



## Policy Evaluation of Medicine availability Effectiveness in Health Department of West Java Province-Indonesia

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**Abstract :** This study is a qualitative research that aims to identify and describe the results of the policy evaluation of medicine availability effectiveness in Health Department of West Java Province. The focus of research is effectiveness of medicine availability policy. Data and information obtained by a depth-interview, observation and documentation. The results showed that effectiveness has not been achieved because the medicine availability is not in accordance with the Medicine Requirement Planning and the target has not been based on the WHO target (100%). Conclusion research showed that the medicine availability in Health Department of West Java Province is not yet assured because medicine availability effectiveness has not been achieved as standard. This has led to the implementation of health has not been optimal so it cannot support the creation of public health degree highly.

**Key words:** Elaeocarpus ganitrus, antihypertensive activity, rennin-angiotensin system.

### Introduction

Health service as part of health development efforts, is the right of every person guaranteed by the Constitution of the State of the Republic of Indonesia Year 1945 to be realized by efforts of improve public health degree highly. Improving of health degree will increase the nation's competitiveness requirements in the era of globalization. As a consequence, the health also needs to be pursued and fought by all parties, both government and society, by all components of the nation, at central and local levels.

Law No. 36 Year 2009 on Health considers that every effort must be based on insight into the development of health. It means national development should pay attention to public health and it is the responsibility of all parties, both government and the public. Health development aims to increase awareness, willingness and ability of healthy life for everyone to realize the degree of public health as high, as an investment for the development of human resources socially and economically productive<sup>1</sup>.

To implement Law No. 36 Year 2009<sup>2</sup> on Health decided to the government policy forms of Indonesian Presidential Regulation No. 72 Year 2012 on the National Health System. In health service, medicine can save lives and improve the quality of health service. The need of essential medicine is one of human rights, provision of essential medicine is the duty of governments at all levels of government<sup>3</sup>.

Medicine availability determines the access of capacity level for health service. According to the Ministry of Health, in 2013, the level of availability of medicine and vaccines has reached 96.82%. That amount increased 4.32%, compared to 2012 reaching a value of 92.5%. However, the availability of medicine and vaccines are yet to be distributed evenly to every province in need. In 2012, there are three provinces that have high levels of medicine availability below 80%, on the other hand there are 6 provincial level medicine

availability above 100%. This situation shows that the management of medicine availability has not been implemented optimally<sup>4</sup>.

Efforts to improve the management of the availability of medicine have been started in the period 2010-2014. One effort to improve the management of medicine availability is through the implementation of the e-catalog and e-logistic medicine initiation. According to data from the Ministry of Health Strategic Plan Year 2015-2019<sup>4</sup>, obtained information that in 2013, 432 Provincial / District / City government and the Hospital, have utilized the e-catalog. In accordance with the objectives of e-government, the use of e-catalog has been saving medicine supply budget by 30%. Likewise with e-logistics, to 2013, pharmaceutical installation District / City has taken advantage of this application is the monitoring of as many as 405. The availability of medicine via e-logistics, will facilitate the management and more real time so as to support the implementation of health programs.

The availability of medicine is good enough, it does not necessarily make pharmacy services in health service facilities are also good (according to standards). Law No. 36 Year 2009 on Health Article 98<sup>2</sup>: mandated in paragraph (1) Pharmaceutical preparations and medical devices to be safe, efficacious / useful, quality, and affordable. Paragraph (3) The provisions concerning the procurement, storage, processing, sale, distribution of pharmaceutical preparations and medical devices must meet the quality standards of pharmacy services stipulated by Government Regulation.

Medicine Accessibility was determined by the availability of medicine for health services. In 2013, the level of availability of medicine and vaccines has reached 96.82%, an increase from the previous year to reach 92.5%. Nevertheless, the availability of medicine and vaccines have not been distributed evenly between provinces. Data in 2012 showed there are three provinces with availability levels below 80%, while there are 6 provinces that have high levels of medicine availability is higher than 100%. This disparity reflects not optimal logistics management of medicine and vaccines. To that end, should be encouraged use of online logistics management system as well as medicine-vaccine relocation scheme between the Province / Regency / City flexible and accountable<sup>4</sup>.

The World Health Organization (WHO) 1999 in the National Medicine Policy Monitoring Indicators should mention that the availability of essential generic medicine and should reach 100%. Objectives and expectations of the government are able to meet even the supply of medicine according to WHO standards should level of medicine availability was 100% should be supported by policies made by the government<sup>5</sup>.

In to guarantee the availability of medicine there are several issues. Problems in the availability of medicine policy today is the gap on policies related to medicine procurement authority at every level of government. Thus, in the process of implementation of the policy of medicine availability are problems of coordination and political interventions that impact on issues of effectiveness, efficiency and fairness.

Regional Regulation of West Java Province No. XI of 2010<sup>6</sup> on the Implementation of Health in the destination sub-system of pharmaceutical, medical device and food is the realization of the availability and affordability of pharmaceutical, medical device and food which is safe, efficacious / helpful, good-quality and affordable by the community to ensure the implementation of health measures in order to improve the health community the highest in the area. In terms of implementation efforts to availability, equity, and affordability of medicine and medical devices mentioned the Regional set guidelines, norms, standards, procedures and criteria in the provision and management of medicine, medical equipment, reagents and vaccines. Provision of medicine based on the National Essential Medicine List to meet the needs of health service. Government by special arrangement, ensures the availability of medicine for the poor, remote, border and disaster areas as well as medicine that do not have economic value (orphan medicine).

Thus, the Health Office of West Java Province has the authority to manage the availability of medicine and distribute to the District/ City Office of health. The existence of problems in the availability of medicine as noted above, led to the availability of medicine in the Office of Health has not been effective and efficient so it cannot meet the needs of the District/City Office of health in the province of West Java. This will affect the public health services at the district/city in West Java. Policy evaluation is to measure the success rate the policy implementation.

## Materials and method

This research is qualitative. According to Moleong<sup>7</sup>: "Qualitative research shows the meaning quality which refers to the natural aspect as opposed to the quantum and number". On the basis of the qualitative research is defined as research that does not hold the calculations ". Bogdan & Taylor in Moleong<sup>7</sup>, explains: "Qualitative research can also be defined as research that produces descriptive data in the form of words written or spoken of people and observed behavior".

Based on these opinions, this study aims to describe and analyze the phenomena relating to the availability of medicine in the Health Office of West Java Province deeply. Research on the evaluation of the availability of this medicine is unique, because there is a phenomenon on the one hand there are emptiness for some items of medicine and on one side there is a cure excess so that expiration occurs every year and have received special attention for later evaluation. If this is not addressed, it will cause the potential loss of a very large country. Therefore, this study used a qualitative approach that aims to explain the phenomenon with deeply through data collection profusely. A qualitative approach is more emphasis on the issue of depth (quality) data is not the number (quantity) data<sup>8</sup>.

This study will evaluate the policy of the availability of the medicine through the research focus of the legal basis;, policy evaluation criteria of coordination, political intervention, effectiveness, efficiency, and fairness policy availability of medicine in the Health Office of West Java Province; public health status of West Java Province. A qualitative approach is a way that is based on the philosophy of post-positivism, is used to examine the condition of the object nature in which the researcher is a key instrument, sampling data sources conducted in purposive sampling, data collection techniques by triangulation (combined), data analysis is inductive and the result is more emphasis on the meaning of generalization<sup>9</sup>.

Methods of data collection in the study of where the researchers conducted several ways, they are In-depth interviews (in-depth interviews), Observation and Documentation. Data analysis techniques in this study using an interactive model of Miles<sup>9</sup>. The analytical methods are continuously performed during the study, by combining interactive and circular stages: data collection, data condensation, data display, and conclusion drawing/verification. In order to obtain data validity or correctness of the results of research, so in this study conducted examining measures of data as proposed by Lincoln and Guba<sup>10</sup>, namely: Credibility (continuous observation, triangulated,. Discuss with colleagues and lecturers), Transferability, Dependability, and Confirmability.

## Results and Discussion

### 1. Basic Law of Medicine Availability Policy

Medicine availability is one of the supporters for the attainment of health in order to realize the implementation of public health degree as high. Likewise with the availability of medicine in the Health Office of West Java Province. West Java Provincial Government seeks to ensure the availability of medicine in the framework of the National Health System as outlined in the framework of the Provincial Health System.

In general, the Provincial Health System of West Java must meet the demands of Law No. 32 of 2004 (Now is No. 23 of 2014<sup>1</sup>) on Regional, which mandates that Regionals for conducting the affairs of government authority. Implementation of decentralization and local autonomy require governmental affairs division between the Central Government and Regional. Affairs under the authority of the area consists of obligatory functions and affairs of choice. Health affairs is obligatory to be implemented by the government. Health policy is an authority possessed by the central government and the regional government, which aims to solve the problems of health and is used to provide the best health services to the community.

Referring to the opinion of Moran<sup>14</sup> which states that the policy can be linked to the principles and priorities adopted by the government into an issue and was not translated into action. In some cases, the target is a sustainable policy. Therefore the availability of the medicine policy as part of a policy in the field of Health can be understood is a priority program of government health choice. The aim is to resolve the problems of the public and used to provide the best health services to the community in a sustainable manner.

Regional Regulation (PERDA) West Java Province No. XI of 2010<sup>6</sup> on the Implementation of Health, established as one of the policy of the Government of West Java province with a view to the establishment of community health status as high, as an investment for the development of human resources productive and competitive socially and economically. Regional Regulation (PERDA) of West Java Province No. XI of 2010 on Health, article 28 is a public policy to guarantee the availability of medicine in West Java which is aimed at solving the problem of medicine availability that support the implementation of health.

Regional Regulation (PERDA) of West Java Province No. XI of 2010<sup>6</sup> on the Implementation of Health in West Java province became one of the important agenda of Regionals, because it is mandated by Law No. 36 Year 2009<sup>2</sup> on the Implementation of Health and the Presidential Decree No. 72 Year 2012<sup>3</sup> on the National Health System. The existence of the West Java Provincial Regional Regulation (PERDA) No. XI The year 2010 should be in line with the policy. However, this policy has not grounding clear authority to the availability of medicine at every level of government. The results showed that since the establishment of the West Java Provincial Regional Regulation (PERDA) No. XI of 2010 on the Implementation of Health, the evaluation of the policy has not been implemented, including the availability of medicine policy evaluation. Policy Evaluation Availability of Medicine in the Health Office of West Java has not been carried out, both in the duties and functions attached to the Health Office of West Java province or through a team evaluation of the policies established under the competent institutions, namely the Ministry of Health or the Coordinating Ministry of Human Development and Culture. So that, the problems in the availability of medicine at Health Medicine cannot be addressed properly.

In view of Moran<sup>14</sup>, policy evaluation includes assessing the strengths and weaknesses of programs and public projects that have been implemented. Implications not only to the development of theories used in policy analysis, where the alternative methods used in the evaluation of the policies developed and recommended to the decision makers and other stakeholders. Similarly, according to Jones<sup>15</sup>, policy evaluation is a design activity that considers the benefits and processes of government programs. Referring to the views of Moran and Jones, policy evaluation availability of medicine in the Health Office of West Java Province is an activity that should or deliberately designed to assess the success of the policy. Through effective policy evaluation can be seen whether or not the policy of medicine availability. Evaluation of availability of medicine policy in the Health Office of West Java Province is an indispensable tool for obtaining feedback, learning and development. The results of the evaluation policy should be clear and have the assurance, despite having the risk of policy changes.

## **2 Policy Evaluation Availability of Medicine in the Health Office of West Java Province**

### **2a. Coordination Evaluation of Medicine Availability Policy**

Regional Regulation (PERDA) of West Java Province No. XI of 2010<sup>6</sup> on the Implementation of Health in Explanation Paragraph (1) states that the Regional guarantee the availability, equity, quality and affordability of medicine and medical supplies medicine include (1) Provision and management of the provincial medicine bufferstock, medical equipment, reagents and other vaccines provincial scale, (2) Planning estimated the needs of medicines, medical equipment, reagents and vaccines to health services and programs at the provincial scale, (3) Procurement supply of medicine, medical equipment, reagents and vaccines the public sector, which is the responsibility of the provinces of bufferstock, medical equipment, reagents and other vaccines provincial scale; (4) Distribution of medicines, medical equipment, reagents and vaccines are the exact kind, amount, on time and on target to ensure availability and equal distribution of provincial scale; (5) Storage in accordance with the requirements to ensure the quality of medicine, medical devices, reagents and vaccines to be used; and (6) Information dissemination and advocacy of the use of medicine, medical devices, reagents and vaccines rationally with the application of pharmaceutical services.

Referring to the explanation PERDA No. XI of 2010<sup>6</sup> on the organization of health, the availability of medicine includes the coordination of activities within the scope of activities as the PERDA explanation. Therefore, in general, coordination of medicine availability in Health Office of West Java Province include the coordination of procurement must be carried out in coordination and planning authority.

The survey results revealed that the coordination for the availability of medicine have been conducted by the Health Office of West Java Province and the Central Government (Ministry of Health) and the Regional

(District/ City Office of health). This is necessary because there is a limit authority the Health Office of West Java Province.

Health Office of West Java Province through the Integrated Medicine Planning Team (TPOT) should verify that medicine requirements planning of District/City Health Office has been verified by the Provincial Office of health submitted to the Ministry of Health. The medicine requirements planning subsequently form the basis of a national scale Medicine Demand Plan.

In the Health Office of West Java Province coordination problems initiated by the non-functioning optimally TPOT. TPOT provincial level have not been able to carry out the verification should be. Furthermore coordination problem is that medicine requirements planning proposed Health Office of West Java Province to the Ministry of Health have not been used as material planning for the procurement of medicine, but merely references (range) in planning the availability of medicine a national scale, so that the medicine available sometimes does not correspond with the needs that have been proposed in medicine requirements planning Health Office of West Java Province. Coordinate planning with the central government and district/ city that has not gone well and the planning has not been a single door, resulting in accumulation of the medicine in the Warehouse Pharmacy Health Office of West Java province, for any level of government providing the medicine for the same type and on the one hand occurs vacancy cure for some types of medicine when requirements.

The availability of medicine in the Health Office of West Java Province on the one hand has experienced a vacancy and on the other hand the advantages for some types/ medicine items as a result of the coordination authority and coordination of planning that has not been implemented as intended. Coordination availability of medicine that work well will have an impact on ensuring the availability of medicine. Therefore, the coordination of the availability of medicine in Health Office of West Java Province with the involvement of all parties involved need to work together in harmony (Malone and Crowston, 1990).

Harmonious coordination mechanisms implemented should take the right. The coordination mechanism requires all parties involved in the supply of medicine have similar interests. In fact, the coordination for the availability of the medicine is on a more formal coordination so that each component has not been carrying out harmonious cooperation (Malone and Crowston, 1990). Harmonious coordination between the Health Office of West Java Province with the District/ City Office of health of Ministry of Health will lead to an effective coordination (Alter and Hage, 1993 in Alexander<sup>25</sup>).

## **2b. Political intervention Availability of Medicine Policy**

Government as a Public Administrator in ensuring the availability of medicine, has inherent legitimacy of the policy and have an ethical obligation to protect the interests of public health. In the state system of Indonesia, the Government needs the support of their duties of Parliament. (Frederickson<sup>24</sup>). Support the legislative is a form of political intervention of external government. Political intervention from Parliament can be done through the exercise of its functions, namely the legislative function, the function of the budget and monitoring functions. Today, the House of Representatives Legislation function of government policies, including the policy of medicine availability is limited to the determination of the Act, so its global/ general. The Law stipulated, technically the government must make the Government Regulation. If the government has not made a Government Regulation as instructions implementing a law is clear, the authority of the Parliament is limited to the immediate impetus for the formation of its authorities. This is an effort to reduce the chances of political intervention based on personal or group interests as a loophole to carry out acts of corruption. (Frederickson<sup>24</sup>). Political intervention of West Java Provincial Parliament on availability of medicine policy in the Health Office of West Java Province has taken the form of support for the establishment of the West Java Provincial Regional Regulation No. XI of 2010<sup>6</sup> on the Implementation of Health. Functions Legislation West Java Provincial Parliament for the policy of medicine availability is obvious because with the aforementioned Regional Regulation means Parliament has been carrying out their legislative functions as a form of support to the Regional.

Legislative political intervention against the policy of medicine availability may occur in the implementation of Budget Function Parliament. The results showed that the Budgeting function of the Parliament since 2011 is restricted to the units 1 and 2, not to detail the budget. Budgeting and allocation is done by the government. For availability of medicines, now the parliament is not having the authority to determine the price, type of medication, permits, etc. Related Functions Budget, Parliament has proposed to the

budget of the Health Ministry, especially in the Directorate General of Pharmaceutical Services in 2016 increased 100% from the Budget of 2015 includes the budget for the availability of medicine.

Based on the legislation, the current government has the authority to make policy and service provision by the standards of efficiency and transparency. One of the Government policy in the era of regional autonomy is through fiscal decentralization based on Law No. 32 of 2004 (has been replaced by Law No. 23 of 2014<sup>1</sup>) of the Regional jo. Law No. 32 of 2004 on Financial Balance between Central Government and Regional (Karianga<sup>26</sup>). So the Parliament should be able to be a partner/ balance out over functions that are run by the government. This is in accordance with the fourth model Svava<sup>23</sup> that the government as a public administrator has inherent legitimacy of the policy and have an ethical obligation to protect the public interest.

Policies set budget each year between the government and Parliament through the Public Policy Budget (KUA) should be based on the will of the people and the orientation of the maximum benefit of the people because of budget policy is the entrance to the determination of planning programs supported development and / or accompanied by a financing / budgeting. Parliament as an institution and the representation of regional legislative sovereignty of the people should be able to position as representatives of the people, and not as government representatives. Determination of budgetary policy annually through KUA-PPAS intends that the state budget/ area well managed effectively and efficiently (Karianga<sup>26</sup>).

Research Results concerning the establishment of budgetary policy indicates that the mechanism of budgeting West Java province, which has been carried out with the mechanisms and governance right, when there is a change in budgeting so that the addition amount of value as a result of an agreement between the executive and legislature. KUA-PPAS not given in full by TAPD related to the OPD. Information about the amount of budget changes is sometimes given orally or email whose contents are not authorized. Political intervention model that appears is the model political agreement on personal interests / groups, outside the model raised by Svava. Despite the normative, political intervention model refers to the fourth model of Svava, but in fact the political intervention of the West Java Provincial Parliament who happens to produce an agreement with the government that do not based on the interests of the people completely. It can be a barrier to the achievement of policy objectives availability of medicine in West Java province.

Budgeting in West Java province, including articles in the Health Office of West Java Province affect the effectiveness of policies that have been set. The results showed that the data in 2012, the health budget large enough more devoted to the development budget include construction of facilities (infrastructure) as well as medical equipment so that the budget for other programs into smaller, including the budget for the availability of medicine. Referring to the opinion of Karianga<sup>26</sup>, it is because the absence of intent (political will) of the Regional to realize that a community-based budget. Budget Public Policy (KUA) / Priority Provisional Budget Ceiling (PPAS) as a political instrument of the budget are merely a formality and the weakness of the role of Parliament in exercising its functions budgeting and controlling functions. Many pro-people budgets are not approved and many deviations of budget execution is muted.

## **2c. Effectiveness Evaluation of Medicine Availability Policy**

Understanding the effectiveness by Dunn<sup>17</sup> with respect to whether an alternative to achieve results is expected, or achieve the purpose of holding actions, the availability of medicine at the Office of health of West Java should consider the needs of health care is optimal in order to realize the degree of public health in West Java as high so that people get excellent service in order to meet their human rights.

The effectiveness of medicine availability in Health Office of West Java Province also measured the realization of the achievement of the target of medicine availability by medicine requirements planning of District/ City. There plans in the availability of medicine according to the number, type and quality of the medicine requirements. Based on the research results, the actual achievement of the target availability of medicine in the Health Office of West Java Province, either by number, quality, and suitability of the availability of medicine although it has been quite good, but not in accordance with expectations. The availability of medicine in the Health Office of West Java Province has occurred in one side of the void to some medicine items.

Targets for the availability of medicine in the Health Office of West Java Province has not referring to the standard WHO stated that availability of the medicine is 100%, Currently Target availability of medicine in

health Office of West Java is still below 100%. 100% supply of medicine intended to achieve optimal health care to the entire community so that the public health level is on the highest increases.

Thus the effectiveness of medicine availability in Health Office of West Java Province as measured through the achievement of the target at RKO has not been reached. Moreover, targeting availability of medicine in the Office of Health has not been determined in accordance with the WHO target. In 1999, the WHO, the Monitoring Indicators of National Medicine Policy states that should the availability of essential generic medicine and should reach 100%. Objectives and expectations of the government to be able to meet even the supply of medicine according to WHO standards should level of medicine availability was 100% should be supported by policies made by the government<sup>15</sup>.

## **2d. Efficiency Evaluation of Medicine Availability Policy**

Evaluation of the efficiency of policy related to the availability of medicine in the Health Office of West Java Province with respect to the amount of effort required to produce the availability of medicine in the Health Office of West Java Province to meet the needs of medicine availability at the District/City Health Office based on medicine requirements planning. Measure of the efficiency of medicine availability includes inputs used and outputs produced and handled.

Input availability of medicine in the Health Office of West Java Province is funding, human resources, technology informationsupport in the form of information management systems and standard operating procedures, parties involved, facilities and infrastructure that support. Thus the efficiency with regarding to how to obtain an output with the input provided. Referring to the opinion of Mahmudi<sup>18</sup> efficiency associated with the relationship between the output of goods or services produced with the resources used to produce that output. A program or activity is said to be efficient if it is able to produce a specific output with the lowest possible input.

Based on the results of policy evaluation research, the efficiency of medicine availability in Health Office of West Java Province has not been achieved, it is known from the research results with the discussion as follows:

## **3. Component Input**

### **3a. Fund**

Regional Regulation of West Java Province No. XI of 2010<sup>6</sup> on the Implementation of Health, the Third Section of the Health Care Financing Paragraph 1 of chapter 20 Paragraph (2) explains that: health financing in the Region be a shared responsibility between Government, Regional, District / City Government, public and private. Paragraph (3) Provision of health budgets in the budget allocated at least 10% outside of employee salaries based on the principle of fairness, adequacy and sustainability, in accordance with laws and regulations. Paragraph (4) The amount of the health budget as referred to in paragraph (2) priority to the interests of public services in the Region, which amount is at least 2/3 (two thirds) of the health budget in the budget. Paragraph (5) Financing of health in the region referred to in paragraph (1) and (2) intended for health service delivery sustainable, equitable, empowering and effective.

Funds for the availability of medicine in the Health Office of West Java Province, APBN and APBD. Along with the National Health Insurance through BPJS, availability of medicine should take into account the source of funds from the program. Health funds sourced from the budget of West Java Province is currently approximately 7%, not 10% as mandated by Law No. 36 of 2009 on Health<sup>2</sup>.

### **3b. Human Resources**

Human resources are the main actors in the management. Similarly to the availability of medicine, the availability of health personnel as human resources is insufficient and will support the implementation of quality management with better medicine availability.

Research findings show that the existence of human resources for the management of medicine availability in Health Office of West Java Province has not met the appropriate standard, both in terms of quantity, quality and competence. Currently there are seven employees as human resources in the

pharmaceutical warehouse with only there is a person pharmacist who concurrently is as a computer operator. It is requirements a person who is responsible to be pharmaceutical warehouse with a background in pharmacy staff.

With the application of management information system for the management of medicine in the form of e-logistics, Warehouse Pharmacy Health Office of West Java province requires specialized personnel graduate informatics management. In addition, the need for clarification of the task of each position is in order to empower human resources optimally.

Based on the above, it can be concluded that human resources for the availability of medicine in the Health Office of West Java Province although there have been power Pharmaceuticals but overall has not been adequate, so it cannot support the management of the availability of medicine properly.

### 3c. Information Technology System

Information technology system plays a vital role in the operation of an efficient, effective management, and the success of the organization's strategy. Information technology system can be a key element to meet the challenges of rapidly changing organizational environment. (O'Brien<sup>27</sup>). In the era of globalization, the use of information technology can create a strategic advantage. Information technology can increase the speed of the organization's work, and in general to change the speed of the work process to increase the flexibility and improve organizational performance.

Presidential Instruction No. 3 Year 2003 on national policy and strategy development of e-Government<sup>28</sup> is one of the government's efforts in the reform era bureaucracy to realize good governance. E-Government is the use of information technology by the government to provide information and services to citizens, businesses, and other matters relating to governance. E-government essentially is the process of using information technology as a tool to help run the government system more efficiently. (Kesuma<sup>29</sup>).

In 2014, the Ministry of Health began to develop technology and information systems for the availability of medicine. This is done in order to support the Ministry of Health's strategic objectives. One of the strategic objectives of Ministry of Health set out in the strategic plan of the Ministry of Health Year 2015-2019<sup>4</sup> include increased access, independence, and quality of pharmaceutical preparations and medical devices, where one indicator targets for achieving these goals is the percentage availability of medicine and vaccines in health centers by (90%). This is partly supported by the implementation of logistics management tools, medicine and vaccines in order to timely fulfillment both in number and quality. Information availability of medicine and medical materials Consumables (BMHP) is an important aspect of medicines management both at the central, provincial, and district / city. The information provided should be an accurate, precise and fast so that it can be used for all those in need.

In connection with the information system needs, Directorate of Medicines and Public Health Supplies has developed applications availability of medicine at the central level, provincial and district, called e-logistics used in the management and monitoring of the availability of medicine in the pharmacy installation. E-logistics system is a system application management and BMHP medicine. The purpose of e-logistics system is to ensure availability of medicine and BMHP at every level of pharmacy; increase the effectiveness of monitoring the availability of medicine and BMHP; facilitate the relocation of the medicine from the excess to areas where shortages of medicine and medical supplies so that the medicine can be absorbed optimally.

Information system applications other than e-logistics have built medicine availability management related e-purchasing is based on the e-catalog. It runs from the issuance Minister Regulation Number 63 of 2014 on Procurement of Medicine based Electronic Catalog/ E-Catalogue<sup>30</sup>. E-purchasing by e-catalog is an information system that was built by the Ministry of Health to be a guideline for procurement of goods/ services including procurement of medicine for the availability of medicine in the Health Office of West Java Province. Thus the information systems that run in the Health Office of West Java Province management related medicines are available that run should refer to the information system applications built by the Ministry of Health. But in reality, the utilization of information system applications related to the management of medicine availability in Health Office of West Java Province is not running properly. This is partly caused by the incomplete application systems are built and need socialization which continues to be run. Therefore, information technology support in the form of management information systems in the management of



medicine availability in the Health Office of West Java Province, is still limited to the recording out of the medicine, so that the information system related to the availability of medicine at the Office of health of West Java province has not yet provided information is accurate, precise and fast.

In addition, technology support and management information systems in medicine availability, Standard Operating Procedures (SOP) medicine availability Health Office of West Java Province is a quality management standard that should be built for clarification of the task. SOP for the availability of medicine in the Health Office of West Java Province through the newly established West Java Governor Decree No. 440/4496-Office of health in 2015<sup>6</sup> on the Standard Operating Procedures on the Administration of Health Office of West Java Province.

### **3d. Parties Involved**

The presence of the parties involved in fulfilling the availability of medicine in West Java Office of health is expected to support ensuring the availability of medicine. Parties involved in fulfilling the availability of medicine in the province of West Java is cross-program within the Health Office of West Java Province, namely Bappeda, Field PLPP, Field Development Healthy Service and the Secretariat and outside government is a provider of medicine involved in the procurement as a provider of a medicine after appointment and parliament is involved in setting the budget.

The involvement of medicine providers is in order to procure the medicine while the Parliament in the setting of the Regional budget. Based on this research, the involvement of medicine in medicine procurement providers generally do not affect the price of medicine because since 2012 the Ministry of Health has been providing e-phurchasing with e-catalog, so that medicine prices are controlled by this program and the medicine prices tend to be lower. However, if the medicine is held not in the list of e-catalog or volume are not met survey HPS and prices are determined by market mechanisms.

Determination of medicine prices conducted by the working group of medicine authorized in setting medicine prices. The high price of the medicine is due to the unavailability of raw materials for medicine in Indonesia and the rise in price of the dollar. Thus the pricing of medicine is not affected by the involvement of parties outside the government. Medicine prices are set by the Minister of Health on Medicine Pricing. With e-purchasing and e-catalog in the current Social Security System, the control of medicine prices become more restrained, except for medicine that do not exist in the system, the price is left to the market mechanism. So the chances of inefficiencies exist in this state.

### **3e. Facilities and Infrastructure**

The quality of facilities and infrastructure to support the medicine availability will ensure the quality of medicine availability. Research results indicate that the infrastructure for the management of medicine availability in Health Office of West Java Province have not been adequate. It can be seen from the fact that the warehouse requires repair, inadequate availability of pallet and the vehicle (truck) is not yet available.

Facilities and infrastructure availability of medicine in the Office of Health of the need to refer to the standard of facilities and infrastructure to support the supply of medicine should be available for at least according to the provisions of DG Binfar and Medical Devices are as follows:

- The building, with an area of  $\geq 500$  m<sup>2</sup>
- Two-wheeled vehicles and four wheels
- Computer and Printer
- Telephone and Facsimile
- Means of storage such as: shelving, pallet, medicines cabinet, and others.

## **4. Output**

The presence of excess and expired medicine were wasted indicate whether sourced from National Budget (APBN) and Local Government Budget (APBD). This situation shows the existence of losses that should not have happened. Referring to the results of another study conducted by Apriyanti<sup>31</sup>, accumulation of the

medicine in the end lead to the condition of the medicine to be damaged and over time will exceed wear or obsolescence. The amount of expired medicine will mean a loss for the government.

The results showed that the availability of medicine in West Java Office of health under conditions of excess and expired. Excessive medicine in the year 2009-2010 is for the medicine programs that MCH (Maternal and Child Health) and Program Tuberculosis (TB). Excessive medicine occurs because the Ministry of Health simultaneously sends the medicine to the Health Office of West Java Province and District/ City. As a result, the availability of medicine at the Office of health can only be distributed a little bit because of the availability of medicine in the district / city is still a lot. Similarly to medicine Primary Health Care (PKD), consequently stock received too excess of requirements (MCH Program and Zink diarrhea). In 2012, medicine excess occurs in HIV and STI medicine program, assistance from the Global Fund) but it has a short shelf life because the medicine is produced abroad. While the availability of medicine in the Health Office of West Java Province is ever happened namely in 2014 for children and Fe TB medicine, as well as the 2015 Amoxicillin 500 mg and oxytocin injection. With the presence of expired medicine cause wasted funds that are harmful country that should be addressed immediately.

## 5. Justice Evaluation of Medicine Availability Policy

In the aspect of the fulfillment of the right to public health, Act Law No. 36 Year 2009 on Health<sup>2</sup> states that the government must realize the comprehensive healthcare services. From the start the level of Regional to the Centre shall provide health services that are sustainable, fair and equitable. This makes access to medicine in Indonesia especially that its essential form part of the fulfillment of human rights that must be implemented in compliance with the principles of justice.

Justice medicine availability at the Office of health of West Java is fairness in the distribution of medicine availability to the rest of District/ City in order to meet the needs of the medicine for people in the region in accordance with medicine requirements planning compiled based on the pattern of disease in basic services and patterns of disease in areas of potential disasters and outbreaks in their territory. Justice availability of medicine in the Health Office of West Java Province, if there is a match with the distribution of medicine requirements planning District/ City.

Basic distribution of availability of medicine by the Health Office of West Java Province is based on the request from the medicine requirements planning District/ City in need. So justice medicine distribution carried out by the Health Office of West Java Province to the District/ City Health Office is in order to meet the needs of medicines at the District/ City Health Office accordance with the request based on the medicine requirements planning. But in reality, the Health Office of West Java Province has not been able to distribute the supply of medicine to the District/ City Health Office in accordance with the request of District/ City Health Office. This will affect the optimal health services to communities in the District/ City. Good Merit Theory from Musgrave<sup>20</sup> states that people tend to consume fewer health services than the amount that should have been (suboptimal). The government should provide a decent consumption by improving the provision of health services. Good Merit Theory from Musgrave supports the notion that a fair case of similarity consumption/ usage of health services for the same need (Murti<sup>21</sup>). When referring to the Policy Evaluation Criteria according to Dunn<sup>17</sup>, the criteria of justice would be equivalent to the adequacy, equity, responsiveness, and accuracy.

Seeing the four criteria of policy evaluation of W.N. Dunn, it appears that the four criteria used to measure more precisely the policy with direct public service. While the West Java Provincial Health Office provides service availability of medicine to meet the need for the proposed medicine District/ City Health Office, so that fairness criteria according to Good Merit Theory from Musgrave<sup>20</sup> is more appropriately used to measure the evaluation of the medicine availability in the Health Office of West Java Province.

## 6. Degree of Public Health West Java Province

Availability of Medicine Policy in the Health Office of West Java Province stated in Article 28 Regional Regulation of West Java Province No. XI Year 2010. The availability of medicine is one of the efforts in supporting the objectives of the health namely the creation of public health degree as high. Health status is one measure of well-being and quality of human resources. (Kurniawati<sup>32</sup>).

The government efforts in the field of health development are to improve community health degree highly, marked also by Indonesia's commitment to achieve the MDGs. The MDG target with regard to development efforts in the health sector include: 1) Reduce Child Mortality; target: Reduce child mortality by two-thirds, between 1990 and 2015; 2) Improve maternal health, with a target: to reduce maternal mortality by three-quarters between the years 1990-2015. 3) Combat HIV/ AIDS, and other diseases, with a target: controlling the spread of HIV/ AIDS and begun to reverse the number of new cases in 2015, control of malaria and started declining number of cases of malaria and other diseases. As is usual to describe the health status indicators which are main qualities, among others, Index of Health, life expectancy, the mortality rate as Maternal Mortality Rate and infant and morbidity that the incidence or prevalence of infectious disease and is not contagious.

Health Index of West Java province, from the year 2010 has increased. However, these improvements have not reached the targets set. Similarly to figure life expectancy .

West Java Province continued to increase, but has not reached the targets set, so with Mortality and Morbidity digits. But, for Maternal and Infant Mortality are inclined low up 2011 until now.

## Conclusion

Based on the results of the evaluation policy research and discussion conclude that policy as a legal basis the availability of medicine in Health Office of West Java Province has not had a clear authority limits; effectiveness, efficiency, justice has not been achieved because of the medicine availability has not been harmonious coordination and political intervention have not fully based on the public interests. Thus the policy of medicine availability does not yet support the efforts of health care that are optimal for the realization of public health degree is the highest, as an investment for the development of human resources productive and competitive socially and economically, because of the medicine availability in the Health Office of West Java Province is not yet assuredly.

## Implications For Future Research

Implications Research theoretically produces a reconstruction of the Operational Theory of W.N. Dunn's evaluation criteria availability of medicine policy. Policy evaluation criteria which consist of adequacy, equity, responsiveness, and accuracy presented by W. N Dunn cannot be applied so constructed with criteria of justice of Musgrave. Another reconstruction conducted on a theoretical model of the legislative and executive relationship of Svara in political intervention against a policy called Political Commitment Model of the relationship agreements that have developed between the legislative and executive in the budget setting process. Therefore, this study is overall finding of theory policy evaluation, especially in the reconstruction of the theory evaluation policy criteria of medicine availability as follows: coordination, Political Interventions, Effectiveness, Efficiency and Justice.

The practical implication of the study is recommending a review of the province of West Java Regional Regulation No. XI of 2010 on the Implementation of Health and adjusted for changes in the existing regulations. To measure the success rate of policy implementation in the health sector including policies need to be in the form of Medicine Availability Evaluation Team for Health Policy at every level of government under the Coordinating Ministry for Human Development and Culture, in order to obtain the recommendation of the evaluation of policies regularly and systematically.

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