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Paper Poster Session

Education and competencies in antimicrobial stewardship

Young doctors' perspectives on antibiotic use and resistance in Europe in 2015 (YPAR): preliminary results

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Background: Young doctors in training start to prescribe antibiotics on their own. Large-scale studies assessing their KABP are rare, since most published studies focus on one country only. We investigated their attitudes toward antibiotic prescribing and antimicrobial resistance.

Material/methods: In October and November 2015 an online survey was sent to young doctors in training via national/regional co-ordinators in 9 European countries. The questionnaire was developed by experts in antimicrobial stewardship based on the literature. In addition, the co-ordinators invited the participants from various countries via Facebook.

Results: We present here interim results. 1056 participants have completed the survey so far, 1366 participants responded to at least half of the questions. Nine countries provided more than 10 participants, less than 10 answers were received from additional 20 countries. Specialty distribution is presented in Figure 1. Most young doctors estimated that the decision to prescribe an antibiotic is influenced by the laboratory results and imaging (98.7%), followed by immune status of the patients (96.9%) and severity of the disease (84.2%). They felt that decision depends upon the prescribing habits of the ward (77.4%) and senior colleagues (70.0%), but rarely expectations of the patients (12.0%). 93.4% and 70.3% of participants, while prescribing an antibiotic, bore in mind antibiotic resistance and *Clostridium difficile* infection respectively. Most participants recognized that antimicrobial resistance is a global (98.7%), and a national problem (92.2%), but less so a problem at the their workplace (76.3%). They were aware that many antibiotics prescriptions are unnecessary (93.6%), but only 37.6% felt that this is their own problem. The participants used grades from 1 to 5 to estimate their knowledge (5 being the highest): highest grade was given for the decision on the need of antibiotic treatment (3.8 ± 0.69) followed by interpretation of microbiology results (3.77 ± 0.86), the choice between parenteral and oral antibiotic (3.67 ± 0.89), the dose and the dose interval (3.51 ± 0.98). They were the least confident with the choice of antibiotic (3.40 ± 0.87) and the treatment duration (3.40 ± 0.86). 98.4% of young doctors claimed that they follow antibiotic prescribing guidelines. In 55.2% cases young doctors reported that they prescribe antibiotics as told by their mentors, who follow the guidelines in only 60.6%. Most young doctors (96.6%) wished to get more education in antibiotic prescribing. Education by industry played a role for only 21.6%.

Conclusions: Young doctors claim that they are aware of the problems of antibiotic resistance and prudent antibiotic prescribing, but not all of them recognize the problems at their own work-place or when they prescribe antibiotic on their own. They rate their own adherence to guidelines higher than the adherence of their supervisors.

Figure 1. Specialty distribution in young doctors who participated in the survey.



