

## OVERVIEW OF OPTIMIZING PATIENT SAFETY THROUGH THE IMPLEMENTATION OF DRUG CENTRALIZATION AT IBNU SINA GRESIK HOSPITAL

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### Abstract

This study aims to explain the overview of patient safety optimization target three through the application of drug centralization. The research used was quantitative with a descriptive approach. The sample used was a total sampling with 16 nurses in the Cempaka room. Data was collected on patient safety target three and drug centralization through interviews, observations, and questionnaires. This study showed that most of the respondents were quite good in optimizing patient safety target three (87.5%), but in the implementation of drug centralization, the results were not good, there were 8 (50%) nurses who still did not provide the format of each type of drug when given to patients and nurses often forgot to ask for signatures after administering drugs to patients. the implementation of patient safety target three through the implementation of drug centralization is still not optimal, there are some that have not been fully implemented. Therefore. Additional motivation is needed for all nurses to consistently centralize drugs per the Standard Operating Procedures (SOP) to improve Patient Safety.

**Keywords:** Patient Safety, Drug Centralization, Hospital

### Abstrak

Penelitian ini bertujuan untuk menjelaskan overview optimalisasi patient safety sasaran tiga melalui penerapan sentralisasi obat. penelitian yang digunakan adalah kuantitatif dengan pendekatan deskriptif. Sampel yang digunakan total sampling dengan 16 perawat di ruang Cempaka RSUD Ibnu Sina Gresik. Data dikumpulkan patient safety sasaran tiga dan sentralisasi obat melalui wawancara, observasi, dan kuisioner. Penelitian ini, menunjukkan sebagian besar dari responden cukup baik dalam optimalisasi patient safety sasaran tiga (87,5%), namun dalam penerapan sentralisasi obat menunjukkan hasil kurang baik terdapat 8 (50%) perawat masih belum memberikan format tiap jenis obat saat diberikan kepada pasien dan perawat sering lupa meminta tanda tangan setelah pemberian obat pada pasien. pelaksanaan patient safety sasaran tiga melalui penerapan sentralisasi obat masih belum optimal, terdapat beberapa yang belum melaksanakan sepenuhnya. Oleh karena itu. Diperlukan motivasi tambahan kepada seluruh perawat untuk konsisten melakukan sentralisasi obat sesuai dengan Standar Operasional Prosedur (SOP) guna meningkatkan Pasien Safety.

**Kata kunci:** Patient Safety, Sentralisasi Obat, Rumah Sakit

## INTRODUCTION

Incidents of *patient safety* are still a global issue and a major problem in hospitals with various health services that have risks that threaten patient safety until death (Yulidar et al., 2019). The goal of *patient safety* in hospitals is to accurately identify patients, improve effective communication, improve the safety of drugs that require treatment, and ensure patients are identified appropriately with the correct procedures, to ensure proper patient care and treatment (Nuraeni et al., 2017). Patient safety can aim to reduce the number of unexpected events that often occur to patients while being treated in the hospital so that it can harm several parties, especially patients and hospitals (Akbar, 2021). The occurrence of unforeseen incidents can occur due to differences in the activities of different professional groups, such as diagnostic errors, laboratory examination or X-ray errors, medication *errors*, communication system errors, and improper treatment (Mohajan & Haradhan, 2018). Errors that arise such as medication errors, which result in the use of drugs that should not be given or that can cause injury to patients while under the control of health workers, one of the typical aspects of medication errors such as medication errors such as. Not good at applying the principle of six correct injection OABT, documentation that is not optimal, not informing the dose to be given, miscommunication between medical staff is a fairly frequent occurrence, but still underreport due to a poor reporting system (Ramya, 2018).

There are 134 million patient safety incidents that occur every year and 2.6 million deaths per year (WHO, 2021). Data in developed countries experiencing patient safety incidents, where the UK reported an 8% increase in incidence rates in 2022, as many as 652,246 cases (National Patient Safety Agency, 2022). In Indonesia, based on SP2KPN (National Patient Health Reporting and Learning System), there were 7,465 cases in 2019, including 171 deaths, 80 serious injuries, 372 moderate injuries, 1,183 minor injuries, and 5,659 no injuries. Meanwhile, in East Java, the frequency of patient safety incidents is obtained with a frequency of 13% (Daud, 2020). Research conducted by Susanti et al. (2025) found that there were 38 locker samples using paper labels that were easy to peel off, and there were 0% of drug lockers that did not use good numbering to facilitate nursing care (Susanti et al., 2025). A preliminary study conducted by researchers on February 10, 2025, in the Cempaka room found that in the room, there was an SOP for drug centralization. The results of the interview with the primary nurse in the cempaka room, the centralization of drugs in the cempaka room already has a locker with the names of each patient with etiquette so that the drugs are neatly arranged, but the availability of facilities in the medicine room is still inadequate, such as there is no large cabinet for storing leftover drugs. Often, the nurse on duty forgets to ask for the patient's family's signature after being given medicine, and there are also no pharmacists assigned to the cempaka room to handle the medicine.

The role of nurses as executors of patient safety as professional health workers and the largest health workers in hospitals has a very important role in realizing patient safety (Dhita Adinda, 2018). Nurses play a role in protecting, promoting, and preventing the occurrence of unexpected events, reducing suffering through diagnosis and treatment, and protecting in the care of individuals, families, communities, and the nursing

population must comply with all service standards (Dhita Adinda, 2018). The role of nurses in carrying out nursing care procedures is to centralize drugs properly so that *medication errors* are minimized, one of the important strategies in the patient safety program in hospitals, which aims to minimize the risk of medication administration errors and increase patient adherence to therapy, this system involves the management of all patient medications by nurses in the treatment room, Starting from receipt to monitoring the effects of drugs, with the centralization of drugs, nurses can ensure that patients receive the right medication, at the correct dose, and at the specified time, thereby reducing the potential for unexpected events (Wati, 2023). The drug centralization process includes making a strategy for preparing drug centralization, preparing the facilities needed, making technical instructions for the implementation of drug centralization, and documenting the results of implementation. The optimal implementation of drug centralization, with the leadership of the head of the room, as well as the knowledge of nurses can affect the process of the accuracy of drug administration by nurses with the principles of 6 T (right patient, right drug, right dose, right route, right time and right documentation) and 1 W (be aware of side effects), so it is hoped that there will be no medication administration errors during the patient treatment process (Salawati, 2024).

Based on a preliminary study conducted by researchers through interviews with primary nurses, nurses said that nurses have implemented *patient safety* on target 3, namely the centralization of drugs in hospitals, but it is not appropriate and not optimal. Efforts that can be made by nurses in optimizing *patient safety* target three are by centralizing drugs properly and according to procedures. The implementation of drug centralization is optimal with the principles of 6 T (right patient, right drug, right dose, right route, right time, and right documentation) and 1 W (be aware of side effects). Based on the above problems, the researcher is interested in knowing and conducting research on "*Overview of Optimizing Patient Safety Through the Application of Drug Centralization in the Cempaka Room of Ibnu Sina Gresik Hospital*".

## **METHOD**

This study used a descriptive quantitative research design. This approach was chosen to provide an objective picture of the effect of drug centralization on patient safety in a hospital environment. This design allows researchers to collect and analyze numerical data related to the variables studied, and describe the conditions or phenomena that occur systematically by the facts in the field. The population in this study was all nurses who served in the Cempaka Room of Ibnu Sina Gresik Hospital. The population was 16 nurses, who were recorded as actively working during the study period, namely from February 10, 2025, to February 12, 2025. With a relatively small population, the sampling technique used is total sampling, that is, all members of the population are used as research samples. This technique is considered appropriate because it allows researchers to obtain comprehensive data from all relevant respondents, so that the results obtained are more representative of actual conditions.

The independent variable in this study is centralization of drugs, which is the process of managing and distributing drugs centrally to improve efficiency and minimize drug

administration errors. Meanwhile, the dependent variable was patient safety, which includes aspects such as prevention of medication errors, improvement of procedure compliance, and reduction of risk to patients. Data were analyzed descriptively using frequency distributions and percentages to describe the characteristics of respondents and the relationship between variables. It is hoped that the results of this study can contribute to the development of safer and more efficient health service policies, especially related to drug management in hospitals.

## RESULTS AND DISCUSSION

**Table 1.** Distribution of Respondents Based on Characteristics of Age, Gender, Education Level, and Length of Employment at Ibnu Sina Gresik Hospital.

NO	CHARACTERISTICS	FREQUENCY	PERCENT
1	<b>Age</b>	0	<b>0%</b>
	a. Teenagers 11-19 years old	0	<b>0%</b>
	b. Young Adults 18-25 years old	16	<b>100%</b>
	c. Adults 25-45 years old	0	<b>0%</b>
	d. Elderly > 45 years old		
2	<b>Gender</b>	6	<b>37,5%</b>
	a. Man	10	<b>62,5%</b>
	b. Woman		
3	<b>Education level</b>	5	<b>31,25%</b>
	a. D3 Nursing	11	<b>68,75%</b>
	b. S1 Nursing-Nurses		
4	<b>LONG HAS BEEN WORKING IN THE HOSPITAL</b>	8	<b>50%</b>
		0	<b>0%</b>
	A. <b>0-5 YEARS</b>	8	<b>50%</b>
	B. <b>6-10 YEARS</b>		
	C. <b>&gt; 10 YEARS</b>		

Ibnu Sina Gresik Hospital with a total of 16 people. The characteristics of the respondents in this study included age, gender, education level, and length of employment. The results of the analysis of the distribution of respondents based on Table 4.1 show that of the 16 respondents who work at Ibnu Sina Gresik Hospital, the majority are aged 25-45 years (100%). Most of the top 11 respondents were female (62.5%), with a S1 Nursing-Nurses education level (68.75%), and the length of work of respondents was 0-5 years (50%) and >10 years (50%).

**Table 2.** Interview Results on *Patient Safety* Target Three and Drug Centralization in the Cempaka Room of Ibnu Sina Gresik Hospital on February 10-12, 2025

NO	VARIABLE	INTERVIEW RESULTS
1	<b>Independent Variables:</b> Centralization of drugs	1. Documentation after administering medication to patients, such as signatures, is still forgotten or not optimal 2. There are no pharmacists who follow the drug centralization process 3. Facilities and infrastructure that are not

		optimal, such as narrow rooms and limited cabinets, also interfere with the performance of nurses in the process of implementing drug centralization
2	<b>Variable Dependents:</b> <i>Patient safety goal three</i>	<ol style="list-style-type: none"> <li>1. Nurses already know the drugs that need to be watched out for (high alert)</li> <li>2. Some nurses are already aware of the SPO for drug safety management</li> <li>3. The hospital has provided a storage place for drugs that need to be watched out for, such as a refrigerator for storing drugs.</li> <li>4. The hospital provided written information on the names of drugs that need to be watched out for.</li> </ol>

**Table 3.** Observation Results on *Patient Safety* Target Three and Drug Centralization in the Cempaka Room of Ibnu Sina Gresik Hospital on February 10-12, 2025.

NO	VARIABLE	INTERVIEW RESULTS
1	<b>Independent Variables:</b> Centralization of drugs	<p>Several sheets or formats support drug centralization:</p> <ol style="list-style-type: none"> <li>1. Medication administration and prescription sheets: The room has medication administration sheets in each patient's medical record.</li> <li>2. There is an informed consent sheet for the administration of drugs</li> <li>3. The nurse already knows the SOP for the central medicine, but it is not optimal</li> <li>4. There is a drug storage locker according to patient etiquette</li> <li>5. There is a medium cabinet for the storage of electrolyte liquid cairan</li> <li>6. The rest of the electrolyte is scattered in Lanatai because there are not enough cabinets</li> </ol>
2	<b>Variable Dependents:</b> <i>Patient safety goal three</i>	<ol style="list-style-type: none"> <li>1. There is a refrigerator for storing medicine</li> <li>2. There are written names of drugs that need to be watched out for</li> <li>3. SPO patient safety is running but not optimal</li> </ol>

**Table 4.** Results of *the Patient Safety* Questionnaire on the Third Target in the Cempaka Room of Ibnu Sina Hospital, which was conducted on February 11-12, 2025

NO	QUESTION	YES	NOT
1	Do you already know what drugs are included in the security medicine that is High Alert Medication	100%	0%
2	Whether you already know how to Operational Standards of Drug Safety Management Procedures to Watch Out for	87.5%	12,5%

3	Has the hospital prepared a storage place for the drugs included in the Drug Safety – Drugs to Watch Out for	87.5%	12,5%
4	Has the hospital prepared a specific, limited-access location for the safety of medicines that need to be watched out for	100%	0%
5	Have the storage places for drugs that need to be watched out for been marked as clues or signs, so that those marked can be seen and read as a sign of the safety of drugs that need to be watched out for	100%	0%
6	Has the Hospital determined what tools are used in the marking of drugs that need to be watched out for	100%	0%
7	Has the Hospital set out what instructions should be used / or what can be known on the Drug Marking Tools – Drugs That Need to Be Watched Out For	100%	0%
8	Do you already know what medicines should not be stored in the treatment room, except in intensive care facilities	87.5%	12,5%
9	Do you know which treatment rooms are allowed to store concentrated electrolytes and should be kept in a limited location?	87.5%	12,5%
10	It is known that the treatment room that is allowed to store concentrated electrolytes must be supervised by an authorized officer.	100%	0%
11	Whether concentrated electrolyte drugs have been given a written announcement on concentrated electrolyte drugs that must be considered by nurses before administering drugs. Especially in medicine concentrated electrolytes that need to be diluted before the drug is given to the patient	100%	0%
12	<b>HAS THE HOSPITAL SET A WRITTEN ANNOUNCEMENT THAT MUST BE WRITTEN AND CAN BE READ BY THE NURSE BEFORE THE MEDICINES GIVEN TO PATIENTS WITH A SPECIAL ELECTROLYTE CONCENTRATE DRUG</b>	100%	0%

Results Data collection through questionnaires and observations was conducted on February 11-12, 2025, to nurses in the Cempaka Room of Ibnu Sina Gresik Hospital. There are 12 questions on the *patient safety* questionnaire in target three, including whether they already know what drugs are included in the safety of drugs that need to be watched out for (high alert medication), whether they already know how the standard operating procedures for managing drug safety that need to be watched out for, whether the hospital has prepared a place to store drugs and whether the storage place for drugs that need to be watched out for has been marked As a guide or sign of the safety of drugs that need to be watched out.



A total of 16 (100%) nurses mostly said that they already knew what drugs were included in the drug safety that needed to be watched out, how the standard operating procedures for drug safety management procedures were, and a small number of nurses said 2 (12.5%) still did not understand the standard operating procedures for drug safety management procedures that needed to be watched out, the storage of drugs that were not optimal. The majority of nurses already know how the standard operating procedures for managing drug safety need to be watched out for, including labeling them as a sign of the safety of drugs that need to be watched out for, then storing the drugs that need to be watched out for in a safe or different place.

**Table 5.** Results of the Drug Centralization Questionnaire in the Cempaka Room of Ibnu Sina Hospital, which was conducted on February 11-12, 2025

NO	COMPONENTS OF DRUG CENTRALIZATION	YES	%	NO	%
<b>A</b>	<b>Centralized Drug Procurement</b>				
1.	Do you know about the centralization of medicine?	16	100%	0	0%
2.	Is this in your room Centralization of drugs?	16	100%	0	0%
3.	If so, has the centralization of existing drugs been carried out optimally?	3	18,75 %	13	81,25 %
4.	If not, does the room need to centralize the drug?	16	100%	0	0%
5.	Do you do drug documentation when accepting new patients?	16	100%	0	0%
6.	Is there a format for the procurement list of each type of medicine? (Oral-Injection- Suppositories-Infusions-Insulin-Emergency Medicine)	14	87.5 %	2	12,5%
<b>B</b>	<b>Drug Acceptance Flow</b>				
1.	Has there been a centralized approval format for drugs from patients/patients' families?	14	87.5 %	2	12,5%
2.	Is the process of receiving drugs from the patient or/patient's family according to the procedure?	16	100%	0	0%
<b>C</b>	<b>How to Store Drugs</b>				
1.	Whether In this room is there a special room for the centralization of drugs?	16	100%	0	0%
2.	Is the completeness of the facilities and infrastructure sufficient to support the centralization of drugs?	3	18,75 %	13	81,25 %
3.	Have you been separating ownership between patients' medications?	16	100%	0	0%
4.	Have you been giving etiquette and address to patient medicines?	16	100%	0	0%

<b>D</b>	<b>How to Prepare Drugs</b>				
<b>1.</b>	You always inform the amount of Ownership of the drug to be used?	13	81,25 %	3	<b>18,75 %</b>
<b>2.</b>	<b>IS THERE A FORMAT FOR EACH TYPE OF DRUG BEFORE YOU GIVE THE DRUG TO THE PATIENT?</b>	<b>8</b>	<b>50%</b>	<b>8</b>	<b>50%</b>

Based on data obtained through an observation questionnaire conducted on February 11-12, 2025, 16 nurses (100%) stated that they mentioned the centralization of drugs, the flow of drug acceptance, the way of storing drugs, and how to prepare drugs. The results of the questionnaire showed that 16 (100%) Cempaka room nurses had carried out drug centralization procedures such as drug documentation for new patients, the existence of a centralized drug approval format for patients/families, separating patient drugs according to their respective lockers, and providing etiquette and addresses on patient drugs. However, there were 13 (81.25%) nurses who said that the drug centralization room must be implemented optimally, such as the addition of cabinets for leftover drugs that accumulate to complement the facilities and infrastructure in the centralization of drugs. Likewise, there are 8 (50%) nurses who still do not provide the format of each type of drug when given to patients, and nurses often forget to ask for signatures after administering drugs to patients.

**Table 6.** SWOT Analysis M3 (*Method*) Drug Centralization

NO	SWOT ANALYZER	WEIG HT	RATI NG	BOBOT X RATING	TOTAL
<b>M3 (METHOD) OF DRUG CENTRALIZATION</b>					
<b>INTERNAL FACTORS</b>					
<b>STRENGTH</b>					
<b>1</b>	The existence of a drug documentation sheet is received for each patient's status	0,3	2	0,6	<b>S – W = 2,5 – 3 = - 0,5</b>
<b>2</b>	The availability of facilities and infrastructure that have not met the requirements in the implementation of SOPs for drug centralization	0,3	3	0,9	
<b>3</b>	Drugs are differentiated according to the patient (name, date of birth, address)	0,2	3	0,6	
<b>4</b>	Providing information to families about the administration of medicines	0,2	2	0,4	
<b>TOTAL</b>		<b>1</b>		<b>2,5</b>	
<b>WEAKNESS</b>					
<b>1</b>	The place and of the drug facilities	0,2	3	0,6	



	centralization are not adequate			
2	Nurses do not always provide approval sheets for administering drugs	0,2	3	0,6
3	Nurses do not always ask for the patient's family TTD after being given medication	0,2	3	0,6
4	Absence of pharmacists who follow the process of drug centralization	0,2	3	0,6
5	Absence of the UDD system of pharmaceutical personnel in drug centralization	0,2	3	0,6
<b>TOTAL</b>		<b>1</b>		<b>3</b>

#### EXTERNAL FACTORS

##### PELUANG (*OPPORTUNITY*)

1	Some students practice nursing management	0,3	3	0,9	<b>O – T = 3 – 2,6 = 0,4</b>
2	There is good cooperation between nurses and students in the centralization of drugs	0,4	3	1,2	
3	Always follow the advice of the doctor	0,3	3	0,9	
<b>TOTAL</b>		<b>1</b>		<b>3</b>	

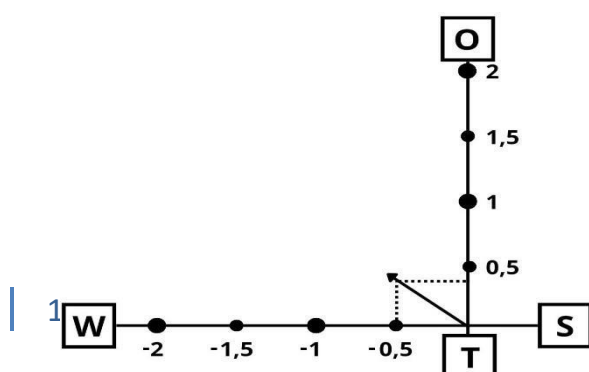
##### ANCAMAN (*THREATENED*)

1	The existence of higher demands than patients to get more professional service	0,6	3	1,8
2	Lack of knowledge of patients and families about the importance of a drug centralisation system	0,4	2	0,8
<b>TOTAL</b>		<b>1</b>		<b>2,6</b>

#### Overview of Drug Centralization Analysis Diagram

- S-W 2,5-3 = - 0,5
- O-T 3-2.6 = 0.4

**Figure 1.** Drug Centralization Diagram



Based on the M3 value, drug centralization is in quadrant II, namely Turn Around, where this quadrant describes something good because there is power that is used to achieve profitable opportunities, where drug centralization carried out in the Cempaka room of Ibnu Sina Gresik Hospital has been carried out, but has not been optimal.

**Table 7.** SWOT Analysis of Patient Safety on the third target

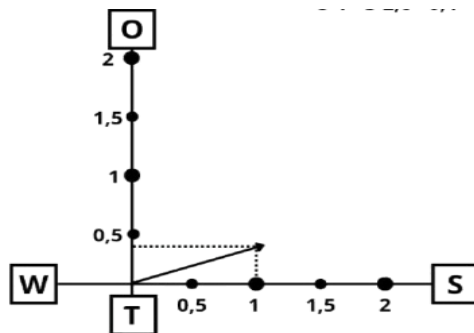
No	SWOT Analyzer	Weight	Rating	Bobot x Rating	Total
<b>PATIENT SAFETY</b>					
<b>Internal Factors</b>					
<b>Strength</b>					
1	The head of the room and other units support the centralized management activities of the drug.	0,3	2	0,6	<b>S – W = 3 – 2 = 1</b>
2	There is a willingness among nurses to centralize drugs	0,3	3	0,9	
3	There is a medication documentation sheet received for each patient's status	0,2	3	0,6	
4	Drug centralization has been carried out by nurses in collaboration with pharmaceutical depots	0,2	2	0,4	
<b>TOTAL</b>		<b>1</b>		<b>2,5</b>	
<b>Weakness</b>					
1	The availability of facilities and infrastructure is still minimal for the management of drug centralization.	0,2	3	0,6	
2	The implementation of drug use management in hospitals is still not optimal	0,2	3	0,6	
3	Nurses do not always ask for the patient's family TTD after being given medication	0,2	3	0,6	
<b>TOTAL</b>		<b>1</b>		<b>2</b>	
<b>External Factors</b>					
<b>Peluang (Opportunity)</b>					
1	The existence of cooperation and the practice of nursing management students to help improve services medicine in the hospital.	0,3	3	0,9	<b>O – T = 3 – 2,6 = 0,4</b>
2	There is good cooperation between nurses and students in the centralization of drugs	0,4	3	1,2	
3	Always follow the advice of the doctor	0,3	3	0,9	

<b>TOTAL</b>		<b>1</b>		<b>3</b>	
<b>Ancaman (<i>Threatened</i>)</b>					
1	Presence of Patients' demands to get professional drug services	0,6	3	1,8	
2	There is a law on patients' rights, family rights	0,4	2	0,8	
<b>TOTAL</b>		<b>1</b>		<b>2,6</b>	

#### Overview of *Patient Safety Analysis Diagram*

- S-W 3-2 = 1
- O-T 3-2.6 = 0.4

**Figure 2.** Diagram of the third target: patient safety



Based on the *patient safety* diagram above, it is in quadrant I (Aggressive), which means in a strong position. Create a strategy by using power to take advantage of opportunities. The strategy that can be developed for *patient safety* is good cooperation between the head of the room, the team leader, and the implementing nurse.

## DISCUSSION

### 1. Drug Centralization

Regarding the process of drug centralization, there are several obstacles that need to be considered. From the observation results, a small percentage of nurses stated that the centralization of drugs in the form of asking for patients/family signatures is often forgotten, and the infrastructure facilities where drug centralization is located are not optimal. These two things underline the potential for disruption to the smooth running of the drug centralization system that can affect the safety and security of patients in the treatment unit.

The accuracy of drug administration is a process carried out by nurses based on 6 exact drugs, and be aware of side effects. Drug centralization is full management and control (centralization) where all drugs that will be given to patients are completely handed over to the nurse, and then the dispensing and distribution of drugs. This process is from receiving drugs, administering drugs, storing, to managing special drugs that are given with strict supervision (Salawati, 2024). Controlling the use and consumption of drugs is one of the duties of nurses, so it needs to be done in an orderly pattern/flow so that the risk of losses, both material and non-material, can be eliminated (Fibriansari,

2019). At the time of administering medicine, the nurse explains the types of medicines, the benefits of medicines, the dosage of medicines, the method of administration, the amount of medicine, and the side effects of medicines in patients/families, and the observation of side effects after taking medicine. Then the nurse who gives the medicine asks the patient/family to sign the form for administering the medicine as proof that the medicine has been given/injected. This can prevent nurses from administering duplicate/recurring medications and prevent patients or families from asking about medication administration that has been carried out by nurses (Septiyana et al., 2023). The proper administration of medication is influenced by several factors. One of these factors is the nurse's behavioral factor, where the nurse does not apply the six true principles of medicine established by the hospital. According to Bloom, the behavioral domain consists of knowledge, attitudes, and actions (Notoatmodjo, 2014).

The obstacles found in the process of centralizing drugs show the need to improve existing systems and procedures. This includes increasing awareness of the importance of complying with the SOPs for drug centralization that have been implemented. In addition, efforts are needed to improve the performance of nurses by coordinating facilities and infrastructure so that nurses can carry out optimal drug centralization. Thus, improvements in the centralization of drugs can bring significant benefits in improving patient efficiency and safety in a healthcare setting.

## **2. Patient Safety**

Patient safety *activities* in the implementation of drug centralization have not been optimal. This shows that there is potential to improve understanding and practical skills in optimizing *patient safety*, especially in target three among the medical staff. Patient safety is a treatment action that aims to prevent and reduce risks, errors, and losses that occur to patients during the provision of health services. Patient safety goals, if implemented correctly, can help improve patient safety through increasing error detection and drug centralization (Rezeki et al., 2022). Patient safety programs can aim to reduce the number of unexpected events that often occur to patients while being treated in the hospital, so that it can harm several parties, especially patients and hospitals (Akbar, 2021). Drug centralization is one of the important strategies in patient safety programs in hospitals, which aims to minimize the risk of medication administration errors and increase patient adherence to therapy (Wati, 2023). Nurses play an important role in preparing and administering medicines, so they must be careful not to make mistakes in administering medicines (Albyn, 2022). Measures that can be taken to prevent medication errors include separating drugs with similar names, separating and placing them apart, informing patients about the treatment program they receive to reduce medical errors, standardizing procedures that are very beneficial for new nurses, and labeling high-risk drugs as examples "*for oral use only*" (Albyn, 2022). The successful implementation of a patient safety culture depends on how well things related to patient safety are conveyed to nurses. It is not enough just to convey that issues related to patient safety; supervisors must also convince nurses that the implementation of a patient safety culture is possible and must be done (Kusumawati &

Listiana, 2022). The supervisor or unit leader must, of course, provide direction and guidance to the implementing nurse; the realization of a patient safety culture can be influenced by the existence of a supervisor or unit leader with good leadership, so that it is expected to be able to create motivation for every nurse who works.

Workload is also one of the things that can make the implementation of patient safety less optimal. The number of additional tasks that nurses must complete can affect nurse performance, thus negatively impacting nurse productivity. Nurses will feel stressed if the workload is too heavy. When nurses experience stress, social interactions with colleagues, doctors, and patients can be affected. The effectiveness of work can also be exhausting because, in general, if a person experiences stress, there will be disturbances in both their psychological and physiological state. This statement is also supported by research by Syukur et al (2023), who stated that high workloads are usually due to time pressures. In certain conditions, when time pressure requires the nurse to complete the task assigned to her, it can lead to errors in the job or cause problems for both the nurse and the patient. In the end, nurses do not apply *patient safety* to the maximum. Meanwhile, Muliana & Mappanganro (2019) stated that the lack of *implementation of patient safety* is caused by a lack of *patient safety training*, so in the development of science.

*Patient safety* is important for hospitals to provide more training and support to nurses by increasing their understanding and practical skills. It is hoped that the implementation of *patient safety* can be significantly improved, so as to be able to improve patient safety and the efficiency of overall health services. Therefore, continuous efforts to improve training and understanding of *patient safety* are important to improve the quality of health services

### **3. Overview of *Optimizing Patient Safety* in the Implementation of Drug Centralization**

The centralization process shows that there are several obstacles that need to be considered. From the observation results, a small percentage of nurses stated that the centralization of drugs in the form of asking for patients/family signatures is often forgotten, and the infrastructure facilities where drug centralization is located are not optimal. These two things underline the potential for disruption to the smooth running of the drug centralization system that can affect the safety and security of patients in the treatment unit. In addition, *patient safety* activities in the implementation of drug centralization have not been optimal. Although most of the nurses have succeeded in implementing patient safety activities in drug centralization well, others still experience obstacles in implementing patient safety in drug centralization. This shows that there is potential to improve understanding and practical skills in *optimizing patient safety* through the application of drug centralization among these nurses.

Patient safety is a treatment action that aims to prevent and reduce risks, errors, and losses that occur to patients during the provision of health services. Patient safety goals, if implemented correctly, can help improve patient safety through increasing error

detection and drug centralization (Rezeki et al., 2022). Patient safety programs can aim to reduce the number of unexpected events that often occur to patients while being treated in the hospital, so that it can harm several parties, especially patients and hospitals (Akbar, 2021). Drug centralization is one of the important strategies in patient safety programs in hospitals, which aims to minimize the risk of medication administration errors and increase patient adherence to therapy (Wati, 2023). Nurses play an important role in preparing and administering medicines, so they must be careful not to make mistakes in administering medicines (Albyn, 2022). The accuracy of drug administration is a process carried out by nurses based on 6 exact drugs, and be aware of side effects. Drug centralization is full management and control (centralization) where all drugs that will be given to patients are completely handed over to the nurse, and then the dispensing and distribution of drugs. This process is from receiving drugs, administering drugs, storing, to managing special drugs that are given with strict supervision (Salawati, 2024). At the time of administering medicine, the nurse explains the types of medicines, the benefits of medicines, the dosage of medicines, the method of administration, the amount of medicine, and the side effects of medicines in patients/families, and the observation of side effects after taking medicine. Then the nurse who gives the medicine asks the patient/family to sign the form for administering the medicine as proof that the medicine has been given/injected. This can prevent nurses from administering duplicate/recurring medications and prevent patients or families from asking about medication administration that has been carried out by nurses (Septiyana et al. 2023).

The successful implementation of optimal *patient safety* culture depends on how well things related to patient safety are conveyed to nurses. It is not enough just to convey that issues related to patient safety; supervisors must also convince nurses that the implementation of a *patient safety* culture is possible and must be done (Kusumawati & Listiana, 2022). The supervisor or unit leader must, of course, provide direction and guidance to the implementing nurse; the realization of a patient safety culture can be influenced by the existence of a supervisor or unit leader with good leadership, so that it is expected to be able to create motivation for every nurse who works. Optimizing *patient safety* in target three is important for medical institutions, especially for hospitals, especially in the centralization of drugs by increasing the understanding and practical skills of nursing personnel who can overcome or minimize the danger to patients in administering drugs. It is hoped that the overview of *patient safety* optimization in the implementation of drug centralization can be significantly improved, which in turn can improve compliance with the *operational procedure standards* that are already available in each room and hospital.

## CONCLUSION

The conclusion of the study on optimizing patient safety through the application of drug centralization in the Cempaka Room of Ibnu Sina Gresik Hospital reveals several key findings. Drug centralization in this unit faces notable challenges, including suboptimal conditions of the drug storage facilities. The room allocated for drug storage is relatively narrow, with limited cabinets, which affects the organization and accessibility



of medications. In addition, documentation by nurses is sometimes incomplete or not conducted optimally. These issues can potentially hinder the smooth and effective implementation of drug centralization within the treatment unit. Regarding patient safety, particularly in relation to target three, the hospital has shown commitment by providing optimal support and implementation systems. Most nurses have demonstrated good adherence to patient safety procedures. However, some individuals still encounter difficulties in practice, indicating that gaps remain in the understanding and application of these safety measures. This situation highlights the need for continuous improvement in training and support to enhance both the knowledge and practical skills of healthcare professionals. Efforts to optimize patient safety, especially within the framework of drug centralization, require consistent reinforcement and evaluation to ensure that all healthcare providers are able to carry out their responsibilities effectively and maintain high standards of patient care

## CONCLUSION

Ahyar, H. (2020). *Buku Metode Penelitian Kualitatif & Kuantitatif* (H. Abadi (ed.); 1st ed., Issue March). CV. Pustaka Ilmu Editor: <https://www.pustakailmu.co.id>

Albyn, D. F. (2022). Keselamatan pasien dan keselamatan kesehatan kerja (A. Munandar (ed.); edisi 1). Media Sains Indonesia.

Aprilia, Nursalam, & Panji Asmoro, C. 2022. Ketepatan Pemberian Obat Berhubungan Dengan Sentralisasi Obat Di Rsud Sidoarjo (Right Medication Related to Drug Centralized in RSUD Sidoarjo). *Jurnal INJEC*, 1(2), 187– 196

Asmirajanti, D. (2021). Penerapan Standar Akreditasi Terhadap Mutu Dan Keselamatan Pasien Sebelum Dan Selama Pandemi Covid 19. *Komisi Akreditasi Rumah Sakit*, 3.

Dhita Adinda. (2018). PERAN PERAWAT DALAM PENERAPAN KESELAMATAN PASIEN DI RUMAH SAKIT. 1–7.

Duryadi. (2018). *Metode Penelitian Ilmiah Buku Ajar* ( josep teguh Santoso (ed.)).Universitas STEKOM.

Fibriansari, R. D. (2019). Modul Praktikum Manajemen Keperawatan. Jember: Unej Press.

Galleryzki, A. R., Sikap, H., Dengan Implementasi, K., Keselamatan, S., Tutik, R. R., Hariyati, S., Afriani, T., Rahman, L. O., Keperawatan, D., Dasar, K., & Keperawatan, I. (2021). Artikel Penelitian Article Info Abstrak. *Jurnal Kepemimpinan Dan Manajemen Keperawatan*, 4(1), 2021

Harlan Johan, J. R. S. (2018). *Metodologi Penelitian Kesehatan* ( purwanto joko Slameto (ed.); 2nd ed.). GUNADARMA.

Ismainar H. (2019). keselamatan pasien di rumah sakit. cv budi utama

Iswadi. (2022). keselamatan pasien keselamatan dan kesehatan kerja (M. m hidayat (ed.)). pusat pengembangan pendidikan dan penelitian indonesia.

- Kemenkes RI. (2011). Modul Penggunaan Obat Rasional 2011. Modul Penggunaan Obat Rasional, 3–4
- Kurnia, C. (2020). Hubungan Sentralisasi Obat Dengan Tingkat Kepuasan Pasien Rawat Inap Ruang Kertabhumi di RSUD Wahidin Sudiro Husodo. *Jurnal STIKES ICME Jombang*, 1, 1–14.
- Lisni I, Octavia YN, Iskandar D. (2020). Study On Rational Antihypertensive Drug Prescribing In One Of Bandung's Primary Health Care Centers. *Jurnal Ilmiah Farmako Bahari*. 11(1): 1-8
- Muhdar. (2021). *Manajemen Patient Safety* (G. T. Tulak (ed.); edisi 1). Tahta Media Group.
- Nuraeni, R., Mulyati, S., Putri, T. E., Rangkuti, Z. R., Pratomo, D., Ak, M., Ab,
- Nursalam. (2016). *Metodologi Penelitian Ilmu Keperawatan: Pendekatan Praktis*. Jakarta: Salemba Medika
- Nursalam. (2020). *Metode Penelitian Ilmu Keperawatan* (P. P. Lestari (ed.); 5th ed.). Salemba Medika. <http://www.penerbitsalemba.com>
- Rachmawati, N., & Harigustian, Y. (2019). Manajemen Patient Safety Konsep Dan Aplikasi Patient Safety Dalam Kesehatan. In A. U. Rengkaningtias (Ed.), Pt. Pustaka Baru. Pt. Pustaka Baru.
- S., Soly, N., Wijaya, N., Operasi, S., Ukuran, D. A. N., Terhadap, P., Sihalohe, S., Pratomo, D., Nurhandono, F., Amrie, F., Fauzia, E., Sukarmanto, E., Partha, I. G. A.,... Abyan, M. A. (2017). Peraturan Menteri Kesehatan Republik Indonesia Nomor 11 Tahun 2017 Tentang Keselamatan Pasien. *Diponegoro Journal Of Accounting*, 2(1)
- Sahir, S. H. (2022). *Buku ini di tulis oleh Dosen Universitas Medan Area Hak Cipta di Lindungi oleh Undang-Undang Telah di Deposit ke Repository UMA pada tanggal 27 Januari 2022*.
- Salawati, L. (2020). Penerapan Keselamatan Pasien Rumah Sakit. *AVERROUS: Jurnal Kedokteran Dan Kesehatan Malikussaleh*, 6(1), 98.
- World Health Organization. 2021. *Global Patient Safety Action Plan 2021–2030: Towards Eliminating Avoidable Harm in Health Care*; WHO Press: Geneva, Switzerland
- Wurandari D.K, D. (2022). manajemen patient safety keperawatan (N. Sulung (ed.)). PT global eksekutif teknologi.
- Yulidar, Y., Girsang, E., & Nasution, A. N. (2019). Analisis faktor-faktor yang mempengaruhi perilaku perawat dalam rangka penerapan pasien safety di Rawat Inap Rumah Sakit Royal Prima Jambi Tahun 2018. *Scientia Journal*, 8(1), 369–380
- Yusdiantoro, Bagus. (2023). Penerapan sentralisasi obat di ruang anak (firdaus) RSUD AL-Islam H.M. Mawardi H.M Marwadi Krian. *Bina Sehat PPNI Mojokerto*, 4(1)88-100. <https://repository.ubs-ppni.ac.id/handle/123456789/2362>