

# Analysis of The Implementation of Pharmaceutical Service Standards in Accordance with The Minister of Health Regulation 73 of 2016 on The Management of Preparations in Pharmacies in Jepara Regency

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The author(s) declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

## ABSTRACT

**Purpose:** This study aimed to analyze the level of implementation of Pharmaceutical Service Standards in accordance with the Minister of Health Regulation No. 73 of 2016 in the management of pharmaceutical preparations in pharmacies in Jepara Regency and to identify supporting factors and obstacles in its implementation.

**Research Method:** This study employed a descriptive, quantitative design with an observational, cross-sectional approach. The population consisted of 218 active pharmacies in Jepara Regency, and a minimum sample of 69 pharmacies was selected using purposive sampling. Data were collected through questionnaires, observations, and documentation, focusing on planning, procurement, receiving, storage, control, destruction, and recording and reporting. Data were analyzed univariately using frequencies, percentages, and averages.

**Results and Discussion:** The implementation of pharmaceutical preparation management was generally in accordance with the standard. Most pharmacies showed high compliance across planning, procurement, receiving, storage, destruction, and recording and reporting. However, several aspects still require improvement, particularly the use of disease-pattern data in planning, pharmacist supervision during procurement, consistency of stock card recording, and the completeness of documentation and reporting.

**Implications:** These findings indicate that pharmaceutical service standards have been widely implemented, but ongoing supervision, training, and system strengthening are needed to ensure more consistent and sustainable compliance across all pharmacies.

**Keywords:** pharmaceutical service standards; Permenkes No. 73 of 2016; pharmaceutical preparation management; pharmacy; inventory control.

## 1. Introduction

Pharmaceutical Service Standards (SPK) are a benchmark used by pharmaceutical personnel in carrying out pharmaceutical services professionally. Pharmaceutical services are direct and responsible services to patients related to pharmaceutical preparations, with the aim of achieving optimal therapeutic results and improving the quality of life of patients. The determination of SPK in pharmacies aims to improve the quality of service, provide legal certainty for pharmaceutical personnel, and protect patients and the



public from the use of inappropriate drugs as an effort to realize patient safety. Along with the development of science and technology, there has been a paradigm shift in pharmaceutical services. Service orientation no longer focuses on drugs as a commodity, but shifts towards pharmaceutical services that are comprehensive pharmaceutical care.

The Government of Indonesia itself has established guidelines for Pharmaceutical Service Standards in Pharmacies (SPKA), since 2004 which has been continuously updated until the Regulation of the Minister of Health of the Republic of Indonesia number 73 of 2016 concerning SPKA, as a reference for Pharmacists in carrying out pharmaceutical services in Pharmacies. SPKA includes management standards for pharmaceutical preparations, medical equipment and consumable medical materials (BMHP) which are managerial in nature as well as clinical pharmaceutical services. The implementation of SPKA is a benchmark in providing quality and quality pharmaceutical services by pharmacists as a consequence of changes in orientation in pharmaceutical services. The implementation of pharmaceutical practices in pharmacies in accordance with the law will have an impact on the provision of quality pharmaceutical services, because regulations that are not implemented properly, economically will also cause losses for the government as a policymaker and the wider community who need it (Parera, 2021)

Several previous studies have shown that the implementation of Pharmaceutical Service Standards in accordance with the Minister of Health Regulation No. 73 of 2016 in various pharmacies is still not optimal. found that pharmaceutical service standards, especially in the management of pharmaceutical preparations, medical devices, and consumable medical materials at Pharmacy X, have not been fully implemented in accordance with the provisions of Permenkes No. 73 of 2016. In addition, research conducted by Wahyu Pratama and his colleagues (2025) reported that drug management in the storage aspect at Pharmacy X Jonggol has only reached 85% compliance with the standards of the Minister of Health Regulation No. 73 of 2016. There is one indicator that has not met the standards, namely the arrangement of drugs that have not been arranged alphabetically, so that it indicates that there is a need for improvement in drug storage management. These findings show that the implementation of Pharmaceutical Service Standards in various pharmacies still faces various obstacles in the management aspect of pharmaceutical preparations. This is an important basis for conducting research to analyze the level of implementation of Pharmaceutical Service Standards in accordance with the Minister of Health Regulation 73 of 2016 on the management of preparations in Jepara Regency Pharmacies.(Arzyki, 2021) (Pratama, 2025)

Although the Pharmaceutical Service Standards have been regulated in the Minister of Health Regulation No. 73 of 2016, the implementation in the management of pharmaceutical preparations in pharmacies is still not running optimally. Some pharmacies have not done proper drug planning so that there is still an excess or shortage of stock. In the procurement process, the documentation is incomplete and the selection of suppliers does not always follow the principle of efficiency. Drug checks upon receipt, such as checking batch numbers, physical conditions, and expiration dates, have also not been carried out optimally. In storage, the FIFO/FEFO system has not been implemented consistently, the drug arrangement is not neat, and temperature monitoring is still lacking. There are still expired drugs that have not been separated and the difference between physical stock and recording. In addition, the reporting of certain drugs such as narcotics and psychotropics has not been done properly. These problems show that the management of pharmaceutical preparations in pharmacies still needs evaluation to determine the level of implementation of pharmaceutical service standards, especially in Jepara Regency.



The remainder of this paper is organized as follows. Section 2 provides a literature review and hypothesis development. Section 3 presents the research method and design. Section 4 provides the results and discussion. Section 5 is Concluding Remarks and Recommendations.

## 2. Literature Review and Hypothesis Development

### 2.1 Pharmaceutical Service Standards

Pharmaceutical service standards are guidelines used in the implementation of pharmaceutical services to ensure the quality of service and patient safety. Based on the Regulation of the Minister of Health of the Republic of Indonesia Number 73 of 2016 concerning Pharmaceutical Service Standards in Pharmacies, pharmaceutical services are an activity that includes the management of pharmaceutical preparations, medical devices, and consumable medical materials as well as clinical pharmacy services that aim to ensure the quality of service and improve patient safety. Pharmaceutical services in pharmacies are an integral part of patient-oriented health service practices and are carried out by pharmaceutical personnel, namely pharmacists and pharmaceutical technicians. (Tangkudung, 2023)

Pharmacies are a means of health services where pharmaceutical practices are carried out directly to the community. In its implementation, pharmaceutical services must pay attention to the quality of services in order to ensure the availability, affordability, and rational use of drugs. Along with the development of pharmaceutical practice, there has been a paradigm shift from drug-oriented to patient-oriented or pharmaceutical care, which is patient-focused services to improve their quality of life. Pharmaceutical services not only focus on drug management, but also include comprehensive clinical pharmacy services, so pharmacists are required to improve their competence, knowledge, skills, and professional attitude in providing direct services to patients (Benita & Faisal, 2023)

### 2.2 Objectives of Pharmaceutical Service Standards

Pharmaceutical service standards aim to improve the quality of pharmaceutical services, provide legal certainty for pharmaceutical personnel, and protect patients and the public from irrational drug use in order to ensure patient safety. This standard also aims to ensure that every pharmaceutical service is carried out professionally, effectively, and efficiently in accordance with applicable regulations. Pharmaceutical services include various activities, such as providing drug information, counseling to patients, and monitoring drug use to ensure safe and effective therapy. These activities are very important to increase the success of therapy and prevent drug misuse. In addition, the availability of pharmaceutical resources and adequate infrastructure facilities also plays an important role in supporting the quality of pharmaceutical services in pharmacies (Heru, 2023)

### 2.3 Components of Pharmaceutical Service Standards

Based on the Regulation of the Minister of Health of the Republic of Indonesia Number 73 of 2016, pharmaceutical service standards in pharmacies consist of several main components, namely pharmaceutical preparation management standards, clinical pharmacy service standards, and resource and facility standards. Pharmaceutical preparation management standards include planning, procurement, receiving, storage, destruction, control, and recording and reporting of pharmaceutical



preparations, medical devices, and consumable medical materials. This activity aims to ensure the availability and quality of pharmaceutical preparations used in health services.

Clinical pharmacy service standards include prescription assessment, dispensing, drug information services, counseling, home pharmacy care, drug therapy monitoring, and drug side effect monitoring. Clinical pharmacy services aim to ensure safe, effective, and rational use of drugs for patients. In addition, resource and facility standards include the qualifications of pharmaceutical personnel, namely pharmacists and pharmaceutical technical personnel, as well as the availability of adequate facilities and infrastructure to support pharmaceutical services. The availability of competent resources and adequate facilities is very important to ensure the quality of pharmaceutical services in pharmacies.

## *2.4 Factors Affecting the Implementation of Pharmaceutical Service Standards*

The implementation of pharmaceutical service standards is influenced by various factors related to human resources, infrastructure, and management systems implemented in pharmacies. Regulation of the Minister of Health Number 73 of 2016 emphasizes that pharmaceutical services must be oriented towards improving the quality of life of patients without neglecting the aspect of drug management. Monitoring the performance of pharmaceutical services is also important to assess the quality of services and the level of patient satisfaction with the services provided (Angraini, 2025). Some of the factors that affect the implementation of pharmaceutical service standards include the competence and professionalism of pharmacists, the availability of adequate facilities and infrastructure, management and regulatory support, good administrative and documentation systems, and supervision from related agencies. These factors greatly determine the successful implementation of pharmaceutical service standards in pharmacies (Resky & Mardhiyani, 2025)

## *2.5 Definition of Drug Management and Pharmaceutical Preparations*

Drug management is a series of activities that include planning, procurement, receiving, storage, destruction, control, as well as recording and reporting drugs and pharmaceutical preparations. Drug management is carried out to ensure the availability of drugs in quantity, types, and quality that are in accordance with the needs of health services (Dewi, 2021). The World Health Organization (WHO) states that good drug management must be able to ensure the availability of sufficient, quality, affordable, and rational drugs by the community. The management of pharmaceutical preparations is an important part of the healthcare system, because the availability of adequate drugs will support the success of therapy and improve the quality of life of patients. Therefore, drug management must be carried out systematically, effectively, and efficiently in accordance with applicable standards.

## *2.6 Stages of Medication Management*

The stages of drug management in pharmacies based on the Regulation of the Minister of Health of the Republic of Indonesia Number 73 of 2016 include several main activities. The first stage is planning, which is an activity to determine the type and amount of drugs needed based on disease patterns, consumption patterns, and community needs. The second stage is procurement, which is the activity of obtaining pharmaceutical preparations through official channels in accordance with the provisions of laws and regulations to ensure their quality and safety.



The next stage is acceptance, which is an activity to ensure the suitability of the type, quantity, quality, and physical condition of the drugs received with the procurement documents. After that, drug storage is carried out in accordance with applicable provisions to maintain the stability and quality of the drug, including the use of the FIFO (First In First Out) and FEFO (First Expire First Out) systems. The next stage is destruction, which is an activity to destroy drugs that are damaged, expired, or do not meet the requirements in accordance with applicable regulations. In addition, inventory control is carried out to ensure the availability of drugs as needed and prevent shortages or excess stocks. The last stage is recording and reporting, which is the documentation of the entire drug management process for the purposes of supervision, evaluation, and accountability.

## 2.7 Drug Management Objectives

Drug management aims to ensure the availability of quality, safe, effective, and in accordance with the needs of public health services. In addition, drug management also aims to improve the efficiency of the use of resources, both manpower, funds, and facilities available in the health service system (Irawan, 2024) The main goal of drug management is to ensure the availability of good quality drugs, with the type and quantity according to needs, and distributed evenly in health care facilities. With good drug management, it is hoped that health services can run optimally and the community's needs for drugs can be met (Pangkei, 2024).

## 2.8 Indicators of Success in Pharmaceutical Preparation Management

The success of pharmaceutical inventory management can be seen from the availability of adequate drugs, guaranteed drug quality, and efficiency in inventory management. Pharmaceutical preparations have an important role in health services because they are the main means in the treatment process, health maintenance, and improving the quality of life of patients (Ministry of Health of the Republic of Indonesia, 2016). One of the indicators of the success of pharmaceutical preparation management is the ability of health care facilities, including pharmacies, to manage pharmaceutical preparations effectively, especially in handling drugs that are close to expiration, damaged, or do not experience stock movement (dead stock). Inoptimal management can cause economic losses, reduce service efficiency, and potentially pose a risk to patient safety In addition, indicators of the success of the management of pharmaceutical preparations can also be seen from the accuracy of planning, the availability of stock according to needs, a good recording system, and compliance with applicable standards and regulations. With good management, it is hoped that pharmaceutical services can run optimally and provide maximum benefits for the community (Rafif, 2025)

## 3. Research Method

This study uses a type of descriptive quantitative research with an observational approach. The descriptive quantitative method is used to systematically and objectively describe the level of application of Pharmaceutical Service Standards in the management of pharmaceutical preparations in pharmacies without providing treatment or intervention to the research object. The observational approach is carried out by observing real conditions in the field and collecting data through pre-prepared instruments. This study uses a cross-sectional design, namely data collection is carried out at



a certain time to describe the conditions of implementing pharmaceutical service standards in accordance with the Regulation of the Minister of Health of the Republic of Indonesia Number 73 of 2016 at the time of the research

The research was carried out in pharmacies in the Jepara Regency area with the main respondents being Pharmacists in Charge of Pharmacies or Accompanying Pharmacists who are actively carrying out pharmaceutical services. The population in this study is all registered and active pharmacies in Jepara Regency as many as 218 pharmacies. The determination of the number of samples was carried out using the Slovin formula with an error rate of 10%, so that a minimum number of samples was obtained from 69 pharmacies. The sampling technique uses purposive sampling, which is the selection of samples based on certain criteria that are in accordance with the purpose of the research. The inclusion criteria include pharmacies that have official licenses, are still actively operating, have active pharmacists, and are willing to be respondents, while exclusion criteria include pharmacies that are undergoing a change in management in less than three months, refuse to participate, or do not complete research data.

Data collection techniques were carried out using questionnaires, observations, and documentation. The questionnaire is used as the main instrument which is compiled based on the indicators of Pharmaceutical Service Standards in accordance with the Minister of Health Regulation Number 73 of 2016 and consists of 33 statements with a Likert scale of 1–3, namely not in accordance with (1), sufficiently appropriate (2), and appropriate (3). The questionnaire is given to the Pharmacist in Charge or the Accompanying Pharmacist to obtain data on the level of implementation of pharmaceutical service standards. Observations were carried out using checklist sheets to directly assess the implementation of pharmaceutical inventory management in pharmacies, while documentation was used to collect supporting data such as SOPs, stock cards, purchase invoices, and other related documents. Cronbach's Alpha with the reliability criterion if the value  $\alpha \geq 0.70$ .

Data processing is carried out through several stages, namely editing to check the completeness and consistency of data, coding to provide numerical codes for each respondent's answer, scoring to calculate the number of scores based on the Likert scale, and tabulating to compile data into the form of tables. Data analysis used univariate analysis with the help of the Statistical Package for the Social Sciences (SPSS) program. The analysis was carried out to produce a distribution of frequency, percentage, and average value of the level of implementation of pharmaceutical service standards. The results of the analysis were then categorized into three levels of implementation, namely high (80–100%), medium (61–79%), and low ( $\leq 60\%$ ). This analysis method is used to descriptively describe the application of Pharmaceutical Service Standards in the management of pharmaceutical preparations in pharmacies in Jepara Regency.

## 4. Results and Discussion

### 4.1 Analysis Results

Based on table 1 of the study, the majority of respondents are aged 26-35 years (62.3%), indicating that pharmacists are dominated by young adults who are in the productive phase. Gender characteristics are dominated by women (92.8%), which illustrates that pharmaceutical practices in Jepara Regency are mostly carried out by female pharmacists without reducing the quality of pharmaceutical preparation management.



Most of the respondents have a S1 Pharmacy + Pharmacist education (98.6%), indicating that the educational qualifications have met the professional requirements. In terms of work experience, the majority have a working period of <5 years (60.9%), so continuous coaching and training are still needed to strengthen competence in inventory management. Respondents almost all worked in private/independent pharmacies (97.1%), showing the dominance of independent pharmacies in Jepara Regency. This condition emphasizes the importance of implementing standards, strengthening the recording system, and controlling inventory. Employment status is dominated by Pharmacists in Charge of Pharmacies (87.0%), which means that the management of pharmaceutical preparations is generally directly under the responsibility of pharmacists. This research will be conducted in 2026 in all pharmacies in Jepara district.

**Table 1 Characteristics of Respondents**

Variable	Frequency	Percentage %
Age		
< 25	7	10.1
26 – 35	43	62.3
36 – 45	16	23.2
46 – 55	2	2.9
>56	1	1.4
Gender		
Men – men	5	7.2
Prempuan	64	92.8
Final Education		
S1 Pharmacy + Pharmacist	68	98.6
S2 Pharmacy + Pharmacist	1	1.4
Long Time Working		
<5 Years	42	60.9
6- 10 Years	15	21.7
11-15 Years	1	1.4
> 16 Years	11	15.9
Types of Pharmacies		
Independent Private Pharmacy	67	97.1
Network Pharmacy	2	2.9
Employment Status at the Pharmacy		
Pharmacist in Charge of Pharmacy	60	87.0
Accompanying Pharmacist	9	13.0

**Table 2 Planning**

Categories	Frequency	Percentage %
Suitable	65	94.2%
Suitable	50	72.5%
Suitable	66	95.7%
Suitable	58	84.1%
Suitable	64	92.8%

Based on table 2 on Planning aspects of pharmaceutical preparation management, it shows that most pharmacies have implemented planning according to standards. The ownership of the regularly compiled drug needs list is in the appropriate category in 65 pharmacies (94.2%), indicating structured planning. Planning that considers community disease patterns reaches 50 pharmacies (72.5%), although

there are still pharmacies in the categories of moderately appropriate (24.6%) and non-appropriate (2.9%), so the use of epidemiological data still needs to be improved.

Pharmacist involvement in planning showed excellent results, with 66 pharmacies (95.7%) in the corresponding category. Budget-based planning also worked well in 58 pharmacies (84.1%), although budget constraints were still an obstacle for some pharmacies. In addition, 64 pharmacies (92.8%) have considered available stock in planning, reflecting the application of inventory control principles. This finding is in line with (Yuwindry & Arzyki, 2021) which emphasizes that drug needs planning is a crucial stage to ensure the availability of the right drugs and prevent vacancies and stock buildups. Overall, the planning aspect at pharmacies in Jepara Regency has gone well, but the optimization of the use of disease pattern data and budget-based planning still needs to be improved.

**Table 3. Procurement**

Categories	Frequency	Percentage %
Suitable	66	95.7%
Suitable	64	92.8%
Suitable	65	94.2%
Suitable	66	95.7%
Suitable	59	85.5%

Based on table 3 on the procurement aspect of pharmaceutical preparations, it shows that most pharmacies have carried out procurement according to pharmaceutical service standards. Procurement through official channels (PBF/licensed distributors) was in the appropriate category in 66 pharmacies (95.7%), reflecting compliance with the legality and safety of drug sources. Ordering based on planning results also showed good results, with 64 pharmacies (92.8%) in the corresponding category, signaling integration between planning and procurement.

A total of 65 pharmacies (94.2%) have completed the order with official documents as a form of orderly administration and supervision. Indicators that pay attention to the quality and legality of products show very good results, namely 66 pharmacies (95.7%) in the appropriate category. However, pharmacist supervision of the procurement process still needs to be improved, because 10 pharmacies (14.5%) are in the category of quite suitable.

This finding is in line with (Yanti et al., 2026), where the aspects of drug procurement and stock recording obtained a high score (92.8%), indicating that procurement has been carried out in a planned manner with a relatively orderly administrative mechanism.

**Table 4. Admissions**

Categories	Frequency	Percentage %
Suitable	66	95.7%
Suitable	65	94.2%
Suitable	66	95.7%
Suitable	63	91.3%
Suitable	62	89.9%

Based on table 4 on Aspects of receipt of pharmaceutical preparations, it shows that most pharmacies have implemented procedures according to pharmaceutical service standards. Physical examination of drugs was carried out by 66 pharmacies (95.7%), and matching with invoices and order letters showed high conformity (94.2%). Inspection of expiration period, batch number, number of items,



and packaging condition has also been well carried out by 66 pharmacies (95.7%), reflecting concern for the quality and safety of medicines.

The recording of drug receipts in the book or stock system has generally gone well, although there are still 6 pharmacies (8.7%) in the category that are quite suitable. The storage of admission documents as archives reached 89.9% of the appropriate category, but administrative order in a small number of pharmacies still needs to be improved.

This finding is in line with (Ramalihi et al., 2025) which reported that drug acceptance in pharmacies is in the appropriate category (87.5%). Overall, the process of receiving pharmaceutical preparations at pharmacies in Jepara Regency has gone well, with the record of improving the consistency of recording and filing still needed.

**Table 5. Storage**

Categories	Frequency	Percentage %
Suitable	65	94.2%
Suitable	68	98.6%
Suitable	67	97.1%
Suitable	59	85.5%
Suitable	67	97.1%

Based on table 5 on Aspects of storage of pharmaceutical preparations, it shows that most pharmacies have implemented storage according to pharmaceutical service standards. The majority of pharmacies store the drug in the factory's original container, with 65 pharmacies (94.2%) in the appropriate category. Storage conditions that ensure the stability and safety of the drug show excellent results, namely 68 pharmacies (98.6%). Storage bins are also generally not used for other items that have the potential to cause contamination (97.1%).

Storage arrangements based on the form of preparation, the class of therapy, and the alphabetical order have been largely implemented, although 10 pharmacies (14.5%) are still fairly appropriate categories. The implementation of the FEFO/FIFO system showed high suitability, with 67 pharmacies (97.1%).

These findings are in line with (Science & Vol, 2025) which reported that the storage of pharmaceutical preparations in pharmacies has been carried out according to standards, including the grouping of preparations and the application of FEFO/FIFO, with excellent results at Pharmacy K-24 Setiabudi Solo (86.4%). Overall, the storage aspect at pharmacies in Jepara Regency has gone well and supports the maintenance of quality, safety, and effectiveness of medicines.

**Table 6. Controls**

Categories	Frequency	Percentage %
Suitable	65	94.2%
Suitable	42	60.9%
Suitable	57	82.6%
Suitable	64	92.8%
Suitable	64	92.8%

Based on table 6 on Aspects of pharmaceutical inventory control, it shows that most pharmacies have implemented inventory control according to pharmaceutical service standards. The majority of

drug orders/procurement, storage, and dispensing arrangements are in the appropriate category, namely 65 pharmacies (94.2%). The use of stock cards (manual and electronic) showed good results, but the conformity rate was lower, with 42 pharmacies (60.9%) in the appropriate category, so consistent stock recording is still a challenge. The ownership of the minimum-maximum stock limit has been implemented by 57 pharmacies (82.6%), playing a role in maintaining the availability of medicines. Monitoring of drugs close to expiration has also been carried out routinely by 64 pharmacies (92.8%), thus helping to minimize the risk of losses.

These findings are in line with a study (Febiana et al., 2023) which reported that inventory control at Pharmacy Kimia Farma Kadipiro and Yosodipuro uses stock cards, both manual and electronic, with a 100% (highly compliant) conformity rate. Overall, inventory control at pharmacies in Jepara Regency has gone well, although the improvement of order and integration of stock cards still needs to be considered.

**Table 7. Destruction**

Categories	Frequency	Percentage %
Suitable	65	94.2%
Suitable	65	94.2%
Suitable	59	85.5%
Suitable	63	91.3%
Suitable	62	89.9%

Based on table 7 on the Aspects of Destruction of Pharmaceutical Preparations, it shows that most pharmacies have carried out the destruction of drugs in accordance with applicable standards and regulations. The destruction of expired or damaged drugs according to the type of preparation was carried out by 65 pharmacies (94.2%). Compliance with regulatory procedures also reached 94.2%. The majority of pharmacies already have a list of destroyed drugs, namely 59 pharmacies (85.5%), although the recording in a small number of pharmacies is still not optimal. The destruction witnessed by pharmacists or authorities was carried out by 63 pharmacies (91.3%), and as an effort to prevent drug abuse by 62 pharmacies (89.9%).

This finding is in line with (Ruliyandari et al., 2026) which reported that the suitability rate of drug destruction in pharmacies was in the range of 85–95%. Overall, the destruction aspect at the Jepara Regency pharmacy has gone well, but improvements in the completeness of documentation and consistency of supervision are still needed.

**Table 8. Recording and reporting**

Categories	Frequency	Percentage %
Suitable	62	89.9%
Suitable	58	84.1%
Suitable	60	87.0%

Based on table 8 on the Aspects of recording and reporting, it shows that most pharmacies have carried out comprehensive recording at each stage of pharmaceutical preparation management. A total of 62 pharmacies (89.9%) were in the appropriate category, reflecting orderly and systematic administrative records. Internal reporting for pharmacy management needs has also been going well, with 58 pharmacies (84.1%) in the appropriate category, although the consistency and completeness of



reports still need to be improved. External reporting, including narcotics and psychotropic reporting, showed good results with 60 pharmacies (87.0%) in the corresponding category.

This finding is in line with (Rulianti & Maryanti, 2023) which reported that some pharmacies do not have SOPs for reporting precursor drugs and have not reported regularly, while the majority of pharmacies already have SOPs and send reports regularly. Overall, recording and reporting at pharmacies in Jepara Regency have gone well, but improving administrative order and reporting compliance is still needed to support accountability and quality of pharmaceutical services.

## 5. Concluding Remarks and Recommendation

The management of preparations in pharmacies in Jepara Regency has generally been carried out well and in accordance with the standards of pharmaceutical services stipulated in the Minister of Health Regulation Number 73 of 2016. Aspects that need to be improved, especially in the use of disease pattern data in planning, consistency of stock card recording, optimization of pharmacist supervision in the procurement process, and orderly documentation and reporting in a sustainable manner. Thus, continuous improvement and supervision efforts are needed so that the implementation of pharmaceutical service standards can be carried out more optimally and evenly in all pharmacies in Jepara Regency.

## Statement of Use of Generative AI

During the preparation of this work, the author used generative artificial intelligence tools to support the scientific writing process. Grammarly was used to check grammar, refine writing style, and improve clarity in scientific writing. All interpretations, analyses, and conclusions presented in this study are the sole responsibility of the author.

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