

EVALUATION OF THE IMPLEMENTATION OF CLINICAL PHARMACY SERVICE STANDARDS BASED ON MINISTER OF HEALTH REGULATION NUMBER 72 OF 2016 AT ELIM RANTEPAO HOSPITAL

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Abstract

This study aims to find out and evaluate the implementation of clinical pharmacy service standards based on the Minister of Health Regulation Number 72 of 2016 at Elim Rantepao Hospital. This study uses a qualitative method with a descriptive approach. Data collection techniques through in-depth interviews with several informants and observation and documentation to support the validity of the information. Data analysis techniques use the Miles and Huberman method: data collection, data reduction, data presentation and conclusions. The results of this study are that clinical pharmacy services at Elim Rantepao Hospital have not all been implemented based on the Minister of Health Regulation Number 72 of 2016 concerning pharmaceutical service standards in hospitals. As for Clinical Pharmacy services that have not been implemented, namely Sterile Dispensing and Monitoring of Drug Levels in the Blood (PKOD). This is because facilities, infrastructure, and human resources are still limited in quality and quantity. Of the eleven aspects of Pharmaceutical Service Standards based on PERMENKES No. 72 of 2016, 9 aspects have been implemented at Elim Rantepao Hospital, meaning that Elim Rantepao Hospital has implemented clinical pharmacy service standards of 81.81%.

Keywords: Service Standards, Clinical Pharmacy, Hospitals

1. Introduction

Pharmaceutical services are a vital and exclusive service for patients in hospitals so they have the potential to influence the hospital's image. Hospital pharmaceutical services are service units that are fully responsible for the management of pharmaceutical preparations, medical devices and other health supplies, as well as the distribution of medicines in hospitals. The Ministry of Health of the Republic of Indonesia has regulated standards for pharmaceutical services in hospitals through Minister of Health Regulation Number 72 of 2016. Pharmaceutical services in hospitals are generally divided into two main services, namely the provision of pharmaceutical supplies and clinical pharmacy services (Ratanadevi & Putriana, 2018).

Based on Minister of Health Regulation Number 72 of 2016, pharmaceutical services include the management of pharmaceutical preparations, medical devices consumable medical materials and clinical pharmacy services. Clinical pharmacy services are the core of pharmaceutical services in hospitals. However, several studies report that the role of pharmacists in several clinical pharmaceutical services in hospitals is still considered to have not met expectations (Rambe et al., 2022). According to Minister of Health Regulation Number 72 of 2016, clinical pharmacy services are direct services provided by pharmacists to patients to improve therapeutic outcomes and minimize the occurrence of side effects due to drugs, for patient safety so that the patient's quality of life is guaranteed.

Clinical Pharmacy Services include assessment and prescription services, tracing drug use history, drug reconciliation, Drug Information Services (PIO), counselling, visits, Drug Therapy Monitoring (PTO), Drug Side Effects Monitoring (MESO), Medication Use Evaluation (EPO), dispensing sterile preparations, and Monitoring Blood Drug Levels (PKOD). Furthermore, several studies report that clinical pharmacy services have been proven to be able to reduce re-admission rates (Cavanaugh et al., 2015), reduce medication errors (Abdulghani et al., 2018), and prevent drug-related problems (Hailu et al., 2020). Apart from that, several other studies state that clinical pharmacy services in several countries are considered to be still not optimal, especially in densely populated countries including Indonesia (Abousheishaa et al., 2020; Amalia & Putri, 2021; Bhagavathula & Sarkar, 2014; Djamaluddin & Imbaruddin, 2019). Clinical pharmacy services that are not yet optimal include drug information services, tracing drug use history, visits, evaluating drug use and monitoring drug therapy (Rambe et al., 2022). For this reason, it is important to encourage the optimization of clinical pharmacy services in hospitals by trained and competent hospital clinical service teams to produce high-quality services and improve the image of the hospital (Jacobi, 2016).

Elim Rantepao Hospital is located at Jl. Ahmad Yani no 68 Rantepao, North Toraja, South Sulawesi has served since its establishment in 1929. Elim Rantepao Hospital has belonged to the Toraja Church since February 25 1991 when it was returned by the Tana Toraja Regency government at that time. Elim Hospital is a type C hospital with a bed capacity of 199, polyclinic visits per day average 230 patients and visits in the Emergency Unit (ER) average per day 60 patients. The Pharmacy Unit at Elim Rantepao Hospital is one of the supporting units which has 8 pharmacists, 15 pharmaceutical technicians (TTK) and 3 administrative staff. The placement of these personnel is in the Outpatient Pharmacy, Inpatient Pharmacy, OK Depot and Pharmacy Warehouse. Based on the explanation of problem identification and literature review above, researchers are interested in conducting research related to evaluating the implementation of clinical pharmacy service standards in hospitals based on Minister of Health Regulation Number 72 of 2016 at the Elim Rantepao hospital as stated in this Final Assignment, entitled "Evaluation of Implementation of Service Standards "Clinical Pharmacy Based on Minister of Health Regulation Number 72 of 2016 at Elim Rantepao Hospital." The reason the author chose this topic is that there has been no research evaluating the implementation of clinical pharmacy service standards based on Minister of Health Regulation Number 72 of 2016 at Elim Rantepao Hospital.

According to Sinambela (2014), service is an activity to fulfill someone's needs or provide for people's needs. Apart from that, service is an activity or sequence of activities that occurs in direct interaction between a person and another person and provides customer satisfaction (Susepti et al., 2017). Meanwhile, in the Big Indonesian Dictionary, services explain the things, methods or results of the work served.

Based on the explanation of the meaning stated above, service standards can be interpreted as a standard activity or way of providing for other people's needs and providing customer satisfaction regarding the results of the work served.

According to Rikomah, clinical pharmacy is a professional expertise in the pharmaceutical field which aims to ensure safety and rationality in the use of patient drug therapy. This arises because there is an emphasis on the functions and duties of pharmacists so that they can work directly dealing with patients (Rikomah, 2016). According to Charles J.P. Siregar, Clinical pharmacy is defined as a specialized health science speciality, responsible for ensuring the safe and appropriate use of medicines in patients, through the application of knowledge and various specialized functions in the care of patients who require special education (specialization) and/or structured training. Referring to Minister of Health Regulation Number 72 of 2016, clinical pharmacy services in hospitals include: reviewing prescription services, tracing drug use history, drug reconciliation, drug information services (PIO),

counselling, visits, drug therapy monitoring (PTO), and monitoring drug side effects. (MESO), Evaluation of Drug Use (EPO), dispensing of sterile preparations and Monitoring Blood Drug Levels (PKOD).

According to the definition of the World Health Organization (WHO), a hospital is a health facility that provides medical services, care and treatment for patients in need. According to the Big Indonesian Dictionary (2023), a hospital is a building where sick people are cared for or a building where they provide and provide health services covering various health problems. In addition, according to the Ministry of Health of the Republic of Indonesia, a hospital is a health service institution that provides complete individual health services, providing inpatient, outpatient and emergency services.

Based on the definition above, a hospital can be defined as a health service institution that provides medical services, care and treatment for patients who need it.

2. Methodology

This research uses a qualitative method with a descriptive approach. This method was chosen by researchers for the reason that this research does not attempt to find causal relationships, but is only carried out to explain and analyze the phenomena that occur. This research aims to find out the extent of implementation of clinical pharmacy service standards based on Minister of Health Regulation Number 72 of 2016 at Elim Rantepao Hospital. Apart from that, to evaluate what types of clinical pharmacy services have and have not been implemented regarding clinical pharmacy service standards based on Minister of Health Regulation Number 72 of 2016 at Elim Rantepao Hospital. Primary data was obtained from field research activities carried out through direct observation and interviews with the director of Elim Rantepao Hospital, all pharmacists who work at Elim Rantepao Hospital and several patients who received clinical pharmacy services. In this research, the secondary data sources are literature, articles and journals relating to the research carried out taken from third parties. The data collection techniques used in qualitative research are observation, interviews and documentation studies.

This interview technique is used to find out in depth, detail and intensively as well as an effort to find the experiences of informants and respondents on certain topics or specific situations studied by 13 competent informants. Data analysis in this study used a descriptive method with one main indicator, namely Minister of Health Regulation Number 72 of 2016 regarding clinical pharmacy service standards in hospitals. The interpretation of the results of this research is made in the form of a percentage of one main indicator as an evaluation of the implementation of clinical pharmacy service standards at Elim Rantepao Hospital. Implementation of clinical pharmacy service standards in hospitals is categorized as good if the score is between 76 - 100%, adequate if the score is 56 - 75%, and poor if the score is <56%

3. Results and Discussion

Elim Rantepao Hospital is a private hospital belonging to the Toraja Church located at Jl. Ahmad Yani 68 Rantepao, North Toraja. Elim Hospital has existed since 1929. The Pharmacy Unit at Elim Rantepao Hospital has 8 pharmacists, 15 pharmaceutical technicians (TTK) and 3 administrative staff. The placement of these personnel is in the Outpatient Pharmacy, Inpatient Pharmacy, OK Depot and Pharmacy Warehouse. Elim Rantepao Hospital has served prescriptions using e-prescribing or digital prescriptions.

Overview of the implementation of clinical pharmacy at Elim Rantepao Hospital. Based on Minister of Health Regulation No. 72 of 2016 there are eleven standards for Clinical Pharmacy services, namely:

1. Review and Prescription Services

The implementation of assessment and prescription services at Elim Rantepao Hospital generally runs well in both Inpatient and Outpatient services. Prescription reviews are carried out to analyze whether there are problems related to drugs. If a problem is found related to the drug, the pharmacist will immediately confirm it with the prescribing doctor. Confirmation is carried out to avoid errors in administering medication to patients or medication errors. Prescription services start from receiving the patient's prescription via e-prescription, checking availability, preparing pharmaceutical preparations including compounding drugs and providing instructions for use (drug labels), checking, handing over pharmaceutical preparations along with providing information.

This assessment and prescription service is also monitored by the Director of Elim Rantepao Hospital, Dr. Adrian Benedict Wijaya, MARS., FISQua, was one of the informants who revealed: "Prescription services at Elim Rantepao Hospital are carried out where doctors no longer write prescriptions on paper but have used electronic prescriptions or e-prescriptions (electronic prescribing), which is an innovation that facilitates drug prescribing. Prescription services are carried out step by step using a computerized system with applications created to minimize errors and prevent medication errors, so that the goal of patient safety is achieved. Apart from that, this system will speed up the flow of prescription services."

2. Search for drug use history

Carrying out a history of drug use at Elim Rantepao Hospital is carried out by asking the patient or the patient's family whether any drugs/pharmaceutical preparations have been or are currently being used as well as tracing whether there are allergies to certain drugs, looking at drug interactions, and patient compliance in using drugs. Medication use history searches are carried out during counseling in inpatient and outpatient settings, as well as when handing over medication to outpatient patients. As stated by one of the informants, namely apt. Rita S., S.Sc. : "When I hand over medicine to the patient/family, I will ask whether there is any medicine that has been taken temporarily or some time ago. I also asked if there were any allergies to certain medications. Also ask whether the patient complies with taking the medication according to the dosage and instructions for use."

3. Medication Reconciliation

Implementation of Medication Reconciliation at Elim Rantepao Hospital is carried out by comparing treatment instructions with the medication the patient previously received including over-the-counter medications including herbal medicines. This drug reconciliation is to prevent drug errors such as drugs not being given, duplication, dosage errors, drug interactions. This is done for patients from one hospital to another, between treatment rooms, when the patient goes home to another health service. Medication reconciliation services have not been optimally and evenly provided to patients due to limited human resources. One of the informants, apt. Ines P., S.Si. revealed: "Medication reconciliation is carried out from the moment the patient enters the hospital, moves from the ER to the treatment unit, and also when the patient is allowed to go home. This is useful to avoid medication errors. "This service has not been implemented optimally due to limited human resources."

4. Drug Information Service (PIO)

The implementation of PIO at the Elim Rantepao hospital is carried out by providing and giving information by answering questions related to pharmaceutical preparations, providing

information when handing over medicines, also through brochures/leaflets, posters/banners, counselling to inpatients and outpatients as well as providing information to making the Elim Rantepao Hospital Formulary book. PIO rooms are not yet available at Elim Rantepao Hospital, so PIO is carried out in outpatient, inpatient and counselling rooms when handing over medication to patients/families. This Drug Information Service has an impact on patients/families so that they can know the indications for drugs, how and when to use drugs, as stated by one of the Outpatient patients, Mr Yohanis Tandi Laa: "I am very grateful to receive an explanation regarding the medicine I am taking, especially an explanation of how to use the suction device from a pulmonary doctor. "So far I have been taking medicine at irregular times, but now I understand how and when to use the medicine."

5. Counseling

The implementation of counseling activities at Elim Rantepao Hospital is carried out by providing advice regarding drug therapy from pharmacists (counselors) to patients and/or their families. The aim of counseling is to optimize the results of therapy, minimize the risk of unwanted drug reactions (ROTD), increase the safety of drug use for patients (patient safety). Counseling is carried out for inpatients and outpatients. Counseling is carried out in the Drug Counseling room available at Elim Rantepao Hospital, equipped with patient data and filling in counseling formats/notes in the Elim Rantepao Hospital system. Counseling is given to patients who have chronic diseases with long-term drug use. and for patients who use a large number of types of drugs, as well as for patients who use drugs with special instructions. The implementation of counseling has not been carried out optimally due to the limited number of pharmacists. As stated by several pharmacists as APT informants. Della, S. Farm., apt. Alce Rahayu, S.Si., apt. Rita, S.Sc. , apt. Mike, S.Si. : "We are not carrying out counseling optimally due to limited time, while there are still many patients to be served. This is due to the limited number of pharmacists serving patients." Apart from that, one of the informants, namely apt. Dra. J. Eunice. L stated: "Outpatient counseling is carried out in the counseling room. We explore the patient's previous treatment journey, drug allergies if any and the patient's compliance with taking the drug according to how to use it."

6. Visite

Visiting activities at Elim Rantepao Hospital are carried out by visiting inpatients by pharmacists, either independently or together with a team of other health workers. The visit aims to directly observe the patient's clinical condition and examine drug-related problems, monitor drug therapy and Unexpected Drug Reactions (ROTD), improve drug therapy, and provide drug information. The results of the visit are carried out by filling in the form in the Elim Rantepao Hospital system. Visits have not been carried out maximally and comprehensively for patients due to limited human resources. One of the patients as one of the informants, namely Mr. Daud S.P in the care unit received a visit from a pharmacist, and said: "I was very happy to be visited by a pharmacist who until now had only been visited by doctors and nurses. "I received a lot of explanations that I didn't know before regarding how and when to use drugs, drug interactions as well as drug storage, drug dosage, etc."

7. Drug Therapy Monitoring (PTO)

Implementation of Drug Therapy Monitoring (PTO) at Elim Rantepao Hospital by Pharmacists is carried out for inpatients. This is done to ensure safe, effective and rational drug therapy for patients. The results of the PTO implementation are filled into the Elim Rantepao Hospital System. Drug therapy monitoring for inpatients has not been carried out maximally and comprehensively for patients due to limited human resources.

8. Monitoring Drug Side Effects (MESO)

The implementation of MESO at Elim Rantepao Hospital aims to monitor any undesirable response to medication (Drug Side Effects). If a drug side effect is found, this incident will be documented in the MESO format for follow-up, discussion and reporting to the national drug side effect monitoring centre. As stated by one of the informants, namely apt. Ines Pratiwi, S.Si. : "MESO is still monitored in the treatment room to see if there are patients who experience ESO, the nurse will fill out the MESO format, submit it to the Pharmacy unit and then report it to the MESO Center if there are patients who experience it"

9. Evaluation of Drug Use (EPO)

Implementation of EPO at Elim Rantepao Hospital by getting an overview of drug use as well as providing input for improving drug use. Qualitative and quantitative evaluation of drug use is not carried out optimally. As stated by one of the APT informants. J. Eunice L.: "EPO is carried out in treatment rooms and outpatients. When we do counselling, we will get an overview of drug use from patients for who we have previously provided education on drug use. EPO has not been implemented optimally due to limited human resources." One of the informants, namely the patient named Mrs. Martha Kokko revealed: "I received an explanation about how to use the Symbicort turbuhaler inhaler 2 weeks ago, but there was a step that I forgot to do."

10. Dispensing Sterile Preparations

The implementation of Sterile Dispensing at Elim Rantepao Hospital is carried out in the treatment room and carried out by nurses. Meanwhile, the requirements for Sterile Dispensing must be carried out in the Pharmacy Installation by pharmaceutical personnel in a special room equipped with a Biological Safety Cabinet and HEPA Filter mixing cabinet and facilities with aseptic techniques that guarantee sterilization. Due to the limited number of pharmacists, the mixing of injectable drugs at Elim Rantepao Hospital is carried out by nurses who are given a mandate or clinical authority. Previously, nurses had to take part in In-House Training on Mixing Sterile Preparations which was delivered by pharmacists who had taken part in the training. Mixing facilities and infrastructure are carried out in cabinets which are not optimal because the required equipment is not yet available. Mixing or handling of cytostatic preparations has not been implemented because there is no oncology doctor in charge, facilities and infrastructure and trained human resources. As stated by the Head of the Pharmacy Unit, apt. Rezkyta T.T., S. Farm. who is also one of the informants: "The implementation of Sterile Dispensing cannot yet be carried out by pharmacists due to the limited number of pharmacists. Prescription services in outpatient pharmacies and inpatient pharmacies really need pharmacists. The implementation of mixing sterile preparations is delegated to nurses who previously had to take part in In House Training on Mixing Sterile Preparations. Another cause is limited facilities and infrastructure. Handling of cytostatic preparations has not been carried out because there are no oncologists and there are no facilities and infrastructure."

11. Monitoring Blood Drug Levels (PKOD)

The PKOD activity, which aims to determine drug levels in the blood, was not carried out at Elim Rantepao Hospital due to limited human resources and the lack of facilities and infrastructure to implement this activity. Monitoring drug levels in the blood is important to ensure optimal drug administration based on target concentrations so that dose adjustments can be made.

4. Conclusion

Clinical Pharmacy Services at Elim Rantepao Hospital are not yet 100% implemented. There are 9 out of 11 clinical pharmacy service standards based on Minister of Health Regulation Number 72 of 2016 that have been implemented or 81.81%. From the results of this

assessment, it was found that clinical pharmacy services at Elim Rantepao Hospital were in the good category, namely at a score of 76-100% (Nursalam, 2016).

The clinical pharmacy service standards that have been implemented at Elim Rantepao Hospital have not been running optimally because the number of human resources compared to the number of patients who will receive clinical pharmacy services is not comparable. Regarding clinical pharmacy service standards that have been implemented but are not running optimally, this is due to limited facilities and infrastructure and the lack of facilities and infrastructure to implement this activity. Monitoring drug levels in the blood is important to ensure optimal drug administration based on target concentrations so that dose adjustments can be made.

Suggestion

1. For Elim Rantepao Hospital to add pharmacists as human resources who will implement clinical pharmacy services at Elim Rantepao Hospital.
2. So that Elim Rantepao Hospital is equipped with facilities and infrastructure that support clinical pharmacy services, including providing a Drug Information Service (PIO) room and facilities/infrastructure for mixing sterile preparations (IV mixture).

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