

48. **ANTIBIOTIC USE AWARENESS AND PRACTICES IN THE INDIAN COMMUNITY DURING LATER STAGES OF COVID-19 PANDEMIC: A CROSS-SECTIONAL SURVEY**

Hiyanoor Ghosh¹, Kanchan Gupta².

¹Third-year Medical Student. Dayanand Medical College and Hospital, Ludhiana, Punjab, India.

² MBBS, MD (Pharmacology). Professor, Department of Pharmacology, Dayanand Medical College and Hospital, Ludhiana, Punjab, India.

BACKGROUND: Irrational prescription of, and self medication with antibiotics is a rampant problem in LMIC'S like India. The prescription of antibiotics for symptoms similar to Covid-19 infection has aggravated the problem of antibiotic overuse, further worsening antimicrobial resistance. This study aims at understanding not only the extent of overuse, but also the social patterns and causes of overprescription or self medication of antibiotics in India. **METHODS:** A cross-sectional survey of the knowledge, attitude and practices on antibiotic use was conducted from September to October, 2022, using a Google form questionnaire. A virtual snowball technique was used to recruit respondents. **RESULTS:** A total of 309 responses were received (56% female and 44% male). 59.5% of the respondents were between 15 to 30 years. Surprisingly, inspite of a majority of respondents (around 70%) having a health sciences background, 67.8% of respondents falsely believe that antibiotics speed up recovery from most coughs and colds. 94.8% of respondents had used antibiotics in the last one year.17.2% of respondents had taken antibiotics without the prescription of a doctor. The most common antibiotic used on prescription and self medication was Azithromycin. Only 20.7% of respondents took antibiotics on suspicion of having Covid-19, with the most common one being Azithromycin. **CONCLUSION:** The study brings to light trends in the awareness and usage of antibiotics with greater emphasis on the Indian medical community. The findings of this study can be used to formulate a more effective Antimicrobial Stewardship Programs to curb antibiotic overuse. The use of antibiotics for self-limiting indications like cough, cold and sore throat needs to be restricted through stricter regulations. The study highlights that a greater knowledge on antibiotic use does not necessitate better attitude towards their cautious and rational use, nor does it guarantee a supportive attitude towards regulations on antibiotic dispensing. In spite of it's significant cardiovascular adverse drug reactions, Azithromycin was found to be the most commonly used antibiotic in our study. Relatively lower rate of self-medication with antibiotics was seen in our study, which might be due to a greater percentage of respondents with a healthcare background, thus exhibiting positive behavior practices on antibiotic use.

Table. Attitude of Respondents regarding Antibiotic Use.

S.No.	Attribute	Frequency (%)
1.	I always complete the course of treatment even if I feel better.	
	Agree	233 (75.4%)
	Disagree	76 (24.6%)
2.	It is good to be able to get antibiotics from relatives or friends without having to see a doctor.	
	Agree	269 (87.1%)
	Disagree	40 (12.9%)
3.	I prefer to use antibiotics when I have a sore throat/cough for more than a week.	
	Agree	193 (62.5%)
	Disagree	116 (37.5%)
4.	Did you take antibiotics on suspicion of COVID-19?	
	Yes	64 (20.7%)
	No	245 (79.3%)
5.	Were you prescribed antibiotics by your doctor after testing positive for COVID-19?	
	Yes	64 (20.7%)
	No	93 (30.1%)
	N/A	152 (49.2%)

Key words: Drug Resistance; Microbial; Antimicrobial Stewardship; Health Knowledge; Attitudes; Practices; COVID 19 (Source: MeSH-NLM).