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 subgroups and antibiotics on total consumption. **METHODS:** 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 Treatment (DOT) measurement units 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 (1,77 DOTs/TID). **CONCLUSIONS:** Very high consumption of antibiotics was observed in outpatient sector with high use of broad spectrum and newer antibiotics. The risk of resistance to beta-lactamase antibiotics and macrolides is expected. Suitable interventions as education of physicians and pharmacist should be implemented to promote rational use of antibiotics. This study could be early warning for the emergence of antimicrobial resistance and more focused studies are needed.

PHP66

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

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OBJECTIVES: Elderly people with multiple chronic conditions usually take a substantial number of medication every year. Thus in order to decrease the out-of-pocket spending on prescription drug, they may choose generic alternatives over the branded drug since generics cost less. The objective of this project aims to characterize the association of number of chronic conditions and generic utilization among elderly people in the United States. **METHODS:** We used 20% Medicare data of 2012, which included the Prescription Drug Event file, and other files containing information about the beneficiary and their health status. The outcome is defined as the generic drug share of the total drug use at the person-year level. We used IMS drug classification to categorize claims of generic and branded drug. 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 Warehouse definition. Other covariates include age, gender, out-of-pocket spending for drug during the year of the beneficiary, plan type that the beneficiary was enrolled in, and whether the beneficiary received any subsidy for health care and drug use. We ran a multivariate linear regression model to examine the association. **RESULTS:** The mean age of the sample population is 69.7 years old and on average, each beneficiary had more than 6 chronic conditions and about 72% of the total claims in the year was generic drug. The coefficient on comorbidity is 0.008 and it's statistically significant, indicating that with one more chronic conditions, the use of generic drug may increase by 0.8%. **CONCLUSIONS:** Elderly people with more comorbidity may tend to use more generic drug in order to save on the out-of-pocket spending.

PHP67

THE BEHAVIOUR OF PHARMACISTS IN PUBLIC PHARMACIES IN RELATION TO THE COLD REGIME DRUGS

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OBJECTIVES: In order to maintain the quality and safety of drugs and medical devices, it is necessary to comply with all the procedures prescribed by the manufacturer on how to store and transport them. Therefore the cold chain of drugs and medical devices has to be respected from the production site to the user. It is essential to provide the right information to the user on further handling this type of medications. **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 32 healthcare institutions; Most participants were female (94.5%) with average age of 44.64±9.04 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. 33.2% 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 4% 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 maintainence of cold chain is also required. ACKNOWLEDGEMENTS Ministry of Education, Science and Technological Development of the Republic of Serbia (project No. 41004 and No. 175036).

PHP68

TIME TRENDS IN SEQUENCE OF DRUG LAUNCH ACROSS EU5

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OBJECTIVES: Deciding on timing is part of the strategy of pharmaceutical companies when planning a product launch in the EU5. An important factor in this strategy is the order of launch across these markets. This research investigates 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 use to categorize products into four periods: A) prior to 1999, B) 1999-2003, C) 2004-2008 and D) 2009 onwards. Launches in the same month were considered simultaneous launches and were given the same rank. **RESULTS:** 305 products met the inclusion criteria. France was mostly the last country in row (rank 4 or 5 in 77%). 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 peeked between 1999 and 2003, but the rate of first-or-second to market decreased to a stable level in the two most recent periods. **CONCLUSIONS:** The order of launch across the EU5 has changed over time. Germany's dominance in first-in-row increased from average to first or second in more than half of all launched products. Meanwhile, the rate of simultaneous launches in multiple markets increased drastically over time, implying a change in strategy by grouping launches.

PHP69

EXPLORING DETERMINANTS OF POLYPHARMACY IN THE ELDERLY POPULATION IN AUSTRIA

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OBJECTIVES: Elderly people are likely to take several medicines at the same time (polypharmacy) which may carry the risk of adverse drug events and drug-drug interactions. The study aims to explore the prevalence and possible socioeconomic and institutional determinants of polypharmacy in the Austrian non-institutionalized population above 60. **METHODS:** Cross-sectional data from the first wave of the European Health Interview Survey (2006/2007) for Austria were analysed through multivariate logistic regression analyses. Prescribed and non-prescribed medication was measured by self-reported consumption of groups of medicines in the last two weeks. Explanatory variables included socioeconomic factors (measured by education), institutional factors (measured by contacts with hospitals and physician practices), controlling for health needs factors and demographic characteristics. **RESULTS:** 15% of the surveyed elderly population reported using no medication at all. 24% took medication from one group of prescribed or non-prescribed medicines, 38% of two or three groups and 23% of four or more groups of prescribed or non-prescribed medication. Most frequently taken were medications to treat high blood pressure, joint pain, and other pain medication. In terms of non-prescribed medicines, vitamins and minerals were consumed most commonly. Polypharmacy was mostly associated with deteriorated health status, higher age, follow-up outpatient visits, previous hospitalization and lower education. **CONCLUSIONS:** The use of a higher number of medicines is not only related to health needs, but also other factors, including socioeconomic status. Further research is needed to understand whether or not medicines are prescribed and used in an efficient and equitable way.

PHP70

REGIONAL TIME TO MARKET OF INNOVATIVE DRUGS IN ITALY

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OBJECTIVES: Following marketing authorization by the Italian Medicines Agency (AIFA), drugs need an approval step at regional level before being available to patients. The main purpose of this research is to define time to market (TTM) for innovative drugs, from the AIFA Pricing and Reimbursement (P&R) assessment, to regional patient access. **METHODS:** A selection of new molecular entities (NMEs), which received a P&R assessment by AIFA in the 2012-2016 period, was considered. The sample included 39 drugs with different characteristics: innovative (n=17), non-innovative (n=22) and belonging to different therapeutic areas (i.e. antivirals, oncologic, cardiometabolic, and Central Nervous System). A desk research on the Italian Official Journals (Gazzette Ufficiali) was carried out to collect P&R approval dates. The dates of first regional dispensation were obtained through the IMS Health Hospital database, which gathers data on hospital and local healthcare unit direct distribution. **RESULTS:** 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 non-innovative and innovative drugs respectively. Regions show a high variability in the mean time (months) required for patients access. The regional analysis on innovative drugs shows a north-south gradient. The Northern regions (i.e. Lombardy, Piedmont-Valle d'Aosta, Tuscany) have shorter TTM (1-1.3 months). On the contrary, the southern regions (i.e. Sicily, Calabria, Basilicata, Molise) show longer TTM (>2.1 months). TTM is shorter for antivirals (1.4 months) compared to oncologics (2.4 months). **CONCLUSIONS:** The regional access is an important additional step that new molecules have to go through, towards final patient access. This process appears to be particularly time consuming especially in some regions. Regional measures and clear access pathway for drug formulary inclusion, while having a fundamental assessment role, should also be particularly devoted to guarantee a fast patient access especially for innovative molecules.

PHP71

PARALLEL EXPORT AND ITS IMPACT ON AVAILABILITY OF DRUGS IN SLOVAKIA

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OBJECTIVES: Slovakia is an attractive base for exporting drugs to those countries where prices are higher. Due to parallel export of drugs, Slovakia has a recurring problem with insufficiency of drug supply. The aim of this work is to estimate the share of parallel export on the whole turnover of pharmaceuticals and point out those drugs where the highest risk of export exists due to big difference of price