



# Hospital antibiotic prescribing patterns in primary health care centre at Suryansh Arogya Shala Ayurveda hospital and research centre JVWU. Jaipur Mahla.

<sup>1</sup>Sarila, <sup>2</sup>Dr. Dharmendra Ahuja, <sup>3</sup>komal Gupta, <sup>4</sup>Akhilesh Sengar <sup>5</sup>Radha Rani, <sup>6</sup>Anshul Saini, Jayoti Vidyapeeth women's university Jaipur.

<sup>1</sup>Sarila student, <sup>2</sup>prof. Dr. Dharmendra Ahuja dean and director of FPS at [JVWU]. <sup>3</sup>Komal Gupta MSC Biotech student, <sup>4</sup>Akhilesh sengar M. pharm. [PCO] student. <sup>5</sup>Radha Rani student, <sup>6</sup>Anshul Saini [associate prof.]

Department of pharmaceutical science PCO [JVWU] Jaipur.

## Abstract

Objectives: the main objectives of this research paper are to control inappropriate use of antibiotics. The study contains an observational study of antibiotics prescribing patterns conducted over 8 months. In this study there are 280 patients who were prescribed with antibiotics from different departments of the hospital. Data was collected from the pc, self-register, patients chat etc. Present study, evaluate and found the maximum number of the patients belonged to the age group, 18to40.the ration of female patients more than the male. More likely adult. Among all the group of antibiotics was used in this article. Quinolones, [16%], macrolides, 8%, cephalosporin [20%] antifungal [15%], aminoglycoside, 12%, antimalarial 5.44% penicillin 8.78% etc. how to collect prescription? Which common antibiotics are used in present study; its methodology everything's are mention in the article. Also, origin of original article is given here.

**Key words;** observational study, departments, antibiotics, pattern, aminoglycoside, quinolone, penicillin, antimalarial.

## Introduction.

Antibiotics are one of the most important agents which are used in reducing infection. These are those agents in the field of medicine that work against microorganisms, and germs caused by bacteria, but nowadays irrational antibiotic use may result in increased cost of treatment, (D-DI) drug-drug interactions, and also cause severe ADR. Reaction. The aim of the present study is to assess the pattern of antibiotic usage in the general medicine department of a primary healthcare hospital in Jaipur. the main objective of the study was to resolve the average number of antibiotics prescribed per prescription, to identify the indication for which the antibiotics were commonly used and to resolve the most commonly prescribed antibiotic in primary health care hospitals. this is a prospective observational article. about 280 patients who were prescribed antibiotics were included in the article. the data on antibiotic-containing prescriptions from each patient were collected from inpatients. The study was carried out from august to april 2022. out of 180(65%) prescriptions were a single drug therapy and 100(50%) prescriptions had multiple antibiotics.

Actually, infection is a common disease no one can be serious about it. That's why the main cause of spreading infection, the discovery of antibiotics is one of the miracles for the patients, in ancient time according to the historical background of antibiotics, researchers used complete part or extracts of herbs that gives the best result against infection. If we talk about allopathy which comes from the pharmacy play huge role in the daily life not an easy task. In Our Arogya Sala researchers, pharmacists and physicians give the new birth for the antibiotics. as current scenario in the pandemic pharmacist invents the vaccine which was very helpful to entire the world.

Antibiotics like azithromycin, ofloxacin levofloxacin, ciprofloxacin penicillin's, cephalosporins, ceftriaxone. was used most. in the Arogya Shala hospital Jaipur. I was collecting the information from the computer, register and carbon copy of prescribing prescription.

## Prescription collection;

prescription was collecting from the different department of the hospital. Like general surgery, general medicine department, orthopaedics, gynaecology, Ent, ophthalmology, obstetrics, paediatrics etc. from the general surgery department I was collect 280 prescribing prescriptions in which quinolones and fluoroquinolones prescribed most. Second, I was collect 35 prescription from

general medicine department, from orthopaedics 50 from the optahlmology25 from gynaecology 40 from obstetrics 25 from paediatrics,30 prescriptions. And psychiatric 12, pulmonary 30and dermatology23.

Table 1.

s.no.	departments	N=prescriptions.
1	General medicine	35
2	orthopaedics	50
3	gynaecology	40
4	ophthalmology	25
5	dermatology	23
6	pulmonary	30
7	paediatrics	30
8	obstetrics	25

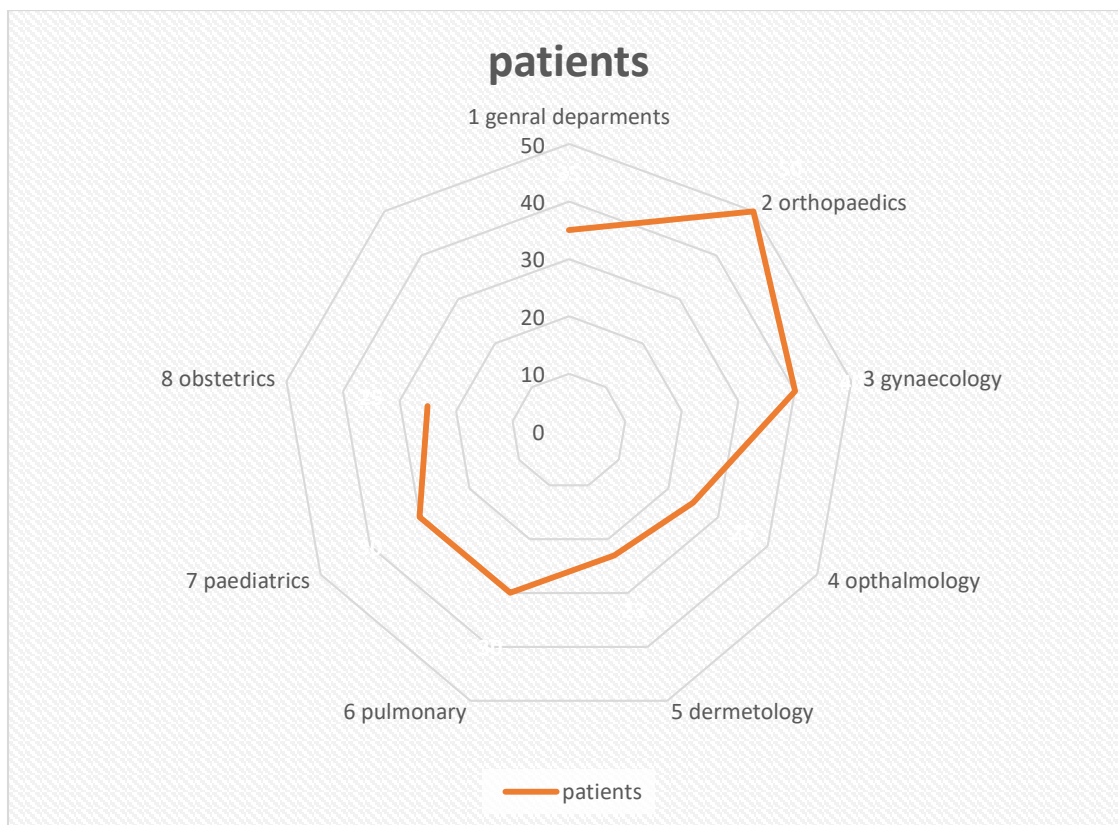


Fig.1.pateints as per departments.

The unforgetting discovery of penicillin by sir alexander Fleming in 1928 was the being of antibiotics revolution, which play a vital role in modern medicine.[1] antibiotics have effectively provoked the life expectancy. Now a day’s antibiotics are most prescribed drugs in a hospital all over the world. This study provides you inappropriate use of medicines, which increased drug resistance.in future which may leads to organ damage of the body. That’s why rational use of antibiotics is a major health desire. Trending study of pharmacovigilance helping to monitoring, the adverse drug reaction, effect, efficacy, and safety of the drug. Pharmacovigilance provides proper medication to the patient, reduce error, makes patient comfortable with their treatment

Most common prescribed antibiotic

antimicrobial antibiotics

%of prescription

Cephalosporin

25.50%

aminoglycoside

13.34%

antifungal

15%

antimalarial

7%

quinolones

12.47%

macrolides

6.29%

others

5.45%



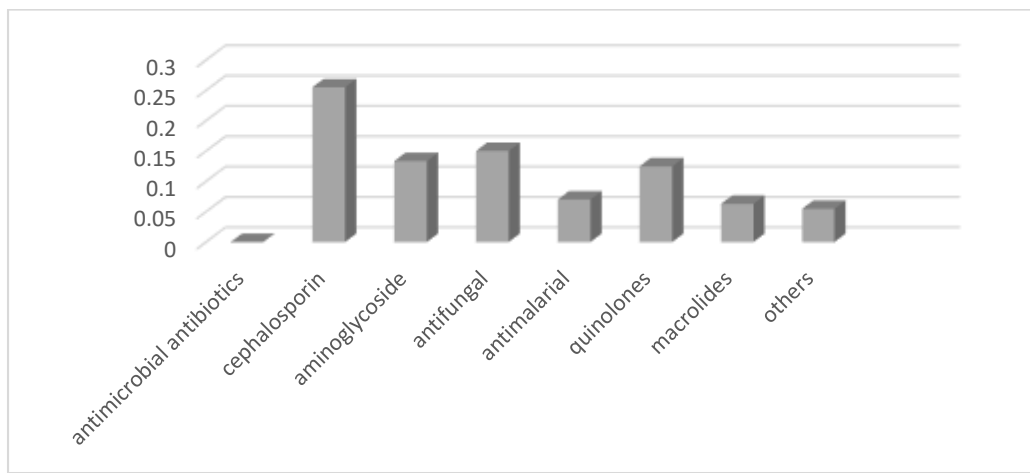


Fig.2; %of used antibiotics.

According to current study 87% of the antimicrobial prescriptions were prescribed each year. Schedule H1 was introduced in India which comes under D and C act 1945 by the regulatory agencies to reduce the irrational use of antibiotics. [2] Irrational uses of drugs seen in rural areas because they had not known the medication which we are taking is correct or not they only know this is a medicine and help us to treat our disease. They purchase antibiotics without prescription or without physician which comes into irrational use of medicines. Various drug prescription problems have been identified in health sectors especially in developing country. [3] India research state that around 20,000 neonatal deaths each year due to unawareness regarding infection. Over 40% deaths occurring due to inappropriate use of antibiotics. It is a huge responsibility of physicians and pharmacist to evoke and motivate the how to use? And when you use?

## Methodology

This study was performed at primary health care centre at Suryans Arogya Shala research hospital Jaipur. [JVWU]. This was an observational study of prescribing antibiotic pattern performed over 8 months, in which 280 patients are involved. Data was subjected to analysed by performing illustrative statistics using the Microsoft excel software. The ration of the patient's female was more than that the male especially adult. Prescribing antibiotics are ofloxacin, ciprofloxacin, levofloxacin, chloroquine, primaquine, ketoconazole, itraconazole, vancomycin, azithromycin amoxicillin, ampicillin, penicillin, cefixime. Cefotaxime etc.

Patients	age
male	35to 45
female	30to 40
adults	18 to 28

Table 2.

The antibiotics were taken by male age between 35to45, female was 30to 40and adults 18to 28respectively.

Almost Similar results were found in studies conduct by Ramnath et al ...,2013.[4], Akram et al. [2015] [5]and Shirin Shamsi Jolanda et al. [2019]. from the all groups of the antibiotics penicillin's, cephalosporine quinolones and aminoglycoside prescribed most in the present study. Similarly, Gopalakrishnan et al, revealed the antibiotics prescribed,49.2% and injection gentamicin 31.7%were most common commonly prescribed .and co-trimoxazole was least prescribed antibiotics 11.5% [6] but in this study there is minor difference in prescribing antibiotics in this study amoxicillin, cefixime, and azithromycin prescribed most. From rural area and for girls living in hostel [JVWU] university. That's why adult girls more involved in prescribing prescriptions. Other than that, comes from irrational use of antibiotics, due lack knowledge. Continuity of medicines Cause resistance which affects other organs of the body. Side effects some come like itching, redness of upper layer of skin, tiredness and so more.

## Conclusion;

This study was performed at primary health care centre at suryans Arogya Shala research hospitals Jaipur. This was an observational study of prescribing antibiotics patterns performed over 8 months. Over use of anything may always Cause harmful effects, but humans are not a thing, awareness is the first thing to stop the over use of the antibiotics. resistance the of the medication may develop their effects at any time of the life period. Sometime we don't know what is going on and we ignore it. Which will become the main cause of sever condition this study was performing in the last 8 months and definitely we result how much antibiotics used in this paper. Adult body may suffer most from the prescribing antibiotics because of laziness the never do extra physical things for their body. When they become ill suddenly, they go to the physician without thing that medication is not a good source to fit your body it is a toxic material for all participates specially adults. This best to save the peoples life.

### Authors suggestion

I am not saying that prescribing antibiotics are wrong but the way to uses of antibiotics is wrong. It is major responsibility of the physicians and pharmacist that, never allow without prescriptions medication to the public, a minor mistake can lead to patients' death. We will try to overcome the irrational use of antibiotics. Otherwise, it will become common news to patients' death for prescribing antibiotics. As a pharmacy profession we should all always remember one thing that we have power to motivate the people to do something for them. If there will no public so, what is this stream for. don't forget it is our identity.

### Origin of research paper.

This study was performed in Suryans Arogya Shala Ayurvedic hospital at Jayoti Vidyapeeth women's university Jaipur. [JVWU] is the India's first private women's university established by Govt. of Rajasthan approved by UGC. Here 3000 or more than 3000 girls appear in different departments for their study. Belong to almost all states of India. Randomly me and my friends were thinking about prescribing pattern of antibiotics. then we reached at hospital and discuss the all things about the research paper to the head of the hospital. Then the nursing staff told us here not university girls are come local male and female are also come for their treatment, and yes it is a good work for the awareness of the regular use of the antibiotics.

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