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E0031 The global point-prevalence survey of antimicrobial consumption and resistance (Global-PPS): 2015 and 2017 results of antimicrobial prescribing in a medical institute - Ministry of the Interior, Sofia, Bulgaria

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Background: A uniform and standardized method for surveillance of antimicrobial use in hospitals was used to assess the quality of antimicrobial prescribing in the Medical Institute – Ministry of the Interior, Sofia, Bulgaria. BioMérieux provided unrestricted funding support for the survey

Materials/methods: PPS was conducted in 1 week in April 2015 and 2017, in the national tertiary care 310-bed hospital. The survey included all inpatients receiving an antimicrobial on the day of PPS. Data collected included details on the antimicrobial agents, reasons and indications for treatment as well as a set of quality indicators. A web-based application is used for data-entry, validation and reporting as designed by the University of Antwerp, Belgium (www.global-pps.com).

Results: In 2015, 23.7% of 215 and in 2017, 29.5% of 224 adult admitted patients were treated with antibiotics. Commonest diagnoses were: pneumonia, pyelonephritis, genito-urinary infections, skin and soft-tissue infections, intra-abdominal sepsis. HAI rate was 4.5%. Top prescribed antibiotics were “the other beta-lactams”. Third-generation cephalosporins and carbapenems were most prescribed on ICU. The duration of surgical prophylaxis in 2015 was mainly 1 day, whereas in 2017 >1 day. Quality indicators included guideline compliance for medical, surgical and ICU patients 95.5%, 81.8%, 70% respectively; documented reason for prescription: 96.6%, 87.5%, 76.9% respectively. Empiric therapy accounted for 74.6% of CAI and 18.8% of HAI.

Conclusions: Global-PPS revealed in 2017 an increased rate of antibiotic consumption, carbapenem use and prolonged surgical prophylaxis. Government’ involvement in Antimicrobial stewardship is necessary including appropriate policy and guidelines, funding, control, implementation of rapid diagnostic methods.