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## **Analysis of Planning and Drug Procurement at Kragan II Public Health Center during The COVID-19 Pandemic**

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### **Abstract**

**Introduction:** Based on the results of a preliminary study at the Kragan II Public Health Center, Kragan District, Rembang Regency, it was found that problems in drug procurement activities were located on the Large Pharmaceutical Trader or *Pedagang Besar Farmasi* (PBF). In addition, the COVID-19 pandemic has also affected the budget cuts for the procurement of drugs at the Kragan II Public Health Center.

**Methods:** This research was descriptive qualitative research. Data collection techniques use in-depth interviews and observation techniques. Sampling technique used was purposive sampling and data were analyzed using Miles and Huberman model.

**Results:** The results showed that the process of planning and supplying drugs at the Kragan II Public Health Center had not gone well even though the indicators in Regulation of the Minister of Health Number 74 of 2016 of the Republic of Indonesia had been realized. The process of planning and procuring drugs at the Kragan II Public Health Center experienced problems in the field of funding for the procurement of drugs due to the Covid-19 pandemic. Another problem is the PBF whose response is slow and the drugs distributed are not following what was ordered by the pharmacist.

**Conclusion:** Regarding debts with PBF, pharmacists are advised to discuss with the Head of the Kragan II Public Health Center regarding budget priorities during the COVID-19 pandemic to immediately pay off debts with PBF so that pharmacists can procure with PBF again. Therefore, drug services to patients can run well.

**Keywords:** COVID-19 pandemic, Drug Planning, Drug Procurement

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### **Introduction**

The population in the world has been growing. There are many types of diseases that can affect the population such as cancers, infectious diseases, diabetes, and neurodegenerative diseases. <sup>1</sup> Drug is an important thing to overcome this problem. It is an essential element in healthcare services that should be effectively and efficiently managed in order to achieve the predetermined objectives. <sup>2</sup>

Drug management indicators are needed to support drug availability and efficient drug inventory management, while clinical pharmacy service indicators are needed to prevent the occurrence of drug-related problems, which ultimately aims to improve patient safety. <sup>3</sup>

Based on Presidential Regulation Number 4 the year 2015 concerning the Fourth Amendment to Presidential Regulation Number 54 the year 2010

concerning the Procurement of Government Goods and Services. The selection of drug procurement is done through e-purchasing by the e-catalog system. The principle of electing goods/services providers electronically aims to be efficient, effective, transparent, open, competitive, fair / non-discriminatory, and accountable.

With the establishment of the E-Catalog Medicine system, all work units in the Central and Regional Health and First-Level Health Facilities (FKTP) or Advanced Level Health Facilities in the procurement of medicines for both the National Health Insurance program and other health programs no need to do the auction process, but can directly utilize the drug e-catalog system with e-purchasing procedures. With the change in the procurement system of this drug, an adaptation process is needed for both the work units as users, industries as drug providers, and distributors.<sup>4</sup>

The Public Health Center (PHC) or Puskesmas is one of the institutions that provide health services to the community. The level of healthcare quality is measured by the ability of PHC in dealing with patients.<sup>5</sup> One of the measurements is the availability of needed drugs for patients. Primary health services are very important for healthy development in Indonesia. To achieve the sustainable development goals (SDGs) by committing all countries to fundamental changes by 2030, including SDG number 3 to “ensure healthy lives and promote well-being for all at all ages”.<sup>6</sup>

The availability of tools, drugs, consumables, and other health facilities at PHC is one of the factors that determine the fulfillment of adequate facilities and infrastructure aspects.<sup>7</sup> It also has one of the services for health recovery and treatment. Providing medical treatment and health restoration services requires the availability of drugs that are in accordance with the needs of existing services.<sup>8</sup>

The Regulation of the Indonesian Minister of Health Number 74 of 2016 concerning Pharmaceutical Service Standards in Public Health Centers states

that pharmaceutical services at a medical center are part of the implementation of health services that play a role in improving the quality of health services.<sup>9</sup>

Pharmaceutical services are carried out in an integrated manner which includes pharmaceutical preparation management activities and clinical pharmacy service activities. Management of Pharmaceutical Preparations and Medical Consumables according to the Regulation of the Indonesian Minister of Health Number 74 of 2016 includes planning needs, requests, receipts, storage, distribution, control, recording, reporting, archiving, monitoring, and evaluation of management.<sup>9</sup>

Based on the Indonesian Minister of Health Regulation Number 74 of 2016, drug planning is the process of selecting drugs and medical consumables to determine the type and amount of drugs in order to fulfill the needs of the PHC. The selection process for medicines and medical consumables is carried out by considering: disease patterns, the previous period of drug consumption patterns, drug data, and development plan. The selection process for drugs and medical consumables must also refer to the National List of Essential Medicines (DOEN) and the National Formulary. The result of the drug planning process is Usage Report and Drug Request Sheet (LPLPO).

Drug procurement activities at the PHC include preparing a list of requests for drugs as needed, submitting drug requests (LPLPO) to the Level II Regional Health Office/Drug Warehouse by using a drug request list form as well as receiving and checking the number of drugs. Drugs procurement at the PHC is also carried out with PBF. Based on the results of initial observations and brief interviews with pharmacists at the Kragan II Public Health Center, Kragan District, Rembang Regency, problems were found in drug procurement activities.

The drug procurement process at the PHC is related to the planning process. If the drug planning is well then the next cycle in terms of drug logistics will also be good. Planning the need for drugs

and medical consumables that are not appropriate can affect the availability of drugs and medical consumables.<sup>7</sup>

Based on the description above, the importance of ensuring the quality of health services, especially in primary health services, is to improve the health status of the community. One of the health services at the PHC namely drug services is a service that is also as important as other health services at the PHC for example, individual health services, namely inpatient and outpatient. If there are problems with drug services, it will affect other health services, because other health services such as inpatient care, patients who are treated need drugs to support their recovery.

The purpose of this study was to determine the process of implementing drug planning and procurement at the Kragan II Public Health Center, Rembang Regency based on the Indonesian Minister of Health Regulation Number 74 of 2016 This study aims to describe and analyze the planning and procurement process at the Kragan II Public Health Center using descriptive qualitative research methods.

Some of the things that distinguish this research from previous studies are the time of implementation and the results of the research. In the research conducted by Nibong et al (2017) with the title "Analysis of Planning and Procurement of Drugs at the Sario Health Center in Manado City" where the research was not carried out during the covid-19 pandemic while in this research article it was carried out during the covid-19 pandemic. In addition, this study has similar analytical methods with research conducted by Rahma (2018) with the title "Planning and Procurement of Drugs at Puskesmas "X" Based on the Minister of Health Regulation Number 74 of 2016 of Republic Indonesia".

The thing that distinguishes it is the results of the research, where this research still has problems related to drug procurement even though it is in accordance with the Minister of Health Regulation Number 74 of 2016 of Republic Indonesia while research

conducted by Rahma (2018) has no problems and is in accordance with it.

## **Methods**

### *Information Sources and Data Retrieval Techniques*

The type of research that will be used is descriptive qualitative research. In this descriptive study, the researcher will conduct a description of the phenomena found, which in this study is about the process of planning and procuring drugs at the Kragan II Health Center. This study started on 1st until 31st January 2022 at the Kragan II Public Health Center, Rembang Regency, Central Java, Indonesia.

In this research, the researcher will use primary and secondary data sources. The technique used in sampling is purposive sampling and snowball sampling. Sources of primary data, researchers collected information obtained directly from the research site and from informants related to the implementation of the planning and procurement process of drugs at the Kragan II Health Center. The sources of informants who will be sources of information are 3 main informants. The sources of the main informants were pharmacists, and 2 assistant pharmacists.

Data collection technique is a method used by researchers in collecting research data. The techniques used by researchers are observation, interviews and documentation. Data collection techniques can change according to the circumstances at the time the research took place.

In the Indonesian Minister of Health Regulation Number 74 of 2016, in the planning process for drug needs, there are activities that must be carried out by the Puskesmas Pharmacy Installation. Elements of requirements that must be carried out in the planning process are (a) planning for drug needs is carried out by the pharmacy room on a regular basis, (b) Selection process is carried out by considering (previous period consumption patterns, disease patterns, mutation data for pharmaceutical preparations, and development plans), (c) The selection process for pharmaceutical preparations

and medical consumables refers to the DOEN. The Pharmacy Room at the PHC must carry out planning process activities in accordance with the Indonesian Minister of Health Regulation Number 74 of 2016. Meanwhile, for the drug procurement process, the required elements that must be carried out according to the Indonesian Minister of Health Regulation Number 74 of 2016 are requests for pharmaceutical preparations and medical consumables submitted to the health office. The purpose of the request for Pharmaceutical Preparations and Medical Consumables is to meet the needs of Pharmaceutical Preparations and Consumable Medical Materials at the PHC, in accordance with the needs planning that has been made.

*Data Validity Check and Data analysis technique*

In checking the validity of the data, the researcher will test the credibility and reliability of the data using the source triangulation method and using reference materials. Researchers will use 3 triangulation informants to test the validity of the data, namely, the Head of the Kragan II Public Health Center, a doctor, and an Administrator of the Health Office of Rembang Regency Sub Coordinator of Pharmacy and Medical Devices.

**Table 1. Main Informant (MI)**

No	Informant	Age	Education	Position	Length of working
1.	Informant 1	25 Years Old	Pharmacist Profession	Principal Pharmacist	2 Years
2.	Informant 2	36 Years Old	Diploma of Pharmacy	Assistant pharmacist	13 Years
3.	Informant 3	33 Years Old	Bachelor of Pharmacy	Assistant pharmacist	8 Years

**Table 2. Triangulation Informant (TI)**

No	Informant	Age	Education	Position	Length of working
1.	Informant 1	43 Years Old	Medical Profession	Head Of Kragan II Health Center	7 Months
2.	Informant 2	29 Years Old	Medical Profession	Doctor	3 Years
3.	Informant 3	43 Years Old	Master of Law	Administrator of the Health Office of Rembang Regency Sub Coordinator of Pharmacy and Medical	10 Years

The main purpose of this study was to determine the process of implementing the planning and procurement of drugs at the Kragan II Public Health Center. In analyzing the data, the researcher will use the data analysis method according to the Miles and Huberman model in the book Sugiyono (2015), namely data reduction, data display, and conclusion drawing/verification.

**Results**

*Characteristics of Informants*

The characteristics of informants divided into two categories which is main informant and triangulation informant. The main informant characteristics shows in **Table 1** and triangulation informant shows in **Table 2** below.

*Drugs Planning Process*

Pharmacists carry out all the planning processes, namely selecting pharmaceutical preparations, especially the drug section, to determine the type and amount of pharmaceutical preparations (Drugs) in order to meet the needs at the Kragan II Public Health Center. The role of the 2 pharmacist assistants at the Kragan II

Devices

Public Health Center is only as pharmacy staff who emphasize more on drug services to patients.

“Drug services, enter daily reports, stock drugs in the medicine room”  
(MI 3)

"such as drug services, monthly reports, and is responsible for drug warehouses."  
(MI 2)

While the role of the Head of the Kragan II Public Health Center is as a decision maker.

“My job is to carry out monitoring on planning, monitoring what is needed for planning and spending on drugs so that these drugs can fit in spending according to the needs of the community.”  
(TI 1)

In planning drugs, the frequency or number of times pharmacists do drug planning is not certain, depending on the condition and condition of the drug. Drugs that are in the warehouse and which are

often used or prescribed to patients are checked periodically, so that it can be seen which drugs are out of stock and still in the warehouse. In checking drugs in the drug storage warehouse or in the drug service room using a Stock Card. Meanwhile, for drug distribution or drug dispensing to other units, for example to another unit of health center/ *Pusat Kesehatan Pembantu (Pustu)*, use a Proof of Goods Out/ *Bukti Barang Keluar (BBK)* card.

"Uncertain, depending on the type of drug needed. sometimes there are slow-moving drugs which usually take up to 2 months and 3 months, but for fast moving it can be once a month."  
(MI 1)

In **Table 3**, where the process of implementing drug planning carried out by a pharmacist has been carried out in the pharmacy room of the Kragan II Health Center. Therefore, the first requirement element regarding drug requirements planning has been carried out in the pharmacy room on a regular basis.

**Table 3. Results of Observation of Drug Planning Process at Kragan II Health Center**

No	Elements of Requirement	Implementation of The Field		Observation results
		Yes	No	
<b>DRUG NEEDS PLANNING</b>				
1	Drug Needs Planning is carried out by the Health Center Pharmacy Room on a regular basis	√	-	Conducted in the Pharmacy Service Unit Room by a Pharmacist
2	The selection process is carried out by considering (consumption patterns of the previous period, disease patterns, mutation data of pharmaceutical preparations, and development plans)	√	-	Using the method of consumptive patterns and drug use last year
3	The selection process for pharmaceutical preparations and medical consumables refers to the National List of	√	-	Referring to the national formulary at the Health Center level

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Essential Medicines/ *Daftar*  
*Obat Esensial Nasional*  
(DOEN) , and the National  
Formulary) of Republic  
Indonesia

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The results of this study are in line with research conducted by Rahmah (2005) that the implementation of drug planning is carried out routinely in the Pharmacy Room. In another study by Herman et al. (2010) also obtained similar results that the implementation of the drug planning process at the Puskesmas has been carried out in the pharmacy room by making a Drug Needs Report/ *Laporan Kebutuhan Obat* (LKO) which is made annually, carried out at the end of the year for planning the drug needs of the Puskesmas for the next one year.<sup>2</sup>

**Table 3** shows the drug selection process to compile and determine the amount and type of drug needed. Pharmacists at the Kragan II Health Center in carrying out the drug selection process used considerations of consumptive patterns and drug use last year. The following is a statement from a Pharmacist informant:

"The plan was made from the consumptive system or usage from last year. So last year's drug recap was added to safe stock. Safe stock, for example, no items have arrived yet, what month's safe stock we order."  
(MI 1)

This is in accordance with the statement from the triangulation informant, a doctor also said the same thing about consumptive patterns:

"Before that, there were a number of patients, how many times a month were they used, a month, a week, what is clear is that there are users. Later we will consider how much to buy. So we can't buy it directly, we can't. How much should the patient use per month, based on need."  
(TI 2)

Based on the results of the study, it was found that pharmacists in planning and

selecting what drugs were needed used consumptive patterns and data on drug use last year, where the reference was the national formulary at the Health Center level. Therefore, sometimes there is a shortage of medicine if you have to make a request for medicine to the Health Office of Rembang District Indonesia. Rembang District Health Office Must follow the National Formulary at the Health Center level in drug planning.

"In terms of medicine, for example, if you ask for better medicine, you can't be stuck with the standard one, and the medicine isn't complete. We procure some medicines from the office and some from ourselves or buy them from the large pharmaceutical trader. If the District Health Office doesn't provide everything, we have to buy it."  
(TI 2)

"So, the drugs provided by the health office are in accordance with the formulary that has been formed, the formulary of the health office and the formulary of the existing Health Center. There are all kinds of things."  
(TI 3)

Problems or obstacles in the drug planning process at the Kragan II Health Center is the National Health Insurance era was more directed at the finances or budget provided by the Health Center. The problem of budget cuts on drug orders affects the planning process which causes pharmacists to be unable to make plans freely due to budget constraints. This budget cut is due to the Covid-19

pandemic, health problems caused by Covid-19 have reduced drug orders.

"When planning drugs at the puskesmas, actually, I came here during the covid-19 pandemic, so there was a cut in funds for spending on drugs that also interfered with drug procurement and drug distribution."

(MI 1)

"Because of this Covid case, patient visits have decreased sharply, even though the planning for the drug was before Covid. Because the number of patients has dropped drastically, it is a law of nature that income will automatically decrease."

(MI 3)

The pharmacist submits an Usage Report and Drug Request Sheet/*Laporan Pemakaian dan Lembar Permintaan Obat* (LPLPO) that has been filled out in the drug planning process to be submitted to the Rembang District Health Office Indonesia. Based on the statement from the pharmacist that LPLPO is a formula for drug use where there are tables and columns for entering drug usage data, then the required drug request will automatically appear. The pharmacist informant also stated that the LPLPO collection to District Rembang Health Office was collected at the beginning of the month. For the distribution of drugs from the pharmacy warehouse of Rembang District Rembang Health Office to the Kragan II Health Center usually in the third or second week.

*Drug Procurement Process with the Rembang District Health Office/ Dinas Kesehatan Kabupaten Rembang (DKK)*

**Table 4. Results of Observation of Drug Procurement at Kragan II Health Center**

No	Elements of Requirement	Implementation of The Fields		Observation Results
		Yes	No	
<b>PROCUREMENT OF MEDICINE NEEDS</b>				
1	Requests for Pharmaceutical Preparations and Medical Consumables are submitted to the Health Office	√	-	an Usage Report and Drug Request Sheet/ <i>Laporan Pemakaian dan Lembar Permintaan Obat</i> (LPLPO) submission to the Rembang District Health Office.

The statement from the Kragan II Health Center Pharmacist is in accordance with the statement from the Sub-Coordinator of Pharmacy and Medical Devices District Rembang Health Office

"Yes, LPLPO is sent to the pharmacy warehouse every 7th for hospitalization, so our delivery to the Kragan II health center, especially this distribution schedule, is the 2nd week and 3rd week. So the first week of collecting LPLPO, the 2nd and 3rd week distributing it to the puskesmas, the 4th week we stock

up on drugs. Every month it's like that."  
(TI 3)

Although the procurement of drugs is carried out monthly at the beginning of each month, the Kragan II Public Health Center, which in this case is a pharmacist, may add stock in the event of an emergency that requires immediate obtaining of the needed medicine. In this emergency, the pharmacist submits a drug application letter to the District Rembang Health Office pharmacy warehouse to pick up the needed medicine. In addition to emergencies,



there are times when there are situations where drugs are running out at the Kragan II Health Center, while dropping from District Rembang Health Office is in the third week, so pharmacists are also allowed to pick them up themselves to the pharmacy warehouse of District Rembang Health Office without waiting for distribution first.

Problems experienced when Procurement of Drugs to District Rembang Health Office, in general the problem was in procuring drugs at the Kragan II Health Center to District Rembang Health Office, namely when the pharmacy warehouse of District Rembang Health Office did not have the stock of drugs needed by the Kragan II Health Center. The problem of drug vacancies in the pharmacy warehouse of District Rembang Health Office can hamper drug services at the Kragan II Health Center. In addition, according to a doctor who work at the Kragan II Health Center, the drugs provided by the District Rembang Health Office are standard drugs and sometimes they are not complete with what was planned by the Kragan II Health Center.

#### *Drug Procurement Process with Large Pharmaceutical Trader/ Pedagang Besar Farmasi(PBF)*

Submission of a Drug Order Letter to large pharmaceutical trader, this process is carried out if there is a shortage of drugs from the pharmacy warehouse of District Rembang Health Office and does not provide drugs that are in an Usage Report and Drug Request Sheet/*Laporan Pemakaian dan Lembar Permintaan Obat (LPLPO)* which requires to procure drugs with other large pharmaceutical trader.

The process of submitting or procuring drugs with PBF starts from before the drugs run out, seeing what drugs will be needed to place an order for drugs with PBF. Before making the order, the list of drugs to be ordered was asked to the PBF by contacting the related Large Pharmaceutical Traders via smartphone whether the drugs on the list are available at the intended PBF. After contacting the PBF, and the relevant PBF stating that the list of drugs needed is available, the

pharmacist will make an order letter that is signed and knows the Head of Kragan II Health Center and the pharmacist himself. Then the order letter is sent to the PBF and transfers funds to the ordered PBF account. After that, wait for the medicine to come and when it arrives, the medicine is put in the drug storage warehouse along with the stock card. The last is the preparation of the National Health Insurance/(JKN) procurement file. The JKN Procurement Documents consist of e-mail, purchase receipt, integrity pact, document correctness, payment order, delivery order (C5 document). Statement regarding the process of submitting an order letter to PBF:

“Before the medicine runs out, you can see if the medicine runs out, then record it, then plan to order any medicine. After I got the note, I contacted the related Large Pharmaceutical Traders, for example, at ABC PBF I separated the injections, medical supplies, tablets and syrup. Make an order letter signed knowing the head of the puskesmas is the same as me. After that, the order letter was photographed and then sent to Matlap”  
(MI 1)

In carrying out the process of procuring drugs to Large Pharmaceutical Traders, the Kragan II Health Center pharmacists select and select which Large Pharmaceutical Traders are official and already have a company license and are registered under the supervision of the Indonesian Ministry of Health.

The problems experienced during the procurement of drugs to Large Pharmaceutical Trader/ *Pedagang Besar Farmasi (PBF)*, namely the first Covid-19 which caused the budget for drug procurement at the Kragan II Public Health Center to be reduced. Second, in the procurement of drugs with PBF, the funds used are the budget from the Kragan II Health Center itself, namely Health National Insurance funds, so that due to the Covid-19 problem which caused



budget cuts, the Kragan II Public Health Center still has debts with PBF.

This causes the Kragan II Health Center to be unable to place an order again before the previously paid debt or the term is still locked. The following are statements from several informants collected regarding debt problems with PBF and Covid-19.

"The previous procurement of drugs from PBF turned out to be financially unfinished. So for the time being the procurement from PBF has not been able to. We are still focused on finances. But yes, about 70% of the debt has been paid."

(TI 1)

From this statement, even though the debt with PBF has been paid, there are still problems related to budget cuts. The drug procurement process with PBF at the Kragan II Public Health Center experienced a budget cut. The budget for the procurement of drugs with PBF uses the National Health Insurance (JKN) fund. The budget cuts are caused by the COVID-19 pandemic, where the source of funds comes from JKN, so with this covid case, if patient visits drop sharply, the patient's income will automatically decrease.

"For the debt, 1 PBF varies between 5-7 million, between those variations. In total, it's around 40 million. Around that range."

(TI 1)

"There is a problem with JKN, the problem at the Health Center is, maybe we want to order but the debt has not been paid above, so it's called locking. So if the debt above has not been paid, we can't order again. We can order but the PBF doesn't send because there are factors that haven't been paid for like that."

(MI 1)

The third problem is that there is a drug shortage from PBF. For example, such as in the event of a communication error between the pharmacist and the PBF

where the pharmacist made an order via cellphone to ask for the availability of the needed drug, the PBF said that the drug needed was available at PBF but when the medicine came to the Kragan II Health Center, it turned out to be the drug that was needed. required incomplete.

"Then there are PBF that are slow in responding, for example, e-catalog is good, ordering from a computer, then there the PBF catches the health center how much they pay, but if by phone by the pharmacist, the message to the PBF is sometimes slow in response or not accurate, for example, we say I ordered this medicine and then the PBF said it was there but it turned out that there was no item that arrived incomplete while the state of the medicine here was finished but the item was not there even though I had said before that sometimes it had not been sent instead, so there was a vacancy here."

(MI 1)

"Yeah a lot, this is a lot of all-empty skin ointment. The problem is that at the end of the year you want to procure the money, or the budget doesn't exist yet, so it's empty. Usually it comes in March, then April comes....."

(MI 2)

The fourth problem is that PBF cannot deliver drugs to the Kragan II Health Center. An example is PBF Tiara, where the PBF only delivers it to the pharmacy warehouse of DKK Rembang. This makes pharmacists have to pick up at District Rembang Health Office with a travel distance of approximately 45 minutes.

## Discussion

Effective and efficient drug management is able to ensure the availability of drugs in terms of the right type and amount and according to need and to prevent shortages and excess drugs.<sup>12</sup> Drugs are a vital component in the delivery of health services.<sup>13</sup> Drug is a supporting element in the complete

plenary health service system (promotive, preventive, curative and rehabilitative). The need for drug cannot be delayed or replaced.<sup>14</sup> Almost every health service intervention always uses drugs.<sup>15</sup>

#### *Drugs Planning Process*

Planning is the basic foundation of the overall management function and can be process of achieving the goals of the health center effectively and efficiently.<sup>16</sup> Planning of pharmacy needs is an activity process in the selection of types, quantities and prices of pharmacy supplies that are accordance with needs and budget to avoid drug vacancies by using accountable methods and predetermined planning bases.<sup>17</sup>

The result of research In the drug planning process at the Kragan II Health Center, all drug planning activities are carried out in the pharmacy room. The results of this study are in line with research conducted by Roza et, al (2018) that the implementation of drug planning is carried out routinely in the Pharmacy Room.<sup>18</sup> In another study also obtained similar results that the implementation of the drug planning process at the Puskesmas has been carried out in the pharmacy room by making a Drug Needs Report/*Laporan Kebutuhan Obat* (LKO) which is made annually, carried out at the end of the year for planning the drug needs of the Health Center for the next one year.<sup>(2)</sup> So the drug planning process at the Kragan II Health Center is in accordance with Regulation of the Minister of Health Number 74 of 2016 Of Republic Indonesia.

The consideration process for selecting drugs carried out by the pharmacy service unit at the Kragan II Health Center used the consumptive pattern method and last year's drug use. This study is in line with the results of research by Rahmah (2018) that which used the method of consumption patterns or drug use in the previous year in planning drug needs at the Health Center.<sup>7</sup> Another pattern that can be used is through an epidemiological approach

based on disease patterns, but this is still not possible.

In considering the pattern of drug consumption, data is needed to determine the drugs needed by the Kragan II Health Center. The results of this study are in line with research Purnama (2017) where drug planning requires data such as a list of drug names, initial stock of drugs, drug receipt data, drug dispensing data, remaining drug stock, expired drug data, average usage data. medicine per year.<sup>19</sup> Accuracy in estimating drug needs is needed at this stage. Ignorance of the health center drug management officers in performing calculations due to the absence of knowledge and guidance can hinder the process of drug service.

In the process of determining the type of drug regulated in the Decree of the Minister of Health No. 813 of 2019 concerning the National Formulary that the determination of the type of drug carried out by health institutions which in this case is the Public Health Center must be in accordance with the National Formulary. Based on the results of the research conducted, it was found that the Kragan II Health Center had carried out drug planning with reference to the DOEN and the National Formulary. This is evidenced in the drug selection process where drugs listed in the LPLPO are also listed in the DOEN and the National Formulary. This research is in line with research Roza et.al (2019) where drug planning activities carried out at the Outpatient Health Center of Rokan Hulu Kabupaten have carried out drug planning with reference to the National List of Essential Medicines (DOEN) and the national formulary, with the discovery of a list of drugs in the LPLPO is in accordance with the national formulary. Therefore, it can be concluded that the Kragan II Health Center has implemented drug planning that is in accordance with PMK Number 74 of 2016.

#### *Drugs Procurement Process*

Drug quality assurance is the goal in realizing therapeutic success so that the drugs obtained by patients are safe, effective and acceptable.<sup>20</sup> Drug procurement is the process of proposing

the supply of drugs and medical devices to fulfill health service needs.<sup>21</sup> Procurement includes proposal activities through the mechanism of the Usage Report and Drug Request Sheet (LPLPO). The drug procurement process at the Kragan II Health Center consists of 2 processes, including:

a. Drug Procurement Process to the Rembang District Health Office (DKK)

Based on the Minister of Health Number 74 of 2016 Of Republic Indonesia is explained that the Health Center in procuring drugs is submitted to the District Health Office. The results of the study by conducting observations and interviews showed the same thing that the Kragan II Public Health Center in making requests for drugs had been submitted to the Rembang District Health Office. The results of this study are in line with the results of research by Roza et.al (2018) that requests for pharmaceutical preparations and medical consumables are submitted to the District Health Office with the parameter if a report of drug requests is found every 3 months to the Rokan Hulu District Health Office, namely LPLPO in 2018.<sup>18</sup>

Kragan II Health Center in carrying out the drug procurement process with the Rembang DKK also did not escape the obstacles or problems that occurred during the process. As obtained from the results of the study, there was a drug vacancy in the pharmacy warehouse of DKK Rembang so that it could hamper drug services at the Kragan II Health Center. Therefore the Kragan II Health Center overcomes it by conducting its own procurement with PBF (Large Pharmaceutical Trader). The results of this study are in accordance with research conducted by Nibong et al (2017) where the Department of Health in ordering drugs through e-catalogs which causes the amount they request to provide only less than that, so when distributed to the Puskesmas it is rather less so that there is a vacancy that occurs.<sup>8</sup> Then, Puskesmas Sario responded by buying from PBF. Research from Fatma et.al (2020) also resulted in the same thing that

Procurement of drugs from district pharmacy warehouses has another obstacle, namely planning the arrival time of drugs and the quantity requested is not appropriate so that the puskesmas responds by buying from PBF.<sup>22</sup>

b. Process of Procurement of Drugs to Large Pharmaceutical Trader (PBF)

Large Pharmaceutical Trader (PBF) is a Limited Liability Company or Cooperative Legal Entity that has a permit for the procurement, storage, distribution of pharmaceutical supplies in large quantities in accordance with the applicable laws and regulations.<sup>23</sup> Large Pharmaceutical Trader (PBF) is one of the distribution facilities for pharmaceutical preparations. PBF is also known as a drug distributor. PBF plays a very important role in the procurement of drugs needed for hospitals, health centers and pharmacies, without PBF services all drug needs for all health facilities will be constrained. The function of PBF is to distribute all pharmaceutical products from pharmaceutical factories to be distributed to all areas that have been covered.<sup>23</sup>

In accordance with the results of research that has been carried out at the Kragan II Health Center that the procurement process with PBF is carried out if there is a shortage of drugs that occurs in the pharmacy warehouse of the Health Office of Rembang Regency. In choosing PBF, Kragan II pharmacists have criteria that must be met, namely the PBF must be official and have a company license and be registered under the supervision of the Indonesian Ministry of Health. With these criteria, the quality and safety of drugs to be given to patients can be guaranteed. The criteria for determining PBF distributors who prioritize patient safety which has been carried out by the Kragan II Health Center Pharmacist is in line with the statement from another study by Puspadina (2021) that Pharmacists must be able to determine the selection of distributors as suppliers of quality drugs, the quality and authenticity of drugs are the main points in the drug procurement process as well as safety factors. and effectiveness is also a priority

that must be met in order to ensure patient safety.<sup>24</sup>

To ensure the safety and quality of drugs, Kragan II Health Center pharmacists in procuring drugs with PBF have documentation in both manual and digital forms. At the Kragan II Health Center, they usually use a document called a drug order letter where the drug order document consists of several other documents. In addition to the order letter, there are also other documents, namely, the JKN procurement file. The JKN procurement file consists of a purchase memorandum, integrity pact, correctness of documents, payment orders, delivery orders (C5 document). The results of this study are in accordance with research conducted by Mustaqimah et al (2021) that Pharmaceutical Wholesalers are required to document the procurement, storage and distribution of pharmaceutical preparations in an orderly manner, from which twenty eight (97%) PBFs have carry out documentation with the type of documentation regarding the receipt of goods orders from customers is carried out by PBF both manually and by computer.<sup>25</sup> According to Mudin (2018) in Mustaqimah et al. (2021) that procurement and release procedures must be issued officially, to ensure that pharmaceutical products to be distributed are sourced from legal suppliers.

During the drug procurement process at the Kragan II Health Center with PBF, pharmacists also had to face obstacles. The Kragan II Health Center experienced a drug shortage due to the slow response of the PBF and did not match what had been ordered by the pharmacist. Based on research in the field that the problem occurred because of a communication error between the pharmacist and the PBF where the pharmacist made an order via cellphone to ask for the availability of the needed drug, the PBF said that the drug needed was available at PBF but when the medicine came to the Kragan II Health Center it turned out medication needed is not complete. This is the cause of drug vacancies at the Kragan II Health Center. Therefore, the Kragan II Health Center

prescribes out-of-pocket drugs or borrows medicine from other health centers.

Another problem is related to budget cuts for drug procurement due to Covid-19. As a result of this pandemic the Kragan II Health Center also still has debts with PBF. So that the strategy that must be carried out by the Kragan II Health Center is to take a policy to overcome this problem by determining the priority scale of needs. Looking at the priority scale first, if you need medicine immediately, the previous debt will be paid off so that you can procure medicine with PBF again.

The obstacles and weaknesses found in this study are, First, there are obstacles when submitting a research permit at the Rembang Regency Health Office, where the permit issued is long enough to cause research delays. Second, when conducting interviews with respondents, often the respondents or their sources do not match the agreed time, causing the interview time to be reduced. Third, there are sources or informants who only provide short answers and sometimes go out of topic for questions. While the weakness in this research is the first, in carrying out data processing it does not use applications so that in analyzing the results of interview transcripts more accuracy is needed. Second, the researcher in providing interview questions is not in-depth so that it is still possible for phenomena or problems that have not been revealed. Third, the researcher in this study is a researcher who is still a beginner, so it is possible that there are still many shortcomings in using the correct language.

## Conclusion

The drug planning process at the Kragan II Health Center has been carried out routinely in the pharmacy room. Then the drug selection process is carried out by considering consumption patterns and types of disease and referring to the the National List of Essential Medicines/ *Daftar Obat Esensial Nasional* (DOEN) and the National Formulary Indonesia. For the problems contained in the planning

process are more directed at cutting drug funding so that pharmacists in planning drugs must determine the priority scale of needs. In addition to these problems, in the drug planning process, pharmacists have implemented it in accordance with the Minister of Health Number 74 of 2016 Of Republic Indonesia.

The drug procurement process at the Kragan II Health Center is mostly done with the procurement of drugs with the Rembang District Health Office. However, if there is a shortage of drugs in the pharmacy warehouse of Rembang District Health Office, the Kragan II Health Center will procure it with the Large Pharmacy Trader/ *Pedagang Besar Farmasi* (PBF). Pharmacists submit an Usage Report and Drug Request Sheet/*Laporan Pemakaian dan Lembar Permintaan Obat* (LPLPO) to Rembang District Health Office for drug procurement. Meanwhile, when procuring with the Large Pharmacy Trader/*Pedagang Besar Farmasi* (PBF), pharmacists make drug orders. The problem that occurs in the procurement process is that there is a shortage of drugs and they still have debts with the Large Pharmacy Trader/ *Pedagang Besar Farmasi* (PBF). which causes the Kragan II Health Center to not be able to procure drugs because they are still locked.

The suggestion is When there is a shortage of drugs in the PBF at the Kragan II Health Center, the pharmacist should prescribe outgoing drugs and immediately procure drugs again with other PBFs. Regarding debts with PBF, pharmacists are advised to discuss with the Head of the Kragan II Health Center regarding budget priorities during the COVID-19 pandemic to immediately pay off debts with PBF so that pharmacists can procure with PBF again. Therefore, drug services to patients can run well.

### **Ethics approval**

This research was carried out after the issuance of Ethical Clearance Number 406/KEPK/2021 by the Health Research Ethics Commission of the Semarang State University. Researchers collected data by conducting interviews and observations

with the approval of the Kragan II Public Health Center and related sources. The resource persons in this study were given informed consent and signed the agreement to be a resource person for interviews.

### **Availability of data and materials**

Available

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### **Author Contribution**

FM researchers conducted data collection, data analysis, and wrote down all research results. BR researchers assist in checking the truth of the research data results.

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