SPSS V23 software was used for data analysis with centralisation and frequency measurements for descriptive data and the χ² test for inference.

**Results** A total of 192 AT were administrated to a total of 168 patients (52% men), mean age 65 (SD 20) years and 68.5% had a Charlson index ≥2. The three main site of infection were respiratory (53%), urinary (19%) and intra-abdominal (12%). 39.6% of the antibiotic prescriptions were assessed as inappropriate. Inappropriateness was classified and distributed as:

- Unnecessary, no signs of infection: 3.3% of AT prescriptions
- Not active for the expected aetiology: 9.8%
- Appropriate, but wrongly dosed: 4%
- Appropriate, but not recommended according to the CIG: 22.8%.

The indication with the highest degree of inappropriateness was urinary infections, with 19 of 31 AT prescriptions being inappropriate. Inappropriate prescription was not found to be a factor related to an increase in hospital stay (OR 1.39; 95% CI 0.77 to 2.50; p=0.269), readmissions (OR 0.751; 95% CI 0.42 to 1.59; p=0.455) or mortality (OR 1.40; 95% CI 0.87 to 2.50; p=0.269), readmissions (OR 0.751; 95% CI 0.42 to 1.59; p=0.455) or mortality (OR 1.40; 95% CI 0.87 to 2.28; p=0.809).

**Conclusion and relevance** In general, CIG were followed because almost two-thirds of AT were appropriate. Furthermore, inappropriate AT prescriptions did not lead to an increase in hospital stays, or readmissions or mortality. The inappropriateness of the AT results may be considered for the development of antibiotic optimisation strategies.

**REFERENCES AND/OR ACKNOWLEDGEMENTS**

**Conflict of interest** No conflict of interest

**4 CPS-243** HEALTHCARE ASSOCIATED CLOSTRIDIODES DIFFICILE INFECTION IN SURGICAL AND MEDICAL PATIENTS

*1 A Peric*, 2V Suljagic, 3B Milenkovic, 4S Vezmar Kovacevic. 1Military Medical Academy-Faculty of Medicine, Sector of Pharmacy, Belgrade, Serbia; 2Military Medical Academy-Faculty of Medicine, Department of Infection Control, Belgrade, Serbia; 3Military Medical Academy, Sector of Pharmacy, Belgrade, Serbia; 4Faculty of Pharmacy, Department for Pharmacokinetics and Clinical Pharmacy, Belgrade, Serbia

Background and importance Clostridioides difficile (C difficile) infection (CDI) is one of the most common healthcare associated (HA) infections in contemporary medicine. The risk factors (RFs) for HA CDI in medical and surgical patients are poorly investigated in countries with a limited resource healthcare system.

**Aim and objectives** To investigate differences in patient characteristics and RFs associated with HA CDI in surgical and medical patients.

**Material and methods** A prospective cohort study was conducted including adult patients diagnosed with an initial episode of HA CDI from 2011 to 2017 in a 1200 bed teaching hospital. Patients hospitalised for any non-surgical illness, who developed initial HA CDI, were assigned to the medical group, whereas those who developed initial HA CDI after surgical procedures were in the surgical group. Data on the use of proton pump inhibitors (PPIs), chemotherapy and antibiotic usage were gathered by hospital pharmacists.

**Results** From 533 patients diagnosed with HA CDI, 268 (48.5%) and 285 (51.5%) were surgical and medical patients, respectively. Medical patients were significantly older than surgical patients (68.59±15.46 vs 64.91±14.86 years, p<0.005), and were treated significantly more frequently with PPIs (38.9% vs 19%, p<0.001), fluoroquinolones (28.6% vs 9.9%,