

GPs KNOWLEDGE OF ETIOLOGY AND TREATMENT OF ACUTE EXACERBATION OF CHRONIC BRONCHITIS (AECB)

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ABSTRACT

Proper treatment of chronic bronchitis (CB) is of great importance because of its high prevalence, economic impact and being one of the leading causes of mortality.

The aim of the study was to evaluate GPs knowledge of etiology and treatment of AECB in outpatient adults.

GPs from out-patient clinics in five Russian cities were asked to fill in the specially designed questionnaire. Independent experts analyzed the data according to the current guidelines.

In total 250 GPs took part in the survey. Most common etiological agents of AECB were named correctly in 13%, partially correctly - in 4% and incorrectly - in 83% of cases. Antimicrobials (AM) for the "first-choice" therapy of AECB were indicated correctly by 32%, partially correctly - by 35% and incorrectly - by 33% of GPs. About 1/4 of GPs (24%) prefer intramuscular route of AM administration. Half of them (52%) usually prescribe AM for 7-14 days and 24% consider microbiological eradication the main criterion for AM discontinuation. Availability and cost of the drug was reported by 36% GPs as the major reason for AM selection, AM activity against the prevalent pathogens; availability of the oral form; excellent tolerability profile; good sputum penetration - by 20%, 18%, 15%, 11%, respectively.

The knowledge of AECB management in GPs differs from current recommendations. The educational efforts should be undertaken and a good feedback of their effectiveness is needed

INTRODUCTION

Chronic bronchitis (CB) is a common disease that affects from 10 to 25% of the adult population¹.

More than 12 million individuals in the USA are believed to suffer from CB¹.

The prevalence of CB in Europe varies from 3.7% in Denmark to 6.7% in Sweden².

Most individuals with CB in the USA experience approximately 3 exacerbations per year, which means at least 30 million exacerbations annually³.

PURPOSES

To find out the GP's knowledge of the etiology and treatment of AECB in outpatient adults.

To compare their knowledge with the currently available guidelines for AECB management.

METHODS

The study was a part of the multi-central wide-ranging program "High quality of lower respiratory tract infections management" which are carrying out in 5 cities (Figure 1). During the first part of 2000 the voluntary survey of GPs working in outpatient departments of Public Health Care was done.

Figure 1. Study geography

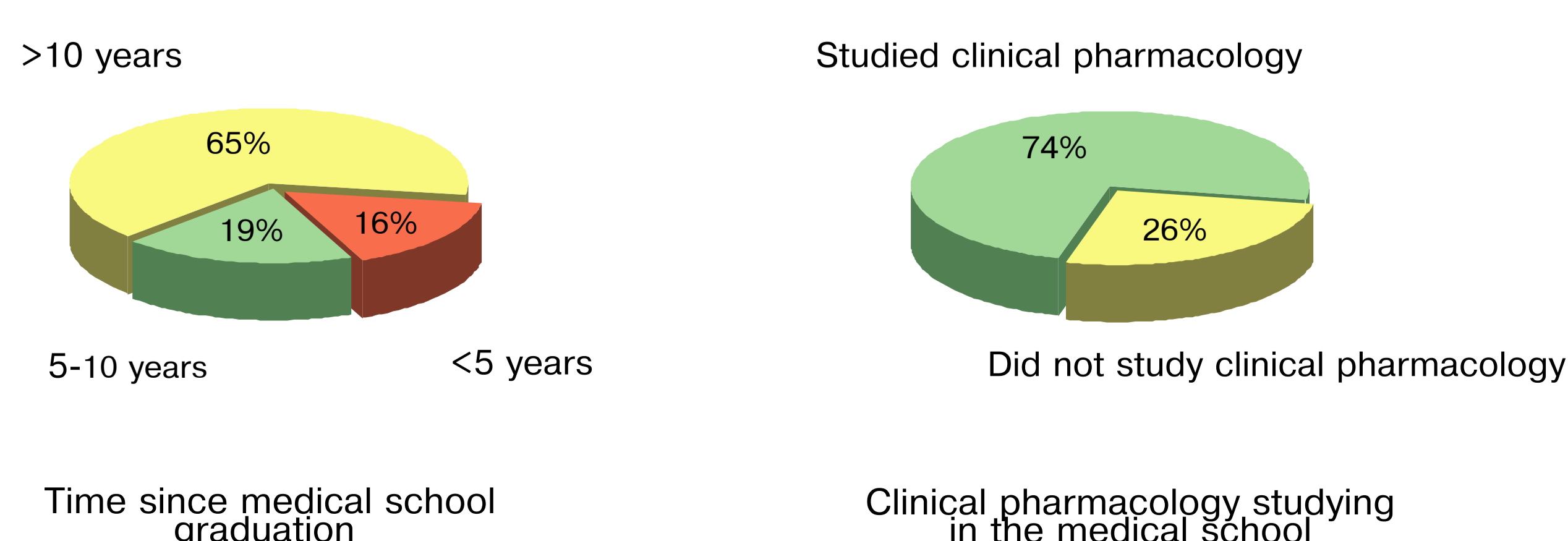


The doctors were ensured of the strict confidentiality of all their personal information. The data were collected with the help of a specially designed questionnaire consisting of 20 questions. The GPs were asked to mark the correct answer or answers. They were also allowed to fill in the questionnaire with their own answers. A group of independent experts analyzed the results of the survey.

RESULTS

Altogether 250 GPs agreed to participate in the survey. Most of them graduated from the institute more than 10 years ago and two third were taught clinical pharmacology when they were in a medical school (Figure 2).

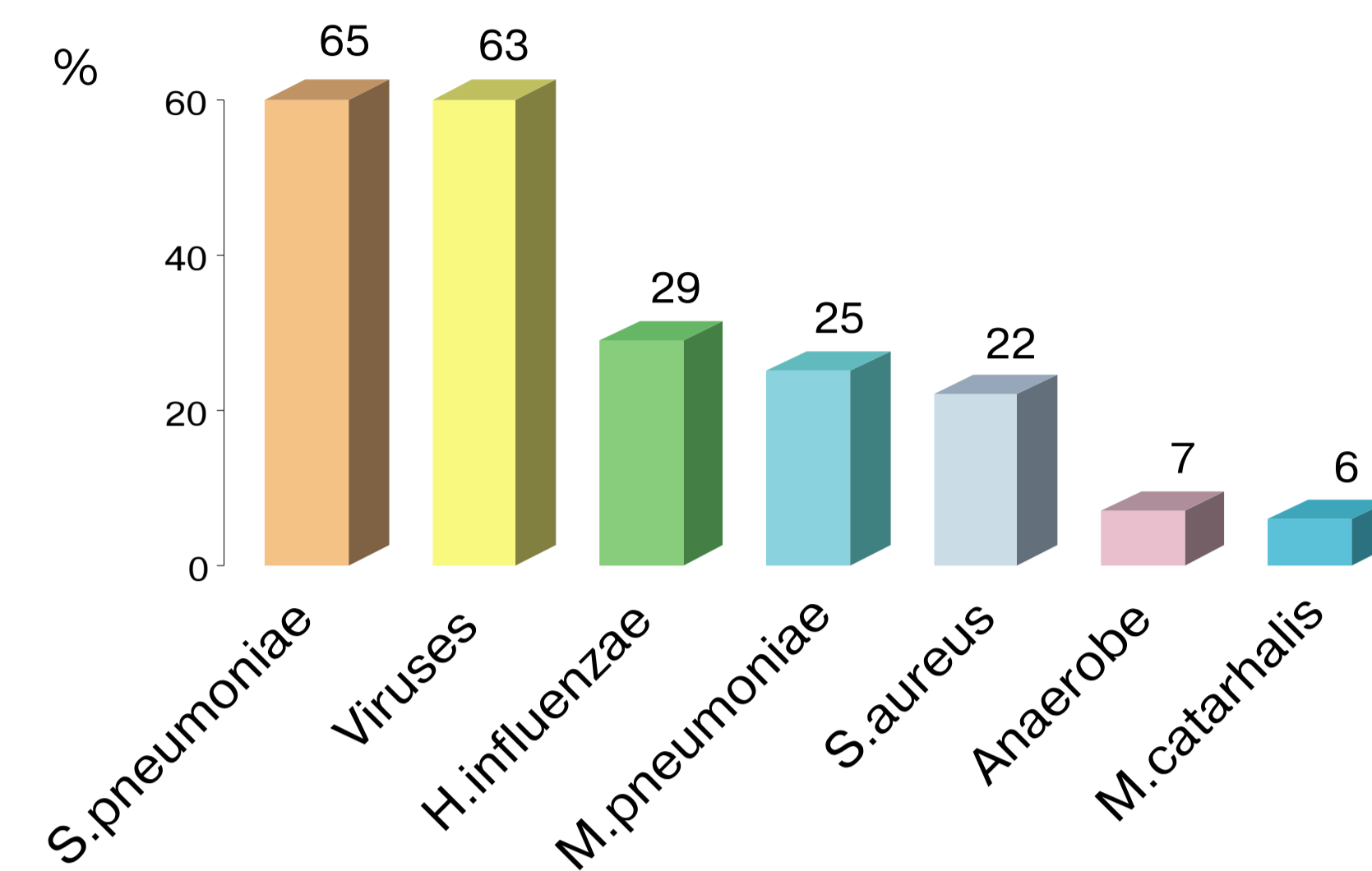
Figure 2. Study population characteristics



RESULTS

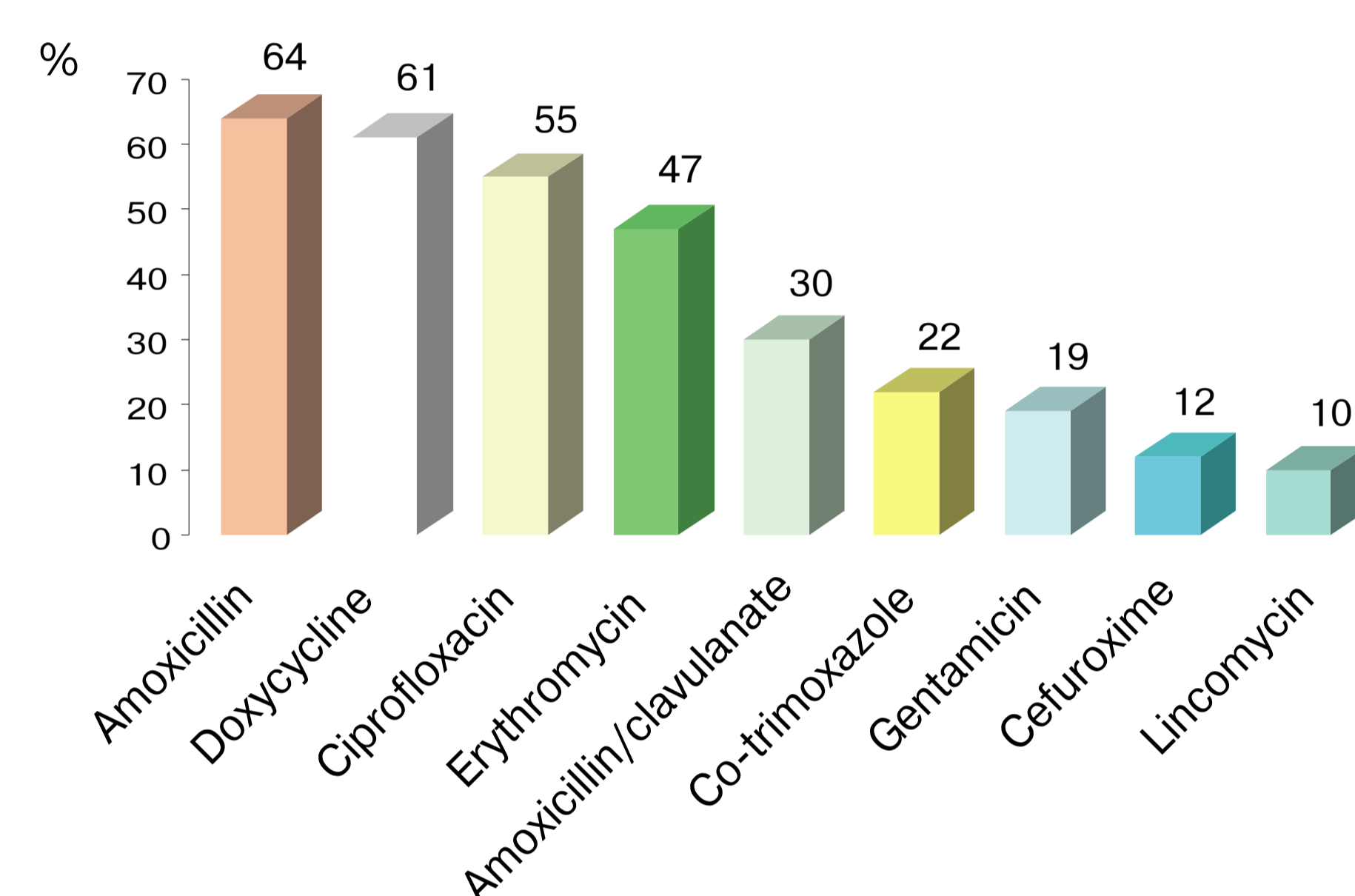
Among the most common causes of AECB 66% of GPs indicated Streptococcus pneumoniae, 65% - viruses, 27% - Haemophilus influenzae (Figure 3).

Figure 3. The most common AECB pathogens



The AM mentioned as the "first line" for the treatment of AECB are shown on Figure 4. Most of GPs preferred to prescribe amoxicillin, doxycycline and ciprofloxacin for outpatients with AECB. Answering the question about the route of antimicrobials administration 24% of GPs would give them intramuscularly, more than half of them (52%) would prescribe AM at least for 7-14 days.

Figure 4. The "first choice" AM for outpatients with AECB



One fourth of GPs considered microbiological eradication the main criterion for antibacterial treatment discontinuation, 6% would even follow unspecific laboratory data to stop the antibacterial treatment of AECB (Figure 5).

The Figure 6 presents the range of factors usually taken into account by GPs when they select the proper AM for empirical treatment of patients with AECB. The first position belongs to the availability and cost of drugs (36%) followed by the activity of AM against the most common pathogens (20%) and availability of the oral form.

Figure 5. The most important reason of AM selection

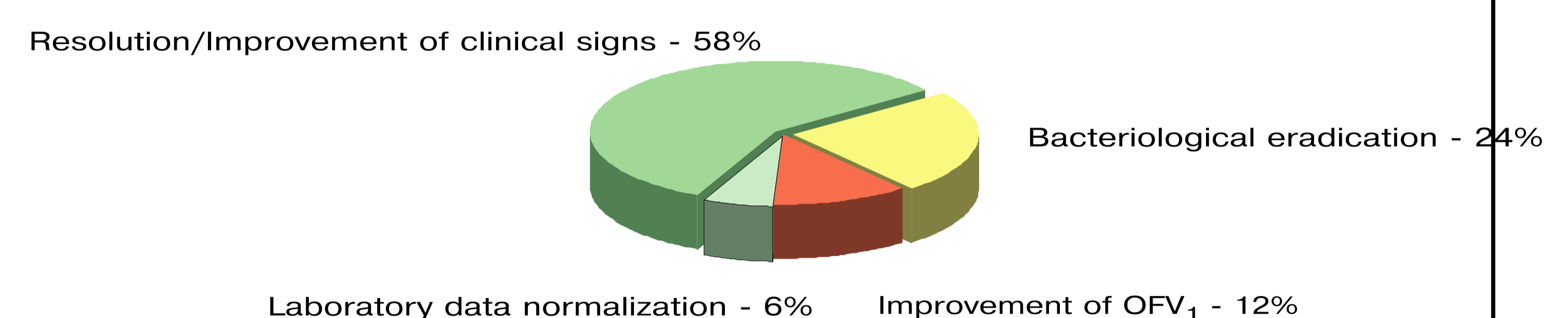
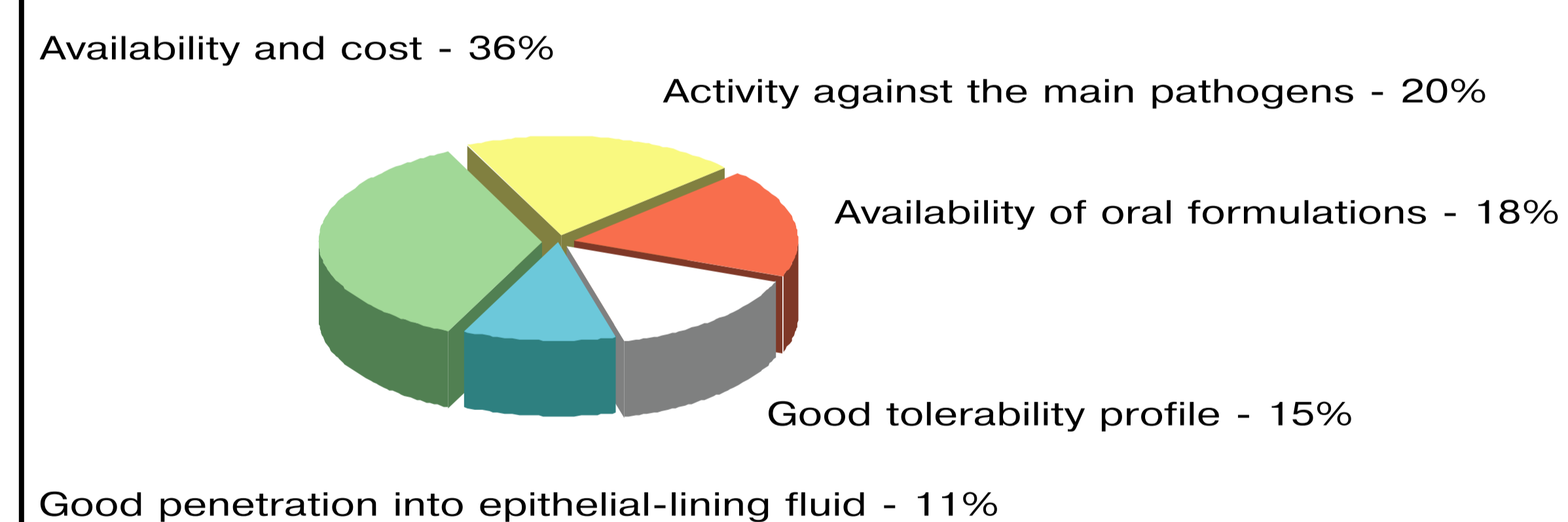


Figure 6. The main criterion for AM treatment discontinuation

CONCLUSIONS

The knowledge of AECB management in GPs differs from the current recommendations. The GPs have superficial idea of the etiology of AECB, their choice of AM and the strategy for treatment isn't always appropriate. The education efforts with a good feedback of their effectiveness are needed.

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¹ Reynolds H.Y. Chronic bronchitis and acute infectious exacerbations. Principles and Practice of Infectious Diseases. 5th ed. Philadelphia: Churchill Livingstone; 2000 p. 706-710.

² Ball P., Make B. Acute exacerbations of chronic bronchitis. An international comparison. Chest 1998; 113: 199-204.

³ Niederman M.S. The role of quinolones in the treatment of acute exacerbations of chronic bronchitis. Infect Med. 1999; 16: 5-7.