



## Research Article

### The Comparison of the Implementation of Primary and Modular Nursing Care Methods at Advent Hospital Bandung

Yosua Wisnu Pratama <sup>1\*</sup>, Myhrna Hutagalung<sup>1</sup>, Belinda Sabatini <sup>1</sup>, Angeline Hutapea<sup>1</sup>

<sup>1</sup>Anggrek, Advent Bandung Hospital, West Java, Indonesia

#### Article Information

Received: 29 January 2025  
Revised: 30 June 2025  
Accepted : 32 June 2025  
Available online: 01 July 2025

#### Keywords

Primary Nursing Method ; Modular Nursing Method ; Length of Stay

#### Correspondence

E-mail: wisnupratama755@gmail.com

#### Website

<https://journal.umtas.ac.id/index.php/healthcare>

#### Doi

10.35568/healthcare.v7i2.6556

©The Author(s) 2025

This is an **Open Access** article distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 International License

#### ABSTRACT

The primary nursing method is a method of providing nursing care aimed at professional values, with adaptability and competitiveness, as well as an effective nursing care model that always considers quality standards and patient safety. Nurses are required to improve the quality of their performance, as evidenced by research results that patient safety attitudes are influenced by patient safety goals. One indication of the success of nursing care provided during patient treatment is the length of stay. Length of Stay (LOS) is the number of days a patient is treated in the hospital, from the day of admission to the day of discharge, and LOS is also used by hospitals as a service indicator. This research is analytical with a descriptive correlational approach. The sampling technique used was purposive sampling. Based on the overall data analysis results, it was found that the Sig. (2-tailed) value = 0.022, which means that there is a significant comparison between the quality of primary nursing care and the Modified Team nursing care on the length of stay of patients in the hospital inpatient room.

#### INTRODUCTION

Health is a fundamental aspect of human life, allowing individuals to carry out daily activities optimally. In the health care system, nursing care plays a crucial role as

the front line in providing health services. According to the Regulation of the Minister of Health (PMK) No. 26 of 2019 concerning Nursing, nursing care is defined as "a series of interactions between nurses and clients

and their environment to achieve the goal of fulfilling the needs and independence of clients in caring for themselves.

Therefore, professional nursing methods become an integral part of organizing in hospitals. Primary nursing methods, as one approach, emphasize professional, adaptive, and competitive values, as well as effective nursing care models by considering quality standards and patient safety. Nurses are required to improve the quality of their performance, as evidenced by the results of research that patient safety attitudes are influenced by patient safety goals (Galleryzki et al., 2022).

Professional nursing services are an inseparable part of health services based on nursing science and skills, aimed at individuals, families, groups, or communities, both in healthy and sick conditions, covering the entire process of human life (Minister of Health of the Republic of Indonesia, 2019). To achieve the goals of nursing services - namely comprehensive, holistic, and continuous nursing care - nursing uses assignments to plan and coordinate activities (Amalia & Lailasari, 2020). The nursing assignment method is used in patient care in hospitals with the aim of improving the quality of nursing services.

Hospitals offer emergency, outpatient, and inpatient care. Length of stay is one of the metrics used to evaluate hospital effectiveness (Yenni et al., 2024). One indicator of the success of nursing care is the length of stay (LOS). LOS reflects the number of days a patient is hospitalized, from the day of admission to the day of discharge, and is used as an indicator of hospital services (Hosizah & Maryati, 2018). LOS indicates the length of a patient's hospitalization in one period of care, measured in days, by calculating the difference between the patient's discharge date and admission date.

Comparative research aims to determine and test the differences between two or more groups, and compare variables

between subjects or at different times to find cause-and-effect relationships. The comparative method is used to compare data and draw new conclusions. Comparative research compares the conditions of one or more variables using two or more different data, or at two different times (Sugiyono, 2017).

The method of providing primary nursing care is the provision of nursing care to a group of patients coordinated by a primary nurse who is responsible for all nursing care for patients from arrival to discharge or transfer (Rowland & Rowland, 1997). The primary nurse's task is to coordinate, evaluate, and provide direct care to patients. Nursing care can be provided comprehensively and continuously, and this method emphasizes the aspect of responsibility for providing nursing care to patients. The primary nurse is responsible for all patient needs, collaborating with other health teams, and is fully responsible for patient care. The primary method is the provision of nursing care that emphasizes the interests of the patient, not the duties of the nurse. The involvement of patients and their families in care will encourage a relationship of mutual trust between nurses and patients and their families, so that it can improve the continuity and effectiveness of discharge planning (Rowland & Rowland, 1997).

Functional approach, case method, team approach, modular approach, and primary nursing are ways of providing nursing care (Setyawan et al., 2025). The Modified Team-Primary Nursing Care Method (Modular) is the provision of team nursing services, also called the modular nursing care method (Magargal, 1987, in Yoder & Wise, 1999). Nurses have more time to provide direct nursing care to patients, and nurses can understand that the nursing care provided is individual, so it is not the same in the approach to patients (Bennet & Hilton, 1990, in Yoder & Wise, 1999). Nurses carry out tasks in the same module, continuously, and the quality of service can be improved.

According to Ann (1994), the modular nursing care method is a modified nursing care method from the primary method, because it uses a professional nurse as a planner in providing nursing care. The modular nursing care delivery method is the same as the team method, because professional and non-professional nurses work together under the coordination of a professional nurse. The modular nursing care delivery method is the same as the primary method, because there are professional nurses who are responsible for providing nursing care to patients, from when the patient arrives until they go home. The quality of nursing care in the inpatient ward is greatly improved by the application of the team management and primary care models. Research by Indrawati & Erlena, (2023) states that with a p-value  $<0.05$ , quasi-experimental research found substantial differences in the quality of care of the two models. The primary model improves nurses' critical thinking skills throughout the nursing care process, from assessment to evaluation, and is considered more competitive and adaptive.

Length of Stay (LOS) or length of stay is the number of days a patient is hospitalized, from the day of admission to the day of discharge or going home. LOS is also used by hospitals as an indicator of service (Hosizah & Maryati, 2018). Length of stay indicates the number of days a patient spends in the hospital during therapy (Abqariah et al., 2024). LOS is an indication of how many days a patient is hospitalized in one treatment period. The unit used for length of stay is days, while the way to calculate length of stay is by calculating the difference between the discharge date (leaving the hospital, either alive or dead) and the date the patient entered the hospital.

#### **METHOD**

The research design that will be used in this study is a descriptive correlational research method. The population in this study was patients treated in the Anggrek and Bugenvil rooms of the Bandung Adventist Hospital.

To determine the sample in this study, the researcher collected samples using the Purposive Sampling method. The sample of this study was postoperative patients treated in Anggrek and Bugenvil rooms of the Bandung Adventist Hospital and met the criteria for potential samples. The number of samples in this study was 34 people.

#### **RESULTS**

In Anggrek room, there were 10 patients aged 18-65, or 50% of the total sample, then those aged  $<18$  years were 1 patient, or 5% and  $>65$  years were 9 patients, or 45% of the total sample. Then there were 11 male patients, or 55% and 9 female patients, or 45% of the total sample. And from all the samples, none experienced infection due to surgical wounds (Table 1).

In Bugenvil room, there were 17 patients aged 18-65 or 85% of the total sample, then those aged  $<18$  years were 1 patient or 5% and  $>65$  years were 2 patients or 10% of the total sample. Then there were 5 male patients, or 25% and 15 female patients, or 75% of the total sample. And of all the samples, none experienced infection due to surgical wounds (Table 2). The average length of stay in Anggrek room with a total sample of 20 patients was 3.15 days, followed by Bugenvil room with an average length of stay of 2.35 days from 20 samples (Table 3).

Based on the results of the overall data analysis, it was found that the Sig. (2-tailed) value = 0.072, which means that there is no significant comparison between the quality of primary nursing care and Modification Team nursing care on the length of time patients are hospitalized in the hospital inpatient room. The results of this study are supported by research conducted by Siregar, Riska (2023) which stated that there was no difference in the length of hospitalization in the control group and in the intervention group after being tested using SPSS with the Wilcoxon Test ( $p < 0.05$ ) Between the control group and the intervention group ( $p = 0.490$ ) Against the implementation of primary MPKP (Table 4).

**Table 1.** Distribution of Demographic Data of Orchid Room Patients According to Profile

No	Age	Sex	Dx	Length of Treatment	Surgical Wound Infection
1.	74thn 3bln 7hr (30-09-1950)	Male	carcinoma bladder + BPH	4 days	no
2.	55thn 5bln 2hr (05-08-1969)	Female	mammary displasia	2 days	no
3.	55thn 10bln 18hr (18-02-1969)	Male	Ca buli	3 days	no
4.	52thn obl 23hr (14-12-1972)	Male	Cholelithiasis + Cholecystitis acute	3 days	no
5.	46thn obl 22hr (16-12-1978)	Female	tumor mamae suspec malignant	4 days	no
6.	52thn 10bln 13hr (24-02-1972)	Male	ca buli	2 days	no
7.	68thn 2bln 13hr (27-10-1956)	Male	LUTS ec BPH	3 days	no
8.	70thn 7bln 18hr (22-05-1954)	Female	Tumor ganas kulit ar infra labialis inferior	3 days	no
9.	65thn 11bln 26hr (14-01-1959)	Male	Retentio urine ec bph	3 days	no
10.	79thn 4bln 6hr (04-09-1945)	Female	HIL dextra reponible	4 days	no
11.	54thn obl 3hr (08-01-1971)	Male	Hernia Ventralis	2 days	no
12.	76thn obl 30hr (11-12-1948)	Female	closed fracture right neck femur	7 days	no
13.	61thn 7bln 3hr (12-06-1963)	Male	Subdural hemorrhage subakut frontotemporoparietal kiri et causa post trauma	7 days	no
14.	46thn 4bln 16hr (29-08-1978)	Female	Tumor mamae dextra susp. Malignan	2 days	no
15.	57thn 9bln 8hr (08-04-1967)	Male	hernia insional	3 days	no
16.	59thn 2bln 20hr (28-10-1965)	Female	CVI	1 day	no
17.	71thn obl 22hr (26-12-1953)	Female	ca thyroid papilare metastasis soft tissue	2 days	no
18.	32thn 5bln 13hr (08-08-1992)	Female	closed fracture at right patella displaced	3 days	no
19.	82thn 5bln 5hr (17-08-1942)	Male	retentio urine ec sgtrictur uretra bulbosa	3 days	no
20.	17thn 9bln 8hr (15-04-2007)	Female	apendisitis akuta	2 days	no

**Table 2.** Distribution of Demographic Data of Bougainvillea Room Patients According to Profile

No	Age	Sex	Dx	Length of Treatment	Surgical Wound Infection
1.	35thn 9bln 13hr (03-04-1989)	Women	Weber B Fracture Left Distal Fibula, Displaced + Suspect Fracture Lama Tip Fibula	2 days	no
2.	27thn 4bln 19hr (29-08-1997)	Women	Tumor colli dextra susp limfadenopati	2 days	no
3.	52thn 6bln 25hr (23-06-1972)	Women	invasive ductal ca mamae	4 days	no
4.	36thn 11bln 13hr (05-02-1988)	Women	tumor dan abses colli sinistra dd TBC	2 days	no
5.	49thn obl 6hr (14-01-1976)	Women	Struma nodosa non toksik bilateral	2 days	no
6.	34thn 11bln 18hr (01-02-1990)	Women	Tumor mammae dextra susp FAM	2 days	no
7.	24thn 10bln 0hr (21-03-2000)	Women	Appendicitis acute	3 days	no
8.	36thn 7bln 1hr (22-06-1988)	Women	batu ureter	2 days	no

9.	48thn 5bln 4hr (20-08-1976)	Men	Tumor mammae susp malignancy	2 days	no
10.	71thn 9bln 15hr (15-04-1953)	Women	Ileus obstruksi total ec adhesi post op , DD ec tumor .	6 days	no
11.	40thn 11bln 24hr (08-02-1984)	Women	Limphadenitis colli sinistra	1 day	no
12.	47thn obl 6hr	Female	thyroid carcinoma	3 days	no
13.	61thn 1bln 13hr	Female	Tumor Thyroid	2 days	no
14.	80thn 7bln 13hr	Male	ca buli	1 day	no
15.	25thn 9bln 13hr	Female	Tumor regio cruris dextra susp chondroma dd/ liposarcoma	2 days	no
16.	26thn obl 7hr	Female	Tumor regio inguinal dextra et sinistra susp limfadenopati	2 days	no
17.	51thn 8bln 27hr	Female	Soft tissue tumor regio pedis sinistra dd/ kista	2 days	no
18.	34thn 4bln 22hr	Female	Tumor kulit dan ulcus chronis	1 day	no
19.	17thn 3bln 17hr	Male	Tumor axilla dextra susp limfadenopati	2 days	no
20.	52thn obl 13hr	Male	Batu ureter	3 days	no

**Table 3.** Average length of stay

	Room	N	Mean	Std. Deviation	Std. Error Mean
Length of Treatment	<i>Anggrek</i>	20	3.1500	1.53125	.34240
	<i>Bugenvil</i>	20	2.3500	1.18210	.26433

**Table 4.** Quality of primary nursing care and Modification Team nursing care on the length of time patients are hospitalized

Independent Samples Test										
Levene's Test for Equality of Variances					T-test for Equality of Means			95% Confidence Interval of the Difference		
Length of Treatment	Equal Variances assumed	F	Sig.	t	off	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Length of Treatment	Equal Variances assumed	417	.522	1.849	38	.072	.80000	.43256	-.07567	1.67567
	Equal Variances not assumed	20	1.849	35.711		.073	.80000	.43256	-.07751	1.67751

## DISCUSSION

Based on the philosophy, principles, and theories of nursing, the nursing practice model describes actual and accurate nursing practice (Yulistiani & Tarigan, 2025). Keliat (2005) in Lobo et al., (2019) stated that the proper implementation of MAKP will have an impact on nurse performance, which can then also have an impact on increasing the utilization rate of hospital beds or Bed Occupancy Rate (BOR), and room quality

indicators, as well as reducing the average number of days a patient is treated or also called Average Length Of Stay (ALOS), and the average number of days a bed is unoccupied from the time it is filled to the next time it is filled or Turn Over Interval (TOI), which are indicators of good hospital service quality and have an impact on nurse performance. The effectiveness of MAKP implementation is also influenced by the number of available personnel and the

suitability of the MAKP model chosen for the room. High-quality nursing care, as well as efficient assistance, advocacy, information, protection, and treatment are some of the benefits of MAKP (Prasetyo et al., 2024).

To organize the provision of nursing care, nurses need a system consisting of procedures, structures, and professional values (Zairina et al., 2022). In the implementation of the Professional Nursing Care Model, the absolute activities that must be carried out and implemented properly in the Hospital are supervision, handover, drug centralization, and good nursing documentation. The better the implementation of these four activities, the better the implementation of the MAKP Team, and of course, it will improve the quality of health services and provide satisfaction to patients in nursing services in the Hospital. Fulfilling desires, impoliteness, obtaining values, justice, and disposition components are among the five job satisfaction models that concentrate on different factors (Lilis Rohayani et al., 2023). In addition to using service standards in the health sector, effectiveness is measured by six service indicators, namely Bed Occupancy Rate (BOR), which is the percentage of bed use in a certain time unit. This indicator provides an overview of the high and low levels of bed utilization in hospitals. The ideal BOR parameter value is between 75-85%. Average Length of Stay (ALOS), is the average length of time a patient is treated. This indicator, in addition to providing an overview of the level of efficiency, can also provide quality of service. When applied to certain diagnoses, it can be something that needs further observation. In general, the ideal ALOS value is between 3-12 days (Ramdhani, Kiki. 2019).

#### **CONCLUSIONS AND RECOMMENDATION**

After analyzing and interpreting the data that has been obtained, the researcher summarizes several analyses and what can be drawn from the data. From this analysis, the researcher can provide suggestions that can be useful, especially in the field of nursing.

Based on the analysis of the data obtained in this study, it was concluded that: There is no significant comparison between the quality of primary nursing care and Modification Team nursing care on the length of time patients are hospitalized in the hospital inpatient room.

#### **REFERENCES**

- Abqariah, Mukhlis, & Masri. (2024). Faktor Faktor Yang Berhubungan Dengan Lamanya Hari Rawat Pada Pasien Di Ruang Bedah Rumah Sakit Umum Daerah Tgk Chik Ditiro Sigli. *Jurnal Sains Riset*, 14(1), 508–515. <https://doi.org/https://doi.org/10.47647/jr.v14i1.2495>
- Amalia, A., & Lailasari, A. (2020). Perbedaan Metode Penugasan Tim Dan Penugasan Fungsional Pemberian Asuhan Keperawatan. *Babul Ilmi Jurnal Ilmiah Multi Science Kesehatan*, 12(1), 119–127.
- Galleryzki Annisa Rahmi (2022). Implementasi enam sasaran keselamatan pasien oleh perawat di masa pandemic covid-19. Jakarta : Berkala Ilmiah Mahasiswa Ilmu Keperawatan Indonesia 10 (1), 18-26
- Hosizah, & Maryati, Y. (2018). Bahan Ajar RMIK - Sistem Informasi Kesehatan II Statistik Pelayanan Kesehatan. Jakarta: Kemenkes RI.
- Indrawati, E., & Erlena, E. (2023). Penerapan manajemen asuhan keperawatan model tim dan model primer terhadap mutu asuhan keperawatan. *Holistik Jurnal Kesehatan*, 17(1), 71–78. <https://doi.org/10.33024/hjk.v17i1.9745>
- Lilis Rohayani, Setiawati, & Zia Airiza Zahara Fauzia. (2023). Hubungan Metode Penugasan Tim Dengan Kepuasan Kerja Perawat Di RS Dustira. *Jurnal Keperawatan Komplementer Holistic*, 1(2), 23.
- Lobo, Y., Herwanti, E., & Yudowaluyo, A. 2019. Hubungan Penerapan Metode Asuhan Keperawatan Profesional (Makp) Dengan Kinerja Perawat Di Ruang Kelimutu, Ruang Komodo, Dan Ruang Anggrek Rsud Prof. CHMK

- NURSING SCIENTIFIC JOURNAL P-ISSN, 3(September), 2580–9784.
- Marriner, Ann. 1986. *Nursing Theorists and their work*. Missouri: C.V Mosby Company, hal: 297-312.
- Prasetyo, J., Suprayitno, E. D., Mulyono, A. T., Efendi, C., & Nasihun, F. D. (2024). Pelaksanaan Model Asuhan Keperawatan Profesional (Makp) Di Rsud Gambiran Kota Kediri. *Jurnal Ilmiah Pamenang - JIP*, 6(2), 224–229. <https://doi.org/10.53599>
- Rowland, H. S & Rowland, B. L. 1997. *Nursing Administration Handbook 4th Edition*. Maryland: An Aspen Publication, hal: 339-358, 331-330
- Setiawati, Rohayani, L., & Akmaludin, I.(2021). Pengetahuan PerawatPelaksana Dengan Penerapan Model Asuhan Keperawatan Profesional Penyakit Dalam Dan Bedah. *Journal of Telenursing (JOTING)*
- Sitorus, R. (2006). *Model Praktik Keperawatan Profesional di Rumah Sakit*. Jakarta: EGC.
- Sitorus, Ratna. 2006. *Model Praktik Keperawatan Profesional di Rumah Sakit: Penataan struktur & Proses (Sistem) Pemberian Asuhan Keperawatan di Ruang Rawat*. Jakarta: EGC, hal: 33-43.
- Setyawan, A., Setiyadi, N. A., & Sugiharto, S. (2025). *Metode Tim Dalam Pelayanan Keperawatan: Systematic Review*. 17(2), 441–448.
- Sudarta, I. W. (2019). *Manajemen Keperawatan*. Yogyakarta: Gosyen Publishing.
- Sugiyono. (2017). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta
- Yenni, F., Purba, M. B., Syauqy, A., Muis, S. F., & Noer, E. R. (2024). Hubungan Mutu Asuhan Gizi Dengan Lama Rawat Inap Pasien Di Rumah Sakit Islam Ibnu Sina Bukittinggi. *Amerta Nutrition*, 8(1), 130–138. <https://doi.org/10.20473/amnt.v8i1.2024.130-138>
- Yoder & Wise. 1999. *Leading and Nursing 2nd Edition*. Missouri: Mosby Inc, hal: 365-383
- Yulistiani, & Tarigan, E. (2025). Analisis Penerapan Model Praktik Keperawatan Profesional (MPKP): Literatur Review Analysis of the Implementation Professional Nursing Practice Model (MPKP): Literature Review Pendahuluan Di era globalisasi dan kemajuan ilmu pengetahuan dan teknologi. *Jurnal Kesehatan Saelmakers PERDANA*, 8(1). <https://doi.org/10.32524/jksp.v8i1.1411>
- Zairina, E., Nugraheni, G., Sulistyarini, A., Mufarrihah, Setiawan, C. D., Kripalani, S., & Lestari, S. I. (2022). Factors related to barriers and medication adherence in patients with type 2 diabetes mellitus: a cross-sectional study. *Journal of Diabetes and Metabolic Disorders*, 21(1), 219–228. <https://doi.org/10.1007/s40200-021-00961-6>