



ST. JOSEPH'S COLLEGE OF PHARMACY

Cherthala-688524, Kerala, India

PROJECT REPORT

On

**“A COMMUNITY SURVEY ON KNOWLEDGE AND
AWARENESS ON ANTIBIOTIC USE AND RESISTANCE”**

[Major Domain: Pharmacy Practice]

As per the syllabus prescribed by Kerala University of Health Sciences and Pharmacy Council of India
in


Eighth Semester B. Pharm

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ABSTRACT

Background: Antibiotic resistance is a growing concern in the medical field. Overuse of antibiotics has led to the development of antibiotic-resistant bacteria, which can be difficult or even impossible to treat. In this project, we aim to explore the current state of antibiotic use and resistance, and to investigate potential solutions to this problem by conducting a community survey among 106 individuals at Cherthala, also make them aware on the same by providing the leaflets on antibiotics and its resistance. **Methods:** A cross-sectional study was conducted including subjects of any gender and age group above 18 years of age. Data collection was done between 1 April 2023 and 20 June 2023. **Results:** Around 80% of people were uncertain of the condition for which an antibiotic is used. Only 25 people admitted the fact that they do not complete the course of antibiotic. 75% of people participated in the survey was aware that completion of antibiotic course are essential. Around 12 people faced some kind of side effects. Around 23% failed to follow the instructions, out of that 23%, most of them stopped the medicines when symptoms subsided and a few forgot to take medicines properly, only one person faced allergic reaction and stopped the therapy. **Conclusion:** The current situation of antibiotic usage and resistance is not well understood.

KEY WORDS

Antibiotics; antibiotic resistance; antibiotic misuse; antibiotic therapy; survey

INTRODUCTION

Antibiotics are a type of antimicrobial drug that are used to treat bacterial infections. They work by either killing the bacteria or inhibiting their growth^{[1][2]}. Antibiotics can be classified into several categories based on their mechanism of action, chemical structure, and spectrum of activity. Some examples of antibiotic classes include penicillins, cephalosporins, tetracyclines, macrolides, and aminoglycosides.^{[3][4][5]} However, it's important to note that antibiotics are not effective against viral infections, such as the common cold or flu.^{[6][7]} Additionally, overuse and misuse of antibiotics can lead to the development of antibiotic-resistant bacteria, which can be difficult to treat. That's why it's important to only take antibiotics when they are prescribed by a doctor, and to always finish the full course of antibiotics even if you start to feel better^{[8][9]}.

The consequences of bacterial infections have been curtailed by the use of antibiotics. Antibiotic revolution began in twentieth century^[10]. Excessive use of antibiotics led to evolution and acquisition of antibiotic resistant genes^{[8][11]}. Antibiotic misuse and over-prescription have created a driving force influencing antibiotic resistance^[12]. Even in the twenty-first century people are unaware of antibiotic resistance and misuse/overuse. In the survey conducted on antibiotic use led to conclusion that people are ignorant about the use of antibiotics, they have least knowledge on whether to use antibiotics for bacterial or viral infections. The issue of antibiotic abuse can only be sufficiently improved and risk of antimicrobial resistance, which leads to serious social and medical problems, can be eliminated by proper educational intervention for both patients and prescribers^[13].