



Physicians' knowledge, attitudes, and practice concerning antimicrobial resistance & prescribing: a survey in Fayoum Governorate, Egypt

Wafaa Y. Abdel Wahed,¹ Eman I. Ahmed², Safaa K. Hassan¹, Enas G. Ibrahim³,
Hanaa M. Eid³

1. Public Health & Community Medicine Department, Faculty of Medicine, Fayoum University, Fayoum, Egypt
2. Pharmacology Department, Faculty of Medicine, Fayoum University, Fayoum, Egypt.
3. Microbiology Department, Faculty of Medicine, Fayoum University, Fayoum, Egypt.

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Abstract

Background: Antimicrobial resistance (AMR), globally and nationally, is considered as a serious problem. We aimed to assess the knowledge, attitudes, and practices of physicians towards antimicrobial resistance. The aim of the work is to assess the knowledge, attitudes, and practices of physicians towards antimicrobial resistance in Egypt. Study design A cross-sectional study. The study was conducted on a group of physicians from various specialties prescribing antibiotics in different hospitals in Fayoum Governorate from January to December 2017. Data was collected using self-administered questionnaires covering four main areas (demographic characteristics, knowledge, attitudes, and practices). Knowledge score was calculated for 11 knowledge questions by giving one point for each correct answer with maximum score 11. Attitude score was calculated for 21 attitude questions by giving 2 for agree, 1 for neutral and 0 for disagree, with maximum score 42. Mean knowledge score of 302 participants was 8.65 ± 1.69 out of 11. The mean knowledge score was significantly higher among physicians working at Fayoum University Hospital (FUH) than at other hospital types, among pediatricians and physicians of internal medicine specialists than surgeons & obstetricians, and among participants reporting internet as a source of knowledge ($P < 0.05$). Mean total attitude score was 36.4 ± 4.47 . Attitude score was significantly higher among physicians working at insurance hospital, followed by those working at FUH, and physicians reporting internet as a source of knowledge ($P < 0.05$). Positive correlation between knowledge and attitude scores was reported ($r = 0.313$, $P = 0.001$). About 33.8% declared that they prescribe antibiotics for viral infections. With regard to factors affecting antibiotic prescribing, the most commonly reported were previous experience (85.4%), antibiotic availability (68.2%), guidelines (70.2%), and microbiological advice (55.6%). Conclusion: despite good



knowledge and appropriate attitudes of our participants, the practices of participants need to be improved.

Keywords: Antimicrobial resistance . Antibiotic prescription . Knowledge . Practices