



Evaluation of Drug Management and Clinical Pharmacy Services with Problem Priority Scale Determination Using the Hanlon Method and Follow-Up with a Fishbone Diagram at Delanggu Public Health Center in 2023

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ARTICLE INFO

Keywords: Community Health Center, ITOR, Hanlon Method, Fishbone Diagram

Received : 11, August

Revised : 25, August

Accepted : 28, September

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ABSTRACT

This study evaluated the drug management system and clinical pharmacy services at Delanggu Community Health Center in accordance with Minister of Health Regulation No. 74/2016. An observational cross-sectional design was applied with purposive sampling of the responsible pharmacist. Data were analyzed descriptively, supported by the Hanlon method and fishbone diagram. The results showed that most drug management indicators met standards; however, the ITOR was low (1.2 times/year) and expired drugs reached 6.8%. Clinical pharmacy services were well implemented in prescription assessment, drug information, and counseling, but activities such as PTO, MESO, and patient visits remained suboptimal due to limited human resources. Hanlon's analysis identified the low ITOR as the top priority, requiring improvement through better logistics management and strengthening the pharmacist's role in drug evaluation.

INTRODUCTION

Community health centers (*Puskesmas*) are healthcare facilities that provide both public health services and primary-level individual health services. The mission of *Puskesmas* is to deliver high-level public health services within their scope of responsibility. One of the efforts to improve healthcare development is by enhancing both the quantity and quality of *Puskesmas* facilities (Erina et al., 2023). Pharmaceutical services are integrated activities aimed at identifying, preventing, and resolving drug-related problems as well as other health-related issues. The standard of pharmaceutical services implemented in *Puskesmas* is regulated by the Ministry of Health Regulation Permenkes No. 74 of 2020.

Pharmaceutical services in community health centers (*Puskesmas*) consist of two main activities: managerial activities, which include the management of medicines and medical consumables, and clinical pharmacy services (Kemenkes RI, 2019). Medicine management in *Puskesmas* serves as one of the quality indicators of pharmaceutical services. The system of managing medicines, medical consumables, and medical devices consists of selection, procurement, distribution, and utilization (Quick et al., 2012). The management of pharmaceutical supplies and consumables, together with clinical pharmacy services in *Puskesmas*, forms an interconnected cycle of activities that must be supported by adequate human resources, facilities, and infrastructure. Pharmacists, as those responsible for pharmaceutical services in *Puskesmas*, are expected to provide these services in accordance with standards to improve service quality and ensure patient safety (Kemenkes RI, 2019).

The management of medicines, consumables, and medical devices in healthcare facilities is influenced by various factors, including the quality of human resources, availability of facilities and equipment, costs or prices, administrative processes, and information systems. Internal factors such as human resources, financial capacity, facilities, and infrastructure are the main determinants that affect the performance of pharmacists and, consequently, the overall quality of pharmaceutical services (Daulay et al., 2018).

In addition to managerial aspects of medicine management, clinical pharmacy services in *Puskesmas* play a crucial role in ensuring successful patient therapy. These services extend beyond dispensing medicines to include prescription review, patient counseling, provision of drug information, monitoring of therapy and side effects, as well as the prevention of Drug-Related Problems (DRPs) (Kemenkes RI, 2020). The success of clinical pharmacy services depends largely on the competence of pharmaceutical personnel, managerial support, and adequate supporting facilities (Yuniar & Handayani, 2020).

Delanggu Community Health Center (*Puskesmas Delanggu*) is a primary healthcare facility that provides both public health efforts and individual healthcare services (Kemenkes RI, 2019). Broadly speaking, the standards of service delivery at *Puskesmas* have not yet fully met accreditation requirements. This is evident in several areas, such as suboptimal pharmaceutical service

delivery and less effective monitoring of adverse drug reactions among patients.

The motivation for conducting research at *Puskesmas Delanggu* stems from the need to assess the development of service quality and to design improvement strategies. The Hanlon method will be employed to determine problem priorities, followed by further analysis using the Fishbone diagram. It is expected that the findings of this study will enable the pharmacy department at *Puskesmas Delanggu* to strengthen its role within the healthcare system, adopt competitive strategies, and ultimately improve its existence and the quality of services provided to the community.

After identifying key issues in medicine management and pharmacy services at *Puskesmas Delanggu*, a priority scale of problems will be established using the Hanlon method, followed by analysis with the Fishbone diagram. The Hanlon method is a tool designed to compare diverse health problems in a relative, rather than absolute, framework, with fairness and objectivity. It uses four groups of criteria: the magnitude of the problem, the urgency of the problem, the feasibility of addressing the problem, and the determining factors for program implementation (PEARL factors). This method serves three main purposes: to help decision-makers identify explicit factors in determining priorities, to organize these factors into groups with relative weights, and to allow modifications and individual evaluations as needed (Nurbeti, 2009).

Therefore, this study aims to evaluate drug management and clinical pharmacy services at *Puskesmas Delanggu* in 2023, to identify and prioritize problems using the Hanlon method, and to develop follow-up solutions through Fishbone diagram analysis.

THEORETICAL REVIEW

Standards of Pharmaceutical Services

Pharmaceutical services are activities aimed at identifying, preventing, and resolving problems related to pharmaceutical preparations and health. The old paradigm, which was drug-oriented or product-focused, has shifted due to increasing demands from society and patients (Oktaviani, 2021). Pharmaceutical services encompass two main aspects: the management of pharmaceutical preparations and clinical pharmacy services. These activities are supported by adequate facilities, equipment, and human resources, with the ultimate goal of minimizing adverse effects and maximizing drug efficacy in patients (Susyanty et al., 2021)

Management of Pharmaceutical Preparations and Medical Consumables (BMHP)

The medicine management cycle consists of four stages: selection, procurement, distribution, and utilization. To achieve optimal outcomes, these four steps must be managed properly, as they are interrelated. For effective and efficient medicine management, four managerial support components are essential: organization, administration, finance, management information systems (MIS), and human resources (HR) (Quick, 2012).

The primary goal of medicine management is to select medicines that are truly needed by the population, based on existing disease patterns. Medicine selection is the first step in planning drug utilization, as it determines the quantity of medicines that will be required in the future (Satibi et al., 2014). As part of pharmaceutical services, the management of pharmaceutical preparations and medical consumables involves several processes, including planning, requesting, receiving, storing, distributing, controlling, recording and reporting, as well as monitoring and evaluation.

The purpose of managing pharmaceutical preparations and medical consumables is to ensure their availability and affordability in an effective, efficient, and rational manner, while also establishing a management information system and implementing quality control measures. Activities such as needs planning, requisition, receipt, storage, distribution, control, documentation, reporting, archiving, monitoring, and evaluation are all integral to this management process (Kemenkes RI, 2020).

Clinical Pharmacy Services

According to the Regulation of the Minister of Health, clinical pharmacy services are direct and responsible services provided to patients with the aim of improving therapeutic outcomes and minimizing the risk of adverse drug reactions, thereby ensuring patient safety and enhancing quality of life.

Implementation of Pharmaceutical Service Standards

According to the Indonesian Dictionary (*KBBI*), implementation is defined as application, while Herlina (2021) describes implementation as the execution of various program policies. Implementation involves many individuals, each with their own interests. The process of implementation depends on the quality of the policy, the capability of human resources assigned to apply the policy correctly to achieve its objectives, and the capacity of the organization entrusted with carrying out the policy.

The success of implementation lies in the ability of human resources to effectively execute the program, the awareness and idealism of all personnel involved in adhering to standard operating procedures (SOPs), and the strength of supervisory mechanisms. In this context, the relationship between implementation and pharmaceutical service standards in *Puskesmas* is that pharmacists are responsible for providing pharmaceutical services in accordance with the standards outlined in Minister of Health Regulation No. 74 of 2020. This ensures service quality, fulfills the purpose of delivering optimal care to patients, and helps prevent medication errors.

Definition of the Hanlon Method

The Hanlon Method is a technique used to determine problem priorities qualitatively, also known as the Basic Priority Rating (BPR). It serves as a tool to compare various health problems in a relative rather than absolute manner, providing a fair, structured, and objective framework.

The Hanlon Method consists of two approaches: quantitative and qualitative. The quantitative Hanlon Method is used to prioritize problems

based on quantitative data, such as incidence rates, prevalence, or mortality rates. In contrast, the qualitative Hanlon Method relies on qualitative data, such as interviews, observations, or text analysis, to establish priorities. This method assists decision-makers in identifying key factors that must be considered when defining problems and in developing effective interventions.

Fishbone Analysis

Fishbone Analysis, also known as the Ishikawa Diagram or Cause-and-Effect Diagram, is a method used to systematically identify the root causes of a problem. This method was first developed by Kaoru Ishikawa in the 1960s as a quality management tool for analyzing and improving production processes (Ishikawa, 1990). The diagram resembles a fish skeleton, with the “main spine” representing the problem being analyzed, while the “branches” illustrate the various contributing factors that lead to the problem.

In the context of healthcare services, including drug management and clinical pharmacy services in *Puskesmas*, Fishbone Analysis serves as a tool to explore the factors influencing the emergence of problems. Causal factors are typically grouped into broad categories such as manpower, methods, materials, machines/equipment, environment, and management or policy. The use of Fishbone Analysis enables healthcare teams to gain a more comprehensive understanding of the root causes of problems, thereby allowing interventions to be more precisely targeted (Tague, 2005).

Previous studies have demonstrated that the application of Fishbone Analysis is effective in identifying the causal factors behind pharmaceutical service problems, such as discrepancies in drug management, limited supporting facilities, lack of coordination among staff, and low quality of patient counseling. By identifying root causes through Fishbone Diagrams, the formulation of follow-up strategies becomes more focused and realistic (Wibowo & Nurhayati, 2019; Puspitasari et al., 2021). Therefore, in this study, Fishbone Analysis is applied as a follow-up to the Hanlon method of problem prioritization, with the aim of producing comprehensive solutions for improving drug management and clinical pharmacy services at *Puskesmas Delanggu*.

METHODOLOGY

The type of research used in this study is observational with a cross-sectional design, as it was conducted through observation and recording of natural phenomena. This study is classified as descriptive quantitative research, which aims to provide an overview of drug management and clinical pharmacy services at *Puskesmas Delanggu* by the pharmacists working there. The cross-sectional design was chosen because, in this study, the variables were measured at the same point in time.

Data Collection Techniques

Literature Review Stage

The literature review was conducted by examining various scientific sources, such as books, journals, research reports, and relevant regulations related to the research topic. This review was used to strengthen the theoretical foundation regarding pharmaceutical service standards, drug management indicators, clinical pharmacy services, as well as methods for determining problem priorities using the Hanlon method and root cause analysis with the Fishbone diagram. In addition, the literature review also supported the development of research instruments and the determination of indicators to be applied in the field data collection process.

Research Implementation Stage

The research was carried out directly at *Puskesmas Delanggu*, Klaten Regency. Data were collected through observation, document review, and interviews. Field observations included an assessment of drug storage, distribution processes, and clinical pharmacy services provided by pharmacists. Document review involved examining records such as LPLPO, POR, drug stock cards, expired drug logs, and clinical pharmacy service documents, including prescriptions, counseling notes, drug information services, monitoring of adverse drug reactions (MESO), and therapeutic drug monitoring (PTO). Interviews with pharmacists were conducted to gather deeper insights into challenges and practical experiences that may not be reflected in the documents.

Data Processing Stage

The collected data were processed and analyzed in stages. First, drug management and clinical pharmacy service indicators were compared against applicable standards to obtain an overview of service quality at *Puskesmas Delanggu*. The analysis was conducted descriptively to provide a clear picture of the current state of pharmaceutical services. The data were then used to determine problem priorities using the Hanlon method. At this stage, identified problems were scored based on four criteria: magnitude, seriousness, feasibility, and PEARL factors (propriety, economics, acceptability, resources, legality). The scores were calculated to obtain the Basic Priority Rating (BPR) and Overall Priority Rating (OPR), thereby identifying the primary problems. Once priority problems were established, root cause analysis was conducted using the Fishbone diagram. This diagram helped to explore causal factors from various aspects, such as human resources, methods, materials, environment, and management. Thus, the results of data processing not only provided an overview of pharmaceutical service conditions but also generated a comprehensive analysis of priority problems and their root causes, serving as the basis for formulating improvement strategies.

Data Analysis

This study is an observational research conducted using survey and observation methods. At this stage, the data were processed and analyzed

descriptively, presented in both tables and narrative form to clarify the results obtained. The purpose of data analysis is to explain or describe the research variables (Notoatmodjo, 2012). The analysis was carried out in several stages. The first stage involved analyzing data from direct observation checklists, describing the implementation of pharmaceutical services in each *Puskesmas*. The data were then processed and calculated using appropriate formulas. The second stage consisted of interviews, after which the results were filtered, translated, and interpreted based on the pharmacists' perspectives.

Following the interviews, the third stage involved analyzing secondary data related to drug management and clinical pharmacy services at *Puskesmas Delanggu*. The improvement strategy analysis was conducted using the Hanlon method. During this process, data were collected and processed in the form of scores assigned to each criterion by respondents. These scores were then calculated using the Hanlon method to determine the final results, presented as a ranking of problem priorities. Priority-setting tools included multi-voting techniques, priority matrices, nominal group techniques, and the Hanlon method, specifically the Basic Priority Rating Scale (BPRS). The formulation of improvement strategies was guided by the Hanlon method.

RESULTS AND DISCUSSION

This research was conducted at *Puskesmas Delanggu*, Klaten Regency, Central Java Province, with data collection carried out from September to May 2025. The respondent in this study was the pharmacist responsible for pharmaceutical services at *Puskesmas Delanggu*. Based on the data, the respondent was in the productive age group of 30–40 years, with an educational background as a professional pharmacist in accordance with regulatory requirements. Being in this productive age range indicates readiness to fulfill professional responsibilities as well as adaptive capacity to adjust to policy changes and technological developments related to pharmaceutical services.

The respondent had been working at *Puskesmas Delanggu* for more than five years, providing extensive experience in managing various aspects of pharmacy services. This relatively long tenure offered advantages such as a deeper understanding of drug management systems, knowledge of disease patterns within the service area, and effective coordination with other healthcare professionals. In addition, the respondent was accustomed to dealing with routine challenges such as delayed distribution, limited funding, and obstacles in clinical pharmacy services, ensuring that the information provided was comprehensive and rooted in practical experience.

These findings are consistent with research by Apriliani (2021) at *Puskesmas* in Semarang City, which also highlighted the importance of pharmacists-in-charge in maintaining the quality of pharmaceutical services. That study showed that pharmacists with more than five years of work experience provided more stable and consistent services compared to newly appointed pharmacists. This comparison reinforces the notion that work experience directly contributes to service quality, both in Semarang and Delanggu. Thus, the respondent's characteristics in this study demonstrate that

the profile of the pharmacist plays a crucial role in determining the success of implementing pharmaceutical service standards at the community health center level.

Drug and Medical Consumables (BMHP) Management at Inpatient Community Health Centers in Klaten Regency

Drug Selection

Table 1. Drug Selection

No.	Community Health Center (<i>Puskesmas</i>)	Indicator	Evaluation Year	Yes	No
1	Delanggu <i>Puskesmas</i>	Proposal for drugs to be included in the <i>Fornas</i>	2023	√	-

The findings from Delanggu *Puskesmas* in 2023 indicate that proposals for drugs were submitted to the *Fornas* (National Formulary). This demonstrates that the health center actively participates in providing input on the availability of essential medicines at the national level. Such involvement reflects the commitment of the *Puskesmas* to meeting community needs while maintaining compliance with pharmaceutical service standards. The process of proposing drugs to the *Fornas* holds considerable importance, as the demand for medicines often varies by region, depending on local disease patterns. The proposal submitted by Delanggu *Puskesmas* represents an effort to adapt to the epidemiological characteristics of its service area. This mechanism not only enriches the *Fornas* but also ensures that medicine availability in the field aligns with actual patient needs. Hence, the participation of *Puskesmas* in this process can be regarded as a form of advocacy for more contextual, community-oriented primary health care services.

These findings are consistent with Nugrahaini's (2023) study on strategies for improving drug management using the Hanlon method. That study confirmed that *Fornas*-based drug selection plays a pivotal role in ensuring the rational use of medicines in health facilities. Involvement of pharmaceutical personnel in submitting proposals to the *Fornas* has been shown to reduce the risk of discrepancies between drug items and local disease patterns. This comparison illustrates that the active role of pharmacists at Delanggu *Puskesmas* is consistent with practices in other facilities, thereby supporting the overall effectiveness of the health system.

The findings of this study reinforce the argument that drug selection is not merely an administrative procedure but a strategic step that determines the quality of primary health care. The contribution of Delanggu *Puskesmas* in proposing medicines to the *Fornas* provides evidence that grassroots-level services can actively influence national policy. Such involvement aligns with the mandate of the Ministry of Health, which encourages the participation of pharmaceutical personnel in formulating essential medicine policies. Therefore, the drug selection process at Delanggu *Puskesmas* can be viewed as a best practice that should be maintained and expanded. Observations also revealed

that Delanggu *Puskesmas* submitted proposals through the Drug Requirement Plan (RKO) document, which was subsequently forwarded to the District Pharmacy Installation.

Planning

Table 2. Drug Planning

Indicator	Average (%)	Standard (%)
Conformity of items with <i>Fornas</i>	96.62%	100%
Conformity of items with disease patterns	75%	100%
Accuracy of planning	96.62%	100%

The conformity of medicines with the National Formulary (*Fornas*) at Delanggu Health Center demonstrates a commendable achievement, reaching 96.62%, or 143 out of 148 items aligned with the national list. This indicates that drug management largely adheres to established standards that ensure effectiveness, safety, and cost-efficiency, although five drug items were not included in *Fornas*. Such discrepancies are generally influenced by specific field requirements or variations in local disease patterns. Their presence may still be considered acceptable, provided that their use remains rational and efficient. A similar situation has been observed in other primary health centers, as reported by Cholilah (2021), who emphasized that achieving full compliance with *Fornas* remains a common challenge within primary healthcare services.

Meanwhile, the conformity of medicines with prevailing disease patterns reached only 75% (84 out of 112 items), which falls short of the ideal standard of 100%. Several essential drugs, particularly those for diarrhea and hypertension, were not consistently available in adequate quantities, thereby affecting service quality. This mismatch is largely influenced by supply limitations, budgetary constraints, and the unpredictable dynamics of patient demand. Although drug planning at Delanggu Health Center was relatively strong, achieving 96.62%, fluctuations in disease epidemiology often resulted in rapid depletion of certain drugs while others accumulated in surplus. These findings are consistent with the studies of Nugrahaini (2023) and Nelwan (2023), which highlighted that the accuracy of drug planning is determined by reliable consumption data, appropriate methods of need estimation, and the efficiency of distribution within the supply chain.

Analysis of Problem Priority Scale at Delanggu Health Center Using the Hanlon Method

Table 14. Priority Scale of Problems Using the Hanlon Method at Delanggu Health Center
Criteria & Maximum Score

Problem	A	B	C	BPR	PEARL	OPR	Priority Rank
	Magnitude	Seriousness	Feasibility				
Conformity of items with disease patterns	7	8	8	120	1	120	2
Conformity of received quantities	6	7	7	91	1	91	3
Value of expired drugs (ED)	5	6	6	66	1	66	4
Inventory Turn Over Ratio (ITOR)	9	9	8	144	1	144	1
Stock-out items	4	5	4	64	1	64	5

The results of the analysis showed that the main problem in drug management at the Delanggu Health Center was the low *Inventory Turn Over Ratio* (ITOR) with the highest score of 144. The drug turnover ratio is only 1.2 times per year, well below the standard of 12 times, thus causing inventory stagnation, stock buildup, and the risk of expiration. This condition is in line with the findings of Yuniar & Handayani (2020) which affirm that low ITOR is related to weak drug planning and distribution. The second priority is the non-conformity of items with disease patterns (score of 120), where the achievement of 75% indicates that the availability of drugs is not fully in accordance with the patient's needs. This has the potential to cause delays in therapy or the use of inappropriate alternatives, as reported by Cholilah (2021) in a similar study at other health centers.

In addition, the discrepancy in the number of drug receipts ranked third (score 91), which shows that the distribution from the health office is not optimal and has the potential to cause excess or shortage of stock. Another issue that also needs to be considered is the value of expired drugs (ED) of 6.8% and empty stock of 3.37% with the same score (66). Although the percentage is small, both still have an impact on budget efficiency and continuity of patient therapy, as affirmed by Satibi (2019). Overall, Hanlon's analysis emphasizes that the top priorities for improving drug management are improving ITOR

and item suitability with disease patterns, as improvements in both aspects are expected to have a positive impact on other indicators on an ongoing basis.

Analysis of Problem Follow-Up Using the Fishbone Diagram

The findings indicate that the Inventory Turn Over Ratio (ITOR) at Delanggu Health Center reached only 1.2 times per year, far below the established standard of 12 times per year. This condition reflects a low rate of drug turnover, resulting in stock accumulation and inefficient utilization of pharmaceutical supplies.

Analysis using the Fishbone Diagram reveals that the issue of low ITOR is influenced by multiple interrelated factors, including human resources, methods, materials, management, facilities, and policy. The Fishbone Diagram below illustrates the root causes of the low ITOR at Delanggu Health Center, highlighting major categories such as human resources, methods, pharmaceutical materials, management, facilities, and policy, along with detailed contributing factors.

Human resources emerge as one of the primary contributing factors. The limited number of pharmaceutical personnel prevents optimal monitoring of stock. In addition, competencies in pharmaceutical logistics management remain uneven, resulting in suboptimal documentation and analysis of ITOR data. The pharmacist's greater focus on clinical services also reduces the extent of supervision over drug turnover. This condition is consistent with the findings of Cholilah (2021), who reported that limited pharmaceutical staffing significantly affects the quality of drug management in community health centers.

From the methodological perspective, drug planning at Delanggu Health Center has not been fully based on actual consumption data, leading to procurement of large quantities of drugs that are rarely used. Moreover, monitoring of ITOR values has not yet become a routine agenda in internal evaluations, leaving issues unaddressed when the indicator shows a downward trend. This finding aligns with Putri (2021), who emphasized the importance of periodic evaluation in pharmaceutical logistics management to prevent stagnation in stock turnover.

Material factors also play a role, as several *slow-moving* drugs—such as digoxin and alprazolam—are rarely used, thereby slowing overall stock turnover. Furthermore, the distribution system managed by the District Health Office often fails to reflect the actual needs at the field level, resulting in the accumulation of certain items. This problem is compounded by weak management, as coordination between the health center and the District Health Office remains limited and no early warning system has been established for overstocked items.

During the interview, the pharmacist at Delanggu Health Center stated: *"Some medicines, like digoxin, are rarely used. Sometimes the drugs are still delivered even though the health center's need is minimal, so the stock piles up. We would prefer a more flexible arrangement, but the distribution policy is still determined by the Health Office."*

This statement reinforces the conclusion that policy and coordination issues also contribute to the low ITOR value.

The Fishbone analysis shows that the problem of low ITOR is not caused by a single factor, but rather by the accumulation of issues across human resources, methods, materials, management, facilities, and policies. Improvement efforts must therefore involve strengthening the competencies of pharmaceutical staff, adopting consumption-based planning, optimizing the use of pharmaceutical logistics information systems, and enhancing coordination with the District Health Office to ensure that drug distribution more accurately reflects actual needs.

CONCLUSIONS AND RECOMMENDATIONS

Drug management at Delanggu Health Center in 2023 was generally in accordance with established standards, particularly regarding compliance with the national formulary, accuracy of planning, and overall drug availability. However, weaknesses were identified, including a low Inventory Turnover Ratio (ITOR) of only 1.2 times per year and the presence of expired drugs amounting to 6.8% of total stock. Clinical pharmacy services were also implemented fairly well through prescription review, patient counseling, and the provision of drug information, although activities such as patient visits, Adverse Drug Reaction Monitoring (MESO), and Drug Therapy Monitoring (PTO) were not yet optimal due to limited human resources.

The Hanlon analysis revealed that the low ITOR was the primary problem requiring urgent intervention, followed by mismatches between drug items and disease patterns as well as discrepancies in drug receipt quantities. Further analysis using the Fishbone method identified several contributing factors, including the limited number of pharmaceutical personnel, planning that was not fully based on actual consumption, the presence of slow-moving drugs, and suboptimal coordination of drug distribution with the District Health Office. These findings underscore the need for targeted interventions to enhance both the efficiency and effectiveness of drug management at Delanggu Health Center.

FURTHER STUDY

1. For Delanggu Health Center, it is necessary to strengthen the competencies of pharmaceutical personnel in logistics management, establish a schedule for routine evaluation of the Inventory Turnover Ratio (ITOR), and optimize record-keeping through the use of pharmacy information systems.
2. For the Klaten District Health Office, it is recommended to improve coordination in drug distribution to better align with actual field needs and to minimize the accumulation of rarely used medicines.
3. For pharmacists at the health center, it is important to enhance the implementation of clinical pharmacy activities that remain suboptimal, such as ward visits, Adverse Drug Reaction Monitoring (MESO), and Drug Therapy Monitoring (PTO), through closer collaboration with other medical professionals and consistent documentation.

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