is occurring in both community and hospital-acquired infections. A comprehensive system of antimicrobial resistance surveillance has identified high rates of resistance in key pathogens in some regions of Croatia. This study has examined the outpatient utilization of antibiotics in Croatia and estimation influence of therapeutic Quintiles Advisory Services, Hoofddorp, The Netherlands

Gubbels L, Dekkers R, Nijhuis T

The order of launch across the EU has changed over time. Germany’s dominance in first-in-row increased from average to first or second in the past decade. Meanwhile the number of innovative drug launches in multiple markets increased drastically over time, implying a change in strategy by grouping launches.

**PHP66**

**GENERIC DRUG UTILIZATION AMONG THE ELDERLY WITH MULTIPLE CHRONIC CONDITIONS IN THE UNITED STATES**

University of Southern California, Los Angeles, CA, USA

**OBJECTIVES:** Elderly people with multiple chronic conditions usually take a substantial number of medications every year. Thus in order to decrease the cost of medication, we need to consider whether or not medicines are prescribed and used in an efficient and equitable way. This study aims to measure the emergence of antimicrobial resistance and more focused needs are studied.

**Methods:** The total utilization from 2010 to 2015 was 23,20 DOTs/TID. The highest utilization was in 2011 – 23.87 DOTs/TID. Penicillins represented the highest utilization with 12.73 DOTs/TID, followed by cephalosporins (3.21 DOTs/TID) and macrolides (3.14 DOTs/TID). Amoxicillin + clavulanic acid was leading antibiotic with 8.36 DOTs/TID, followed by amoxicillin (3.22 DOTs/TID) and azithromycin (3.77 DOTs/TID).

**Results:** This study surveyed antibiotic use in the Croatia in period 2011 – 2015 using the data from wholesalers and all retail pharmacies to obtain a complete picture of antibiotic use over a 5-year period. The Anatomical Therapeutic Chemical (ATC) classification and the Days of Therapy (DOT) measurement were assigned to the data. Antibiotic use was measured as DOTs and DOTs per thousand inhabitants per day (DOTs/TID).

**Results:** The total utilization from 2010 to 2015 was 23.20 DOTs/TID. The highest utilization was in 2011 – 23.87 DOTs/TID. Penicillins represented the highest utilization with 12.73 DOTs/TID, followed by cephalosporins (3.21 DOTs/TID) and macrolides (3.14 DOTs/TID). Amoxicillin + clavulanic acid was leading antibiotic with 8.36 DOTs/TID, followed by amoxicillin (3.22 DOTs/TID) and azithromycin (3.77 DOTs/TID).

**Discussion:** The TTM is more rapid for innovative drugs compared to the non-innovative ones. The national average for TTM is 2.8 months; 3.7 and 1.8 for Germany (2.4 months). Germany’s first launches increased: the country was first or second for 29% of products from period A (1999), but this rate increased to 56% for products from period D (2009+). The UK’s first launches peaked between 1999 and 2003, but the rate of first row products decreased to the last three periods. Germany’s first launches in first-in-row increased from average to first or second in the past decade. Meanwhile the number of innovative drug launches in multiple markets increased drastically over time, implying a change in strategy by grouping launches.

**PHP67**

**THE BEHAVIOUR OF PHARMACISTS IN PUBLIC PHARMACIES IN RELATION TO THE CHINESE RISING ECONOMY**

Milscevoj, Georgievs A1, Krajnovic D1, Marinovic V1, Tasic A1, Arsic J1, Manojlovic J1

**University of Belgrade, Belgrade, Serbia, 1Materna medicina, Vranje, Serbia**

**OBJECTIVES:** The objective was to analyze the qualification and education of drugs and medical devices in pharmacy. The main variable of interest is the number of chronic conditions of the beneficiary, which was defined as the total number of different chronic diseases according to Chronic Condition-Decision definition. Other covariates include age, gender, TTM, days of therapy, days of treatment, and days of treatment per month. The TTM is defined as the time to market, the time from the first time a new drug is on the market to the time it is available on the market. The TTM is more rapid for innovative drugs compared to the non-innovative ones. The national average for TTM is 2.8 months; 3.7 and 1.8 for Germany (2.4 months). Germany’s first launches increased: the country was first or second for 29% of products from period A (1999), but this rate increased to 56% for products from period D (2009+). The UK’s first launches peaked between 1999 and 2003, but the rate of first row products decreased to the last three periods. Germany’s first launches in first-in-row increased from average to first or second in the past decade. Meanwhile the number of innovative drug launches in multiple markets increased drastically over time, implying a change in strategy by grouping launches.

**Methods:** The prospective cross-sectional study was conducted in the first half of the year 2016, using specially created questionnaire on a sample of pharmaceutical professionals in the primary level of health care system in Serbia. The questionnaire approved by the Ethics Committee for biomedical research of the Faculty of Pharmacy. The informed consent was obtained by participants who completed the survey instrument. Results: The questionnaire has been completed by 575 pharmacists at 52 healthcare institutions. Most participants were female (94.5%) with average age of 44.6±9.4 years. Almost all pharmacies have products that require cold chain regime (99.30%) and 98.8% claim that they respect its principles. The method and frequency of temperature checking in the cold chain is quite different from pharmacy to pharmacy. 32.2% of pharmacists measure the temperature twice a day, while 2.2% do that once or twice a week. In 6.8% pharmacies participants stated that the procedure with products that require cold chain in case of natural disasters does not exist, while for 6% of them the procedure is unknown. Conclusions: It is necessary to define uniform procedures for all the pharmacies on the primary level of health care system on handling cold chain. Additional training of health care workers on proper maintenance of cold chain is also required.

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**PHP68**

**TIME TRENDS IN SEQUENCE OF DRUG LAUNCH AROUND EUROPE**

Guliubel L, Dekker R, Nijhuis T

Quintiles Advisory Services, Hoofddorp, The Netherlands

**OBJECTIVES:** Deciding on timing is part of the order of pharmaceutical companies when planning a product launch in the EU. An important factor in this strategy is the order of launch across these markets. This research organizes the order of launch in France, Germany, Italy, Spain and the United Kingdom. **METHODS:** Pharmaceutical products subjected to health technology assessments (HTAs) in the EU5 since 2011 were identified. Products that were launched in at least four out of five markets were selected. Countries were ranked (1-5) in order of launch, with automatically rate 5 when a product was not launched. The year of first launch was used to categorize products into four time periods. After period A (1999-2003), period D (2009+). The UK’s first launches peaked between 1999 and 2003, but the rate of first row products decreased to the last three periods. Germany’s first launches in first-in-row increased from average to first or second in the past decade. Meanwhile the number of innovative drug launches in multiple markets increased drastically over time, implying a change in strategy by grouping launches.