Communication in Teamwork</i> ○ <i>Conflict Management Styles</i> ○ <i>Working Together for a Quality Job in Healthcare</i> ○ <i>Re-orientation of Job Descriptions</i> ○ <i>Effective Leadership</i> • Conduct periodic departmental meetings to discuss issues relating to teamwork or collaboration. • Re-assess the teamwork using the same instrument size months following the implementation of this plan. 				
The dimensions of developing of the unit and collaboration predicted	To appropriately engage nurse managers in	<p>Note: all activities cited in the first and second areas of concern are</p>	<ul style="list-style-type: none"> • Nurse Managers or Nurse Supervisors • Head Nurses • Department 	<p>Note: all resources cited in the first and second areas of</p>	<ul style="list-style-type: none"> • 4th quarter of 2025 onwards 	<p>Note: all success indicators cited in the first and second areas</p>

teamwork.	developing the unit and collaboration to improve teamwork.	applicable here.	Heads <ul style="list-style-type: none"> • Staff Nurses • Other Healthcare Team Members • Chief Nurse • Hospital Administrators • HR Director 	concern are applicable here.		of concern are applicable here.
-----------	--	------------------	--	------------------------------	--	---------------------------------

REFERENCES

1. Agency for Healthcare Research and Quality (2025). CUSP toolkit, The role of the nurse manager, facilitator notes. <https://www.ahrq.gov/hai/cusp/modules/nursing/nursing-notes.html#slide5>
2. American Nurses Association (2023a). Leadership in nursing: Qualities and why it matters. ANA Nursing Resources Hub. <https://www.nursingworld.org/content-hub/resources/nursing-leadership/leadership-in-nursing/>
3. American Nurses Association (2023b). Charge nurse vs. nurse manager: What's the difference? ANA Nursing Resources Hub. <https://www.nursingworld.org/content-hub/resources/nursing-resources/charge-nurse-vs-nurse-manager/>
4. Baek, H., Han, K., Cho, H. et al. (2023). Nursing teamwork is essential in promoting patient-centered care: a cross-sectional study. *BMC Nursing*, 22, 433. <https://doi.org/10.1186/s12912-023-01592-3>
5. Bakht, K., Mir, S., & Shah, S. A. (2024). Nursing teamwork: An in-depth concept analysis with Walker & Avant's Framework. *Journal of Health and Rehabilitation Research*, 4(2), 1500–1505. <https://doi.org/10.61919/jhrr.v4i2.1118>
6. Beiboer, C., Andela, R., Hafsteinsdóttir, T. B., Weldam, S., Holtrop, T., & van der Cingel, M. (2023). Teamwork, clinical leadership skills and environmental factors that influence missed nursing care – A qualitative study on hospital wards. *Nurse Education in Practice*, 68, 103603. <https://doi.org/10.1016/j.nepr.2023.103603>
7. Bragadóttir, H., Kalisch, B. J., Flygenring, B. G., & Tryggvadóttir, G. B. (2023). The relationship of nursing teamwork and job satisfaction in hospitals. *SAGE Open Nursing*, 9, 23779608231175027. <https://doi.org/10.1177/23779608231175027>
8. Brodowicz, M. (2024). Correlational research: Explanatory and predictive designs. Author. <https://aithor.com/essay-examples/correlational-research-explanatory-and-predictive-designs>
9. Costello, M., Rusell, K. & Coventry, T. (2021). Examining the average scores of nursing teamwork subscales in an acute private medical ward. *BMC Nursing*, 20, 84. <https://doi.org/10.1186/s12912-021-00609-z>
10. Davis, M. B. H., Joseph, M. L., Zimmermann, D., & Ward, D. (2023). The role of the wider organization and community in meaningful nurse manager recognition. *Nurse Leader*, 21(6), 644-651. <https://doi.org/10.1016/j.mnl.2023.08.010>
11. Dawes, N., & Topp, S. M. (2022). A qualitative study of senior management perspectives on the leadership skills required in regional and rural Australian residential aged care facilities. *BMC Health Services Research*, 22(1), 1-1.
12. El Haddad, M., Faithfull-Byrne, A., Thompson, L., Wilkinson, G., & Moss, C. (2022). Nurse unit managers' work and impacts on clinical leadership: A cross-sectional study. *Collegian*, 29(5), 635-644. <https://doi.org/10.1016/j.colegn.2022.02.004>
13. Gad, S. A., Safan, S. M., & Gaballah, A. R. (2021). Staff nurses' perception about teamwork and its effect on their job performance at Menoufia university hospitals. *Menoufia Nursing Journal*, 6,(1), 131-145.
14. Gunawan, J., Aungsuroch, Y., & Fisher M. L. (2019). Competence-based human resource management in nursing: A literature review. *Nursing Forum*, 54(1), 91–101. <https://doi.org/10.1111/nuf.12302>

15. Kalisch, B., Lee, H., & Salas, E. (2010). The Development and Testing of the Nursing Teamwork Survey. *Nursing Research*, 59, 42-50. <https://doi.org/10.1097/NNR.0b013e3181c3bd42>.
16. Kohanová, D., Hrbková, Ž., & Žiaková, K. (2024). Teamwork among nursing staff: a cross-sectional study. *Central European Journal of Nursing and Midwifery*, 15, 1031-1041. <https://doi.org/10.15452/cejnm.2023.14.0020>.
17. Maryville University (2024). Teamwork and collaboration in nursing: Top 5 benefits. <https://nursing.maryville.edu/blog/top-5-benefits-of-teamwork-in-nursing.html#:~:text=Teamwork%20in%20nursing%20involves%20communicating,appropriately%20and%20empathetically%20with%20laypeople>.
18. McCombes, S. (2023). Descriptive research. Definition, types, methods and examples. <https://www.scribbr.com/methodology/descriptive-research/>
19. Meneses-La-Riva, M. E., Fernández-Bedoya, V. H., Suyó-Vega, J. A., Ocupa-Cabrera, H.
20. G., Grijalva-Salazar, R. V., & Ocupa-Meneses, G. d. D. (2025). Enhancing healthcare efficiency: The relationship between effective communication and teamwork among nurses in Peru. *Nursing Reports*, 15(2), 59. <https://doi.org/10.3390/nursrep15020059>
21. Nurmeksela, A., Kinnunen, J., & Kvist, T. (2020). Nurse managers' work content: development of the questionnaire and results of the pilot study. *Scandinavian Journal of Caring Science*, 34(4), 839-851. <https://doi.org/10.1111/scs.12796>
22. Nurmeksela, A., Mikkonen, S., Kinnunen, J., & Kvist, T. (2022). Validation of the nurse managers' work content questionnaire and factors—A structural equation modeling study. *Journal of Nursing Research*, 30(6), e245. <https://doi.org/10.1097/jnr.0000000000000526>
23. Nurmeksela, A., Mikkonen, S., Kinnunen, J. et al. Relationships between nurse managers' work activities, nurses' job satisfaction, patient satisfaction, and medication errors at the unit level: A correlational study. *BMC Health Services Research* 21, 296. <https://doi.org/10.1186/s12913-021-06288-5>
24. Nursing Education Staff (2024). Nurse insights: What are the best strategies for teamwork in nursing? *Nursing Education*. <https://nursingeducation.org/insights/teamwork-in-nursing/>
25. Omery, A., Crawford, C. L., Dechairo-Marino, A., Quaye, B. S., & Finkelstein, J. (2019). Re-examining nurse manager span of control with a 21st-century lens. *Nursing Administration Quarterly*, 43(3), 230–245. <https://doi.org/10.1097/NAQ.0000000000000351>
26. Patarru, F., Weu, B. Y., Handini, F.S., & Heryyanoor, H. (2019). The role of the nurse Unit manager function on nursing work performance: A systematic review. *Journal Nursing*, 14(3si), 231-235. [http://dx.doi.org/10.20473/jn.v14i3\(si\).17108](http://dx.doi.org/10.20473/jn.v14i3(si).17108)
27. Salas, E., Sims, D., & Burke, S. (2005). Is there a “Big Five” in Teamwork?. *Small Group Research*, 36, 555 -599. <https://doi.org/10.1177/1046496405277134>.
28. Sanford, N., Lavelle, M., Markiewicz, O., Reedy, G., Rafferty, D. A. M., Darzi, L. A., & Anderson, J. E. (2024). Decoding healthcare teamwork: a typology of hospital teams. *Journal of Interprofessional Care*, 38(4), 602–611. <https://doi.org/10.1080/13561820.2024.2343835>
29. Wong, K. L., Chua, W. L., Griffiths, P., Goh, Q. L. P., Low, K. W. C., Tan, J. Q. A., & Liaw, S. Y. (2025). Teamwork between registered nurses and unlicensed assistive personnel in acute care settings: A scoping review. *International Journal of Nursing Studies Advances*, 8, 100293. <https://doi.org/10.1016/j.ijnsa.2025.100293>.
30. Yarooms (2023). Collaboration vs. teamwork: Understanding the key differences. <https://www.yarooms.com/blog/collaboration-vs.-teamwork-understanding-the-key-differences#:~:text=While%20teamwork%20emphasizes%20collective%20effort,them%20essential%20for%20organizational%20success>.
31. Yen, M., Trede, F., & Patterson, C. (2015). Learning in the workplace: The role of Nurse Managers. *Australian health review: A publication of the Australian Hospital Association*, 40. <https://doi.org/10.1071/AH15022>.