

# Antibiotic Resistance: A Threat to Global Health

**Title: A Cross-sectional Study on Knowledge, Attitude, Awareness, and Practice of Antibiotic Use and Antibiotic Resistance Among Students at University of Cyberjaya**

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*Afroza started looking into the use of Antibiotics after she found out how Antibiotics resistance can lead to the spread of infections that become difficult to treat and increase mobility as well as mortality rates. Realising how crucial it was, she developed and executed the following study to gauge the awareness as well as use of antibiotics using the UoC community as a yardstick for future studies and improvement in the quality of treatments.*

Since its discovery, antibiotics have helped treat or prevent bacterial infections. Some of the most common antibiotic treated infections include acute cough, rhinosinusitis, otitis media, sore throat, and non-specific infections.

It is a widely used and widely purchased medicine. Even late in the pandemic, prophylactic antibiotic were widely used to prevent hospital-acquired infections during COVID-19 treatment.

However, due to the misuse and overuse of antibiotics, many suffer from antibiotic resistance.

The COVID-19 pandemic has brought on a greater impact on the matter as antibiotics used to treat bacterial co-infections resulted in antibiotic-resistant bacteria.

Antibiotic resistance, caused by resistant bacteria, make it difficult to ensure the safety of patients during emergency medical procedures, surgery and organ transplants.

Some of the causes of antibacterial resistance include self-medication, improper prescriptions, inappropriate ingestion, and excessive use of antibiotics. The outcome of antibacterial resistance include poorer clinical prognosis, and a greater burden on healthcare resources which leads to longer hospital stays, increased healthcare costs and even mortality.

To find out if the general public is aware of antibiotic resistance, a

cross-sectional study was conducted among students at University of Cyberjaya using a questionnaire-based analytical survey. 54 per cent of the study sample were Malaysian students whereas the rest were international students.

The study found out that most of the students in the study were well aware of the global antibiotic resistance. Students from the medical programme were able to answer all the questions better and had a more informed attitude towards dealing with the problem of antibiotic use and antibiotic resistance.

Medical students performed better in all knowledge-related questions (higher percentages of right answers) and had more awareness about the issues of antibiotic usage and antibiotic resistance (had higher percentages of correct answers in all questions related to attitude). As a result, they demonstrate a sound understanding and a positive behavioural attitude regarding the responsible use of antibiotics.

The study also found that 10 per cent of the respondents had self-medicated themselves with antibiotics in the past. However, non-compliance with the prescribed treatment was reported despite the modest self-medication. A significant amount of the respondents agree that antibiotic use and resistance should be better publicised for public awareness.

