

27th **ECCMID**

Vienna, Austria
22 – 25 April 2017

The congress of  ESCMID

Session: P050 Antibiotic prescribing - consumer and prescriber surveys

Category: 5d. Pharmacoepidemiology, improved prescribing and antibiotic stewardship

24 April 2017, 12:30 - 13:30
P1116

Young doctors perspectives on antimicrobial use and resistance in Europe: preliminary results of the YPAR study

Bojana Beovic^{*1}, May Dousak², Céline Pulcini³, Guillaume Beraud⁴, José Ramón Pano-Pardo⁵, Diamantis Kofteridis⁶, Joana Cortez Alvares⁷, Leonardo Pagani⁸, Maša Klešnik⁹, Kristina Nadrah¹⁰, Samo Uhan¹¹, Mitja Hafner Fink², Dilip Nathwani¹²

¹*University Medical Centre Ljubljana; Department of Infectious Diseases*

²*Faculty of Social Sciences*

³*Chru de Nancy; Faculté de Médecine de Nancy; Service de Maladies Infectieuses*

⁴*University Hospital of Poitiers; Infectious Diseases*

⁵*Hospital Clínico Lozano Blesa*

⁶*University Hospital of Heraklion; Internal Medicine - Infectious Diseases Unit*

⁷*Praceta Prof. Mota Pinto*

⁸*Bolzano Central Hospital; Infectious Diseases Unit*

⁹*University Medical Centre Ljubljana*

¹⁰*Department of Infectious Diseases*

¹¹*Faculty of Social Sciences, University of Ljubljana*

¹²*Ninewells Hospital and Medical School; Infection Unit*

Background: Young doctors in training start to prescribe antibiotics on their own. We investigated their perspectives on antibiotic resistance and prescribing with regard to the country of residency, the specialty, the year of training and demographics.

Material/methods: A 23-item on-line questionnaire was developed by a multidisciplinary group of experts and sent to young doctors in training via national/regional co-ordinators in 9 European countries between October 2015 and March 2016. In further analysis we included the countries and the specialties with more than 100 respondents. Principal component analysis was used to view data structure. Bivariate analysis (one-way analysis of variance, ANOVA) was used to assess differences between residents in different years of training, between countries and speciality groups. To test direct effect of the year of the training, analysis of variance (ANOVA) with multiple factors was applied.

Results: 2366 participants completed the survey. We further analyzed results from 6 participating countries Spain (N=818), France (N=653), Slovenia (N=444), Italy (N=187), Portugal (N=154) and Greece (N=110), and specialties which were grouped in five major groups: family medicine (N=628), internal medicine (N=288), surgery (N=205), infectious diseases (N=156), and pediatrics (N=170). 323 participants were in their 1st year of residency, 331 in their 2nd, 380 in their 3rd, 277 in their 4th and 186 in their 5th or 6th year. The principal component analysis identified five independent dimensions: self-assessment of knowledge, decision making based on expected side-effects, decision making based on the severity of the clinical presentation, perception of different prescribing habits, and perception of antimicrobial resistance. Self-assessed knowledge on antibiotic prescribing was statistically different between the countries of specialization and the specialty groups being the highest among infectious diseases and family medicine residents and the lowest in surgery residents. We also observed an increase in the self-assessment of knowledge with the advance of the training with residents that have been further in their training being more confident about their knowledge than the residents that have just started their training. In addition, more experienced (higher year of residency) participants gave higher priority on patient's clinical picture. The perception of side effects did not differ between any of the groups. The perception of different prescribing habits differed among the countries of specialization and the specialty group. The perception of resistance as a problem was higher in female residents, we also found statistically significant differences among the countries and the specialty groups.

Conclusions: The study reveals the importance of sociocultural context defined by the country and the type of specialisation for the perception of antibiotic use and resistance in young doctors in training. Possible effect of tertiary socialisation is visible in the increase of self-assessed knowledge and the appreciation of clinical picture later during the training .