

UNIVERSITI TEKNOLOGI MARA

**ANTIBIOTIC SELF-MEDICATION AMONG
PHARMACY STUDENTS, HEALTH SCIENCE
STUDENTS AND NON-MEDICAL STUDENTS IN
UITM SELANGOR, PUNCAK ALAM KAMPUS**

WAN NURFATIN NAJWA BINTI WAN YAHAYA

**Dissertation submitted in partial fulfilment of the requirements for the
Bachelor of Pharmacy (Hons.)**

Faculty of Pharmacy

JUNE 2017

ACKNOWLEDGEMENTS

Praise to Allah Almighty because of His permission this thesis can be completed within the time given. First and foremost, I would like to take this opportunity to express my sincere gratitude to my supervisor, Mr. Muhammad Anwar Nawab Khan, lecturer in Department of Clinical Pharmacy, Faculty of Pharmacy, UiTM Puncak Alam, for his idea, guidance, and continuous support throughout the completion of this study. My special thanks to all the students who participated in this research for the willingness to spend time to complete the survey form. This study might not be success without their participation. I also would like to thank my friends for their help and support throughout the research period. Last but not least, my deepest gratitude to my family for their continuous support throughout my life.

Thank you very much.

TABLE OF CONTENT

APPROVAL SHEET	ii
AUTHOR’S DECLARATION	iii
ACKNOWLEDGEMENTS	iv
TABLE OF CONTENT	v
LIST OF APPENDICES	vii
LIST OF TABLES	viii
LIST OF FIGURES	ix
ABSTRACT	x
CHAPTER 1: INTRODUCTION.....	1
1.1 BACKGROUND	1
1.2 OBJECTIVES OF THE RESEARCH.....	2
1.2.1 Main Objective	2
1.3 RESEARCH QUESTIONS	3
1.4 HYPOTHESIS.....	3
1.5 RESEARCH PROBLEM	4
1.6 SIGNIFICANCE	4
CHAPTER 2: LITERATURE REVIEW.....	5
2.1 BACKGROUNDS.....	5
2.2 EPIDEMIOLOGY	6
2.3 CLASSIFICATION OF ANTIBIOTICS	12
2.4 ADVANTAGES OF SELF-MEDICATION.....	14
2.5 DISADVANTAGES OF SELF-MEDICATION	15
2.6 RISK FACTORS OF ANTIBIOTIC SELF-MEDICATION	17
2.6.1 Patient Behaviour	17

ABSTRACT

Antibiotic is a medication that is used to treat bacterial infection. The purpose of this study is to assess the knowledge on antibiotic medication and also the antibiotic self-medication behaviour among the students in UiTM Selangor, Puncak Alam Campus. A cross sectional study by using convenience sampling was conducted among undergraduate students from eight different faculties in UiTM Puncak Alam. A number of 430 questionnaires were distributed among the undergraduate students. The response rate was 81.4%. The questionnaire consisted of 30 items divided into 3 parts which were part A for demographic profile, part B for knowledge on antibiotic medication, the part C is for antibiotic self-medication behaviour. The data were analysed by using Statistical Package for the Social Sciences (SPSS) version 21.0. Chi square test was used to determine the significant association between the tested parameters with p value less than 0.05. The study revealed that students have low knowledge on antibiotic medication. Although antibiotic is a drug that can only be get by prescription, there is still students that buy and get the antibiotic from community pharmacies without any prescription. There is action need to be taken, to prevent serious problem that arising nowadays, such as antibiotic resistance.

CHAPTER 1: INTRODUCTION

1.1 BACKGROUND

There are numerous types of medication prescribed to the patient who were diagnosed with disease. Among the medications that are often prescribed is the antibiotic. Antibiotic is used to fight bacterial infection. By understanding the function and structure of the pathogenic bacteria, we can understand how antibiotics inhibit or kill the bacteria. According to Alan (2012), to understand how antibiotics work, three aspects of bacteria must be understood which are bacterial replication, the bacterial cell envelope and the biosynthetic process within the bacteria. Antibiotics can be classified into several groups which are the β -lactam agents, macrolides, tetracyclines, aminoglycosides, glycopeptides and fluoroquinolones. Antibiotics have different bacterial components as their target including the cell wall by the β -lactams and glycopeptide. The ribosome of the bacteria is targeted by the macrolides, aminoglycosides and the tetracycline while the fluoroquinolones target the bacterial DNA (William, Dlawer A., & Tim, 2005). Antibiotics can also be classified based on their spectrum whether narrow or broad-spectrum and also whether it is bactericidal or bacteriostatic. The dosage forms available for antibiotic medication are oral dosage form, intravenous and also topical. According to William, Dlawer A., & Tim, (2005), antibiotics are mostly given orally, but intravenous therapy is used when high dose are required for serious or deep-seated infections or when oral preparations are not available as for the topical usage is used for certain superficial infections.