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Abstract (poster session)

First results of a Polish surveillance programme of Clostridium difficile infections: high prevalence of Clostridium difficile polymerase chain reaction (PCR) ribotype 027

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Objective. Stimulated by the ECDC capacity building network of CDI (ECDIS-net) we developed a surveillance programme to assess the incidence of hospitalized patients with CDI in Poland and to characterize *C. difficile* isolates. **Methods.** We selected 13 laboratories from different region in Poland to participate. The laboratories were requested to retrospectively determine the CDI incidence in 2011 and to collect *C. difficile* isolates during a prospective survey in February and March 2012. *C. difficile* isolates were cultured from three to ten consecutive-positive tested stool samples, obtained in routine diagnostics between February and March 2012. Isolates were sent to the Department of Medical Microbiology, Medical University of Warsaw (MUW), Poland for PCR-ribotyping and susceptibility testing for moxifloxacin, erythromycin, clindamycin, metronidazole, vancomycin and rifampicin. All strains resistant to moxifloxacin were confirmed by use RT-PCR (Cepheid) as presumptive Type 027/176. **Results.** In 2011, the mean incidence of CDI was 3,668 per 10.000 hospital admission (range between 0,842-6,67) in 13 participating centers. In February and March 2012, a total 124 *C. difficile* isolates was collected of which 44 (30%) revealed high level of resistance to moxifloxacin (MIC=32 mg/L). Of these 44 isolates, 95% belonged to Type 027 and 5% to Type 176 by PCR-ribotyping. Susceptibility testing was performed of 124 strains. Of these, 75% isolates were high resistant to moxifloxacin (MIC=32 mg/L), 20% to clindamycin (MIC 256 mg/L), 78% to erythromycin (MIC=256 mg/L). All strains were susceptible to vancomycin and one strains (Type 027) was resistant to metronidazole (MIC=2mg/L), according to EUCAST criteria. 20% of isolates Type 027 were highly resistant to rifampicin (MIC= 32 mg/L). **Conclusion.** We concluded that the epidemiology of CDI in Poland is changing with types 027 and 176 as the predominant types of fluoroquinolones resistant isolates. The incidence of CDI is comparable with incidence rates reported from other European countries. *C. difficile* Study Group: Mol A, Schneider A, Lisowska K, Kedzierska J, Kostkiewicz M, Gospodarek E, Mikucka A, Polowniak-Pracka H, Waker E, Hass K, Duda U, Dubiel G, Guzek A, Szulencka G, Sztych K, Pawlik D. G. Nurzynska Acknowledgements: This work was supported by National Science Center, Grant no. 3G27.