

## THE ANALYSIS OF ETIOLOGICAL FACTORS CAUSING LOWER RESPIRATORY TRACT INFECTIONS ISOLATED FROM HOSPITALIZED PATIENTS

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**Background.** Lower respiratory tract infections (LRTI) account for 20-30% of all hospital-acquired contagions. They are characterized by high mortality of hospitalized patients. The most serious form of LRTI is pneumonia, and the most common etiological factors in such cases are bacteria. The article gives the analysis of bacterial flora samples obtained from lower respiratory tract of hospitalized patients. In vitro susceptibility of pathogens to selected antibiotics has also been assessed.

**Material and methods.** The retrospective analysis of 1171 bacterial strains isolated from 1171 patients treated in clinics of the Military Institute of Medicine in Warsaw, Poland was performed. In most cases the samples were collected from an artificial airway (71,5%) and from bronchoalveolar lavage (21,7%).

**Results.** The most commonly isolated pathogens included *Acinetobacter baumannii* (35,8%), *Staphylococcus aureus* (27,6%), *Klebsiella pneumoniae* (19,4%), and *Pseudomonas aeruginosa* (16,2%). Multidrug-resistant gram-negative bacteria exhibited 100% susceptibility to colistin only. *Klebsiella pneumoniae* ESBL+ and *Acinetobacter baumannii* were most susceptible to carbapenems, while *Pseudomonas aeruginosa* strains to ceftazidime. Methicillin-resistant *Staphylococcus aureus* were 100% susceptible to vancomycin, linezolid and tigecycline.

**Conclusions.** Identifying the etiological factors causing infections of the lower respiratory tract and determining their drug-susceptibility is of key importance in empirical treatment.