
DESCRIPTION OF THE USE OF ANTIBIOTICS WITH PRESCRIPTION AND WITHOUT DOCTOR'S PRESCRIPTION IN ESTER FARMA PHARMACY DELI SERDANG DISTRICT

Dilla Sastia Mara¹, Muharti Sanjaya²
Universitas Efarina^{1,2}

Abstract

Antibiotics are drugs derived from all or certain parts of microorganisms and are used to treat bacterial infections. Antibiotics have long been used to fight diseases caused by bacterial infections. The irrational use of antibiotics will cause resistance problems. Resistance problems due to irrational use of antibiotics, one of which is caused by use that is not in accordance with the patient's condition, which can occur due to the use of antibiotics without a doctor's prescription. The use of antibiotics without a doctor's prescription can potentially pose various risks, including an increase in the number of cases of infection caused by resistant pathogenic bacteria, an increase in the risk of adverse drug events, decrease in the effectiveness of therapy and increase in health costs. This research is a descriptive study with cluster random sampling. The study was conducted prospectively to determine the use of antibiotics without a doctor's prescription and retrospectively to determine the use of antibiotics with a doctor's prescription. The research was conducted in August 2019 at the Laju Farma Pharmacy, Deli Serdang Regency. The results showed that the use of antibiotics with a doctor's prescription at the Laju Farma Pharmacy, Deli Serdang Regency during August 2019 was 90 prescriptions (15.95%) out of 564 prescriptions, patients who used antibiotics without doctor's prescriptions for 72 patients (10.74%) and 670 patients.

Keywords: Antibiotics, Prescription, Non Prescription

INTRODUCTION

Antibiotics are drugs derived from all or certain parts of microorganisms and are used to treat bacterial infections. Some antibiotics kill bacteria and inhibit bacterial growth. The use of antibiotics has long been used to fight diseases caused by bacterial infections (Tripathi, 2008). resistance problem in which bacteria develop genetic ability to become less or insensitive to antibiotics through mechanisms of acquired resistance, transferred resistance and spontaneous mutations Resistance can also be nongenetic when the bacteria are in a resting state but will become sensitive again if the bacteria are active again. Cross-resistance occurs in antibiotics that have almost the same or different chemical structures but almost the same mode of action as erythromycin and lincomycin (Tripathi, 2008). Increased risk of adverse drug events, reduced effectiveness of therapy and increased health costs (Skalet, et al., 2010; Hicks, et al., 2011; Hadi, et al., 2010). The resistance of microorganisms that cause infection to antibiotics is one of the biggest risks that needs to be watched out for in the practice of using antibiotics without a doctor's prescription (Djawaria, et al, 2018)

Based on the above, the researcher is interested in conducting research on the description of the use of prescription and non-prescribed antibiotic drugs at the Laju Farma Pharmacy, Deli Serdang Regency.

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Formulation of the problem

Based on the background above, the problems in this study can be formulated as follows:

1. What is the description of the use of antibiotics with a prescription and without a doctor's prescription at the Laju Farma Pharmacy, Deli Serdang Regency?
2. What is the percentage level of antibiotic use with a prescription and without a doctor's prescription at the Laju Farma Pharmacy, Farma District, Deli Serdang?

METHODS

Types of research

This research is a descriptive study with cluster random sampling. The study was conducted prospectively to determine antibiotics used without a doctor's prescription and retrospective method to determine the use of antibiotics with a doctor's prescription.

Location and Time of Research

Research sites

The research location was carried out at the Laju Farma Pharmacy, Tanjung Morawa District, Deli Serdang Regency.

Research time

The research was conducted in August 2019.

RESULTS AND DISCUSSION

Prescription use of antibiotics

The results of the study provided patient prescription data at the Laju Farma Pharmacy, Deli Serdang Regency during August 2019 as many as 564 prescriptions. As many as 90 prescriptions (15.95%) were given to patients by doctors containing antibiotics. Use of antibiotics with a doctor's prescription

Use of Antibiotics Without a Doctor's Prescription

There were 670 patients who came to the pharmacy to buy medicine for self-medication during August 2019. Patients who used antibiotics without a doctor's prescription during August were 72 patients (10.74%). The use of antibiotics without a prescription was smaller when compared to a study conducted in Surabaya. Djawaria et al (2018) said that out of 267 respondents, 63 patients (23.60%) often used antibiotics without a doctor's prescription, 203 people (76%) rarely used antibiotics without a doctor's prescription and 1 patient (0.37%) did not answer questions. (Djawaria, et al, 2018). Use of antibiotics without a doctor's prescription at the Laju Farma Pharmacy, Deli Serdang Regency.

The results showed that the most use of antibiotics without a doctor's prescription at Laju Farma Pharmacy was the use of 130 capsules (23.7%) of cefadroxil antibiotics, followed by the use of 110 tablets (20%) of Amoxicillin antibiotics, 90 tablets of ciprofloxacin (16.4%), chloramphenicol and ampicillin each 50 tablets/capsule (9.1%), Cefat syrup 11 bottles (2%) and Amoksan syrup 8 bottles (1.5%).

Complaints experienced by patients while using antibiotics are caused by fever, flu and cough. Self-medication using antibiotics by patients at the Laju Farma Pharmacy is an irrational use of antibiotics. The patient does not know the exact cause of his illness. Fever is a symptom of a disease that is not necessarily caused by a bacterial infection. The use of chloramphenicol becomes very irrational when the patient does not know for sure the

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cause of the increase in the patient's body temperature whether it is caused by an infection with *Salmonella* sp which is the cause of typhus. The use of the antibiotic chloramphenicol is the drug of choice which is only given when the patient has typhus or meningitis.

Giving antibiotics to patients who have flu and cough is also irrational. Flu and cough are generally caused by the presence of the influenza virus. Antibiotics are not effective against infections caused by viruses, fungi, or other non-bacterials, and each antibiotic varies widely in effectiveness against various types of bacteria. Antibiotics can be obtained with a doctor's prescription and must be used rationally, namely the right treatment, the right dose, the right method of use, and the right time of use. Patients must be disciplined when undergoing treatment with antibiotics. Antibiotics must be consumed until they run out because patient adherence to taking antibiotics determines the success of therapy. Misuse of antibiotics can lead to antibiotic resistance (Asharina, 2017).

CLOSING

Conclusion

Based on the results of research conducted on the description of the use of antibiotics with a prescription and without a doctor's prescription, it can be concluded that:

1. The use of antibiotics with a doctor's prescription at the Laju Farma Pharmacy, Deli Serdang Regency during August 2019 was 90 recipes (15.95%) out of 564 recipes.
2. Patients who used antibiotics without a doctor's prescription at the Laju Farma Pharmacy, Deli Serdang Regency, were 72 patients (10.74%) of 670 patients.
3. The highest use of antibiotics prescribed by a doctor at Laju Farma Pharmacy was Cefadroxil with 22 prescriptions (24.4%), followed by Ciprofloxacin and Cefixime with 17 prescriptions (18.9%), Azithromycin with 16 prescriptions (17.8%), Amoxicillin 10 prescriptions (11.1%) Amoxicillin and Clavulanic Acid 4 prescriptions (4.4%), Erythromycin 3 prescriptions (3.3%) and Clarithromycin 1 prescription (1.1%).
4. The most use of antibiotics without a doctor's prescription at Laju Farma Pharmacy was the use of 130 capsules (23.7%) of cefadroxil antibiotics, followed by the use of 110 tablets (20%) of Amoxicillin antibiotics, 90 ciprofloxacin tablets (16.4%), 50 capsules each for chloramphenicol and ampicillin (9.1%), 11 bottles of Cefat syrup (2%) and 8 bottles of Amoksan syrup (1.5%).
5. the Angiotensin Receptor Blocker (ARB) class of Irbesartan type 15.15% was used by 35 patients, the Beta Blocker class of Bisoprolol type 6.49% was used by 15 patients, then
6. the Beta Blocker class of Propranolol type 1.73% was used by 4 patients as well
7. Calcium Channel Blocker (CCB) class of Nifedipine type 1.7306 is used by the patient.

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