## **Knowledge and Attitudes towards Antibiotic Usage**

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## **ABSTRACT**

**Background:** Antibiotic resistance is a global problem, and the World Health Organization (WHO) has made this problem one of its priorities for solving. Repeated and improper use of antibiotics is the main reason for the bacteria's resistance to the drugs.

**Objectives**: This study aimed to evaluate the knowledge, and attitudes of Palestinians regarding antibiotic usage and awareness about resistance.

**Methods:** This was a cross-sectional study that targeted Palestinians from different cities. We used an online questionnaire which distributed randomly for data collection. The questionnaire consists of 52 questions to measure the knowledge, attitudes, and awareness of antibiotic use and resistance. Statistical Package for the Social Sciences (SPSS) version 25 was used to analyze the data collected.

Results: A total of 744 participated in the study and completed the questionnaire, and the majority of them (60.5 %; n= 450 out of 744) were from the Hebron Governorate. The major of the respondents also were females (n= 653, 87.8%) and their age between 20-35 years old (n= 498, 66.9%) with a bachelor degree (n= 502, 67.5%). The majority of them (75.5%, n= 560) think that antibiotics should be given only by prescription, and about half of the people (52%= n= 387) believe that antibiotics are not safe. Most participants relied on the physician for dispensing the antibiotic (60.1%, n= 455) but the same percentage of them use leftover antibiotics that have been used previously. Four hundred eighty-three (65%, n= 483) who completed the questionnaire heard about the antibiotic resistance term from medical staff, and their main primary sources of information about antibiotics and medicines were from health staff too (50%, n= 371), then internet (25%, n= 185). Some people (16%, n= 119) mentioned that pharmacists have a role in educating them and providing all the necessary information, or advice about the use of medicines and the dangers of medication misuse. Most of the participants obtained the antibiotics by prescription from a doctor (n= 339, 45.6%), then from the Pharmacist (n= 91, 12.2%), and 63 persons (8.5%) purchases them on their own. Quite a high number of participants (n= 348, 46.8%) stop taking antibiotics when they start feeling better. According to the results obtained, social media was the primary source of information regarding antibiotic resistance.

**Conclusions:** Higher education, younger age, gender, profession, and a high monthly income were associated significantly with good knowledge and a positive attitude toward antibiotic use. Educational interventions for appropriate antibiotic use are needed all the time and enforcing antibiotics regulations should be also considered to reduce antibiotic resistance.