Prevalence of Antibiotic Prescription Among Graduates Dental Interns of King Abdulaziz University in Saudi Arabia

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Abstract

Objectives:

Antibiotics are frequently prescribed in the dental clinics. One of the most serious side-effects of the frequent, indiscriminate use of antibiotics is the development of resistant bacterial strains. The objectives of our study were to know the prevalence of antibiotic prescription among graduates dental interns of KAU and to evaluate their knowledge regarding the types of antibiotics and the indications for prescription.

Materials and Methods:

Questionnaires were distributed among the interns who were graduated from KAU. A total number of 71 interns (25 male and 47 females) participated in this study. Information were sought on the percentage of patient to whom antibiotics were prescribed, preferred type of antibiotic, indications for prescription, the use of antibiotics for particular common clinical conditions and conditions were prophylactic antibiotics would be prescribed.

Results:

A total number of 61 questionnaires were returned giving a response rate of 86% including 36.1% males and 63.9% females. Most of the interns were treating less than 6 or 6-11 patients daily (44.3% & 41% respectively). 83.6% of the respondents were prescribing antibiotics to less than 10% of the patients and the duration of 5-7 days were recommended by 54.1% of them. Penicillines were the most commonly prescribed antibiotics (85%) while
Cephalosporins were the least commonly prescribed (8.3%). Regarding the indications of antibiotic prescription, almost all of the interns (95%) prescribed antibiotics for prophylaxis and the majority (75%) prescribed for definite clinical indications. The majority of the interns prescribed therapeutic antibiotics for cellulitis (80%), aggressive periodontitis (77%), and salivary gland infection (70.5%).

**Conclusion:**

Prescription of therapeutic antibiotics by some of the interns was not based up on sound clinical principles. Some of them prescribed antibiotics for clinical conditions in which local treatment would be sufficient. Regarding prophylactic antibiotics, many interns were not aware of the new guidelines of the American Heart Association to prevent bacterial endocarditis. There is a clear need for more education about the current antibiotics guidelines and the indications of their use at the undergraduate level.