

Influences on antibiotic prescribing by dentists: insights from a pilot study

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Background



- Antibiotics have contributed significantly to the reduction of morbidity and mortality associated with infectious diseases
- Antibiotic resistance is a key public health problem, primarily related to the inappropriate (and excessive) use of these drugs
- Portugal is one of the European countries with the highest consumption of antibiotics and one of the highest rates of antimicrobial resistance

Background & Objective

Why studying antibiotic prescribing in dentistry?

- Antibiotics account for the majority of medicines prescribed by dentists
- The literature provides evidence of inappropriate prescribing by these healthcare professionals
- There is a paucity of research on the causes of suboptimal prescribing, which is important to design interventions that effectively change practice

Our aim was to explore issues related to antibiotic prescribing by dentists, including influences on prescribing

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Methods

- Purposive sample (n=14), in an attempt to obtain variability in key characteristics (e.g. years of practice, specialisation area, involvement in academic teaching)
- Semi-structured topic guide, piloted with two dentists selected by convenience
- Interviews were audiotaped (subjected to written consent), transcribed *verbatim* and analysed using the five-stage "Framework Approach"* , with the aid of the software WebQDA
- Ethical approval was granted

*Pope C, Ziebland S, Mays N. Analysing qualitative data. BMJ. 2000;320:5-7.

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Results

- A “**defensive**” practice emerged as one of the factors influencing antibiotic prescribing

Underlying this practice was a concern of avoiding clinical complications and a fear of losing patients, and not a threat of liability:

“I know antibiotics are probably prescribed too much. But lots of times there are risks if you don't prescribe them and I don't think there's a need for that. It's an assurance measure.” (E1)

“But I can't take that risk. And then the patient will say 'Ah' you're no good and whatever, and I don't do this, I prefer that he takes the antibiotic.” (E5)

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Results

- The influence of **clinical guidelines** on antibiotic prescribing seems subtle
 - Out of the eight interviewees that endorsed guidelines only a minority provided examples of the guidance used
 - However, there was a general sense of agreement with this tool, even amidst those who stated not using guidelines:

“I try to keep an eye (on guidelines) but sometimes things change and we are not informed.” (E12)

- Opposition was demonstrated by only one interviewee
- Reliance on experience appears to be an overarching influence upon antibiotic prescribing

“Experience is what influences most of our information when prescribing.” (E3)

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Results

- Dentists acknowledged the existence of **patient pressure**

"It's huge (the pressure)" (E5)

- Pressure for not being prescribed antibiotics was mentioned as well as a demand for these drugs
- Providing information to patients was the preferred strategy to deal with pressure; invoking authority was seen as the last resort
- Capitulation to patient pressure was admitted in few cases

"When I worked in a rural area (...) If it was something very specific and the patient could give me an explanation, I would end up giving in." (E1)

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Results

- Pressure from **drug companies' representatives** was not unanimously acknowledged:

"I'm rarely visited by a drug company representative. I think I can count on 1 hand how many times I was visited. And I don't prescribe much, they already know that and so they don't visit me." (E12)

- Even interviewees who mentioned being visited demonstrated reluctance in changing prescribing habits as a result of the visits

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