

Misuse of Antibiotic Azithromycin And attitude of community pharmacists

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Abstract—*Background* The study came because of the frequent randomization of antibiotics, and here we talked about azithromycin, which has many risks to human health and the immune system in the first place., *Objective:* Evolution how the pharmacist well information is sufficient about azithromycin *Detection of Azithromycin exchange in a scientifically correct manner* *Identification the complications arising from indiscriminate use* *Determine patient awareness of the risk of using azithromycin at random* *Methods:* This study was conducted on pharmacists, where questions were distributed to him in the form of a questionnaire. The questions varied between the duration of treatment dispensing and its dispensing without a prescription and drug interactions, for example its interaction with heart medications such as digoxin and blood thinners such as warfarin, migraine medications such as ergotamin. The answers were collected, counted, and expressed by calculating the percentage ratio After collecting and analyzing the data, *Results:* we got the results we notice through the percentages of each answer to a question, for example, in the rate of exchange of azithromycin on a daily basis, 39% was the largest rate of exchange. Also, the average age of patients consuming this drug was 66% of different ages. The non-prescription drug order came at a rate of 79%. Also, the drug dispensing for migraine patients came at 62%. The drug was dispensed with anti-clotting drugs by 54%, and the drug was dispensed with drugs for heart muscle failure or for heart patients, 73.5%. *Conclusions:* From the results it was found that there is random dispensing and the absence of a healthy medical mechanism for administering antibiotics, and here we are talking about azithromycin. Therefore, it is necessary to legalize the use of the antibiotic azithromycin and study all drug information about it, and this leads to raising the health level of people and developing knowledge of pharmacists .

Keywords- *Antibiotics, Azithromycin , pharmacist awareness..*

I. INTRODUCTION

In this research, we talked about the common mistakes in dispensing the antibiotic azithromycin, as the random consumption of azithromycin and the risks involved in this use we have studied and found out the extent of its consumption among patients and whether patients take it without a prescription also Does the pharmacist dispense azithromycin without a prescription and for a period The supposed treatment he took and its relationship to some diseases such as heart failure, blood clotting, migraines, and the effect of eating on the effectiveness of azithromycin the first time in 1980 and it

is an antibiotic belonging to the group of antibiotics called macrolides. These drugs disrupt the process of producing proteins in bacteria, but not in humans It is recommended to take the dose on an empty stomach (an hour before or two hours after food). It is forbidden to use azithromycin with ergot compounds (ergotamine and its derivatives) because it causes what is known as ergotoxicity if used together. (Giorgiopp2017). In this study, we applied a questionnaire method and distributed it to a group of pharmacists to obtain sufficient information about the extent of the pharmacist's knowledge of sufficient information about Azithromycin previously mentioned. The importance of the research lies in the statistical extent of knowing all the medical details of azithromycin and the extent of its effect on the patient's health. *Aims of study:* 1.Evolution how the pharmacist well information is sufficient about azithromycin. 2.Detection of Azithromycin exchange in a scientifically correct manner. 3.Identification the complications arising from indiscriminate use.4.Determine patient awareness of the risk of using azithromycin at random.

II. METHODS AND MATERIALS

A. Study setting and duration: :

This study was conducted in private pharmacies, and the duration of the study was from November 26, 2023 until December 28, 2023, and that data were collected through the pharmacists' answers to the questionnaire. The questionnaire was distributed to pharmacists.

B. Statistical analysis

The quantitative description was used to limit the answers to the questionnaire, using the percentage of the questionnaire to see the variance of the answers and obtain an explanation from them to understand the research.

III. RESULTS AND DISCUSSION

Table (1) and figures (1) showed the Explanation of some of the results, we notice through the percentages of each answer to a question, for example, in the rate of exchange of azithromycin on a daily basis, 39% was the largest rate of exchange. Also, the average age of patients consuming this drug was 66% of different ages. The non-prescription drug order came at a rate of 79%. Also, the drug dispensing for migraine patients came at 62%. The drug was dispensed with anti-clotting drugs by 54%, and the drug was dispensed with drugs for heart muscle failure or for heart patients, 73.5%. By listing some of the results of the research, we would like to compare them with some of the studies that have been listed above. For example, when talking about random dispensing of azithromycin without a prescription, a study in Spain simulates the percentage of pharmacies that dispense antibiotics without a prescription for different diseases. Take, for example, the percentage of drug consumption for inflammatory patients. 79.7% .(Cachafeiro . *et al* .2019). compared to 58.3% in the research. Also, the interaction of azithromycin with heart medications, a study in America reported that 1 in 5 people died due to an irregular heartbeat, which led to death,(Gowtham *et al* .2014) . In the study, 37.8% of pharmacists dispense azithromycin to heart patients. As well as the interaction of azithromycin with warfarin, where the percentage of pharmacists who dispense them came with some 54%, this is due to the seriousness of this reaction to the increase in the rate of liquidity in patients, ." (Adam G, *et al*.2014) as was mentioned in previous studies.

TABLE I. The Percentage ratio of different answer of questioners.

Questioners	Yes	No
15-25 Dispense medication without a prescription	58.3%	14.6%
Patients come to order medication without a prescription	79%	28.8%
Ask the patient that he has any chronic disease	75%	25%
Dispense medication for migraine sufferers	62.5%	37.5%
Dispensed with warfarin	54.1%	45.8%
Taking the medicine in terms of its timing with meals	95.8%	4.1%

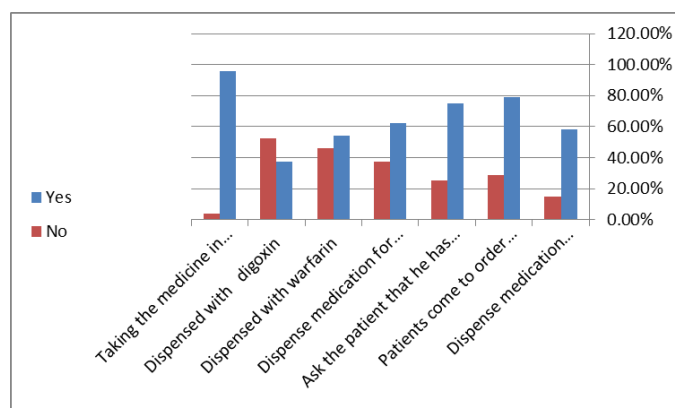


Figure (1). show the Percentage ratio of different answer of questioners.

IV. CONCLUSION

Through the study and comparisons, it was found that there is insufficient awareness of the importance of the risk of azithromycin, as it was not administered according to the correct criteria. Some recommendations can be summarized in the following points :1-Preserving the immune system, by committing to taking the antibiotic when necessary, due to the presence of severe infections, especially in light of the spread of epidemics and the inability of the body to resist diseases2-Full or comprehensive knowledge of drug interactions with azithromycin is very important because it may lead to patient death or serious complications.3-The pharmacist must explain the details of taking the treatment to the patient, even if the patient does not ask him.4-Also, alerting the patient to the necessity of taking the treatment on time to obtain a quick response to treatment, not to repeat the antibiotic, and to alert the patient to the danger of repeated treatment without consulting a medical or a pharmacist.

5-Explain and clarify all information about azithromycin through social media pages and distribute leaflets in public places such as universities, government institutions and public markets to raise people's health awareness.

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