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# Analysis of Drug Needs for Basic Health Services in Bombana District Health Department of the Year 2021

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## **Abstract**

Health service units are required to provide quality health services and plenary included in the service of medicine. Planning the drug as one of the functions of management logistics health, aims to plan and determine the needs as well as the procurement of drugs to meet the needs of basic Health services. This study aims to analyze the process of planning the drug conducted by the Department of Health District Bombana. Types of qualitative Research approach case study. Data collection is done through observation, document review and indepth interviews to the Head of the Pharmacy Installation District Bombana, Section of Pharmacy, the Staff of the planning the installation of the pharmaceutical, and the Head of the Department of Health District Bombana. The results showed that each of the Planning stages of the drug in the analysis based on the standard guidelines for the planning of drug Pharmacy Installation District issued by the Ministry of Health. Several stages of the planning has been done well, but not the whole stage of the planning is done in accordance with the guidelines between the other stages of the selection of drugs is not done by a Team of Planning the Needs of Integrated drug, on the compilation the use of the drug use of the data is not accurate and does not use the method of analysis of the budget that is effective at the stage of budget adjustments need of the drug. Conclusion; In General, the planning needs of the drug do not meet the applicable guidelines. These conditions lead to the occurrence of excess and deficiency in some items of the drug during the distribution of the current year. Advice; the need for increased management services medicine through management training drug for most planners medicines and health supplies to enhance began and skills of officers.

Key	Words:	Planning	The Drug;	Basic	Health	Services

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## 1. Introduction

The World Health Organization (WHO) stated that these kinds of basic Health services established on the basis of epidemiologic condition of a country. The WHO also suggest that the type of service they have proven to be cost effective, affordable, and practical to be implemented. Types suggested are: the Treatment of common diseases and injuries, dental Services, the Provision of essential drugs, basic Laboratory and radiology, the Efforts of school Health, Vaccination, ANC, Weighing toddlers and treatment of malnutrition, Treatment of diarrhea in children, the Control of communicable Diseases, Health Education, environmental Health, and food security. From to 13 advice on the type of service the basis of the above, there are 3 services related to the provision of the drug as a basic service [1]. Drug management districts/cities is the full responsibility of the district/city government. From the aspect of planning needs medicine for primary health care system based on "bottom up", the calculation of the plan needs the drug, as well as coordinate the planning needs of the drug from several source of funds. The head of District Health Office/City submitted its Plan to the Needs of the Drug and the reported use of the drug to the Government of Regency/City, the Province and the Center. Each district has a structure and its own policies in the management of the drug, the next Manager of the Drug Regency/City is called with the Management Unit of Medicine and Public Health Supplies District [2]. On the drug management, process planning and procurement is very influential on the availability of drugs service health. Ensuring the item and the amount of drug sufficient become one of the most important aspects of the health services to be able to provide the best service. In addition, because of the huge costs incurred by the health service on the management of the drug, especially at the stage of planning and procurement, it is necessary to the evaluation of these stages [3]. The policy of the government about the increase in drug access are listed in some of the policies that the Law of the Republic of Indonesia Number 36 year 2009 on Health, the Indonesian Government Regulation no. 51 of 2009 about the work of the Pharmaceutical System, the National Health Policy and National Drug. SKN 2009 provide a foundation, the direction and guidelines for the implementation of Health development for all the organizers of Health care, both at the central, Provincial and District/City. One of the sub-system SKN 2009 is a drug and medical supplies [4]. Standard Availability of drugs according to WHO is 90%, while in Indonesia, the target indicators the percentage of availability of the drug in the year of 2019 is 90%. The availability of the drug as much as 135 drug items each year has increased. Target the availability of drugs and vaccines has increased significantly each year, in 2014, which is 75, 50%, and in 2017, namely 85, 99%. Nationally, the availability of drugs and vaccines has reached the target in each year, but the distribution of the drug and the vaccine has not been evenly distributed so there is still the presence of Health facilities especially the health center are some of the items of the drug is not available [5]. To improve the efforts of a rational treatment, the use of essential drugs in health care facilities in addition to a should be adjusted with the treatment guidelines that have been set, it is also very related to the management of the drug. Management of medicines is an activity that includes the stage of selection, planning, procurement, storage, distribution and use of drugs by utilizing the resources available. The drug needs to be managed well with the main goal of the management of the medicine is the availability of the drug with good quality, evenly dispersed, with the type and amount according to the needs of basic health services [6]. According to the Directorate of Medicine and Public Health Supplies (2010), Pharmacy District is responsible for the entire management of the drug in the working area of the district Health Office which consists of the planning, procurement, storage and

distribution of drugs to the health centers. The planning needs of the drug is an activity to determine the amount and the period of procurement of pharmaceutical preparations, medical devices and medical consumable materials [7]. In planning the need for medication, there are a few stages in accordance with the Management of the Pharmacy in Pharmacy Installation Districts/Cities that are regulated by the Ministry of Health, the stage of selection of drugs, stages of compilation the use of the drug, the calculation of the need of the drug, the stage of a projection of the need for medication, and phase adjustment plan the procurement of drugs. On the planning needs of the drug has three methods, namely the method of consumption, epidemiological methods and method combinations [8]. Planning a drug that can either contribute to health services for the community, as the guidelines say that the planning of the integrated drug benefits including avoiding the overlap of the use of the budget, the integration in the evaluation, use and planning, the perception of similarity between drug users and the provider of the budget, the estimated need of the drug is appropriate, the coordination between the provider of the budget and the users of the drug, as well as, the utilization of funds the procurement of drugs can be optimized [7] In addition, Planning is good medicine can also prevent a void or excess stock of medicines and to maintain the availability of drugs in the Pharmacy Installation of the District. The planning stages of the drug at the Pharmacy Installation Districts based on the instructions of the technical standards of pharmaceutical services, namely the selection of drugs based on the needs in accordance with the needs of the programmer, the doctor, and other Health workers are loaded in the formulary of the district. Further collection of data based on the number of patient visits and morbidity. If the data has been collected and adjusted to the formulary District made, then made Plans to meet the Needs of the Drug by the District Health Office. On the phenomena that occur, the planning of the drug can lead to the occurrence of an excess of the drug which resulted in the damage of drugs and likewise if there is a vacancy of the drug resulted in a Health service that is not maximal. The results of research conducted by [9] said that in 120 of the existing Health facilities in East Africa funded by PEPFAR, particularly in Kenya and Uganda shows the availability of essential drugs are bad, especially analgesics. Research conducted by [8] said that the planning of the drug which carried out the Department of Health of Coal there are some stages that are not in accordance with the applicable guidelines, among others, did not commit phase adjustment planning. In addition, the inaccuracy of the planning requirements of the drug is generally caused by the human resources are inadequate and the basic data less accurate. The results of research conducted by [10] said that the management system of the drug in a Pharmaceutical Warehouse Ngawi has been good, The deficiency often occurs causes the emptiness of the stock by the Pharmaceutical wholesalers, frequency error of the invoice, delivery errors due to the negligence of the officers of the sender. To increase the effectiveness of the required training and equipping additions to make the officer Warehouse Pharmacy is optimal in the work and that in the future, choose a Great Trader of Pharmaceutical quality. The results of the initial survey carried out by the researchers found reports on usage and report the demand for drugs, there are drug items that are not available from the overall demand for the drug, whereas if it refers to the formulary district that has been made, the amount of the drug to the category of basic Health services is still somewhat lacking. Poor planning needs of medicine in the Department of Health District Bombana is caused by the lack of accuracy of the basic data used for planning, such as the inaccurate calculation of the need for the drug in the next period and also due to the delivery of goods that late so there was a vacancy of the drug in a long time. Besides, there is still demand certain medications from health centers that do not fit or does not exist in the planning of needs proposed to the Department of Health District Bombana (there are specific drugs that

experience a shortage and excess) so that the use of the budget is less effective and efficient. Based on these facts, the inventory of drugs that are on the Installation of the Pharmaceutical Department of Health District Bombana is still found in the incidence of "stock out" and overstock". Department of Health District Bombana, which oversees 22 health centers, but have never done the evaluation and analysis of the planning process needs the drug. On the basis of these considerations it is necessary an analysis related to the process of planning in the Department of Health to find out the problems that occur in the process of planning the needs of the drug. The purpose of this study is to analyze the process of planning the drug conducted by the Department of Health District Bombana 2021

#### 2. Materials and Methods

This research is a qualitative research, using a case study approach. The informant the key is the Head of the Pharmacy Installation of the District and the Staff of the Planning the installation of the pharmaceutical province and the informant is the Head of the Department of Health District Bombana and head of the Section of Pharmacy. Data collection using observation, in-depth interviews and review of documents related to the process of planning the needs of medicine in the Department of Health District Bombana. Data analysis to analyze the problem was done descriptively, which emphasizes the analysis of the process of inference of the dynamics between the observed phenomena, using the logic and ways of thinking formal and argumentative [11].

#### 3. Results

## a. The Selection of The Needs Of The Drug

The selection of the needs of the drug is a stages of the activities carried out by a team of planners drugs to determine the type, amount, and quality of the drug that will be provided by the health care units in order to support the process of health services. The activities of the planning requirements for drugs and medical supplies is an attempt to calculate and plan for the needs of medicines and medical supplies in accordance with the requirements in the health services. Basically planning is the need of the drug is one of the processes in the management of logistics to calculate and develop the drug in accordance with the level of need of the drug in the health service. The planning process of the drug into the initial activity in the procurement of drugs and medical supplies through the selection of this medicine will be reflected how much the drug items that will be consumed. Based on the findings of in-depth interviews can be obtained that in the planning activities of the drug, not to have a team of planners medicine integrated in the planning of the need for medication, however in the planning activities of drugs is carried out by the staff of the planning section in the Installation of the Pharmaceutical District through the coordination of the Head of the section of Pharmacy and head of the Pharmacy Installation as well as the Head of the Department of Health, as a statement of some of the informants here;

"...No Team Planner Integrated Drug, but during this planning the drug is carried out by the planning the installation of the pharmaceutical helped by me then we can communicate to the Head of the Health Department and then submitted to the Procurement Service Unit to perform the procurement to pharmaceutical

wholesalers.." (i2)

"...We do the Planning drugs and then we submit to the Procurement Service Unit to perform the tender..." (i3)

"...The planning of the drug is carried out by the Installation part of the pharmaceutical district..." (i4)

The results of the other findings at the time of in-depth interviews obtained data and a list of references that support for composing or concocting a plan needs medicine in the Department of Health District Bombana is the National Formulary, drug list essential and Formulary District, as a statement of some of the informants here;

"...The Data used for the selection of drugs that most based on the national formulary or list of essential drugs..." (i1)

"...For the selection of drug we usually in the Installation of the pharmacy using the national formulary and we've also created a formulary district this year but its application is not maximized." (i2)

"...For the selection of the needs of the drugs we use the list of drugs on the national formulary and we choose in accordance with what is required by the health center based on the Report of dirt, oil and impurities, but not realized all.." (i3)

#### b. Compilation of Drug Use

Compilation of drug use is a summary of the data usage of drugs in the health care units sourced from the Report of dirt, oil and impurities that includes the number, type, brand and quality. List of compilation the use of these drugs can be obtained from each unit of health services. With the activities of the compilation of the use of drugs there is some Information that can be obtained from the compilation of the use of drugs such as the number of use of each type of medication in each unit of health services, the percentage of use of each type of drug to the total use of a whole year of health care units, the use of the average for each type of drug at a rate District. There are several benefits of information which can be obtained from the compilation of the use of the drug including as a source of data in calculating the drug needs to use the coming year and calculate the stock inventory of safety in order to support the preparation of the plan of distribution. Based on the findings of indepth interviews can be obtained that the use of the drug in the Pharmacy Installation District Bombana during the year 2020 undergone many constraints due to the pandemic of corona. As for the amount of use of the drug which is whole of the amount of drug use that have been distributed to health centers based on the Report of dirt, oil and impurities each clinic, as a statement of some of the informants here;

"...the use of the drug in 2020 outside his estimates of us, because there's a pandemic of corona which resulted in the presence of some drugs that lags or less used because of the lack of patient visit to the clinic, and in early 2020 we are very stuttering face a pandemic the corona in terms of the logistics of the drug for the prevention, except to treat the symptoms may be we are still ready in terms of the stock of the drug. for the amount bis akita look at the Report dirt, oil and impurities each clinic..." (i2)

"...the drug that we have planned for the year 2020 it has actually been in accordance with the request of the health center, just a lot of factors that cause the number or type of cure vacancy occurs, to the amount of the drug that we have distributed to health centers that exist on the card stock of drugs, later the rest of the calculated course as a whole..." (i3)

"...for the dissection of the pharmacy itself is less so know the amount of the drug that has been used public health centers during 2020, because the process of the calculation of the use of the drug is carried out by the Installation of a pharmacy District..." (i4)

The results of the other findings at the time of in-depth interviews can be obtained that the presence of the drug expired in the Department of Health in this regard in the Installation of the Pharmaceutical District due to a delay in the delivery of the goods from the distributor which causes a buildup in the pharmaceutical warehouse, let alone the expiration date of the drug within a maximum of 3 years. In addition, the cause of the absence of the drug which expiration is the method used the method based on the use of the drug in the previous period and did not see the case of diseases that exist in the current conditions. The buildup of expired medications is also caused by the process of return by public health centers experience a buildup of the drug because of the lack of patients in the pandemic, as some statement of the informant following;

"...That expired there, but few in number, and as much as we might minimize drug that will expire..." (i1)

"...There are drugs that are expired, because the buildup in a pharmaceutical warehouse. The buildup is usually caused due to some factor that is first because of the delay distribution of pharmaceutical wholesalers, the second because it is not used by a doctor, especially in the time of pandemic, many drugs that are unused because of a lack of patient visits to the clinic..." (i3)

"...A drug that is expired must be in a pharmaceutical warehouse, usually because in return by public health centers experience a buildup of the medication which expired..." (i4)

Other findings also at the time of in-depth interviews can be obtained that the vacancy stock of drugs in the Pharmacy Installation District Bombana common due to the delay of a drug that comes from the distributor or Pharmaceutical wholesalers. The delay is due to the raw material for the manufacture of the drug at the distributor's late coming from abroad or delivery of the goods wrong location, as a statement of some of the informants here;

"...The emptiness of the drug may be common, but only a few items of course, but if it's empty in the warehouse, right public health centers can buy independently with money capitation.." (i1)

"...Never, Empty Drug Is Usually Due To The Distribution Of Drugs From The Pharmaceutical Wholesalers Here That Long, Or If A Great Trader Pharmaceutical Regular New Goods Come Late Because One Of The Delivery Location And Also Pharmaceutical Wholesalers Who Are Already Winning The Tender Usual Have Run Out Of Raw Materials So That The Cure New Old Can Be So..." (i2)

"...Yes, several times we experienced the emptiness of the drug due to the old distributor send the goods, and also in the pandemic, demand for the drug increased in health centers such as vitamins, drugs tightness, and others that cause us to experience the void, but if it is really an emergency we ask remedies buffer stock in the province of..." (i3)

## c. Calculation of The Need for Medicine

The calculation of the needs of the drug is an activity carried out by a team of planners drugs to perform the calculation of the needs of the drugs based on the specific method. Determine the need for drugs is a difficult challenge that must be faced by Pharmacists who work in the Health care Unit or in a Pharmaceutical Warehouse. The problem of the emptiness of the drug or the excess of the drug which occurs when the information theoretical needs treatment. With the coordination and planning process for the procurement of drugs in an integrated manner as well as through stages such as the above it is expected that the planned medication can be the right type, the right amount and right time [12]. Based on the findings of in-depth interviews can be obtained that the planning section Staff assisted with the Head of the Pharmacy Installation perform the calculation of the amount of the drug that will be planned in the year to come. Planning the needs of drug calculated based on the remaining stock of the end of the drug in a pharmaceutical warehouse and then in the add by the number of average use of drugs at the health center and then multiply by 18. Figure 18 is more than 1 year due to drug ordered should have a buffer stock so that When there is an increase use of the drug, pharmacy still got a stock of cure, as the statement of some of the informants here;

"...If to take into account the amount of use of the medication planned we see the number of the use or expenditure of the drug in the earlier period and also request data from the health center, but the amount we get later we will add as a buffer stock in case there is a rise in the demand for the drug in the clinic.." (i2)

".. The calculation of the amount of the drug that will be planned, the first of which we calculate first the rest of the stock late in the warehouse, then we add the number of drug demand from each clinic to see an average of each month, after that we multiply by 18. Why is 18, because the last 6 months is the amount of buffer stock to keep the case if there is a rise in the demand for the drug or drugs from distributors come too late.." (i3)

"...If the calculation of the amount of the drug may be based on the amount of use the average of the drug at the health center and then add the buffer stock.." (i4)

# d. The Projection of the Needs Of The Drug

The projection of the needs of the drug is the Calculation of the drug needs in a comprehensive manner taking into account the data of drug use and the amount of remaining stock in the period that is still running from various sources of the budget. How to in making a projection of the needs of the drug is carried out by determining the Amount of the procurement needs of the drug years to come, determining the Amount of inventory of the drug in a pharmaceutical warehouse, determine the Amount of drug received in the current budget year, determine the Plan of procurement of drugs for the next year based on the source of the budget and determine the Level of adequacy of any kind of drug [13]. Based on the findings of in-depth interviews can be

obtained that the projection of the needs of medicine in the Department of Health District Bombana using the data remaining stock in the previous period and then add it with the needs of a drug that has been calculated in the previous stage, only in the previous stage using data which is not so accurate so that the buffer stock of the drug can experience the void, as a statement of some of the informants here;

"...to see the projection of the use of the drug in the future, well as I said in the beginning, we see the data usage of the drug in the previous period, where the amount of drug needed we customize it with a pattern of disease in the clinic." (i1) "...the approximate amount of medicine remaining later in the end of that period we calculate the wear formula, where the formula we calculate the first of all the number of needs for next year and then added with the rest of the existing stock. If the buffer stock is taken of the needs of the drug in the next 6 months. But again this is sometimes still the case also void the drug because of the old distributor send the cure." (i3) "...The process of the estimated need of the drug for a period in the future I don't know, but the details are definitely using data from the use of the drug in the previous period and add the buffer stock. Only constraints that are commonly experienced the emptiness of the drug even from the buffer stock though ..."(i4)

## e. Adjustments to the Plans the Procurement of Drugs

Adjustment of the Drug Procurement Plan is a stage of activities carried out by the drug planning team to adjust the drug procurement plan with the drug planning that has been previously determined. By adjusting the planning of drug needs with the amount of available funds, the information obtained is the number of plans, the priority scale of each type of drug and the number of packages for the planned drug needs for the coming year, [4]. Based on the findings of in-depth interviews can be obtained that the adjustment of the procurement plan of the drug in this case the determination of the type and amount of medication based on the budget that there is no use methods of analysis that is effective, namely the method of analysis of ABC-VEN. Health Departement of District Bombana make adjustments procurement of drugs with drug health center based on the reports of the usage period of the previous, as a statement of some of the informants here;

"... if it had to calculate the budget that will be used in the procurement of drugs, we submit it to the planning and head of the pharmacy installation, because those who know the method of calculation of the effective and the amount of the budget provided for the procurement of drugs each year change depending on the conditions..." (i1) "... the calculation of the amount of the budget for the procurement of drugs, based on the needs of, for example at this time due to the pandemic of corona then the amount of the drug and the budget for the handling of the pandemic we improve.. if we generally only see the needs of the health center of the data the use of the drug and then we calculate the budget that we will use..." (i2) "... actually supposed to be so, we good idea to use one method or combine the methods of calculation of the budget, it's just in the process of planning related drugs our budget is not so involved, just my knowledge for this, for the calculation of the budget was adjusted with the amount of drug needed.." (i3)

#### 4. Discussion

The selection of the needs of the medicine is the process of determining the type of medication required in

accordance with the pattern of existing diseases. The process is done based on the selection on generic drugs especially those that are listed in the list of drugs of basic Health services and the national essential drug list that are still valid with the benchmark price in accordance with the decree of the Minister of Health. In choosing a drug, it must consider a few things which drugs are selected based on the selection of medical, type of drug should be as minimum as possible, avoid the drug combination, and have the benefit or the cost of favorable [8]. In the Process of planning the needs of the drug at the District Health Office/City needed a Team of Planners need of the Drug according to the direction of the Ministry of Health in order to improve the effectiveness and efficiency of the use of funds through coordination, integration and synchronization among agencies involved with the planning of the drugs in each district/city [8]. The results of in-depth interviews with informants related, obtained information that the absence of a Team of planners need of the drug which is formed by the Department of Health District Bombana, this is in accordance with the statement of the head of the pharmacy Installation District Bombana. In earlier periods of the planning needs of the drug is carried out by the Head of the Pharmacy and the staff of the planning. This is in line with the research [14] said that had not Yet formed the Committee on Pharmacy and therapeutics, yet the drafting of the formulary so it can not be applied to the planning needs of the drug on the formulary. The absence of a drug demand planning team will make it difficult for drug managers to purchase drugs in terms of quantity, type, quality, product brand and drug price. On the other hand, it will complicate drug planning, determining drug needs and drug budgeting. Therefore, the existence of a drug requirements planning team really needs to be formed. The activities of the drug needs planning team start from collecting drug use data, analyzing drug needs data, calculating drug needs, determining the type of drug, determining drug prices, determining the timing of drug purchases, determining the provision of funds for drug needs, determining the quality of drugs and drug trademarks to be purchased. The absence of a Team of Planners Need of the Drug which is formed by the Department of Health District Bombana is caused due to the absence of written guidelines or the guidelines of the ministry of health that is used as a reference in the planning process of the drug. It is recognized by the head of pharmacy installation and planning section staff the previous period only using the guidelines or pattern formed by earlier people. The selection of the type of drugs using the list of generic drugs in the formulary district created by the Department of Health District Bombana. The formulary contains a type of drug that will be used in basic Health services at the health center, but still the presence of drugs that are not available in the Pharmacy Installation. This is because there is synchronization of the demand centers and the procurement is done, it is also associated with the absence of team planner a drug that is made, so the absence of accurate communication in the selection of the type of drug. On the selection of the type of drugs conducted by the Department of Health District Bombana using the national formulary and formulary district. Only the application is still not quite optimal, can be seen from the existence of the drug in the formulary district but it is not available at the Pharmacy Installation District Bombana if done request by the health center. This is in line with the research of [14] who says that Planning has not been running well because there is no hospital information system which can cause the data needs of the drug is not optimal so often delays parties pharmacy to make the proposal needs the drug, so that in the process of planning the needs of medicine is always changing. The existence of vacancies or shortages of drugs in the Regency Pharmacy Installation will disrupt health services at the Public Health centers. If there is a lack of medicine at the Public Health centers, the patient will not get drug service quickly, thus the patient will buy medicine at the nearest pharmacy or drug store. The condition of drug vacancies at the Public Health centers

will harm patients because they have to spend a certain amount of money to buy the drugs outside the Public Health centers. However, in poor patients, they cannot afford to buy medicine and surrender to the situation. Therefore, the Bombana District Health Office should improve the management of drugs so that drug vacancies and shortages can be addressed properly in the future. Drug shortages on each unit of health services is a component of a complex problem. It is therefore necessary management of the drug which is effective and efficient. One process of managing an effective remedy is to ensure the availability of the drug both in terms of type and amount appropriate to the needs so that can avoid the shortcomings and advantages of the drug [15] Compilation of drug Use is a process to determine the use of the drug in the health centers of each month of each type of drug that has been distributed by the Department of Health of the District/city and also stock the optimum through the data base of the health center [7]. The results of the statements of related informants, obtained information that the basic data used in the planning process for drug needs at the Bombana District Health Office are Usage Reports and Health Center Drug Request Sheets, Drug Needs Plans and drug stock cards at the Pharmacy Installation. The data is used to calculate the optimum amount of usage during the previous period to be used as a reference in calculating drug needs in the future period. In practice, the data used is not enough accurate, is because the drugs are expired or damaged remains inserted in a matter of usage, so the ordinary happened excess stock of drugs that make ineffective use of funds. This then becomes very risky in the procurement of drugs, due in part to excessive medication make some again became vacant due to lack of funds in the procurement. This case concerns the integrity of the person in charge of the pharmacy at the health center and the staff of the planning section in the Installation of the pharmaceutical District Bombana. Findings in the field obtained that there is still data on drug use that is not available accurately. The inaccuracy of drug use data makes it difficult for drug planning to determine the number of needs, types of drugs, drug quality, drug trademarks, and drug suppliers. Generally, drug use data is collected from each part of the Public Health centers service unit, then the data is analyzed to determine the amount of drug use, determine drug needs and drug budgeting. In this planning, the health office should involve the drug managers of the Public Health centers to jointly determine drug needs and identify problems in drug services, including finding solutions to problems in drug management. Pharmacy service as one of the elements of the main service in health care, is a part that can not be separated from the system of health services that are oriented to patient care, the provision of drug quality, including pharmacy services clinic that is affordable for all walks of life. The practice of pharmacy services is a unified activity, with the aim to identify, prevent and resolve problems related to drugs and health [14]. The calculation of the Needs of medicine is one of the pharmacy job done by the Pharmacist at the Pharmacy Installation of Regency/City. The calculation of the drug is expected to be of the right type, amount and time as well as quality-assured by the method of calculation of consumption and / or morbidity in accordance with the basic data from the health center [7]. The basic Data is the data used in the planning of the needs of medicine in the Department of Health. Basic Data greatly affects the results of the planning itself. The basic Data needed in planning the need of the drug is the data that will be used to set up the type and amount of drug items will be held by the government in the budget year applies. The accuracy of the basic data used to determine the accuracy of the planning undertaken by the Department of Health. The Data is taken from the report of the health center which then compiled into a plan drug needs of the public and Health supplies districts/cities that are equipped with Engineering-engineering calculations [2]. In the process of the calculation of the needs of medicine, Department of Health District Bombana only using the method of consumption,

namely by looking at the number of drug use health center in the previous period. Such conclusion was stated by the Head of the pharmacy Installation and planning section staff, which is where the calculation of the need for drugs based on drug use reported by the health centers every month. The statement of the informant related that the basic data used are not so accurate because the data only in the form of drug use, but there are no plans need a drug that is made by the health center. Based on these statements, the phenomenon of emptiness and excess drug that occurred because it is caused by the basic data of the wrong to be a reference in the calculation of the needs of the drug. This happens because of not doing the procedure returns drugs from the clinic to the Installation of a Pharmaceutical that is damaged or expired, so the drug which suffered damage are included in the calculation of the use of the drug. The factor is the low knowledge of officers in drug management so that there are still vacancies or excess drugs in the pharmacy installation and the lack of good coordination between the Public Health centers and the pharmacy installation so that drug management information cannot be done properly. The impact on health services is the absence of drugs in the Public Health centers so that patients cannot get good drug services. In the 2020 data, there are health workers in the working area of the Bombana District Health Office, from 22 public health centers there are 5 public health centers that do not have pharmacists, namely Masaloka Raya public Health Center, Poleang public Health Center, Southeast Poleang, Tontonunu public Health Center and West Poleang Public Health Center. This makes the report on planning the need for drugs at the Public Health Center not optimal, so that it becomes one of the factors that result in errors in the calculation of drug needs at the Bombana District Health Office. The competence of pharmacists is very important in the management of Public Health centers drugs. Some Public Health centers do not yet have the pharmacists needed by the Public Health centers. The unavailability of pharmacists will complicate the management of drugs at the Public Health centers. Therefore, it is necessary for the Public Health centers and the health office to provide a supply of pharmacists through employee recruitment or transfer planning for health workers to meet the needs of these workers. Drug management districts/cities is the full responsibility of the district/city government. From the aspect of planning needs medicine for primary health care system based on "bottom up", the calculation of the plan needs the drug, as well as coordinate the planning needs of the drug from several sources funds. The head of District Health Office/City submitted its Plan to the Needs of the Drug and the reported use of the drug to the Government of Regency/City, the Province and the Center. Each district has a structure and its own policies in the management of the drug, the next Manager of the Drug Regency/City is called with the Management Unit of Medicine and Public Health Supplies District [2]. The projection of the needs of the drug is the calculation of the drug needs in a comprehensive manner with the consideration of data on drug use from the health centers and the rest of the stock of drugs that are on the Installation in the period is still running for the needs of the period in the future [10]. Government regulations about the work of the pharmacy with the goal of setting the pharmacy job is to provide protection to patients and the public in obtaining and / or set of pharmaceutical preparations and services of pharmaceutical, maintain and improve the quality of the work of pharmacy in accordance with the development of science and technology and legislation and provide legal certainty of the patient, the community and pharmacy personnel [2]. The statement of the informant related provides information that at the stage of a projection of the needs of the drug is carried out to see the rest of the existing stock and then added with the amount of drug required for a period in the future. The results are then added again with the buffer stock, which is taken from the number of needs the drug for 6 months in the future. This is in accordance with the guidelines of the ministry of Health to perform the

projection needs the drug in order to minimize the occurrence of excess or emptiness of the drug. But in the world happens nonetheless Department of Health District Bombana experience of emptiness or the excess of the drug. This is due to the mistakes of the early stages of planning, which uses data that is not accurate regarding the type and amount of drug needed. The planning process consists of the estimated needs, set goals and determine strategies, responsibilities and resources needed to achieve the goal. Planning is performed optimally so that the pharmaceutical supply can be used effectively and efficiently [15]. Adjustments to the plans the procurement of drugs is an activity adjustment planning the drug with the amount of funds available, then the information obtained is the amount of the procurement plan, the scale of the priority of each type and amount of packaging to plan the procurement of drugs coming year [10]. On the results of in-depth interviews obtained information that the adjustment of the amount of the drug and the budget is there, it's done by looking at the number of drug needs of each health center and then match it to the existing budget. But in these stages there are constraints such as the absence of a drug from one of the pharmaceutical wholesalers that are needed in the system e-catalog so that the drug should be replaced by other brands with prices more expensive. This makes the reduction of the amount of drug needed because the funds have already been determined. In the guidelines of the ministry of Health about the adjustment of the plan procurement of drugs has explained some of the analysis in drug calculations based on the existing budget. The theory is not run by the Department of Health District Bombana because only refers to the patterns that take into account the needs of the drug by looking at the number of previous usage. If the previous experience of emptiness or excess drug then in the future it keeps happening, this is due to the absence of evaluation or supervision in the use of the budget. This is in line with the research of [14] who said that the Planning needs of the drugs in the Hospital Kartika Pulo Mas hasn't gone well so there is still a void of the drug. The planning needs of the pharmaceutical is the process of activities in the selection of the type, amount and price of pharmaceutical supplies that suit your needs and budget, to avoid the emptiness of the drug by using a method that can be accounted for and the basics of planning that has been determined, among others, consumption, epidemiology, the combination of the method of consumption and epidemiological adjusted with the available budget [16]. The purpose of planning is to obtain the type and amount of antibiotics according to the needs of the service as well as to improve the rational use of antibiotic. Inventory planning that will better avoid the occurrence of problems that lead to the inefficient utilization of antibiotics in health care [17]. The limitations of this study is the time of the data collection is limited it is caused by a number of busy informants in running the jobs so that they do not have enough time to provide data and information to researchers when collecting data/information

# 5. Conclusions and Recommendation

Conclusion; In General, the planning needs of the drug do not meet the applicable guidelines. These conditions lead to the occurrence of excess and deficiency in some items of the drug during the distribution of the current year. Advice; the need for increased management services medicine through management training drug for most planners medicines and health supplies to enhance began and skills of officers.

#### 6. Conflict of Interest

Author declare no conflict interest.

# **Bibliography**

- [1]. P. Kementrian, "Penguatan Pelayanan Kesehatan Dasar di Puskesmas," Jakarta, 2018.
- [2]. I. N. Rumbay, G. D. Kandou, and T. Soleman, "Analisis Perencanaan Obat di Dinas Kesehatan District Minahasa Tenggara," Jikmu, vol. 5, no. 2b, pp. 469–478, 2015.
- [3]. M. Ulfah, C. Wiedyaningsih, and D. Endarti, "Evaluasi Pengelolaan Obat Tahap Perencanaan dan Pengadaan di RSUD Muntilan District Magelang Tahun 2015 – 2016," Jmpf, vol. 8, no. 1, pp. 24–31, 2018.
- [4]. R. Kepmenkes, Pedoman Teknis Pengadaan Obat Publik Dan Perbekalan Kesehatan Untuk Pelayanan Kesehatan Dasar. Jakarta, 2008, p. 13.
- [5]. P. Kementrian, "Penyediaan Obat, Vaksin dan Alat Kesehatan," Jakarta, 2019.
- [6]. Sulltra and Dinkes, "Laporan Penggunaan Dana Dekonsentrasi Program Kefarmasian dan Alat Kesehatan Satuan Kerja Dinas Kesehtan Provinsi Sulawesi Tenggara tahun 2019," Kendari, 2020.
- [7]. D. B. K. dan A. Kesehatan, Materi Pelatihan Manajemen Kefarmasian di Puskesmas. Jakarta: Dirjen Bina Kefarmasian dan Alat Kesehatan, 2010.
- [8]. Rosida and Ella, "Analisis Perencanaan Kebutuhan Obat Pelayanan Kesehatan Dasar Tahun 2016 di Dinas Kesehatan District Batu Bara," Universitas Sumatera Utara, 2017.
- [9]. R. Harding et al., "Availability of essential drugs for managing HIV-related pain and symptoms within 120 PEPFAR-funded health facilities in East Africa: A cross-sectional survey with onsite verification," Palliat. Med., vol. 28, no. 4, pp. 293–301, 2014, doi: 10.1177/0269216313498637.
- [10]. R. D. Hapsari, "Evaluasi Pengelolaan Obat Di Gudang Farmasi Dinas Kesehatan District Ngawi," STIE WIDYA WIWAHA Jogjakarta, 2019.
- [11]. Consuelo S.G, Pengantar Metodologi Penelitian. Jakarta: Penerbit Universitas Indonesia, 1997.
- [12]. Hartono and P. Joko, "Analisis Proses Perencanaan Kebutuhan Obat Publik Untuk Pelayanan Kesehatan Dasar (PKD) di Puskesmas Sewilayah Kerja Dinas Kota Tasikmalaya," Universitas Diponegoro, 2007.
- [13]. K. RI, Pedoman Penyusun Formularium Rumah Sakit. Jakarta: Direktorat Jenderal Bina Kefarmasian dan Alat Kesehatan Kementerian Kesehatan RI, 2010.
- [14]. D. K. Ningsih, D. D. Tjatur, Y. Jak, Djajang, and F. Hutapea, "Analisis Perencanaan Terhadap Kebutuhan Obat di Instalasi Farmasi RS Kartika Pulomas," J. Manaj. dan Adm. Rumah Sakit, vol. 2, no. 1, pp. 49–58, 2018, [Online]. Available: http://ejournal.urindo.ac.id/index.php/MARSI/article/view/416.
- [15]. G. Nesi and E. Kristin, "Evaluasi Perencanaan Dan Pengadaan Obat di Instalasi Farmasi RSUD Kefamenanu District Timor Tengah Utara," J. Kebijak. Kesehat. Indones. JKKI, vol. 7, no. 4, pp. 147–153, 2018.
- [16]. F. Henni, Manajemen logistik farmasi rumah sakit. Jogjakarta: Gosyen Publishing, 2013.
- [17]. V. Laurensia, G. N. V. Achmad, R. Diniya, and I. Soeliono, "Evaluasi Perencanaan Persediaan Antibiotik Secara Kuantitatif Di Instalasi Farmasi Rumah Sakit Tipe A," J. Manaj. DAN PELAYANAN Farm. (Journal Manag. Pharm. Pract., vol. 10, no. 3, p. 176, 2020, doi: 10.22146/jmpf.49035.