

STUDY ON THE RATIONAL USING DRUGS IN UPPER RESPIRATORY TRACT INFECTIONS (ARI) NON PNEUMONIA AND NON-SPECIFIC DIARRHEA IN PUBLIC HEALTH KOTARAJA JAYAPURA YEAR 2009

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ABSTRACT

One of the government's efforts to achieve this goal is to establish Community Health Center (Puskesmas). Medicine is one of the important resources needed in order to primary health care. Procurement of drugs in the medicine health centers is limited, therefore it is necessary to take measures planning, medication management is good and the more important is its Pengu be rational. The purpose of this study was the observation of drug use, especially in patients with non Pneumonia and Diarrhea ARI non-specific in Public Health Centre Kotaraja, Jayapura in 2009. Research methods using quantitative methods to look back at the prescription data, daily registration sheet patient clinic, LBI, followed by method qualitative approach Indepth interviews (in-depth interviews). Research result shown drug use in health centers in 2009 Kotaraja are not rational. This is evident in the high use of antibiotics in respiratory disease non Pneumonia by 80.22%. The use of drugs in health centers in 2009 Kotaraja are not rational. This is evident in the high use of antibiotics in non Specific Diarrhea by 70.48%.

Keywords: *health center, upper respiratory tract infection, Diarrhea.*

I. INTRODUCTION

The goals of national health development, has set four key areas that need to be considered, They namely as Health Development, Health Manpower Development, the National Drug Policy and Development of Environmental Health. National Drug Policy is a part that cannot be separated from national policy for drugs is one of the important elements that have a strategic value in the efforts of health (MOH, 1998).

One of the government's efforts to achieve this goal is to establish Community Health Center (Puskesmas). PHC is a leading health care organization unit that has the mission as a center for the development of the health care and integrated to the people living in a particular work area. Health centers as one of the functional organization of community development centers that provide *health promotion* (increase), *prevention* (prevention),

curative (treatment), *rehabilitation* (health recovery). One health recovery efforts are conducted through basic health center is a treatment. In providing health services especially treatment at the health center, the drug is a very important element.

Based on the analysis of health financing (including the Government and the people Private) conducted by the Ministry of Health, society and the World Bank during the years 1982/1983 and 1986/1987 year show that the special expenses of medicines in the public sector amounted to 18% of overall health care financing and community projects worth 40% of their health care costs to buy drugs (Anonymous, 2002).

Prescribing and use of drugs is one of the mainstays of health services in health centers. Given the limited number of existing physicians, most health centers in Indonesia, especially in rural areas are forced to utilize nurses to provide treatment services, resulting

in variations in the prescribing health care workers can not be avoided.

Medicine is one of the important resources needed in order to primary health care. Procurement of drugs in the medicine health centers is limited, therefore it is necessary to take measures planning, and medication management is good and more importantly is penguunaannya must be rational. The use of drugs that are not rational would also have a negative impact on the economic side (waste of resources), on the side of the medical (side effects, resistance and iatrogenic disease), and on the psychosocial in the community is that the community's dependency on certain drugs eg, injection (Dwiprahasto, 2006) ,

The results of the initial survey in PHC Kotaraja in April 2010 showed many recipes ARI cases non Pneumonia, Diarrhoea non Specific provided is in accordance with the guidelines basic treatment at the health center, so the impact on the patient, where the patient should not be given antibiotics instead is given by nurses or a doctor, it can lead to resistance and problem drug use in health centers, which are known in the book that the treatment guidelines for cases of ARI non-pneumonia and diarrhea non Spesifik not use antibiotics. From the data report Public Health Centre activities Kotaraja years 2010, based on 10 diseases, respiratory diseases are the first, and there are as many as 8472 and the number of cases of diarrhea was number 8, with the number of cases of 638 cases.

Research purposes

To find using rationalization of antibiotic drugs in diseases Ispa non pneumonia and non-specific diarrhea in Public Health Centre Kotaraja City of Jayapura, Papua .

RESEARCH METHODS

This type of research used in this study is the kind of descriptive research, to describe the rationalization of the use of antibiotics in cases of ARI non-pneumonia and diarrhea in health centers non Specific Kotaraja in 2009. While the methods used is quantitative method with a look back at the data prescribing, sheet registrasi daily patient clinic, LB1, later followed by a qualitative method approach

Indepth interviews (in-depth interviews) with doctors and nurses diagnose / prescribe to patients.

This research was conducted at the Health Center Kotaraja in June to July, 2010.

In this study, the unit of analysis is the Recipe (January-December 2009) on non respiratory diseases as pneumonia and diarrhea 8103 non Specific recipes as much as 559 recipes. Subjects were Number of Doctors and Nurses prescribers are 2 doctors and 3 nurses.

Data source

1. Quantitative Data

- a. Data prescribing in the case of non Pneumonia and Diarrhea ARI non-specific to a single diagnosis.
- b. Registration sheets Daily Patient Health Centers (LRHPP)
- c. Monthly Report 1 (LB1).

2. Qualitative Data

Interviews with doctors and nurses diagnose and prescribe for patients in health centers.

Data collection

Data collected is by doing direct observation of non-prescription respiratory diseases Pneumonia, Diarrhoea non-specific, with the help of direct view Daily Patient Registration Sheet Kotaraja health center. The recipes one by one will be seen suitability of the use of the medicine (concerning the use of antibiotics for cases of non Pneumonia and Diarrhea ARI non-specific) by the book treatment at the health center, after it was immediately noted by researchers in the form of research data collection.

Then, the data collection in-depth interviews with the doctors and nurses who diagnose and prescribe antibiotics in patients with non-Pneumonia and Diarrhea ARI non Specification at the health center.

RESULTS AND DISCUSSION

A. Research result

From the results of research regarding the rationalization of the use of antibiotics in respiratory disease and non-specific diarrhea in health centers in 2009 Kotaraja conducted

during one month, then the results are as follows:

1. Percentage Use of Antibiotics in disease ISPA Non Pneumonia and Diarrhea non Specification in Puskesmas Kota king can be seen in the table below:

Table 1. Percentage of Use of Antibiotics Disease ISPA Non Pneumonia and Diarrhea non Spesifik Di PHC Kotaraja The year 2009

No.	Recipe type	The type of disease	
		ISPA Non Pneumonia (%)	Specific non diarrhea (%)
1	Recipes with antibiotics	6501 (80.22)	394 (70.48)
2	Recipes without antibiotics	1602 (19.78)	165 (29.52)
amount		8103 (100)	559 (100)

Source: Primary Data 2010

Based on the calculation and the table above shows that from 8103 non pneumonia prescription respiratory diseases there are 6,501 (80.22%) recipes that use antibiotics and only 1,602 (19.78%) who did not use antibiotics. The use of antibiotics in ARI non-pneumonia tends to be greater than the prescription without antibiotics. It is also apparent on antibiotics in non-specific diarrhea diseases, of 559 recipes there are 165 (29.52%) that use antibiotics. Similarly, the non pneumonia respiratory disease antibiotic uses in non-specific diarrhea disease were more likely to prescribe antibiotics when treatment guidelines should ARI non-pneumonia and non-specific diarrhea does not use antibiotics. It can be seen that the use of drugs in health centers in 2009 Kotaraja irrational.

2. Interview result

The results of in-depth interviews with the doctors and nurses who prescribe and diagnose patients at the health center Kotaraja have treatment guidelines. But Dispensing does not refer to the guidelines pengobatan masih antibiotics, but treatment guidelines for ARI non-pneumonia do not need antibiotics because it will heal by itself.

a. Giving antibiotics in ARI non Pneumonia Disease

Based on interviews and direct observation in the study on the rationalization of the use of antibiotics in respiratory diseases, antibiotics are given to patients who present with ARD accompanied by heat and fever will be given

antibiotics to reduce the heat, in addition to the patients also suffer from coughing and inflammation thus given antibiotics to reduce or eliminate the cough and reduce inflammation, such as respondents' statements:

In addition, antibiotics are given to patients because these patients have a cough, runny nose which is already more than 3 days and high leukositnya. Antibiotics are given because of the condition the patient is weak, recurrent pain (over 4 days) and to kill germs that cause respiratory infection.

b. The use of antibiotics in non-specific Diarrhea

Based on interviews and direct observation at the health center on the use of antibiotics in diarrheal disease non-specific, antibiotics are given because in general patients come already with a waste water (diarrhea) more than 3 days, and because of diarrhea caused by bacteria, antibiotics to kill bacteria the. At first aid has been given ORS but a waste of water does not stop the antibiotics.

DISCUSSION

The use of drugs in health centers Kotaraja irrational. This is evident in the high administration of antibiotics in respiratory disease non pneumoniae at 6,501 (80.22%) were supposed to be in treatment guidelines is 0%. Based on these findings conducted interviews with two doctors and three nurses.

Based on interviews and direct observation in the study on the

rationalization of the use of antibiotics in ARI non-pneumonia known that the use of antibiotics are given for treatment of non-pneumonia ARI is very relative. Patients who present with non-pneumonia ARI accompanied by heat and fever will be given antibiotics to reduce the heat, in addition to the patients also suffer from coughs, colds and inflammation so given antibiotics to eliminate the cough and reduce inflammation.

Throat Inflammation in infants from the study by Purnamawati 2008) proved 80-90% not due to strep infection, so do not need antibiotics. Inflammation due to a streptococcal infection almost never occur in under two years of age, are even rarer to less than four years.

The results of this study also found that many patients are still infants given antibiotics, but since the birth of man equipped immune system advanced, when it was attacked infectious diseases such as ARI non-pneumonia, the immune system is triggered harder, infections due to vi rus can only be overcome by increasing the immune system by eating well and adequate rest, and given medicine for fever if the temperature, above 38,5° Celsius. So, not given antibiotic, unless the patient has an immune system disorders such as HIV infected (Purnamawati, 2008).

Based on the results of the study also found that administration of drugs for respiratory diseases types of non pneumonia average of 3-4 kinds of drugs. It clearly describes the irrational prescribing by doctors and nurses in prescribing, which is based on guidelines for the treatment of respiratory diseases non pneumonia treatment does not require any kind of medication as it is and does not need to be given antibiotics. Excessive administration of drugs that unconsciously the patient will result *kesehaatan fatal disorder*.

In this study it was found that most patients who come to the health center with a diagnosis of non-pneumonia ARI both adults and toddlers tend to be given antibiotics. Various studies show that ARI is generally caused by a virus and is cured itself without medical therapy (*self-limiting disease*), so that antibiotics are certainly not

necessary in the majority of ISPA (Dwiprahasto, 2006).

Based on the results of the in-depth interview, the obtained answers were averaged together include administration of antibiotics in patients with symptoms of ARI non-pneumonia caused by the condition of the patient when it comes to the health center for treatment in a state hospital average of over 3-4 days, patients inflammation, fever accompanied by high fever, cough, runny nose and other reasons, namely because of high patient leukocytes.

On drugs strong antibiotics or high doses, can cause disorders of the kidneys, rapid bone loss or tooth easily dated. During arguments doctors give antibiotics on the disease coughs, colds, and diarrhea so that no secondary infection. In fact, it is not necessarily so how treatment (Soebandrio, 2004).

Based on the results Interview with nurses and doctors, found reason antibiotics for patients who present with fever and heat they give antibiotics to reduce fever and heat, whereas in the treatment guidelines it is clear that non pneumonia respiratory disease should not be given antibiotics.

3.The use of antibiotics in non-specific diarrhea diseases in Public Health Centre Kotaraja of 2009 irrational, it is seen in the high use of antibiotics in non-specific diarrhea diseases in the amount of 70.48% which should have been 0%.

Based on interviews and direct observation at the health center on the use of antibiotics in diarrheal disease non-specific, antibiotics are given because in general patients come already with waste water more than 3 days, and see the condition of the patient is weak, and because of diarrhea caused by bacteria then given antibiotics to kill the bacteria. At first aid has been given ORS but a waste of water does not stop the antibiotics.

The use of antibiotics in non-specific diarrheal disease is irrational use of drugs as an inaccuracy in the selection of drugs and not in accordance with the existing treatment guidelines. Treatment of non-specific diarrhea according to the Ministry of Health in 2005 does not need antibiotics and was only given ORS.

Another reason stated by respondents MR that antibiotics given for patients who come in already with a waste water (diarrhea) over 4 times daily. In general, respondents believe antibiotics are given to kill the germs that cause diarrhea and to stop the waste of water (diarrhea) is. Yet it is clear in Treatment Guidelines that do not require antibiotics for diarrhea is cured itself in line with the improvement in endurance.

In the reality on the ground if there are people who use antibiotics arbitrary or irrational use then there is the good bacteria in the body will be disrupted. If the good bacteria are disturbed, consequently there are some bacteria in the intestine, skin, vaginal tract, or the mouth join eliminated. If the good bacteria involved are eliminated, it will cause diarrhea, or conversely constipation because there is no good bacteria that process the exhaust. Because the body parts are in dire need for a balance of bacteria (Soebandrio, 2008).

These types of drugs for the disease had reached 3-4 drugs. Based on the existing treatment guidelines, non-specific diarrheal disease can be cured only by using ORS. Many types of drugs given to this disease is very detrimental, both in terms of side effects for patients because the drugs are excessive and improper, also in economic terms is a waste of resources which drugs should not be needed but it is given., But probably only excessive drug can be used for the treatment of other types of greatest need.

The uses of antibiotics in Indonesia are almost without direction. Many doctors and nurses give antibiotics to patients, but the illness they actually do not require antibiotics. Indonesia does not have standards regarding the use of antibiotics, while overseas triggering to faithfully disease has been carried out (Soebandrio, 2004).

Some circumstances may need to be observed if the child antibiotics are gastrointestinal disorders, such as diarrhea, nausea, vomiting, early / colic, skin rash, to swelling of the lips, eyelids, up to respiratory distress. Various studies have also shown, giving antibiotics early in life

will trigger an allergy in the future probability (Purnamawati, 2008)

Antibiotics should not be given to children because it causes damage to the immune item. Child immunity that occurs even go down, and then get sick again. And if given another antibiotic, immunity fell ill again and again. So hysterical and a visit to the health center will be more frequent because the child is sick added (Darmansjah, 2008).

Alternatively, interruption due to side effects of some antibiotics are fever, a blood disorder in which one of the antibiotics such as chloramphenicol can suppress bone marrow production of blood cells down. Then, the possibility of liver abnormalities, such as antibiotics erythromycin, as well as many health problems that would result from the use of improper antibiotic.

Nowadays doctors often prescribe antibiotics for cough, colds, and diarrhea when the disease has had such a nature can heal itself with improved endurance. Therefore, there is also a cough, runny nose, and diarrhea caused by a virus. So the treatment must be observant and do not need to use antibiotics (Siswono, 2004).

Based on the interview respondents said that health centers have Kotaraja treatment guidelines, but in reality in the field of drug administration does not refer to the guidelines. As a result, doctors and nurses give antibiotics without providing safer treatment alternatives such as giving ORS and not giving antibiotics. Whereas in the treatment guidelines it is clear that non respiratory diseases as pneumonia and diarrhea non spesifict do need not be given antibiotics, the disease is only given ORS for diarrhea are self-limiting. The types of drugs listed in the guidebook treatment have been proven to provide the maximum benefit and the risk to the smallest as well as the quality guaranteed.

CONCLUSION

1. The use of drugs in health centers in 2009 Kotaraja were not rational. This was evident in the high use of antibiotics in respiratory disease non Pneumonia by 80.22%.

2. The used of drugs in health centers in 2009 were not rational. This was evident in the high use of antibiotics in non Specific Diarrhea by 70.48%.

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