E0016 The global point prevalence survey of antimicrobial consumption and resistance (Global-PPS): results on Clostridium difficile acute diarrhea (CDAD)

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Background: The Global-PPS (www.global-pps.com) assesses antimicrobial prescribing worldwide using a standardized and validated method. *Clostridium difficile* Acute Diarrhea (CDAD) is observed in hospitals (acquired hospital infection) but also in the community, particularly in nursing homes. All antibiotics can lead to CDAD, but cephalosporins, fluoroquinolones and clindamycin, are considered as important risk factors. We aimed to analyse hospital acquired CDAD prevalence, the prescribed antibiotics for patients with CDAD as well as a set of quality indicators.

Materials/methods: We analysed 2015 Global-PPS data (53 countries/335 hospitals) to study prescribing for CDAD in patients aged >50 years. CDAD was defined as an healthcare-associated infection if diagnosed >48 hours post-admission or diagnosed <30 days after discharge from previous admission episode. Denominator used are the number of patients with antimicrobials for those hospitals reporting at least 1 CDAD case.

Results: Overall, CDAD was reported in 126 hospitals of 32 countries. Worldwide prevalence of CDAD was 2.5% (n=372 patients) varying by region (0.5% in East-Europe to 3.4% in West-Central Asia) and hospital (0.3% in North-Europe to 14.6% in East-South Asia). CDAD patients were most often admitted on adult medical wards (53.9%), followed by adult surgical wards (18.7%). In total, 434 antibiotics were prescribed to treat CDAD. Top five prescribed were oral metronidazole (36.2%), oral vancomycin (34.3%), parenteral metronidazole (14.5%), oral fidaxomicin (2.3%) and parenteral vancomycin (2.1%). Overall, guidelines were not available in 7.8% of prescriptions and guideline compliance was 92.4%. Overall documentation of the reason for prescription was 76.5% (range: 42.7% in South-Europe to 97.2% in South-America). Documentation of stop/review date was 42.4% (range: 22.2% in South-Europe to 64.8% in North-America).

Conclusions: Reported prevalence of CDAD as well as antibiotic quality indicators vary a lot between regions and hospitals. The Global-PPS tool can be used for tailor-made antimicrobial stewardship interventions which allow identifying issues at hospital level, especially prescribing practices which could be targeted for change.