

Factors that affect dentists' use of antibiotic prophylaxis: Findings from The National Dental Practice-Based Research Network questionnaire



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INTRODUCTION

Little is known about factors that influence dentists' decision making concerning antibiotic prophylaxis (AP) prescribing. The objective of this study was to determine factors that influence dentists' AP prescribing habits in patients at risk of developing infective endocarditis and prosthetic joint infections.

METHODS

A questionnaire was administered to 3,584 dentist members of The National Dental Practice-Based Research Network. In addition to descriptive statistics, ordinal regression models were used to determine the factors most likely to impact dentists' decisions to prescribe AP.

RESULTS

Overall, 2,169 (61%) dentists in The National Dental Practice-Based Research Network responded. Responders' decisions to prescribe antibiotics were influenced primarily by official guidelines, scientific literature, and physician or medical specialist opinion. Regarding potential risks, the greatest level of concern was for the development of infective endocarditis or prosthetic joint infections. Although litigation was deemed problematic, more than 90% of responders indicated a strong concern for the best course of action for the patient's health. Dentists also indicated a high level of concern about the potential for generating antibiotic-resistant bacteria with AP use and increased risk of adverse drug reactions.

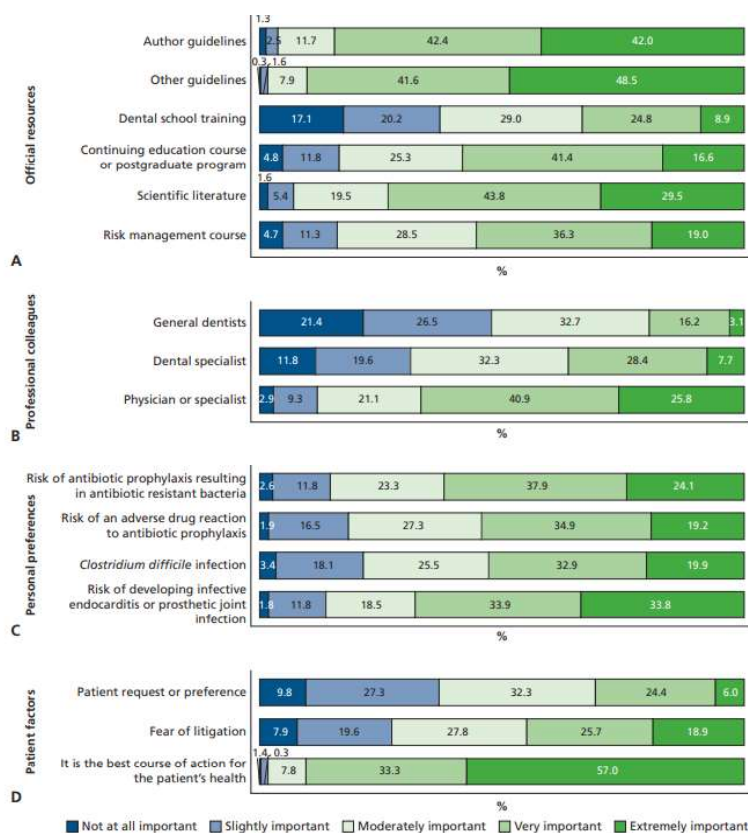


Figure 1. How important is each of the following in your decision to prescribe (or not prescribe) antibiotic prophylaxis? A. Official resources. B. Professional colleagues. C. Personal preferences. D. Patient factors. ADA: American Dental Association.

DISCUSSION & CONCLUSION

Dentists' AP decision making seems most influenced by official guidelines, scientific literature, and advice from a physician or medical specialist. These results suggest that one of the most effective means for promoting concordance of dentists clinical practice with the scientific basis for AP is to emphasize the importance and clarity of American Heart Association and American Dental Association recommendations and antimicrobial stewardship regarding prevention of infective endocarditis and prosthetic joint infections.