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ТЕЗИ/ABSTRACTS

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of infectious complications pathogens in patients with critical conditions. The majority of isolates of *A. baumannii* (67.2%), *P. aeruginosa* (72.4%), *P. mirabilis* (20.5%) demonstrated phenotypic polyantibiotic resistance, to carbapenems (up to 63.4%; 33, 4% and 5.88% respectively) including. The molecular genetic determinants of *bla*VIM resistance to carbapenems have been established among clinical strains of *P. aeruginosa* (5.8%), *P. mirabilis* (4.3%), *A. baumannii* (2.2%). It was found that poly-antibiotic-resistant microorganisms that caused infectious complications retained sensitivity to DCM antiseptic. Thus, the bactericidal effect of the antiseptic against *A. baumannii* ($36.4 \pm 1.1 \mu\text{g} / \text{ml}$), *P. aeruginosa* ($106.1 \pm 5.6 \mu\text{g} / \text{ml}$), *P. mirabilis* ($81.3 \pm 5.9 \mu\text{g} / \text{ml}$) were determined. The established values of MIC of meropenem and imipenem are: to *A. baumannii* (105.03 ± 14.54 and $123.3 \pm 33.3 \mu\text{g} / \text{ml}$, respectively), *P. aeruginosa* (90.47 ± 10.65 and $197.3 \pm 3, 5, 9 \mu\text{g} / \text{ml}$, respectively), *P. mirabilis* (126.8 ± 41.8 and $131.3 \pm 43.4 \mu\text{g} / \text{ml}$, respectively). In the presence of sub bacteriostatic concentrations of DCM *in vitro* studies have shown the renovation / increase of sensitivity of *A. baumannii* clinical isolates to meropenem (in 3.46 times), *P. aeruginosa* to meropenem (in 6.50 times).

Conclusions. Polyantibiotic resistant gram-negative microorganisms (*P. aeruginosa*, *P. mirabilis*, *A. baumannii*), as prevailing infectious complications pathogens in patients with burns and critical conditions, have *bla*VIM-determined resistance to carbapenems, but retain sensitivity to DCM antiseptic.

DCM in SC promotes effective increase of sensitivity to meropenem, imipenem of *bla*VIM-positive carbapenem-resistant strains of gram-negative bacteria, which opens the prospects of further in-depth study of the mechanisms of restoration of sensitivity of antibiotic-resistant bacteria with the help of decamethoxin

Key words: antibiotics, antiseptics, *bla*VIM genes, infectious complications, carbapenems, burns, PCR, resistance

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Level of Parental Awareness about the Problem of Antibiotic Resistance: a Survey among Urban Residents in Ukraine

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Background. Over the past decades, global spread of antibiotic-resistant bacterial pathogens has posed enormous problems in fighting infectious diseases. Overuse of antibiotics by population and underestimation of the problem by doctors and pharma-

cists are the main drivers for the spread of microorganisms resistance. In outpatient clinics, antibiotics are often prescribed for viral infections, primarily acute respiratory viral infections (ARVI). The use of antibiotics by children with ARVI fluctuates from 14% to 80% in different countries. In Ukraine the possibility to purchase antibiotics without prescription along with availability of a large number of pharmacies in large cities contribute to growing access to antibiotics. Therefore, the level of awareness about the use of antibiotics among the population of large cities is important.

Purpose of this study was to determine the level of awareness about the problem of antibiotic resistance among parents living in large cities.

Materials and methods. Cross-sectional study was conducted in April-May 2018 in two large cities in Ukraine, Kyiv and Kharkiv, by using validated questionnaire. The questionnaire was designed to assess awareness level, attitude and practices with regard to the use of antibiotics and contained 48 questions. Parents of schoolchildren who had given informed consent were selected for this study.

Results and discussion. Data were collected from 170 people aged 30 to 57 years. The proportion of female participants was 82.8%, male – 17.2%. The vast majority of respondents (78.5%) had higher education. According to the data obtained, most of the parents (79.8%) receive information about the use of antibiotics from a doctor, 39.9% from the Internet, 21.5% from relatives and friends.

More than a third of parents (37.5%) believe that children with ARVI symptoms get better faster when antibiotics are given and their use can prevent complications. A total of 75.3% believe that antibiotics should be given to all children with high fever. The majority of respondents (64.9%) stated that they would reuse any antibiotics leftover whenever their child has similar symptoms of an ARVI.

Almost half (47.4%) of the respondents would ask the doctor to prescribe an antibiotic if the child often suffers from ARVI, and only a small fraction (8.3%) believes that most ARVI resolve without antibiotic administration because they are self-limiting.

Despite the fact that only a small percentage (5.8%) of the parents considers themselves being aware of the prudent use of antibiotics, the majority (79.6%) would be dissatisfied if the doctor does not prescribe antibiotics for ARVI. Most of respondents (73.7%) regularly ask their doctor whether or not the prescription of antibiotics is necessary, but only 7.2% of people consider the possible antibiotic adverse reactions when using them.

Conclusion. The survey allowed to assess the level of awareness, attitude and practices with regard to the use of antibiotics among parents of schoolchildren in Kyiv and Kharkiv. The findings indicate that there is a lack of awareness and low level of practices of prudent use of antibiotics. Health-educational campaigns organized among population would optimize efforts in preventing the development of antibiotic resistance of pathogenic microorganisms.

Key words: pathogens of bacterial infections, cross-sectional study, survey, antibiotics.