

### **348. PECULIARITIES OF MEDICAL STUDENTS' KNOWLEDGE AND ATTITUDES REGARDING THE ANTIMICROBIAL RESISTANCE PHENOMENON**

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**Introduction.** Antimicrobial resistance (AMR) is one of Public Health issues today. Resistant microorganisms are responsible for serious infections, which increase health expenditure and can lead to disability or death. Inappropriate use of antibiotics is one of the main causes of AMR development. Currently, as a result of infections caused by antimicrobial resistant microorganisms 33.000 people die in Europe every year and 700.000 people die annually worldwide.

**Aim of the study.** Studying the peculiarities of medical students' knowledge and attitudes regarding the antimicrobial resistance phenomenon and antibiotic consumption.

**Materials and methods.** A cross-sectional study was conducted. Epidemiological and statistical methods of study were used when conducting the study. A questionnaire on recent antibiotic consumption and attitudes regarding antimicrobial use was developed. To carry out the study, 164 national and international 2nd year students from *Nicolae Testemitanu* SUMPh were interviewed.

**Results.** The medical students who participated in the study were from the Republic of Moldova - 90 (54.9%) and Israel – 74 (45.1%). When asked if they ever used antibiotics, the students answered in the following way: yes – 138 (84.14%), no – 24 (14.64%), don't know – 2 (1.22%). 62 students (37,8%) have not used antibiotics during the last 12 months, 56 (34.15%) students have consumed antibiotics once, 42 (25.6%) students have consumed antibiotics 2-5 times and 4 (2.44%) students are not sure. When asked if antibiotic use for animals can reduce the possibility of effective antibiotic treatment for humans, students answered as following: yes – 80 (48.78%), no – 40 (24.39%), don't know – 44 (26.82%). 70 (42.68%) students think that AMR can spread from animal to human, 40 (24,39%) students consider that AMR does not spread from animals to human and 54 (32.93%) students don't know. 50 (30.49%) students think that AMR can spread from human to human, 54 (32.93%) students consider that AMR does not spread from person to person and 60 (35.59%) students don't know. The answers to question *Nowadays, AMR is a big problem worldwide* were the following: *Agree* – 90 (54.88%), *Partially agree* – 20 (12.2%), *Don't agree* – 30 (18.29%), *Don't know* – 24 (14.63%).

**Conclusions:** 1) AMR is an important issue worldwide. Resistant microorganisms are often responsible for serious infections, as well as healthcare-associated infections. 2) Maintaining the effectiveness of antibiotics is the responsibility of everyone Rational use of antibiotics can prevent the development of resistant microorganisms and can preserve antibiotics' effectiveness for future. 3) This study has shown that medical students have certain knowledge and attitudes regarding antibiotic use, but also further information and awareness about the rational consumption of antibiotics is still needed.

**Key words:** antimicrobial resistance; medical students; knowledge and attitudes.