

EVALUATION OF COVID DRUGS MANAGEMENT IN PHARMACEUTICAL INSTALLATIONS OF ROYAL PRIMA HOSPITAL MEDAN DURING THE COVID-19 PANDEMIC

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Submitted: 29 January 2022, Revised: 06 February 2022, Accepted: 18 February 2022

Abstract. Coronavirus Disease 2019 (COVID-19) has been declared by WHO as a global pandemic and in Indonesia it is declared as a type of disease that causes public health emergencies and non-natural disasters, which is not only causing death but also cause significant economic losses, so it is necessary to take steps to overcome it including prevention and control. This study aimed to analyze the evaluation of the handling of Covid drugs at the Pharmacy Installation of the Royal Prima Hospital in Medan during the COVID-19 Pandemic. This study used qualitative research located at the Pharmacy Installation of RSU Royal Prima Medan during the COVID-19 Pandemic. While The population in this study were 5 informants consisting of the Director of Medical Services, Head of Pharmacy Installation at Royal Prima Hospital Medan, Head of Pharmacy Warehouse, Pharmacist, and Assistant Pharmacist. In this study, the techniques used in data collection methods were Direct Observation, In-Depth Interviews, and Document Literature. The data analysis method was carried out by compiling, discussing, and evaluating the data and the results of interviews/observations using the Triangulation Test. Based on results studies, this state has carried out the process of procurement, receipt, storage, and distribution in the evaluation management drug covid on installation Pharmacy at Hospital Royal Prima Medan during the COVID-19 pandemic with supported with existence existing facilities and infrastructure and the number of available human resources at Hospital Royal Prima Medan.

Keywords: COVID drug management; COVID -19; pharmacy.

INTRODUCTION

Coronavirus Disease 2019 (COVID-19) has been declared by WHO as a global pandemic and in Indonesia declared as a type of disease that causes emergency health Public as well as disaster non-natural, which is not only causing death but also cause big enough economic loss so, at the beginning by 2020, 2019 Covid infections will be problem world health. Indonesia reports the case first on March 2, 2020. Case increases and spreads quickly throughout Indonesia (Yusuf, Muzwardi, & Syukri, 2021). Until 9 July 2020 the Ministry of Health reported 70,736 cases confirmed COVID-19 with 3,417 cases died (CFR 4.8%) (Pan et al., 2022). The COVID-19 pandemic has brought up a domino effect in many line-lives of a global society. The spread of the SARS-CoV-2 virus occurs very exponentially and is impactful simultaneously in a multidimensional manner (Ménard-Moyon, Bianco, & Kalantar-Zadeh, 2020); (Bang, Lee, Shin, & Oh, 2021). Increase in total case progress fast enough, and spread to various areas in a short time. On 9 July 2020, WHO reported 11,84,226 cases confirmation with 545,481 deaths worldwide (Case Fatality Rate/CFR 4.6%).

Hospital is an institution service health that organizes service health individuals by plenary that provides service in inpatient, outpatient, and emergency (Auliyah, Nugrahartani, Kurniawati, & Zamroni, 2021); (Ferlie, Mcgivern, & FitzGerald, 2012). Hospital Royal Prima Medan is one of the COVID-19 Hospital referrals in Medan City that carry out handling COVID-19 patients in Medan. Where pharmacy is

one of the units in the Hospital Royal Prima Medan which has a role important in handling COVID-19 patients receiving treatment at Royal Prima Hospital Medan (Wirani & Manurung, 2020).

Installation Pharmacy Hospital (IFRS) is the only part of the hospital that is fully responsible for the management of pharmaceutical preparations and other health supplies (Mauliana, Wiryanto, & Harahap, 2020); (Alanazi, Al Rabiah, Gadi, Househ, & Al Dosari, 2018), so that all drug distribution is under the control of the pharmacy installation in the hospital (1 door system) however in fact almost all IFRS not yet implemented it (Salem, Muntasir, Salesman, & Roga, 2020).

METHODS

This study used qualitative research located at the Pharmacy Installation of RSU Royal Prima Medan during the COVID-19 Pandemic. While The population in this study were 5 informants consisting of the Director of Medical Services, Head of Pharmacy Installation at Royal Prima Hospital Medan, Head of Pharmacy Warehouse, Pharmacist, and Assistant Pharmacist. In this study, the techniques used in data collection methods were Direct Observation, In-Depth Interviews, and Document Literature. The data analysis method was carried out by compiling, discussing, and evaluating the data and the results of interviews/observations using the Triangulation Test.

RESULTS AND DISCUSSION

Management Pharmacy (medicine) is the process of using source power pharmacy to reach purpose from profession pharmacy through planning, making decisions organizing, leadership, and supervision ([Moullin, Sabater-Hernández, Fernandez-Llimos, & Benrimoj, 2013](#)); ([Lian, Ferris, & Brown, 2012](#)). Facilities and Equipment maintenance Service Pharmacy at Hospital should be supported by facilities and equipment that meet the provisions and regulations of the applicable pharmacy. The location should be merged with hospital system service, separated among facilities for maintenance management, service direct to patient, compounding, production, and laboratory equipped quality handling waste. Equipment needed accuracy measurement should do calibration tools and the calibration by periodically by hall testing health or authorized institution. Equipment should do maintenance, documented, as well as evaluated periodically and continuously ([Suprpto & Sari, 2019](#)). According to ([Pereira, Luiza, Campos, & Chaves, 2021](#)) gathering standard procedure in service pharmacy as for purpose service pharmacy is as follows: 1) Guarantee quality, benefits, safety as well as efficacy ready pharmaceuticals and tools health; 2) Guarantee certainty law for power health; 3) Protect patients, community and staff from use drugs that don't rational in skeleton safety patients (patient safety) and 4) Reduce number error use medicine.

This study was done by that researcher with in-depth interview informants as

following:

A. Director of Medical Service

1. Procurement

What method is used in procurement medicine?

The method permanent that we used is an inventory pharmacy, so there is buying drugs and there are also drugs given from service health. The drugs given from service health cannot be for sale or cash. It is given free according to what is given from service health.

How do you determine the time for medicine procurement?

The medicine procurement needs to be calculated by section pharmacy. There is a procedure used to know the number of medicines needed.

Do obstacles happen when you do medicine procurement?

There are some obstacles, for example, the stock of the drugs running out at the moment the covid patients are increasing drastically.

2. Reception

How is the medicine receipt and inspection process?

Pharmacy fulfills all drug requests from the rooms. Then, the drugs are delivered from the pharmacy room to room by hand. The medicine is prepared inside and then delivered outside every

afternoon.

3. Storage

How does the spatial arrangement of medicine storage set?

It's distinguished based on the drug's need and use. The place and the inventory are the same, so it is easy to take it.

What method do you use to record the medicine stock?

There is no obstacle because, in the room, we have information about what drugs are proper and improper for the patients. Due to the prevention of misuse of expensive drugs the nurses are ordered to take a video while giving the patients the drugs. It is an effective way to manage the medicine stock in order.

Are our facilities and infrastructure capable of being the places to store the medicines?

Already.

What difficulties happen when organizing storage medicine?

Nothing.

4. Distribution

How does the medicine distribute?

Yes, it's distinguished so that easy to take it.

B. Head of Installation Pharmacy at Royal Prima Medan Hospital

1. Procurement

What method is used in procurement medicine?

Procurement is done based on Covid disease and based on need. If we accept a Covid patient, we have to cure him based on determined by the Health Ministry or WHO. We estimate the drug use for 3 months and we also forecast the rise of patients. So that, we multiply the number by 2 times. We have to make PO quickly to manage the uncertainty of Covid cases and the internal problem of the drug distributors.

2. Reception

How is the medicine receipt and inspection process?

Reception from the supplier directly enters the warehouse from the distributor. There are 2 times to order, first 8 am to 2 pm and at 2 pm to 6 pm, received by warehouse officer by SP (letter order), invoice, no back, and expired note.

Has activity for the reception of the drug supply already been regulated by pharmacy rule?

Already.

What problems happen when you receive medicine?

Nothing.

3. Storage

How does the spatial arrangement of medicine storage set?

It is set by The Health Ministry.

How do you store the medicine stock?

Storage drugs are done for stability, for example, covid drug stored in the refrigerator, human albumin at a temperature of 2-8 °C. Other drugs are appropriate with room temperature and a record use system.

What method do you use to record the medicine stock?

We use stock cards.

Are drug storage facilities and infrastructure adequate?

This Means the system no by implemented standards

What happens when you store medicines?

We use one door system all. There is still a human error but it is much less and can be fixed.

4. Distribution

How does medicine distribute?

One Day Dose Distribution is for one-day usage. It is requested by a nurse, input (later one SPK) like drugs, medical supplies, PPE

quantity by new needs given to drugstore service. Then, solved therapy is continued and given by a nurse who stays. After that, it is delivered and handed over to a room officer. I manage the data based on patients' insurance, BPJS later, non BPJS sooner.

C. Head of Pharmacy Warehouse of Royal Prima Hospital, Medan

1. Procurement

What method is used in procurement medicine?

Procurement is done even though the patients are many or a few. There is a FIFO system and it is based on conditions in the field.

Do the drugs that have been ordered or purchased immediately arrive on time?

Yes, it comes every day. It is started at 8 am until 2 pm. There are 2 trips at 8 am - 2 pm on the first trip, and 2 pm - 5 pm on the second trip.

What are the problems when doing medicine procurement?

Nothing.

2. Reception

How is the medicine receipt and inspection process?

The acceptance process based on PO is published by the

pharmacist after goods come checked one by one based on existing PO rise. If it is already suitable with PO, with an invoice, with goods, expired, then signed with stamp and input into the system. Then it is distributed to the pharmacy or needs room medicine.

Has the activity of receiving drug procurement been regulated by the provisions of the pharmacy?

Already.

3. Storage

How does the spatial arrangement of medicine storage set?

It is done by the health minister of the Hospital.

How do you store the medicine stock?

It is compiled alphabetically from AZ and separated, the bottom syrup alphabetically, medicine syrup/ ampoules in the middle to avoid damage from falling or broken.

What method do you use to record the medicine stock?

It is done by the existing stock card system.

How do you preserve or maintain the quality of the drugs in a warehouse?

We compiled the drugs based on medicine type, especially

packaging type. The record is already there. It is on the stock card because in our system we still use do the stock cards manually due to lack of personnel.

4. Distribution

How do you distribute the medicines?

Distribution based on requested input from installation pharmacy based on needs them, the things they ask for that we lower after downing from warehouse pharmacy to installation pharmacy.

D. Pharmacist

1. Procurement

What method is used in medicine procurement?

The Covid drug is from the hospital, but sometimes there is also help from service health if procurement is needed. For example, we see the case and we customize the total and the average of daily usage, so if it's in stock already reduced, we order it again.

How do you determine the time of medicine procurement?

It is by order through distribution and there is also a form special for booking for covid.

Do the drugs that have been ordered or purchased immediately arrive on time?

So far, it is on time even though sometimes there is a problem of a dramatic rise of patients. If we don't have the drugs that we need, we try to get the patients medicine until they are cured.

Do obstacles happen when you do medicine procurement?

We see the stock because no one can be so sure when the Covid will end. We manage the stock always available because the drugs are unavailable in the hospital it will result in the hospital loss. If we have a situation of running out of drugs, we will borrow the drugs from another hospital so that we can provide free health care for patients.

2. Reception

How is the medicine receipt and inspection process?

Acceptance and inspection process drug is done by warehouse personnel, the ones who receive the drug we order. The warehouse officer checking matches it with the invoice including the amount, physical condition, and expired date. After that, we deliver.

Are drug procurement activities regulated by pharmacy regulations?

So far, it runs well but if a reception drug contains several

must-have medicines, it should be signed by the pharmacist.

What problems happen when you receive the medicine?

The last obstacle that complicates the officer is the introduction because drugs are there so they should get over here for asking to sign his hand, the thing that is usually from OCT drugs.

3. Storage

How does the spatial arrangement of medicine storage set?

It is already appropriate. Tablet medicines, medical devices, syrups, infusions, liquids, are prepared alphabetically and by medicine category. For example, drugs are generic alphabetically, patent drugs are in alphabetical order, syrup according to the alphabet. For the method, the medicine that has been in place for a long time was brought forward to avoid expired date drugs.

What method do you use to record the medicine stock?

For recording in stock, we from the system called SIMS. There, we will see the drug use that usually later we stock hospitalization.

How do you guard or maintain the quality of the drugs in a warehouse?

It is saved by drug storage standards.

Have facilities and infrastructure been adequate for the place storage medicine? Not yet.

What problems happen when you store the medicines?

The placement drug in the room is like a tree. There is a possibility of fall, so if it falls then and is swept by the Cleaning Service, it will reduce stock physically but not reduce stock systemically.

4. Distribution

How do you distribute the medicines?

The Covid drug distribution is done by the nurse. We prepare the drugs they request based on the patients' names at night. Then, the drugs are delivered to the room. There are two ways to take the drugs; BPJS patients on the backside, and independent patients on the front side.

E. Assistant Pharmacist

1. Procurement

What method is used in procurement medicine?

Procurement of Covid drugs is

estimated by the number of patients that need to be cured. After that, the request is approved and forwarded to Finance and later signed by the Director. Drugs are distributed to the warehouse and displayed by FIFO and delivered to pharmacies.

How do you determine the time of medicine procurement?

For drug covid that alone there are any medicines.

Do the drugs that have been ordered or purchased immediately arrive on time?

Several medicines come on time but sometimes it comes late because of many factors, for example, the goods are empty and due to long transport.

2. Reception

How is the medicine receipt and inspection process?

We check the expired date of the drugs and match the number on the list with the goods physically. We also check if there is damage or not.

Is the activity of receiving drug procurement regulated by the provisions of the pharmacy?

Already.

What obstacles do you face when receiving the medicines?

Nothing.

3. Storage

How does the spatial arrangement of medicine storage set?

Usually, we customize the medical condition, for example, we put the drug in room temperature refrigerator temperature and arranged based on FIFO and FIFO.

Are the facilities and infrastructure adequate for drug storage?

Facilities and infrastructure are already adequate but the system is slow so it makes the process slow as well.

4. Distribution

How do you distribute the medicines?

Goods come from and are transported to the pharmacy. After being approved by the night officers, tomorrow morning the drugs are delivered to every floor well. It is not directly given to the patients but it is checked by the nurse. After the need for the drugs is evaluated, it is given to the patients.

Based on the results of the researcher's interview with the informed Director of Medical Services, it can be seen that the process of Procurement, Receipt, Storage, and Distribution is carried out in the Evaluation of Covid Drug

Management at the Pharmacy Installation of Hospital Royal Prima Medan During the COVID-19 Pandemic. And based on the results of researcher interviews with informants as an assistant Pharmacist of Pharmacy at Hospital Royal Prima Medan, it can be seen that the process of Procurement, Receiving, Storage, and Distribution is done in Evaluation Management Drug Covid in Installation Pharmacy at Hospital Royal Prima Medan During the COVID-19 Pandemic.

According to Amanda's 2021 research on Analysis Management preparation Pharmacy During the COVID-19 Pandemic At the Health Center districts Rawamerta Public Health Center obtained results study showing that management preparation pharmacy during the COVID-19 pandemic at the Rawamerta Public Health Center owns Mark presentation 97% of the questionnaires while at the Balongsari Public Health Center with Mark presentation 90.75% questionnaire. This study concludes that there is no significant difference to management preparation pharmacy with Mark significant 0.301 (p -value > 0.05) using the Mann Whitney test.

CONCLUSIONS

Based on the study results to Evaluation Management Drug Covid In Installation Pharmacy at HOSPITAL Royal Prima Medan

During the COVID-19 Pandemic, it can be concluded that it has carried out the process of procurement, receipt, storage, and distribution in the evaluation management of covid drug on installation Pharmacy at HOSPITAL Royal Prima Medan during the COVID-19 pandemic are supported by the existence of existing facilities and infrastructure and the number of available human resources at Hospital Royal Prima Medan.

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