

# Antibiotic Misuse in Saudi Arabia: A Comprehensive Assessment of Knowledge, Attitudes, and Practices

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## ABSTRACT

### Study Design: Cross-sectional

**Background:** Antibiotic resistance is a significant issue worldwide and has serious health consequences for individuals who misuse antibiotics. This research aimed to investigate the knowledge, attitudes, and practices associated with antibiotic misuse among various demographic groups in Saudi Arabia.

**Methods:** A cross-sectional study was conducted using an online questionnaire distributed via social media platforms. The questionnaire was developed and validated by experts from the Colleges of Pharmacy, Public Health, and Health Informatics at the University of Hail.

**Results:** The study included 2361 participants. The largest age group represented was 18 to 24 years, comprising 33.5%. Female participants constituted 64.13% of the sample. A notable 45.45% of respondents incorrectly believed that antibiotics are effective against both viruses and bacteria. A significant majority (87.59%) disagreed with the idea that it is safe to use antibiotics prescribed for someone else, and 94.58% acknowledged the importance of completing the full course. Additionally, 33.38% admitted to storing antibiotics for future use.

**Conclusion:** Improper antibiotic use remains prevalent and requires various approaches to address it. Innovative measures to limit unauthorized access to antibiotics are necessary to mitigate the spread of critical health challenges.

**Keywords:** Antibiotic misuse, antibiotic resistance, knowledge, attitudes, practices, Saudi Arabia, public health, cross-sectional study

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