

Jurnal Aisyah: Jurnal Ilmu Kesehatan

Volume 6, Issue 3, September 2021, p. 729–736 ISSN 2502-4825 (print), ISSN 2502-9495 (online)

Literature Review: Strategy Analysis of Pharmaceutical Service **Quality Improvement**

Arie Sulistiyoningrum^{1*}; Ayun Sriatmi¹; Septo Pawelas Arso¹

¹ Department of Public Health, Faculty of Public Health, Universitas Diponegoro

ARTICLE INFO ABSTRACT Hospitals are individual health service facilities and part of health resources Article history: that are indispensable in supporting the implementation of health efforts. Quality improvement in health services is not only oriented to quality service Received 11 July 2021 processes but also the results of the quality of health services following the Accepted 21 August 2021 wishes of customers or patients. One type of hospital service that must be Published 10 September 2021 provided is pharmacy services. Pharmacy services must be carried out according to predetermined service standards. Problems that are still Keyword: encountered in Indonesian hospital pharmacy installations are: speed of service time is not optimal, service friendliness is still not optimal, and Pharmacy services limited drug availability. This study aims to determine the strategy for Hospital pharmacy installations improving the service quality of hospital pharmacy installations in Indonesia. Pharmacy service strategy This research is a literature review by searching electronic databases Service quality improvement published in 2017-2022 and meeting the inclusion criteria. Articles were taken from the Scopus, Science Direct, ProQuest, Springer Link, Google Scholar, Nature, JSTOR, and Emerald Insight databases with a total of 20 articles used. Twenty articles show that to improve the service quality of hospital pharmacy installations in Indonesia is to pay attention to several aspects of indicators including, service friendliness, service speed, service accuracy, product completeness, workforce professionalism, and service convenience. ABSTRAK Kata kunci: Rumah sakit merupakan fasilitas pelayanan kesehatan perorangan serta bagian dari sumber daya kesehatan yang sangat diperlukan dalam Pelayanan farmasi mendukung penyelenggaraan upaya kesehatan. Peningkatan mutu dalam Instalasi farmasi rumah sakit pelayanan kesehatan selain berorientasi kepada proses pelayanan yang Strategi pelayanan farmasi bermutu, juga hasil mutu pelayanan kesehatan yang sesuai dengan Peningkatan mutu pelayanan keinginan pelanggan atau pasien. Salah satu jenis pelayanan rumah sakit yang wajib disediakan adalah pelayanan farmasi. Pelayanan farmasi harus *) corresponding author dilakukan sesuai standar pelayanan yang telah ditentukan. Permasalahan Arie Sulistiyoningrum yang masih ditemui di instalasi farmasi rumah sakit Indonesia yaitu: Department of Public Health, Faculty of kecepatan waktu pelayanan belum optimal, keramahan pelayanan masih belum optimal, dan ketersediaan obat yang terbatas. Penelitian ini bertujuan

kenyamanan pelayanan.

Public Health, Universitas Diponegoro Jl. Prof. Soedarto No.1269, Tembalang, Kecamatan Tembalang, Kota Semarang, Jawa Tengah - Indonesia 50275

Email: drg.arie3003@gmail.com

DOI: 10.30604/jika.v6i3.1096

This open access article is under the CC-BY-SA license.

untuk mengetahui strategi peningkatan mutu pelayanan instalasi farmasi

rumah sakit di Indonesia. Penelitian ini adalah literature review dengan

pencarian database elektronik yang diterbitkan 2017-2022 dan memenuhi kriteria inklusi. Artikel diambil dari database Scopus, Science Direct,

ProQuest, SpringerLink, Google Scholar, Nature, JSTOR, dan Emerald Insight dengan total 20 artikel yang digunakan. Dua puluh artikel menunjukkan

bahwa untuk meningkatkan mutu pelayanan instalasi farmasi rumah sakit di Indonesia adalah dengan dengan memperhatikan beberapa aspek indikator diantaranya, keramahan pelayanan, kecepatan pelayanan, ketepatan pelayanan, kelengkapan produk, profesionalisme tenaga kerja dan



INTRODUCTION

Hospitals are individual health service facilities and part of health resources that are indispensable in supporting the implementation of health efforts (Obaid et al., 2021). Health services in hospitals must be safe, quality, anti-discriminatory and effective by prioritizing the interests of patients according to service standards (Yuliati & Andriani, 2021).

Hospitals must change the paradigm of hospital management towards a consumer point of view, empowering employees and improving service quality (Hasanah et al., 2021). Quality improvement in health services is not only oriented to quality service processes, but also the results of the quality of health services in accordance with the wishes of customers or patients (Agow et al., 2021).

Minimum service standards for hospitals consist of several types of services, with indicators and standards for achieving hospital service performance (Babar, 2021). One type of hospital service that must be provided is pharmacy services. Pharmacy services must be carried out according to predetermined service standards.

Quality services must meet service standards that are determined from the waiting time for pharmacy services. Based on the Regulation of the Minister of Health of the Republic of Indonesia Number 58 of 2014 and its amendments in Number 34 of 2016 concerning Pharmaceutical Service Standards in Hospitals that to improve the quality of pharmaceutical services in hospitals that are patient safety oriented, a standard is needed that can be used as a reference in pharmaceutical services (Kementerian Kesehatan, 2016), (Kementerian Kesehatan, 2014).

Problems that are still encountered in Indonesian hospital pharmacy installations are: the speed of service time is not optimal, it can be seen by the queue of patients at the Pharmacy Installation due to the uncertainty of the time in providing services to patients when taking drugs at the pharmacy installation, the friendliness of the service is still not optimal, it can be seen With complaints from the patient's family regarding the drug information service provided by the officer, the limited availability of the drug resulted in the patient having to return to get a replacement prescription because the drug was not available, and this had an impact on the patient's request not being fulfilled immediately.

The problems mentioned above, allegedly caused by the quality of service that has not been running optimally. Starting from the description above, the writing of this literature review is carried out as input for strategic planning to improve the quality of hospital pharmacy installation services so that they have sustainable competitiveness. Increasing service quality is expected to be able to increase Pharmacy Installation and customer satisfaction and loyalty.

METHOD

This research is a literature review. The literature review is a method of reviewing research on a particular topic that emphasizes single questions that have been systematically identified, assessed, selected, and concluded according to predetermined criteria based on high-quality research evidence relevant to the research question. The source of this research data comes from the literature obtained through the internet in the form of scientific research results from several sources. Data collection was carried out through internet searching with keywords entered, namely pharmacy installation, strategy to improve the quality of hospital services, and pharmacy services.

The population in this research is research with a focus on improving the service quality of hospital pharmacy installations from 2017 to 2022, obtained as many as 20 research results sourced from scientific publications Scopus, ProQuest, Springer Link, Google Scholar, Portal Garuda, JSTOR and Emerald Insight. Quantitative data is obtained which is then analyzed systematically to obtain discussions and conclusions that represent the contents of the literature review.

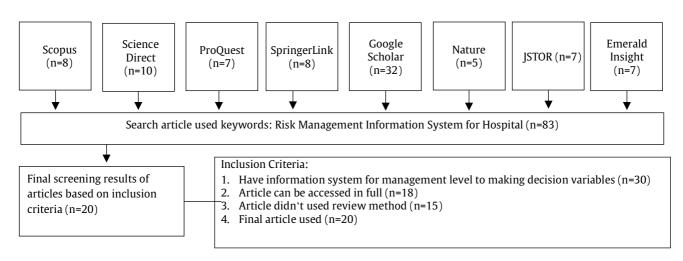


Figure 1. Flow Chart Screening Article

RESULTS AND DISCUSSION

Based on synthesized articles. There are 6 main ideas related to this review. The main ideas are the speed of service strategy, the strategy for product completeness, the service friendliness strategy, the service accuracy strategy, the service convenience strategy, and the professionalism strategy of the sales force. These six things are interrelated to improve the quality of service in Indonesian hospital pharmacy installations.

Table 1. Article Synthesis Result

No.	Main Idea	Indicator	Similarities of Research Findings
1.	Service Friendliness (Annuar et al., 2021), (Lima et al., 2018), (Sousa et al., 2020), (Knop, 2019)	Improve the ability of officers to provide solutions or alternatives to customers, maintain the gentleness of greeting, and always say thank you at the end of the transaction.	The strategy to increase customer satisfaction on the service friendliness factor is prioritized through the ability to sell, the softness of speech, and thanks. The development of this strategy can be done by using a computerized system to measure the level of satisfaction and or friendliness of the staff by simply pressing or touching the button on the screen provided near the delivery of the recipe.
2.	Service Accuracy (Chen et al., 2020), (van de Pol et al., 2021), (See et al., 2021), (Murry et al., 2021)	Maintaining promotion and outreach, maintaining a productive workforce	The strategy to improve the accuracy of service to customers is to increase the reach and coverage through promotions, improve service quality, and increase the standard procedure for prescription service times.
3.	Service Speed (Alghamdi et al., 2022), (Zonneveld et al., 2020), (Flood et al., 2021)	Providing seven-day service for 24 hours non-stop, the officer informs about the number of queues to wait and the estimated time to provide non-concoctions drugs to customers.	The strategy to increase the speed of service is emphasized on the non-stop service factor, the service time of concocted and non-concocted drugs.
4.	Workforce Professionalism (Ponangsera, 2017), (Widyaningrum et al., 2017), (Ardiany et al., 2020)	Recruiting experienced human resources, recruiting competent human resources in the pharmaceutical field.	The customer satisfaction strategy on the professionalism of the sales force is prioritized on product knowledge by making internet-based training or e-learning so that every employee can easily update product knowledge.
5.	Service Convenience (Anusha et al., 2020), (Pratiwi, 2017), (Varas- Doval et al., 2021)	Maintaining the physical facilities of the pharmacy installation.	The strategy to improve service convenience to customers is to increase salaries for contract workers, improve monitoring systems, administrative systems, and management of pharmaceutical installations.
6.	Product Completeness (Collins & Borders, n.d.), (Perraudin et al., 2019), (Nina & Hakim, 2020)	Maintaining the completeness of existing products, maintaining the existing drug ordering system through official channels, maintaining the completeness of existing over-the-counter drugs, maintaining the completeness of existing generic and non-generic drug products.	The customer satisfaction strategy, on the completeness of the product, prioritizes the completeness of local products, guarantees the authenticity of drugs, completeness of over the counter and generic drugs.

DISCUSSION

Analysis of improving the quality of pharmaceutical services

The strategy that needs to be applied to the Pharmacy Installation is to use strengths to take advantage of long-term opportunities, namely by increasing the quality and quantity of human resources, optimizing BPJS patients, and improving pharmaceutical services that are more focused on patient satisfaction (Ardiany et al., 2020). The strengths of a Pharmacy Installation are that it has service operational standards, as a referral hospital, and the availability of 12 polyclinics with specialist doctors in each polyclinic. Meanwhile, the weaknesses of a pharmacy installation are the location is less strategic, the facilities and infrastructure are not optimal, the location of the IFRS is far from the ward, and the lack of communication between patients and pharmacy employees. Opportunities possessed by a pharmacy installation are local government support, collaboration with BPJS, and implementing a one-stop policy. In addition, there are also threats to the Pharmacy Installation, namely following the development of science and technology in the era of globalization, the quality of human resources in the competition in the era of globalization, the existence of complementary pharmacies, and customer demands for drug information services (Tripujiati, 2017).

Service Friendliness

In terms of service friendliness, officers must communicate well and understand customer needs. This can be achieved if the number of officers is sufficient, so that the workload is not too heavy, thus allowing the officers to be friendly (Amrin et al., 2013). The good or bad of a health service according to the patient is the attitude of the health worker. Health services are considered good because the staff is friendly, friendly, patient and communicative (Adriansyah & Nadatien, 2019). On the other hand, if the health service is not considered good because the officers are rude and speak impolitely. Friendly service when providing counseling/information about drugs is important because it can show concern and concern for patients, help patients to regulate and get used to drugs, help patients to regulate and adjust the use of drugs to their illness, and also guide and educate patients and or the patient's family in the use of drugs to achieve treatment goals and improve the quality of patient treatment (Rupp, 2011).

Service Accuracy

In terms of service accuracy, drugs can only be given after receiving a prescription order from a doctor and the pharmacist analyzes them pharmaceutically. Pharmacists must review prescriptions in an effort to prevent medication errors (Fahriati et al., 2021). Therefore, when administering drugs to patients, it must always be accompanied by correct information, where the drugs given to patients are following the name of the drug, the rules and method of use, the dose and time of use of the drug, as well as given information in case of allergies and drug reactions that do not occur. Desired (ROTD), contraindications, and drug interactions used (Ceballos et al., n.d.).

Service Speed

In terms of speed of service, the responsiveness of officers is proven by effective service time and patient satisfaction in meeting their needs. Responsiveness is also a measure of how well the health service has the expected results. Providing clear information will let service users be willing to wait because they have a positive perception of the quality of pharmacy services in hospitals (Pittenger et al., 2013).

Workforce Professionalism

In terms of workforce professionalism, the addition of Human Resources, especially pharmacists, with salaries through BLUD funds, it is hoped that the addition of pharmacists can improve the quality of service in pharmacy installations following pharmaceutical service standards. The addition of pharmacists through payroll from BLUD funds because it is following the BLUD principle of flexibility in using the budget to support improving services to the community (Verawaty et al., 2017).

Service Convenience

In terms of service convenience, the appearance of the pharmacy installation in the hospital is a physical condition regarding the arrangement of the waiting room and interior design, cleanliness, and comfort of the waiting room, and other supporting facilities such as TV, toilet, call queue and appearance of officers, as well as general information in the form of posters and notice board about service procedures (Idacahyati et al., 2019). In addition, there must also be room, equipment, and other facilities that support the administration, professionalism, and technical functions of pharmaceutical services to ensure the implementation of competent and professional pharmaceutical services.

Product Completeness

In terms of product completeness, the completeness of the existing products in the hospital pharmacy installation is an indicator of service. The concept of service quality is centered on efforts to fulfill customer needs and desires and the accuracy of delivery to balance customer expectations. The perception of the patient will form a good service inpatient treatment services. (Larasati & Wulandadari, 2019)

Effective Strategy to Improve the Quality of Hospital Pharmacy Installation Services

There are main activities that have to be done from the beginning which include maintaining pharmacy records,

serving patients, and others. Some of the technical problems that arise after the pharmacy unit are increasing: differences in pharmacy practice, maintaining standard documentation of customer details, demographic changes, and also stock recording. To overcome this problem, here are 3 strategies that you can apply to improve the quality of your pharmacy management (Dwi et al., 2016).

Maintain periodic records on drug management

Pharmacists should take the time to develop clinical policies, procedures, etc. So, they should take the time to prepare standard documents. They should keep regular reports of all pharmacy details such as inventory records, drug details and others, neatly. Documents made must be reviewed by experienced pharmacists so that data bias does not occur and makes your pharmacy unit lose money (Sugiono et al., 2019).

Encouraging a relationship with a doctor

Sometimes pharmacists have to contact doctors so they can get the right information. The pharmacy management system remains a link between the doctor and pharmacist relationship. Pharmacists make doctor's prescriptions more reliable for patients. Pharmacists should also ensure that patients do not think twice about taking their medications (Sugiono et al., 2019).

Using the right pharmacy management app

Using the right pharmacy management application for your health facility can be very helpful in managing the pharmacy unit very easily. All other customer and vendor details can be stored and retrieved with low maintenance costs by putting them in cloud-based storage. This kind of application gives the pharmacy unit a big picture of business performance and a real-time overview of costs, revenues, and also sales. Forward-thinking pharmaceutical businesses have turned to digital to manage their business (Sampurno, 2015).

Pharmacy management application helps pharmacy work more effectively and efficiently. Pharmacy management applications have advantages including; Procurement proposals, procurement plans, orders, receipt of goods, and returns for purchasing pharmaceuticals and pharmacy services that sell drugs and medical equipment easily and completely. Another feature is the handling of stock of drugs and medical equipment, hospitalization, as well as mutation of pharmaceuticals as well as their disposal and transfer. Another equally important feature of the Pharmacy Module is printing reports on HPP, Pareto, inventory, BHP usage, and stock out reports on sales (Permata, 2016). Pharmacy module also has excellent features such as:

Notification of E-prescribing and Expired Drugs

This feature is used to view the prescriptions entered from the service, so with this, the pharmacy will get a notification that there is an incoming prescription in real-time. While the expired drug feature is used to help the pharmacy find out what drugs have expired, there is no need to look for them one by one. This feature will display data on drugs that have expired at least a week before the expiration date of the drug (Permata, 2016).

Inventory Report

This feature makes it easy to print and monitor monthly inventory reports so that you can make drug and medical equipment planning effectively and efficiently (Permata, 2016).

Drug tracking in real time and easy

This stock card feature makes it easy for you to view drug data or information starting from the name of the drug, the expiration date of the drug, as well as the entry and exit of drugs and the rest of the drug along with the work unit where the item is stored. This feature is real time (Permata, 2016).

Factors that affect the quality of service in the Hospital Pharmacy Installation

Reliability Factor

Reliability is the patient's response to the performance of health workers in terms of data accuracy and services according to promises so that they are satisfactory (Ayutyastiningsih, 2021).

Guarantee or Assurance Factor

The safety guarantees shown by health workers (assurance), the accuracy of the examination schedule, and doctor's visits are also included in this factor. Health care insurance is one of the very basic approaches or efforts in providing services to patients (Ayutyastiningsih, 2021).

Physical Evidence Factor

The dimension of physical/tangible evidence is defined as the appearance of facilities, equipment and officers who provide services because a service cannot be seen, smelled, touched or heard, the aspect of physical/tangible evidence becomes very important as a measure of services (Meina & Maryati, 2021).

Factors of Attention or Empathy

Attention or empathy is a willingness to care and give personal attention to service users. Empathic service requires a personal touch/feel. The empathy factor is a dimension that provides a great opportunity to create a "surprise" service, which is something that the service user does not expect but is actually provided by the service provider (Meina & Maryati, 2021).

CONCLUSIONS AND SUGGESTION

Based on the results of a review of 20 journals that have been carried out, it is found that the strategy that can be done to improve the quality of hospital pharmacy installation services in Indonesia is to pay attention to several aspects of indicators including, service friendliness, service speed, service accuracy, product completeness, workforce professionalism and service convenience. To improve the quality of other services at the Hospital Pharmacy Installation, in principle, a policy can be made regarding the need for Human Resources in the Home Pharmacy Installation that refers to the applicable Pharmaceutical Service Standards, and efforts are made to plan for the needs of Human Resources so as to improve the quality of service in the Installation. Pharmacy in accordance with Pharmaceutical Service Standards.

Funding Statement

The authors did not recieve support from any organization for the submitted work.

Conflict of Interest Statement

The authors declared that no potential conflicts of interest with respect to the authorship and publication of this article

REFERENCES

- Adriansyah, A. A., & Nadatien, I. (2019). Hubungan Waktu Tunggu Dan Sikap Petugas Dengan Kepuasan Pasien Pada Instalasi Farmasi Rumah Sakit Islam Surabaya (Rsis) Jemursari. *Medical Technology and Public Health Journal, 3*(1), 1–8. https://doi.org/10.33086/mtphj.v3i1.946
- Agow, M. C., Citraningtyas, G., & Rumondor, E. M. (2021). Customer Perspective And Learning And Growth Perspective In Measuring Performance Of Pharmacy Installation At Manado Advent Hospital With Balanced Scorecard Method Dalam Mengukur Kinerja Instalasi Farmasi Rumah Sakit Advent. *Pharmacon*, 10(2), 691–699.
- Alghamdi, A., Alhulaylah, F., Al-Qahtani, F., Alsallal, D., Alshabanat, N., Alanazi, H., & Alshehri, G. (2022). Evaluation of pharmacy intern-led transition of care service at an academic hospital in Saudi Arabia: A prospective pilot study. *Saudi Pharmaceutical Journal*, xxxx. https://doi.org/10.1016/j.jsps.2022.02.007
- Amrin, S. binti, Oetari, & Satibi. (2013). Strategi Pengembangan Instalasi Farmasi Rumah Sakit. *Jurnal Manajemen Dan Pelayanan Farmasi*, *3*(3), 161–166. http://webcache.googleusercontent.com/search?q=cache:m WoKWUPiuoAJ:jmpf.farmasi.ugm.ac.id/index.php/1/article/v iew/188+&cd=1&hl=id&ct=clnk&gl=id
- Annuar, A. S., Rahman, R. A., Munir, A., Murad, A., El-enshasy, H. A., & Illias, R. (2021). Assessing the Comperative Effectiveness of Implementation Strategies for Professional Sevices to Community Pharmacy: A Systematic Review. *Carbohydrate Polymers*, 118159. https://doi.org/10.1016/j.sapharm.2022.03.019
- Anusha, G., Sunayana, R., Ponnam, M., & Kumar, B. A. (2020). Evaluation of Drug Management Achievement in Pharmacy Installation of Langsa General Hospital. *Asian Journal of Pharmaceutical Research and Development*, 8(6), 77–80.
- Ardiany, W. M., Citraningtyas, G., & Mpila, D. A. (2020). Strategi Pengembangan Instalasi Farmasi Rsud Datoe Binangkang Di Kabupaten Bolaang Mongondow Menggunakan Analisis Swot. *Pharmacon*, 9(3), 390. https://doi.org/10.35799/pha.9.2020.30023
- Ayutyastiningsih, L. A. (2021). Optimalisasi Pencegahan Kesalahan pemberian Obat pada Pasien di Pelayanan Farmasi Puskesmas. *Jurnal Pemerintahan Daerah*, 3(2), 38–49.
- Babar, Z. U. D. (2021). Ten recommendations to improve pharmacy practice in low and middle-income countries (LMICs). *Journal of Pharmaceutical Policy and Practice*, *14*(1). https://doi.org/10.1186/s40545-020-00288-2

- Ceballos, M., Ospina, A. S., Hernandez, D. S., & Amariles, P. (n.d.). Effectiveness of a Continuing Education Program of Drugs with Fiscalized Substance to Improve Pharmacy Staff Competencies. 1–11.
- Chen, X., Li, S., & Wang, X. (2020). Evaluating the effects of quality regulations on the pharmaceutical supply chain. International Journal of Production Economics, 230(May), 107770. https://doi.org/10.1016/j.jpe.2020.107770
- Collins, B., & Borders, T. F. (n.d.). Utilization of Prescription Medications and Ancillary Pharmacy Services Among Rural Elders in West Texas: Distance Barriets and Implications for Telepharmacy. 90.
- Dwi, P., Jaluri, C., Gunawan, R. A. O., & Widodo, P. (2016). Strategi Pengembangan Akreditasi Manajemen Penggunaan Obat Dengan Metode Hanlon Di IFRSUD Sultan Imanuddin Pangkalan Bun Development Strategy Management Accreditation Drug Use with Hanlon Methods In IFRSUD Sultan Imanuddin Pangkalan Bun dalam pemberian pe. 13(1), 22 - 33
- Fahriati, A. R., Aulia, G., Saragih, T. J., Wijayanto, D. A. W., & Hotimah, L. (2021). Evaluasi Penyimpanan High Alert Medication Di Instalasi Farmasi Rumah Sakit X Tangerang. Edu Masda 56. Iournal. *5*(2), https://doi.org/10.52118/edumasda.v5i2.131
- Flood, M., Ennis, M., Ludlow, A., Sweeney, F. F., Holton, A., Morgan, S., Clarke, C., Carroll, P., Mellon, L., Boland, F., Mohamed, S., De Brún, A., Hanratty, M., & Moriarty, F. (2021). Research methods from human-centered design: Potential applications in pharmacy and health services research. Research in Social and Administrative Pharmacy, 17(12), 2036-2043. https://doi.org/10.1016/j.sapharm.2021.06.015
- Hasanah, U., Fitriani, L., & Zaini, E. (2021). Video as a Tool in Improving Pharmacy Student's Knowledge and Skills About Tonicity. Proceedings of the 3rd International Conference on Educational Development and Quality Assurance (ICED-QA 506(February). 2020), https://doi.org/10.2991/assehr.k.210202.049
- Idacahyati, K., Nofianti, T., Aswa, G. A., & Nurfatwa, M. (2019). ABC Analysis Towards Drug Needs Planning in Pharmacy Installation of RSUD Kota Yogyakarta in 2010. 4(2), 67–73.
- Kementerian Kesehatan. (2014). Peraturan Menteri Kesehatan Republik Indonesia Nomor 58 Tahun 2014. In Pontificia Universidad Catolica del Peru (Vol. 8, Issue 33, p. 44).
- Kementerian Kesehatan. (2016). Peraturan Menteri Kesehatan Republik Indonesia Nomor 34 Tahun 2016. In Gastronomía ecuatoriana y turismo local. (Vol. 1, Issue 69, pp. 5-24).
- Knop, K. (2019). Evaluation of quality of services provided by transport & logistics operator from pharmaceutical industry for improvement purposes. Transportation Research Procedia, 40, 1080–1087. https://doi.org/10.1016/j.trpro.2019.07.151
- Larasati, N., & Wulandadari, C. A. (2019). Implementation of Unit Dose Dispensing using Management Information System in Pharmacy Installation of Panti Rapih Hospital. JURNAL MANAJEMEN DAN PELAYANAN FARMASI (Journal of Management and Pharmacy Practice), 8(4), 153. https://doi.org/10.22146/jmpf.37402
- Lima, T. de M., Aguiar, P. M., & Storpirtis, S. (2018). Evaluation of quality indicator instruments for pharmaceutical care services: A systematic review and psychometric properties analysis. Research in Social and Administrative Pharmacy, 405-412. *14*(5), https://doi.org/10.1016/j.sapharm.2017.05.011

Meina, D., & Maryati, H. (2021). Gambaran Sistem Pelayanan Farmasi Rumah Sakit Di Rumah Sakit "X" Kota Bogor Tahun

560. 2019 Promotor, *3*(6), https://doi.org/10.32832/pro.v3i6.5561

- Murry, L. T., Al-Khatib, A., & Witry, M. J. (2021). Using journey mapping to understand the patient experience with selecting a Medicare part D plan using a pharmacy consultation service. Exploratory Research in Clinical and Social Pharmacy, 1, 100006. https://doi.org/10.1016/j.rcsop.2021.100006
- Nina, Y., & Hakim, I. M. (2020). Lean Hospital Approach for Improving the Process of Taking Drug Services in Outpatient Pharmacy Installations. IOP Conference Series: Materials Science and Engineering, *1003*(1). https://doi.org/10.1088/1757-899X/1003/1/012105
- Obaid, D., El-Dahiyat, F., & Babar, Z. U. D. (2021). Recommendations to improve pharmacy practice research in the Middle Eastern Arab countries. Journal of Pharmaceutical Policv and Practice. 14(1). 21 - 23. https://doi.org/10.1186/s40545-021-00357-0
- Permata, D. (2016). Strategi Pengendalian Persediaan Obat Pada Instalasi Farmasi Rumah Sakit Islam Ibnu Sina Bukittinggi. Jurnal Ekonomi STIE Haji Agus Salim, 19(1), 1–14. http://ojs.stiehas.ac.id/index.php/JE/article/view/4
- Perraudin, C., Locca, J. F., Rossier, C., Bugnon, O., & Schneider, M. P. (2019). Implementation of an interprofessional medication adherence program for chronic patients in community pharmacies: How much does it cost for the provider? 11 Medical and Health Sciences 1117 Public Health and Health Services. BMC Health Services Research, 19(1), 1–10. https://doi.org/10.1186/s12913-018-3851-x
- Pittenger, A. L., Westberg, S., Rowan, M., & Schweiss, S. (2013). An interprofessional diabetes experience to improve pharmacy and nursing students' competency in collaborative practice. American Journal of Pharmaceutical Education, 77(9). https://doi.org/10.5688/ajpe779197
- Ponangsera, O. T. (2017). STRATEGI PENGEMBANGAN KUALITAS PELAYANAN MELALUI METODE IMPORTANCE PERFORMANCE ANALYSIS (Studi Empiris pada Pelanggan PT. Kimia Farma Apotek Unit Bisnis Yogyakar ta). Jurnal Bisnis Strategi, 22(2), 1 - 27.
- Pratiwi, R. I. (2017). Perumusan Strategi Peningkatan Kepuasan Pasien Rawat Jalan Instalasi Farmasi Rumah Sakit Umum Daerah Kardinah Tegal Parapemikir: Jurnal Ilmiah Farmasi, *6*(1), 107-110. http://ejournal.poltektegal.ac.id/index.php/parapemikir/artic le/view/475
- Rupp, M. T. (2011). Aligning the interests of administration and faculty to improve pharmacy student retention. American Journal of Pharmaceutical Education, *75*(9), 190. https://doi.org/10.5688/ajpe759190
- Sampurno. (2015). Analisis Mutu Pelayanan Instalasi Farmasi pada RSUD Cilacap dan RS PKU Muhammadiyah Karanganyar. Jurnal Ilmu Kefarmasian Indonesia, 8(2), 101–107.
- See, K. F., Md Hamzah, N., & Yu, M. M. (2021). Metafrontier efficiency analysis for hospital pharmacy services using dynamic network DEA framework. Socio-Economic Planning 101044. Sciences. 78(March). https://doi.org/10.1016/j.seps.2021.101044
- Sousa, M. do C. V. B., Fernandes, B. D., Foppa, A. A., Almeida, P. H. R. F., Mendonça, S. de A. M., & Chemello, C. (2020). Tools to prioritize outpatients for pharmaceutical service: A scoping review. Research in Social and Administrative Pharmacy, 1645-1657. *16*(12), https://doi.org/10.1016/j.sapharm.2020.02.010
- Sugiono, C. H., Rollando, R., Susanto, F. H., & Monica, E. (2019). Korelasi Pelayanan Kefarmasian dan Citra Rumah Sakit dalam

Analisa SWOT Instalasi Farmasi RS Baptis Batu. *JURNAL MANAJEMEN DAN PELAYANAN FARMASI (Journal of Management and Pharmacy Practice), 9*(3). https://doi.org/10.22146/jmpf.41599

- Tripujiati, I. (2017). *Development Strategy of Pharmacy Unit Based on Accreditation Evaluation of Medication Man With Matrix Method.* 128–135.
- van de Pol, J. M., Heringa, M., Koster, E. S., & Bouvy, M. L. (2021). Preferences of patients regarding community pharmacy services: A discrete choice experiment. *Health Policy*, *125*(11), 1415–1420. https://doi.org/10.1016/j.healthpol.2021.08.009
- Varas-Doval, R., Saéz-Benito, L., Gastelurrutia, M. A., Benrimoj, S. I., Garcia-Cardenas, V., & Martinez-Martínez, F. (2021). Systematic review of pragmatic randomised control trials assessing the effectiveness of professional pharmacy services in community pharmacies. *BMC Health Services Research*, *21*(1), 1–14. https://doi.org/10.1186/s12913-021-06150-8
- Verawaty, Ramadani, M. ., Laksmitawati, D. R., & Meidiawati, C. (2017). ANALISIS KEBUTUHAN TENAGA KEFARMASIAN DI INSTALASI FARMASI RUMAH SAKIT GRHA PERMATA IBU TAHUN 2016. 7, 65–74.
- Widyaningrum, N., Sampurno, & Wahyono, D. (2017). Analisis Strategi Peningkatan Mutu Pelayanan Instalasi Farmasi Rumah Sakit. *Jurnal Manajemen Dan Pelayanan Farmasi, 3 nomor* 2, 144–151. http://webcache.googleusercontent.com/search?q=cache:LAr 37pkudvEJ:jmpf.farmasi.ugm.ac.id/index.php/1/article/view/ 113/115+&cd=1&hl=id&ct=clnk&gl=id
- Yuliati, V., & Andriani, H. (2021). Implementation of lean kaizen to reduce waiting time for the Indonesian health social security agency prescription services in hospital pharmacy installation. *Open Access Macedonian Journal of Medical Sciences*, *9*(December 2021), 1495–1503. https://doi.org/10.3889/oamjms.2021.7610
- Zonneveld, S., Versace, V. L., Krass, I., Clark, R. A., Shih, S., Detert Oude Weme, S., & Mc Namara, K. P. (2020). The Inverse Care Law might not apply to preventative health services in community pharmacy. *Research in Social and Administrative Pharmacy*, 17(5), 875–884. https://doi.org/10.1016/j.sapharm.2020.07.0 13