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Self-Medication with Antibiotics: Prevalence, Practices and Related Factors among the Pakistani Public (2022) Antibiotics, 11 (6), art. no. 795, .

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Abstract

Self-medication with antibiotics (SMA) has become considerably common in developing countries, which is a critical factor for driving antibiotic resistance. Individuals involved in SMA generally do not have adequate knowledge regarding the appropriate use, indications and dosage of these drugs. The objective of the present study was to investigate population SMA practices, knowledge and sociodemographic factors associated with SMA in Islamabad, Pakistan. The study adopted a cross-sectional methodology and data collection was performed through an anonymous, structured and pilot-tested questionnaire, which was interview-administered. Inferential statistics and multivariate logistic regression were performed. Out of 480 participants, 55.6% (n = 267) were male with a mean age of 37.1 ± 10.1 years; the total prevalence of SMA was 32.5%. Ciprofloxacin (42.9%) was the most commonly used antibiotic to treat coughs or colds, a runny nose, flu or sore throat, diarrhea or fevers, which were relevant reasons for SMA. Findings from multivariate logistic regression showed that predictors of SMA were: male gender (95%CI: 0.383-1.005), age (95%CI: 0.317-0.953) and highest level of education (95%CI: 0.961-0.649). Despite reasonable access to healthcare facilities, people are still obtaining antibiotics without prescription, bypassing diagnostic and consultative healthcare services. Thus, the government must implement strict healthcare policies to restrict the sale of antibiotics without prescriptions, while at the same time, targeted public awareness campaigns about the proper use of antibiotics are also required. © 2022 by the authors. Licensee MDPI, Basel, Switzerland.

Author Keywords

antibiotics; antimicrobial resistance; logistic regression; Pakistan; practices; questionnaire; self-medication

Index Keywords

amoxicillin, antibiotic agent, ciprofloxacin, erythromycin, levofloxacin, metronidazole, non prescription drug; adult, aged, antibiotic resistance, Article, awareness, common cold, content validity, coughing, cross-sectional study, diarrhea, educational status, face validity, female, fever, government, headache, health care, health care facility, health care personnel, health care policy, health care practice, health service, human, human experiment, inferential statistics, influenza, information processing, interview, knowledge, major clinical study, male, multivariate logistic regression analysis, Pakistan, Pakistani, pilot study, prevalence, questionnaire, reliability, rhinorrhea, self medication, sociodemographics, sore throat, total quality management, urinary tract infection, wound infection, young adult

Chemicals/CAS

amoxicillin, 26787-78-0, 34642-77-8, 61336-70-7; ciprofloxacin, 85721-33-1, 86393-32-0, 128074-72-6, 128074-76-0, 192934-52-4, 93107-08-5, 86483-48-9, 96186-80-0; erythromycin, 114-07-8, 70536-18-4; levofloxacin, 100986-85-4, 138199-71-0; metronidazole, 39322-38-8, 443-48-1

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