

Relationship of Nursing Management Functions with Missed Nursing Care: A Cross-Sectional Study

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Abstract

A crucial role of the nurse is to provide safe nursing care without missing anything. Unsafe care is a key contributor to morbidity and mortality in the world. This study aimed to identify the relationship between management functions and nursing care that were missed at three inpatient installations at regional general hospitals. The research used a quantitative approach with an analytic research and cross-sectional design. The sample consisted of 238 nursing staff comprising team leaders and implementing nurses who worked at Regional Hospitals A, B, and C. The management function ($p = 0.001$) and all its components of planning, organizing, staffing, direction, and control ($p = 0.001$; $p = 0.001$; $p = 0.001$; $p = 0.001$; $p = 0.001$) were significantly related. The management function and all its components are thus related to missed nursing care. The recommendation is to improve the quality of the implementation of the nursing management function.

Keywords: management function, missed nursing care

Abstrak

Hubungan Fungsi Manajemen Keperawatan dengan Asuhan Keperawatan yang Terlewatkan: Studi Cross Sectional. Peranan penting seorang perawat salah satunya adalah pemberian asuhan keperawatan yang aman tanpa ada yang terlewatkan. Hal ini dikarenakan perawatan yang tidak aman adalah salah satu sumber morbiditas dan mortalitas terpenting di dunia. Penelitian ini adalah untuk mengidentifikasi hubungan antara fungsi manajemen dengan asuhan keperawatan yang terlewatkan di 3 (tiga) Instalasi Rawat Inap Rumah Sakit Umum Daerah. Penelitian ini menggunakan pendekatan kuantitatif dengan desain penelitian analitik dan rancangan cross-sectional. Sampel berjumlah 238 staf pelaksana keperawatan yang terdiri dari ketua tim dan perawat pelaksana yang bekerja di Rumah Sakit Umum Daerah A, B, dan C. Fungsi manajemen ($p = 0,001$) dengan seluruh komponennya perencanaan, pengorganisasian, ketenagaan, pengarahan dan pengendalian ($p = 0,001$; $p = 0,001$; $p = 0,001$; $p = 0,001$; $p = 0,001$) berhubungan secara signifikan. Fungsi manajemen dan seluruh komponennya berhubungan dengan asuhan keperawatan yang terlewatkan. Rekomendasi yaitu meningkatkan kualitas pelaksanaan fungsi manajemen keperawatan.

Kata Kunci: asuhan keperawatan yang terlewatkan, fungsi manajemen

Introduction

In her nursing theory, Virginia Henderson stated that there are 14 components of human basic needs. These include the need to breathe normally, drink and eat adequately, eliminate bodily waste, move, dress and undress, maintain body temperature, keep the body clean, avoid environmental hazards, communicate with others, work, play, learn new things, worship, and achieve adequate sleep and rest (Potter et al., 2020). The fulfillment of these 14 basic human

needs is arranged into one unit within the nursing care process composed of nursing assessment, nursing diagnosis, nursing planning, nursing implementation, evaluation, and nursing documentation (Toney-Butler & Thayer, 2019). It is mandatory to ensure that the basic human needs are met when someone is hospitalized. The nurse therefore plays an important role in ensuring these needs are fulfilled.

In reality, however, problems arise because nurses often skip the fulfillment of these basic

needs. Lake et al. (2020) stated that 80% of nurses reported that they often skipped nursing care during a work shift. Activities found to have been frequently overlooked included teaching patients and families (15%), talking to patients (12%), helping and advising breastfeeding mothers (11%), and preparing patients and families to go home (9%). Further, dos Reis Dutra, et al. (2019), in their study, stated that around 74.1% of nurses reported at least one nursing activity that was missed during a work shift. The frequently overlooked activities in their study included bathing the patient (91.38%), performing wound care (93.11%), washing hands (98.28%), and assessing patients' vital signs (89.65%).

Nilasari et al. (2020) reported similar findings, notably that nurses did not fully complete various activities. They found that nurses completed only 26% of oral hygiene tasks, 24% of duties involving the provision nutrition, and 23% of tasks related to ensuring patients were placed in a suitable position to maintain the airway.

Missed nursing care has a huge impact not only on patients but also on nurses. The results may include decreased patient satisfaction, a rise in patient safety-related incidents, and increased patient mortality (Ball et al., 2018). Missed care results also have a significant impact on nurses, namely a decrease in the quality of care, increased turnover, decreased job performance, and an increase in the intention to leave (Jones, et al., 2015; Lake et al., 2018). Janatolmakan and Khatony (2022) stated that nurses believed that the main consequence of missed nursing care was a reduction in the quality of nursing care provided to the patients. They cited consequences such as endangered patient safety, prolonged hospital stay, and even death.

Nilasari et al. (2020) stated that one of the reasons for missed nursing care was that the head nurse lacked direction and control of the care process, Standard Operating Procedure (SOP) regarding the implementation of care and monitoring. SPO regarding the implementation of

care that is not yet owned and monitoring. dos Reis Dutra et al. (2019) contended that nursing care was overlooked because the head nurse, as a leader, must be able to simultaneously supervise, engage in teamwork, and support sustainable education (Global Centre for Nursing Executives, 2015). Patarru et al. (2019) stated that team performance was impacted by the assignment of a management function to the head nurse. The greater the proportion of the planning function carried out by the head of the room, the better the performance of a team. As such, to reduce the amount of missed nursing care, it would be very useful to identify the relationship between the nursing management function and nursing care that has been over-looked.

In a preliminary study at Regional General Hospital A, three out of four nurses stated that actions were missed, such as providing nutritional needs. Meanwhile, at Regional General Hospital B, four out of five people often overlooked measures such as patient personal hygiene. Meanwhile, in Regional General Hospital C, Muthmainnah et al. (2017), in their research, stated that nurses in inpatient rooms carried out more medical tasks compared to providing nursing care to their patients. This study therefore aims to identify the relationship between nursing management functions and missed nursing care.

Methods

This study used a quantitative approach with an analytic research and cross-sectional design to analyze management function factors as the independent variables related to overlooked nursing care as the dependent variable. The population was located in Regional General Hospitals A, B, and C; the samples comprised 238 nurses who worked in a regional general hospital. The sample population was determined using a simple random sampling technique, namely by selecting members from the population at random without paying attention to the existing strata in the population. Precisely, the proportional sampling formula was used to determine the number of samples to take in each room; that is, the

population in each room was multiplied by the number of samples divided by the total population.

This research obtained a certificate of ethical review from the Ethics and Research Committee of the Faculty of Nursing, Universitas Indonesia with the number SK-53/UN2/F12/D1.1.1/ETIK.FIK.2020 and obtained permission from the Director of each Regional General Hospital (RSUD). The ethical test was passed at RSUD A with number 003/KEPK/RSUDT/2020 and from RSUD C with number 19/KEPK/06.03/2020. The data collection was carried out simultaneously from April to May 2020 using the Google Forms application. The validity and reliability of the questionnaire for the nursing management function were tested on the team leader and implementing nurses, namely a total of 30 nurses at the Cibinong Hospital Inpatient Installation, on 4 – 5 March 2020. The regional general hospital was chosen due to the similarity in characteristics, namely type B. In the questionnaire, the management function comprised seven statements with an r table total of < 0.361. A supervisor consultation was then carried out. In the planning sub-variable, statements 1 (r 0.330), 4 (r 0.325), and 5 (r 0.140) were omitted. In the organizing sub-variable, the sentence structure of core state-

ments 7 (r 0.059) and 8 (r 0.219) was improved. For sub-direction, statement 16 (0.132) was omitted while statement 19 (0.137) was omitted from the control sub-variable. A total of 17 statements were omitted or their sentence structure was amended.

Results

The results of the univariate analysis displayed in Table 1 reveal an average score of 53.11 (78.10% of the maximum value) across the three regional general hospitals, with Regional General Hospital B on 55.27 (81.27% of the maximum value) and RSUD C on 53.23 (78.27% of the maximum value). The average score across the majority of management functions was 79.55%; by component, this included an average for planning of 81.41%, organizing on 72.5%, staffing 84.75%, actuating 72.62%, and controlling 72.58%.

The results of the bivariate analysis in Table 2 indicate a significant relationship between the nursing management function and missed nursing care (p = 0.001). This is supported by each component in the nursing management function that has a significant relationship with planning, organizing, managing, directing, and controlling (p = 0.001).

Table 1. Overview of Nursing Management Functions

Variables Management function	Regional General Hospital A			Regional General Hospital B			Regional General Hospital C			Three Regional General Hospitals		
	\bar{x}/σ	% of max	95% CI	\bar{x}/σ	% of max	95% CI	\bar{x}/σ	% of max	95% CI	\bar{x}/σ	% of max	95% CI
Variables	53.1/6.5	78.1	51.8 – 54.4	55.27/5.57	81.27	54.20 – 56.20	53.23/9.23	78.27	49.75 – 56.71	54.10/6.60	79.55	53.25 – 54.94
Planning	9.8/1.5	82	9.5 – 10.1	10.06/1.27	83.83	9.82 – 10.31	9.50/2.17	79.16	8.68 – 10.31	9.89/1.54	82.41	9.70 – 10.09
Organizing	10.8/2.0	67.5	10.4 – 11.2	13.41/2.01	83.81	13.05 – 13.79	12.56/2.45	78.5	11.64 – 13.48	11.60/2.11	72.5	11.33 – 11.87
Staffing	9.9/1.8	82.9	9.5 – 10.3	10.44/1.51	87	10.19 – 10.77	9.80/2.42	81.66	8.89 – 10.70	10.17/1.79	84.75	9.94 – 10.40
Actuating	11.8/1.7	74.1	11.5 – 12.2	12.55/1.57	78.43	12.24 – 12.54	12.60/1.81	78.75	11.92 – 13.27	12.26/1.74	76.62	12.05 – 12.48
Controlling	8.6/1.1	72	8.4 – 8.8	8.75/0.96	72.91	8.51 – 8.94	8.76/1.95	73	8.03 – 9.49	8.71/1.20	72.58	8.55 – 8.86

Table 2. Relationship between Management Functions and Overlooked Nursing Care

Variables Management function	Regional General Hospital A		Regional General Hospital B		Regional General Hospital C		Three Regional General Hospitals	
	Missed nursing care		Missed nursing care		Missed nursing care		Missed nursing care	
	r	p	r	p	r	p	r	p
Variables	0.383	0.000*	0.416	0.000*	0.585	0.001*	0.397	0.001*
Planning	0.289	0.003*	0.365	0.000*	0.547	0.002*	0.374	0.001*
Organizing	0.006	0.952	0.327	0.001*	0.212	0.260	0.274	0.001*
Staffing	0.407	0.000*	0.442	0.000*	0.712	0.000*	0.479	0.001*
Actuating	0.316	0.001*	0.181	0.062	0.477	0.008	0.271	0.001*
Controlling	0.168	0.094	0.246	0.011	0.586	0.001*	0.297	0.001*

Discussion

The implementation of management functions at the three regional general hospitals was found to stand at more than 70%. The head nurse is a professional nurse who is responsible for managing one room in the hospital where nursing care is provided and is the liaison between the middle and upper management levels and the nursing staff (Hadi-Moghaddam et al., 2021). Their management functions include planning, organizing, staffing, actuating, and controlling; these are essential to ensuring that the desired results are achieved and nurses' performance is improved (Kendall, 2018).

In terms of individual management functions, RSUD B has the highest value in the implementation of planning, organizing, and staffing. Planning can be formal or informal, tactical, strategic, or operational. Some planning practices are very pertinent for the effective and efficient administration of the unit. The nurse manager in this position is the head nurse and they must conduct an environmental analysis to evaluate the current situation of the unit. This enables them to formulate goals and objectives, and to come up with alternative actions for cost-effective analysis. In terms of day-to-day operations, the head nurse must plan the nursing care, explain the nursing care as guided by the Standard Operating Procedures (SOPs), and

plan a supervision schedule. Ofei et al. (2019) and Allah et al. (2020) identified planning for the supervision, training, and development of colleagues, the mode of organizing nursing care, staff attitudes, and resource acquisition as the basic functions of the nurse manager that make the role implicit to the achievement of organizational goals. Meanwhile, effective communication essentially advocates the dissemination of pertinent information about work in the unit. Good planning helps to increase staff satisfaction.

The head nurse organizes the distribution of nurses based on the needs/level of patient dependence, assigning tasks according to the patients' abilities. They draw up official schedules and coordinate training activities within inpatients in collaboration with other health workers. Nurse managers also coordinate activities in the unit with other professionals and cadres to ensure client satisfaction and create a positive workplace environment that fosters staff satisfaction while ensuring the achievement of healthcare organizational goals (Ofei & Paarima, 2021).

In terms of staffing, the role of the head nurse is to allocate nursing tasks in inpatient rooms, orientate new nurses, and set assignment methods. Parreira et al. (2021) noted that staffing, associated with the level of competencies in the

budgetary/financial dimension, should be considered. However, it should also be noted that the adoption of task-oriented methods (low-quality methods that are being put aside) as opposed to person-centered methods impacts the patient, the professional, and the organization. While the former methods may appear to create an economy because they require only low staffing levels, this advantage is quickly negated by the tremendous impact of poor-quality care, often leading to high rates of avoidable errors and accidents due to related adverse events.

In actuality, the head nurse coaches new nurses, provides opportunities for staff to partake in seminars or activities, and performs supervising and motivating duties. Fukada (2018) stated that coaching is a training method aimed at developing novice nurses' qualifications to enable them to work effectively in the provision of high-quality care and services. Through their head nurses' coaching skills, novice nurses can receive sound mentoring and feedback on the technical aspects of their responsibilities. Head nurses should also be held accountable for helping novice nurses to practice their new roles through the use of interactive listening and clarifying coaching skills. As such, the present study's education program is very important not only in terms of improving head nurses' coaching skills but also in reducing role ambiguity for novice nurses and helping them to become accountable for the efficient practice of their new role.

The role of the head nurse in controlling includes evaluating nursing documentation, assessing nursing actions, and providing feedback on nurses' work. As a manager, the head nurse will positively impact the correct fulfillment of the documentation requirements as carried out by implementing nurses, while a good relationship will ensure assistance and support is available to assist in the provision of effective nursing services (Nopriyanto et al., 2020).

The bivariate method reveals that the planning

process is associated with missed nursing care; the correlation shows that the better the planning of the head nurse, the better the fulfillment of nursing care. This finding is in line with Babaeipour-Divshali et al. (2016), who stated that careful planning is required to enable the proper direction of nurses' performance. Nilasari et al. (2020) highlighted the importance of the head nurse determining the direction and purpose of the room and planning according to the hierarchy. Ofei et al. (2020) also contended that nurse managers must know and use the planning process, while the standards set out in the organization planning can be informal or formal. Informal plans involve nothing in writing and no shared goals. They are general in nature and lack continuity as they are usually created by individuals who have not shared information with staff. Formal planning, on the other hand, encompasses and sets specific goals that cover a defined period, which can be years or months. Goals are written and shared with staff to avoid ambiguity, and they create a shared understanding of what needs to be done.

The organizing process is also known to be associated with missed nursing care. Here, the correlation shows that the better the organization of the head of the room, the better the fulfillment of nursing care. This is in line with Smeulders et al. (2019), who found that the head of the room is responsible for organizing the existing nursing staff and the nursing service activities to be carried out according to the needs of the patient so that nothing is overlooked. The organizing function also involves establishing a formal structure that ensures the best coordination or use of resources to achieve goals (Marquis & Huston, 2017). Organizing is a management function that involves the development of an organizational structure and the allocation of human resources to ensure that no nursing care is missed (Patarru et al., 2019).

In terms of the association of the workforce process with missed nursing care, the correlation shows that the better the head of the nursing room's workforce, the better the fulfillment

of nursing care. This reflects Cho et al. (2016), who stated that energy adequacy is a predictor of missed nursing care. Diab and Ebrahim (2019) also stated that there is a significant relationship between inadequate staff numbers and missed nursing care. Low levels of nursing staff are associated with adverse hospital outcomes, especially mortality (Griffiths et al., 2018). Therefore, the head nurse must ensure that they have sufficient numbers of competent nursing staff every day.

The correlation between the actuating process and missed nursing care shows that the better the direction of the head nurse, the better the fulfillment of nursing care. This aligns with Amri and Ardenny (2015), who identified a significant relationship between the actuating function and the motivation of nurses in providing nursing services ($p = 0.002$). Gunawan et al. (2021), meanwhile, noted that the role of the head nurse in providing direction has a major influence on the implementation of nursing care. Noer'aini et al. (2016) also found a significant relationship between actuating and the implementation of nursing care ($p = 0.00$). The role of the nursing manager can however be overlooked in nursing care. In this context, they provide the requisite direction and motivation to ensure that staff can always provide the planned care according to the patients' basic needs.

In terms of the relationship between the controlling process and missed nursing care, the correlation shows that the better the control of the head of the nursing room, the better the fulfillment of nursing care. Noer'aini et al. (2016) found a significant relationship between controlling and the implementation of nursing care ($p = 0.00$) In their study, it was found that standardized supervision would affect patient management. Moghaddam et al. (2019) highlighted that controlling functions include planning, directing, guiding, teaching, observing, encouraging improvement, trusting, monitoring, and evaluating, continuously, for every nurse, patiently, justly, and wisely. The aim is

thus for every nurse to provide nursing care properly and skillfully, while maintaining security and safety, promptly and thoroughly, according to competence.

Ultimately, the head nurse is an internal stakeholder who plays an important role in carrying out management functions to achieve organizational goals by working together through people and other organizational resources (Kallio et al., 2018). As a first-line manager, the head nurse plays an important role and brings knowledge and skills to improve care (Babaeipour-Divshali, et al., 2016). They must be able to perform their function to ensure that no nursing care is missed.

Conclusion

The head nurse plays a key role in carrying out management functions, which are important in achieving organizational goals. The management functions range from planning based on the hierarchy to coordinating the organizational structure and managing resources. They must also ensure there are sufficient numbers of competent personnel available at the same time as providing motivation, guidance, and direction. Ongoing monitoring and evaluation are crucial to ensure the fulfillment of nursing care.

The head nurse can improve the implementation of management functions to improve the quality of nursing care and can be a driving force in ensuring that the proper level of nursing care is provided. For this reason, as a nursing manager, the head nurse must be aware that their management function is highly influential in terms of the fulfillment of nursing care. This demonstrates the importance of the head nurse performing a manager's function in an effort to optimize the fulfillment of nursing care. The nursing manager can optimize care by executing and strengthening the planning function, namely planning care with the team leader and explaining care activities according to SOPs. They must also coordinate the division of tasks and service activities in the nursing room. As

people managers, they are responsible for implementing and strengthening the workforce function to ensure the competence of staff in carrying out nursing care. This includes supporting staff to continue their studies, distributing tasks evenly, orienting new nurses, and determining methods of care provision. They will also implement and strengthen the directive function by holding meetings with minimal staff, providing staff with opportunities to participate in seminars/other scientific activities, and motivating staff. Finally, their role in implementing and strengthening the control function involves evaluating the implementation of nursing care and providing feedback. Nursing managers must also pay attention to the course of leadership in the nursing room by creating a comfortable atmosphere for workers and efforts to fulfill management elements (HR, methods, finance, and equipment). In the management element, managers should learn that the division of tasks is inappropriate when faced with a shortage of staff. Monitoring and managing communication problems between staff, along with issues around inadequate equipment, can thus be central to remaining abreast of nursing care that is decreasingly unfulfilled.

Investigating nursing care that is missed also enriches knowledge as it highlights the specific activities that are often missed and the factors that contribute to this. The results of this study can therefore be used to enrich nursing knowledge, so that fulfilment of the 14 basic needs does not become a concern. This research may be used as the basis for further studies, either qualitative research or studies involving other factors such as individual norms and organizational culture, as well as research into the impact of missed nursing care.

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