

## Analysis Of Support Management In Drug Management In The Pharmaceutical Installation Of Permata Serdang Hospital

Nadya Cahya Paramitha<sup>1</sup>, Puput Oktami<sup>2</sup>

<sup>1</sup>Magister Kajian Administrasi Rumah Sakit, Fakultas Kesehatan Masyarakat, Universitas Indonesia

<sup>2</sup>Departemen Administrasi Kebijakan Kesehatan, Fakultas Kesehatan Masyarakat, Universitas Indonesia

Article Info	ABSTRACT
<p><b>Keywords:</b> Support management, Medication Management, Pharmacy Installation, Hospital.</p>	<p>Support management in the Pharmaceutical Installation has the aim of supporting the drug management system so that drug management in hospital agencies runs optimally. Pharmaceutical support management consists of human capital, organizational capital, information capital and finance capital, the four of which are interrelated so as to make the system that has been running effective and efficient. The purpose of this study was to determine the condition of support management at the Permata Serdang Hospital Pharmacy Installation. This research is a qualitative research with a case study approach and data collected from interviews and secondary data from the review of hospital documents. The results of interviews with informants from the Pharmacy Installation of Permata Serdang Hospital show that from the human capital aspect there are still problems related to the lack of human resources in related units. In organizational capital, it is known that an organizational structure has been formed that supports a work culture that focuses on patient safety and service efficiency. In information capital, the use of SIMRS has been utilized to support the management of medicines and services, although there are still some technical problems such as slow application and has not been fully utilized for decision making in the management of medicines. There is no information obtained from the finance department for the finance capital aspect, but the Hospital Pharmacy Installation carries out a control process to prevent losses from medicines that have been purchased. Therefore, the Hospital needs to improve the quality of management support such as increasing the number of human resources who also support the organization in the Permata Serdang Hospital Pharmacy Installation, as well as maximizing the function of SIMRS as a decision-making tool in the hope that drug management will run more effectively and efficiently.</p>
<p>This is an open access article under the <a href="https://creativecommons.org/licenses/by-nc/4.0/">CC BY-NC</a> license</p> 	<p><b>Corresponding Author:</b> Nadya Cahya Paramitha Magister Kajian Administrasi Rumah Sakit, Fakultas Kesehatan Masyarakat, Universitas Indonesia Jl. Lingkar, Pondok Cina, Kecamatan Beji, Kota Depok, Jawa Barat 16424 <a href="mailto:ncparamitha@gmail.com">ncparamitha@gmail.com</a></p>

### INTRODUCTION

Pharmaceutical installations are an important part of the health care system in hospitals, focusing on patient care and the provision of pharmaceutical preparations, medical devices,

and medical consumables. Carrying out pharmaceutical activities such as planning, procurement, storage, and destruction will achieve optimal management of pharmaceutical logistics. Hospital budgets and expenditures closely correlate with drug management. The ideal pharmaceutical installation manages pharmaceutical supplies and medical devices for 30–40% of the hospital budget. Research on evaluating drug management in hospital pharmaceutical installations has been carried out by several previous researchers, including research by Diana *et al.* (2021) on evaluating drug use based on prescribing indicators at Tora Belo Hospital and research by Sabarudin *et al.* (2020) on evaluating drug use at Dr. R. Ismoyo Kendari Army Hospital.

According to Quick *et al.* (cited in Handayany, 2022), the drug management cycle comprises four interrelated stages: selection, procurement, distribution, and use, all of which require effective management to function optimally. A well-organized and mutually supportive system will ensure the availability of drugs that support services and can be a source of hospital income. Management support factors, such as organizational human resources, administration and finance, and management information systems (SIMRS), are essential for supporting the drug management cycle, ensuring its effective and efficient execution. Research by Afiyani, Suwandi and Andriani (2023) on analyzing management support in drug management in the pharmacy unit of the University of Indonesia hospital explained that the duration of service and the welfare of human resources are the impacts of the problem of lack of human resources from the human capital aspect.

During its implementation, the Permata Serdang Hospital Pharmacy Installation encountered several challenges in managing drugs. Some of the findings in the first quarter of 2024 were that there was a difference between the physical amount of drugs and stock-taking; there was a difference in the amount of stock of consumable medical materials in the unit and in SIMRS; there were drugs that had to be returned due to expiration; and there were reports from the unit about drug stock shortages. According to Fakhriadi (cited in Ramadhani *et al.*, 2022), inefficient and substandard drug management will have a negative impact on hospitals, both from a medical, social, and economic perspective. When there is a difference in the amount of stock physically and in SIMRS, there will be a possibility of unpredictable drug vacancies and an impact on patient care. Unmonitored expired drugs will also cause financial losses for the hospital.

The purpose of this study is to determine the conditions and problems in the management of support in drug management at the Permata Serdang Hospital Pharmacy Installation in terms of human capital (HR), organizational capital, information capital, and financial management, so that solutions can be provided for solving problems related to management support in drug management at the Permata Serdang Hospital Pharmacy Installation for the basis of decision-making in drug management.

## METHODS

The study was conducted at the pharmacy installation of Permata Serdang Hospital, Serang Regency, Banten Province, in May–June 2024. Permata Serdang Hospital is a type D public hospital with private ownership. The research was qualitative research with a case study

approach, and data was collected from interviews and secondary data from reviewing hospital documents. The variables studied included human capital, organizational capital, information capital, and finance capital in drug management at the Permata Serdang Hospital Pharmacy Installation.

Interviews were conducted with the Head of the Pharmaceutical Installation Unit of Permata Serdang Hospital, pharmacists, and pharmaceutical technical personnel. Direct observation to directly observe the management process, including the administration and service of the pharmaceutical installation.

Primary data was obtained from in-depth interviews with informants to identify management support in drug management. Secondary data was obtained from document searches related to employee needs related to workload from the hospital's HR department. Observations were made by directly observing the drug management process in the Permata Serdang Hospital Pharmacy Installation from the administrative to the service section. Data were analyzed descriptively to obtain solutions in problem solving.

## RESULTS AND DISCUSSION

### Human Capital

According to Prayetno (2017), the human capital aspect is not just human resources (HR), but rather a system to improve the performance of employees and companies so that a company has a competitive advantage. According to Afiyani, Suwandi and Andriani (2023), logistics performance is defined by factors such as process time, efficiency, transaction constraints, and information exchange. Good human capital is essential for carrying out pharmaceutical activities, including patient service and drug management stages.

The results of interviews with three informants from Permata Serdang Hospital regarding human capital or human resources indicate that the primary issue facing the unit is the insufficient number of human resources. The number of human resource needs at the Permata Serdang Hospital Pharmacy Installation was analyzed according to workload, and the results were still insufficient.

**Table 1.** Workload Analysis at the Permata Serdang Hospital Pharmacy Installation

Position	Needs	Current Condition	Shortage
Pharmacist in Charge	1	1	0
Accompanying Pharmacist	2	1	1
Pharmaceutical Technical Personnel	3	4	0
Administrative Personnel	2	1	1

Source: HRD Employment Document of Permata Serdang Hospital

The first informant stated that the current number of resources is still insufficient according to the pharmaceutical service standard, which states that there should be at least three pharmacists, namely one APJ and two assistant pharmacists.

According to Permenkes Number 72 of 2016 concerning Pharmaceutical Service Standards in Hospitals, pharmacy service standards are for HR needs, which include having pharmacists and pharmaceutical technical personnel in accordance with the workload and

other supporting officers to achieve the goals and objectives of the pharmaceutical installation in the form of good and safe service quality Permenkes Number 72 of 2016 concerning Pharmaceutical Service Standards in Hospitals bases the calculation of pharmacist needs on the needs of the managerial division and the patient services provided in the outpatient and inpatient sections. The workload in pharmaceutical services for inpatients determines the pharmacist needs, which include managerial and clinical pharmacy tasks such as prescription review, drug reconciliation, tracing drug use history, monitoring drug therapy, PIO, counseling, education, and visits. For inpatients, this includes managerial pharmacy and clinical pharmacy services like prescription review, drug delivery, drug use, and counseling. For outpatients, this includes managerial pharmacy and clinical pharmacy services like prescription review, drug delivery, drug use, and counseling, and ideally, one pharmacist is required for every 50 patients. The shortage of human resources, particularly pharmacists, certainly has an impact on the operation of the Permata Serdang Hospital Pharmacy Installation service.

The three informants stated that with a lack of human resources, job desks overlap, and there is concern that this will have an effect on patient safety, such as medication errors or patient complaints due to unsatisfactory service. Medication errors are possible errors in pharmaceutical services in the prescribing, transcribing, dispensing, and administration processes that have the potential to harm patients (Putri et al., 2023). When outpatients are busy, the impact of a shortage of human resources becomes particularly apparent. To ensure patient safety, we must continue to verify prescriptions. This is one of the efforts made to avoid errors when giving medication to patients, but the patient service time becomes longer, so that the impact is that patient complaints arise regarding service time.

### **Organizational Capital**

Organizational capital can be defined as the company's ability to fulfill its vision and mission, resulting in overall intellectual and business performance, which is a collection of people who work together in achieving this. Organizational capital acts as a strong foundation so that a company can run well (Trisnawati & Maulana, 2023). The Permata Serdang Hospital Pharmacy Installation implements an organizational structure, with the Head of the Permata Serdang Hospital Pharmacy Installation leading it, and the person in charge of Administration, Management of Pharmaceutical Supplies, Outpatient Services, and Inpatient Services providing assistance. The Head of the Installation and the Pharmacist in Charge directly oversee the planning and procurement of medicines.

Informant One stated that the lack of human resources and the frequent turnover of pharmacists in the pharmacy installation of Permata Serdang Hospital made the organization's running unfavorable. Some of the reasons for employee resignation at the Permata Serdang Hospital Pharmacy Installation are personal needs such as having children and also looking for higher offers elsewhere. Employee turnover can negatively impact the organization by causing instability, uncertainty about workforce conditions, and an increase in invested HR costs. The organization will also be ineffective because the company loses experienced employees and needs to retrain new employees (Kuncoro, 2012).

Informant One informed me that some of the reasons for the departure of employees at the Permata Serdang Hospital Pharmacy Installation were personal reasons, such as having a new child and also looking for a new place with a higher income. However, they reported that the pharmacy installation's employees adapted easily to their new colleagues. According to Mcbey & Karakowsky (cited in Harvida & Wijaya, 2020), the reason for employee quitting is due to individual characteristic factors, which are influenced by personal character and demographic aspects of employees. These factors influence whether an employee will stay or leave an organization. These factors are age, tenure, education, and marital status. Meanwhile, the driving factor originates from the organization itself, and it is crucial for the organization to effectively manage this factor. Factors that include push factors are job satisfaction, satisfaction with salary, and appreciation of performance. Individual characteristics influence the decision to resign due to child-rearing, while the push factors of employee turnover encompass the pursuit of a higher salary or offer.

All three informants stated that the Permata Serdang Hospital Pharmacy Installation is focused on service efficiency and patient safety. Despite the limited human resources, it's crucial to provide a clear job description, as some officers find themselves juggling multiple tasks. According to the second and third informants, communication takes place during shift passes. Short messages and passbooks convey the obstacles that occur. Communication with other units is carried out by appointing the person in charge of the unit in the Permata Serdang Hospital Pharmacy Installation to convey and receive requests for drugs and obstacles that occur related to pharmaceutical supplies in each unit. The lack of human resources at the Permata Serdang Hospital Pharmacy Installation results in an inefficient jobdesk, hampering services and monitoring of medicines in the unit so that it affects the stock of unit medicines.

The Permata Serdang Hospital Pharmacy Installation prioritizes service efficiency without overriding patient safety and security. Clear communication is essential within the unit and between units to ensure the availability of medicines and enhance patients' quality of life.

### **Information Capital**

Hospitals, as health care facilities, necessitate information management to facilitate the various services they provide, including medical services. Information systems play three crucial roles in aiding the health service process: they support health service processes and operations, aid in staff and management decision-making, and support strategies for hospitals to become competitive institutions. The ideal SIMRS must provide convenience in its operations while also being able to overcome hospital patient service constraints (Molly & Itaar, 2021).

Information systems have 3 important roles in supporting the health care process, namely: supporting health service processes and operations, supporting staff and management decision making and supporting various strategies for competitive advantage. The hospital information system (SIMRS) used in a hospital must provide convenience in operations and must be able to overcome the obstacles to patient service in the hospital.

The Pharmacy Installation of Permata Serdang Hospital uses SIMRS to help manage drugs and pharmaceutical services. Although they have not yet implemented E-prescription, the recording of drug stocks, expiration dates, and data retrieval can be done using SIMRS. Informants one, two and three stated that SIMRS makes pharmacy work easier in both service and managerial aspects. Managers utilize certain features, such as inputting stock, invoices, and retrieving patient data, to create pharmacy reports. Informant two stated that SIMRS simplifies pharmacy work, speeds up service and minimizes errors because etiquettes are automatically printed. SIMRS can assist with decision-making because it provides information on drug stocks and usage.

As an information system, SIMRS must be able to facilitate access to real-time information in order to support medical services, reduce medical errors, monitor service activities, and even observe and evaluate operational costs. Hospitals expect SIMRS to integrate and share precise and accurate real-time information (Molly & Itaar, 2021).

All three informants stated that the obstacles experienced in using SIMRS at Permata Serdang Hospital were slow in some features such as data storage or data retrieval over a long period of time. Disruptions in the internet network, low bandwidth, or outdated software are among the factors contributing to slow system responses (Oktaviana et al., 2022). The slow data storage hinders the service, thereby affecting patient satisfaction.

SIMRS at Permata Serdang Hospital does not fully support e-prescriptions or e-prescribing, even though, according to Ulum et al. (2023), electronic prescriptions (e-prescribing) are able to eliminate errors in handwriting, provide access to prescription history and patient drug allergies, improve safety, and speed up waiting times so as to increase patient satisfaction with health services. In Indonesia itself, it has not been fully implemented due to a lack of human resources, applications, and supportive facilities. Wijayanta et al. (2022) in their research wrote recommendations to increase officer intention to use SIMRS, namely developing (upgrading) the SIMRS application, interoperating/integrating SIMRS with several service units and other applications, and conducting socialization or training for officers in using SIMRS.

### **Financial Capital**

The financial administration aspect is budget management, control, cost analysis, financial information, and reporting related to routine pharmaceutical service activities. Drug expenditure is an important component of hospital expenditure that must be managed effectively and efficiently, which requires good planning and management (Hadnayanay, 2022; Afiyiani et al., 2023). In this study, no information was obtained from the finance department regarding the financing carried out to fulfill the needs of medicines, BHP, and medical equipment at Permata Serdang Hospital.

The Head of the Pharmacy Installation, with the help of other pharmacy officers, directly manages the planning and control of medicine needs, according to the findings of the three informants' interviews. Informant 1 stated that the finance department has not yet presented any significant obstacles related to drug procurement. This statement was supported by informant three, who stated that when there is a sudden need for drugs such as cito drugs, procurement requests are not difficult and tend to be processed quickly. The Permata

Serdang Hospital Pharmacy Installation, according to all three informants, controls the purchased medicines to prevent any losses during implementation.

Control at the storage, distribution, and use stages is carried out to reduce losses that occur. Hospitals must manage drug logistics effectively and efficiently to prevent material losses (Setiyaningrum & Saputra, 2021). Proper procurement planning will prevent hospitals from buying medicines beyond their needs and avoid losses due to drug expiration.

## CONCLUSION

The results of the interview with the Head of the Pharmacy Installation of Permata Serdang Hospital show that the support management in the Pharmacy Installation is running well, although it still needs improvement. Of the four aspects discussed, the biggest problem is on the human capital side, which results in disrupted services and is feared to have an impact on patient safety. This aspect of human capital is one of the reasons organizational capital has not run optimally due to personnel changes. Nevertheless, the focus of pharmacy employees remains on efficiency and patient safety. In information capital, SIMRS has been used to support both management and pharmacy aspects, although it has not yet implemented electronic prescriptions, which will certainly help the service. SIMRS is expected to be a tool to help make management decisions, especially in the management of medicines at the Permata Serdang Hospital Pharmacy installation. In financial capital or financial management, the pharmaceutical installation plays an important role in controlling so that losses do not arise due to inefficient drug management. Recommendations arising from this research for hospitals are consideration for additional human resources in accordance with workload needs, in addition to meeting formation needs as well as supporting management in the organizational capital aspect. In addition, it is important to upgrade SIMRS so that it can facilitate hospital staff, especially pharmacy staff, in providing patient services and conduct training related to SIMRS to optimize support management in the Permata Serdang Hospital Pharmacy installation.

## REFERENCE

- Afiyani, N., Suwandi, I. P., & Andriani, H. (2023). Analisa Manajemen Support dalam Manajemen Obat di Unit Farmasi Rumah Sakit Universitas Indonesia. *MAHESA: Malahayati Health Student Journal*, 3(10), 3355–3364.
- Diana, K., Kumala, A., Nurlin, N., & Tandah, M. R. (2021). Evaluasi penggunaan obat berdasarkan indikator persepsian dan pelayanan pasien di Rumah Sakit Tora Belo. *Jurnal Farmasi Dan Ilmu Kefarmasian Indonesia*, 7(13), 13–19.
- Handayani, G. N. (2022). *Manajemen Farmasi*.
- Harvida, D. A., & Wijaya, C. (2020). Faktor Yang Mempengaruhi Turnover Karyawan dan Strategi Retensi Sebagai Pencegahan Turnover Karyawan: Sebuah Tinjauan Literatur. *JIANA (Jurnal Ilmu Administrasi Negara)*, 18(2), 13–23.
- Kuncoro, A. W. (2012). Pengaruh Sistem Remunerasi, Kepuasan Kerja, Komitmen Organisasi Terhadap Turnover Intention. *Jurnal Ekonomika Dan Manajemen*, 1(2). <https://doi.org/10.36080/jem.v1i2.282>

- Molly, R., & Itaar, M. (2021). Analisis Pemanfaatan Sistem Informasi Manajemen Rumah Sakit (SIMRS) Pada RRSUD DOK II Jayapura. *Journal of Software Engineering Ampera*, 2(2), 95–101. <https://doi.org/10.51519/journalsea.v2i2.127>
- Oktaviana, E., Putra, W. H. N., & Rachmadi, A. (2022). Evaluasi Sistem Informasi Manajemen Rumah Sakit (SIMRS) RSUD Gambiran Kediri menggunakan Framework Human, Organization, and Technology-Fit (HOT-FIT) Model. *Jurnal Pengembangan Teknologi Informasi Dan Ilmu Komputer*, 6(4), 1779–1788. <https://j-ptiik.ub.ac.id/index.php/j-ptiik/article/view/10923>
- Prayetno, S. (2017). Strategi human capital: sebuah paradigma baru bagi para eksekutif. *Majalah Manajemen & Bisnis Ganesha*, 1(2), 97–113.
- Putri, E. A. L., Sukohar, A., & Damayanti, E. (2023). Medication Error pada Tahap Prescribing, Transcribing, Dispensing dan Administration. *Medical Profession Journal of Lampung*, 13(4), 457–462. <https://doi.org/10.53089/medula.v13i4.667>
- Ramadhani, S., Akbar, D. O., & Wan, J. R. (2022). Evaluasi Pengelolaan Obat pada Tahap Distribusi, Penyimpanan, serta Penggunaan Obat Pada Pasien Rawat Jalan di Instalasi Farmasi Rumah Sakit Mutiara Bunda Tahun 2019. *Generics: Journal of Research in Pharmacy*, 2(1), 61–66.
- Sabarudin, S., Ihsan, S., Nirmala, F., Adjeng, A. N. T., & Dzulhijjah, D. (2020). Evaluasi Pengelolaan Obat di Instalasi Farmasi Rumah Sakit Angkatan Darat dr. R. Ismoyo Kendari Tahun 2018. *Medula*, 8(1), 23–33. <https://doi.org/10.46496/medula.v8i1.15024>
- Setiyaningrum, E. D., & Saputra, Y. D. (2021). Evaluasi Pengelolaan Stok Obat yang Mendekati Kadaluwarsa di Instalasi Farmasi Rumah Sakit Bethesda Yogyakarta Periode Januari–Juni 2019. *Jurnal Kefarmasian Akfarindo*, 21–28. <https://doi.org/10.37089/jofar.vi0.99>
- Trisnawati, N. A., & Maulana, F. (2023). Organization capital. *Jurnal Riset Dan Inovasi Manajemen*, 1(3), 278–292. <https://doi.org/10.59581/jrim-widyakarya.v1i3.816>
- Ulum, K., Hilmi, I. L., & Salman, S. (2023). Review Artikel: Implementasi dan Evaluasi Peresepan Elektronik Dalam Upaya Menurunkan Kesalahan Pengobatan. *Journal of Pharmaceutical and Sciences*, 6(1), 192–198. <https://doi.org/10.36490/journal-jps.com.v6i1.19>
- Wijayanta, S., Fahyudi, A., & Ginanjar, R. (2022). Evaluasi Implementasi Sistem Informasi Manajemen Rumah Sakit (SIMRS) di Pelayanan Rawat Jalan RSUD dr. Gondo Suwarno Ungaran Menggunakan Metode Unified Theory of Acceptance and Use of Technology (UTAUT). *Jurnal Rekam Medis Dan Informasi Kesehatan*, 5(1). <https://doi.org/10.31983/jrmik.v4i2.8277>