



## BALANCING THE ACT-SELF MEDICATION WITH ANTIBIOTICS

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Article Received on 23/06/2019

Article Revised on 13/07/2019

Article Accepted on 03/08/2019

### ABSTRACT

Self-medication is defined as the use of drugs for the treatment of self-diagnosed disorders or symptoms or the continued use of prescribed drug for chronic or recurrent disease or symptoms. In developing countries like India, most illnesses are treated by self-mediation. Demerit in the self-medication seen through missed diagnosis and delays in appropriate treatment. Maximal antibiotic treatment for all patients with a bacterial infection is non-viable, because it will rapidly induce resistance and exhaust this finite resource. Excessive use of antibiotics and their influence on the community over a period of time discussed in this paper.

**KEYWORDS:** Antibiotics. Self – medication.

### INTRODUCTION

India is one of the largest consumer of antibiotics in the world. Antibiotics misuse and overuse is rampant. As a result 'Super bugs' that are resistant to all known types of antibiotics are starting to thrive. Infection-causing pathogens have been pinging away at humanity's defenses ever since Penicillin was discovered in 1928. Prolonged exposure to any drug allows certain strains of bacteria to acquire resistance, through natural evolutionary process. India where poor public health infrastructure, a high burden of disease, and cheap unregulated sales of antibiotics has created ideal conditions for a rapid rise in resistant infections.

### DISCUSSION

India is in the center of a perfect storm, since antibiotics have contributed significantly to a broad rise in life expectancy, and are used for everything from preventing infections during surgeries to protecting cancer patients undergoing chemotherapy. Within India, several bacterial organisms which have become resistant to more than one variety of antibiotic drug have already been identified. Resistance to last resort antibiotics is also increasing. Diseases like pneumonia and typhoid have become difficult to treat. In 70 % of the cases, treatment begins with more expensive, third generation drugs which are administered for a longer duration than before.

As per the 2017 scoping report, there is high resistance to broad-spectrum antibiotics like Fluoroquinolones and Cephalosporins which are most commonly prescribed for respiratory and urinary tract infections. Antibiotics

continue to be prescribed for common cold or flu, for which they are not even required.

India's antibiotic consumption has increased by 103 % from 2000 to 2015 the highest in low and middle – income countries. The average amount of antibiotics consumed by 1000 inhabitants in India every day also increased 63% between 2000 and 2015.

The increase in antibiotics consumption is worrying as antibiotics unnecessarily expose us to side effects. And each time we use antibiotics, few superbugs, including bacteria, which are able to survive antibiotics, begin to thrive. Over time the entire population of bacteria is made up only of these superbugs and our antibiotics no longer work.

### USE AND ABUSE OF ANTIBIOTICS

|               |             |                                                      |
|---------------|-------------|------------------------------------------------------|
| Ciprofloxacin | Diarrhoea   | Resistance to these antibiotics is highest in India. |
| Ofloxacin     | Cough       |                                                      |
| Erythromycin  | Fever       |                                                      |
| Azithromycin  | Common cold |                                                      |

### RESULTS

A sample survey made in the college among the students of biological sciences during the 1<sup>ST</sup> week on July. A sample of 150 students interacted and the results were discussed here.

- 1. Basic knowledge on the use of antibiotics:** 70% of the respondents mentioned that antibiotic is just like drug which cures the disease. Respondents don't know the mechanism of antibiotic activity and the

long term influence on the immune system. Rest 30 % mentioned that with the guidance of the doctor and parents they have some idea about the antibiotic action.

2. **Use of antibiotics as per prescription:** 80% of the respondents mentioned that as the severity of the disease decreases the use of antibiotic dose as per prescriptions neglected. At times the respondents stop the administration of the antibiotics in midway without the course completion. The rest mentioned that they follow the dose and administration as per the prescription.
3. **Knowledge on the antibiotic resistance:** 90% respondents have no idea about the antibiotic resistance. They mentioned that the mg mentioned on the capsule is the dose only. It is alarming to note that the administration of antibiotics without any knowledge on the antibiotic resistance is to be addressed at the community level.
4. **Knowledge on the un used left over antibiotics:** 65% of the respondents mentioned that the left over antibiotics will be preserved for future use when they suffer with any ailment.
5. **Administering the left over antibiotics by self-medication:** 75% of the respondents expressed the opinion that they administer the left over antibiotics as self-medication.

## CONCLUSION

Self-medication with antibiotics greatly affects the immune system of individuals. It is ironical that in this age of information, many people in this country are unable to educate themselves about health matters. They are ill informed about the illness, about the fact that a common cold is caused by virus and thus does not need to be treated with antibiotics. Peoples ignorance is not just about the cause of disease; it also about the medicines that they consume. They may heard the term "antibiotic", but often do not know that it is prescribed for an illness caused by bacteria, and they also does not know that it is meant to be taken for a fixed period of time.

Pharma industry and medical representatives promote irrational use of antibiotics. There are hardly any Government regulations on antibiotic use in India. Policies meant for implementation in hospitals are not strictly implemented. Antibiotic disposal is to be addressed properly. It is interesting to note that there are number of ethical issues in inappropriate antibiotic use. Huge campaign is needed urgently at the community level to address these issues in India.

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