

## 26. PHARMACEUTICAL ASSISTANCE OF TREATMENT WITH ANTIBACTERIAL DRUGS

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**Introduction.** Adverse reactions to antibacterial preparations are responsible for over 140,000 emergencies, about half of which are due to reactions to antibiotics.

**Aim of the study.** Analysis and evaluation of antibiotic complications in hospitalized patients in 2019–2021.

**Methods and materials.** For the present study, the consumption of antibiotics was evaluated for a period of three years (2019–2021), in the Institute of Emergency Medicine (IMU) and in its main subdivisions, which record a higher consumption of antimicrobial drugs.

**Results.** In Moldova, the consumption of antibiotics per 1,000 inhabitants is an intermediate one and constitutes 21 defined doses. The highest consumption is in the beta-lactam and penicillin group of 7.5 DDD, followed by other beta-lactams with 3.2 DDD, and the third place belongs to fluoroquinolones with a consumption of 2.7 DDD per 1,000 inhabitants. The consumption of antibiotics in the IMU, compared to most hospitals in European countries, and others is intermediate and is 64%. The consumption of beta-lactams and penicillins (ampicillinum, amoxiciline, amoxicillinum + clavulanic acid) in the IMU is about five times lower than the average in the other hospitals presented, and that of other beta-lactams (cephalosporins of generation I cefalexin, cefazoline, generation II cefuroxime, cefachlor, generation III cefotaxime, ceftazidime, ceftriaxone, cefixime, cefoperazone, cefoperazone + sulbactam, carbapemen meropenem, imipenem + cilastatin) invers, are about twice as much. In the hospital 76% of patients used antibacterial drugs from the group of macrolides and cephalosporins. One of the indicators of the quality of the rational use of antibiotics is related to the ratio of parenteral and enteral pharmaceutical forms. Thus, the rate of consumption of antibacterial drugs with enteral form increased in the IMU, in the period 2019–2021, from 14.1% to 25.2%, and that with parenteral form decreased from 85.9 to 74, 8 or 11.1%. In most hospitals around the world, the rate of consumption of parenteral forms, compared to enteral, is about 50%. Regarding the incidence of drug side effects reporters, the majority - 85.19% of cases were reported by medical workers, 7.94% - by patients, 6.49% - pharmaceutical companies and medical representatives, and pharmacists – 0,36%.

**Conclusion.** Pharmacists should be the most accessible healthcare providers who can help patients with the best recommendations for the use of antibiotics and the prevention of possible complications during the treatment.