

OBJECTIVES: Clinical trials comparing rivaroxaban or dabigatran to warfarin show similar results for major and non-major clinically relevant bleeding. Post-marketing data regarding bleeding rates for these new oral anticoagulants (NOACs) is lacking. Our goal was to evaluate bleeding related outcomes with NOACs using a disproportionality analysis of spontaneous adverse event reports. **METHODS:** We evaluated the FAERS database from 10/2011 – 12/2012 to compare frequency of events in reports of rivaroxaban, dabigatran, and warfarin related to fatal and non-fatal bleeding. Reports were included if the anticoagulant was the primary suspected agent for the event. Reporting odds ratio (ROR) and proportional reporting ratio (PRR) were calculated to estimate risk for each anticoagulant. **RESULTS:** Of 22,244 eligible adverse drug reports for the anticoagulants, 7661 (34%) bleeding reports were submitted, with 1868 (24%) deaths, 5028 (66%) hospitalizations and 1040 (14%) life-threatening events. Dabigatran was the most commonly reported anticoagulant exposure among bleeding cases ($n=5203$, 68%). Of the bleeding cases associated with dabigatran, death was reported in 29%, hospitalization in 67%, and life-threatening events in 15% of cases. The odds of exposure for fatal bleeding was significantly higher with dabigatran (ROR 2.28, 95% confidence interval [CI] 2.02-2.56) and significantly lower with rivaroxaban (ROR 0.75, CI = 0.69-0.8) and warfarin (ROR 0.53, CI = 0.44-0.63). PRR indicated significantly increased risk of non-fatal bleeding with dabigatran (PRR = 2.12, CI = 1.99-2.24) and warfarin (PRR = 1.27, CI = 1.17-1.38) with a significant decrease associated with rivaroxaban (PRR 0.8, CI = 0.75-0.86). **CONCLUSIONS:** Among the NOACs, patients having fatal and non-fatal bleeding were found to have higher odds of dabigatran exposure and significantly lower odds of rivaroxaban exposure. Though FAERS is subject to significant bias, the results suggest dabigatran-related bleeding is higher in clinical practice and rivaroxaban may be a safer alternative.

PCV26

ANTIHYPERTENSIVE DRUG UTILIZATION IN ELDERLY OUTPATIENTS IN SERBIA

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OBJECTIVES: Arterial hypertension represents a major cause of morbidity and mortality among elderly population in Novi Sad, Serbia. The aim of this study was to analyze patterns and address financial aspects of antihypertensive drug utilization among elderly outpatients (>60). **METHODS:** Data on antihypertensive issued on prescription were collected from all state-owned pharmacies in Novi Sad (population 350,000) from September 2011 to February 2012. Consumption was calculated using the ATC/DDD methodology, and results were expressed in DDD/1000 inhabitants/day. DU90% (drug utilization 90%) segment and price per DDD were determined. **RESULTS:** The total use of antihypertensives among population >60 years in Novi Sad, Serbia was 203.1 DDD/1000inh/day. ACE inhibitors were the most frequently used drugs and accounted for 58.44% of total consumption, followed by calcium channel blockers (23.51%) and beta-blockers (11.10%). Consumption of diuretics (4.29%) and angiotensin receptor antagonists (<3%) was low. High use of ACE inhibitors was also reflected in DU90% profile. Even though most commonly prescribed drug was amlodipine (18.49%), out of 16 drugs within DU90% segment, 10 were ACE inhibitors or ACE inhibitors/diuretics fixed combinations. Average price per DDD within DU90% was 0.09 euro per DDD whereas it was 0.12 euro per DDD for drugs beyond the DU90% segment. **CONCLUSIONS:** High consumption of ACE inhibitors and disregard to other antihypertensive agents points to therapeutic irrationalities which can have considerable clinical and economic consequences. Targeted education may both improve efficacy of treatment of hypertension in elderly and provide significant savings. Acknowledgement: This work was supported by the Ministry of Science and Technological Development, Republic of Serbia, project No. 41012.

PCV27

USE OF SELECTIVE-SEROTONIN REUPTAKE INHIBITORS AND PLATELET AGGREGATION INHIBITORS AMONG INDIVIDUALS WITH CO-OCCURRING HEART DISEASE AND DEPRESSION OR ANXIETY

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OBJECTIVES: Anxiety and depression are prevalent in individuals with coronary heart disease. Selective-serotonin reuptake inhibitors (SSRI) are first-line therapy for many anxiety and depression disorders. Platelet aggregation inhibitors (PAI) are the cornerstone of therapy for various types of heart disease. These medications are relatively contraindicated due to an increased risk for many types of bleeding. The purpose of the study was to examine the prevalence and predictors of use of both SSRI and PAI among individuals with co-occurring heart disease and anxiety or depression. **METHODS:** Respondents who were age 22 years and older, alive throughout the study period, diagnosed with heart disease and co-occurring anxiety or depression ($n=1,253$) in 2009-11 of the Medical Expenditures Panel Survey were included. Use of treatment was grouped as: 1) SSRI and PAI, 2) SSRI or PAI, and 3) Neither SSRI or PAI. **RESULTS:** Overall, 11.2% used both SSRI and PAI, 46.3% used SSRI or PAI, and 42.5% used neither SSRI nor PAI. Significant subgroup differences were observed in the use of treatment. Females were less likely to be prescribed the inappropriate combination [AOR 0.57 (95%CI= 0.36-0.92)] while respondents having education less than high school [AOR 2.27 (95%CI= 1.30-3.99)] or a diagnosis of diabetes [AOR 2.13 (95%CI= 1.28-3.53)] were more likely to be prescribed the inappropriate combination. **CONCLUSIONS:** In this sample potentially inappropriate medication use was prevalent. Patients with less education or lower socioeconomic status are more likely to have health disparities and are at higher risk for both physical and mental health conditions. In this study, the patients with lower levels of education were more likely to be receiving an inappropriate combination of medications. The strong association with diabetes diagnosis and treatment choice is important because of the increased risk for bleeding in patients who received treatment for diabetes.

PCV28

VOLUME AND STRUCTURE OF ANTIHYPERTENSIVE DRUGS CONSUMPTION IN UKRAINE

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OBJECTIVES: Arterial hypertension (AH) largely determines the high mortality rate and disability of working age persons from coronary heart diseases. In Ukraine in 2012 according to official statistics 12.1 million patients with AH were registered. It is 32.2% of the adult population. The purpose of the study - assessment structure and volume of antihypertensive drugs (AHDs) consumption during 2008-2013 in Ukraine. **METHODS:** Analysis of AHDs consumption was performed using ATC/DDD-methodology and data of drugs supply in informational-search system "Pharmaceuticals" of company MORION during 2008-2013. Consumption of AHDs was determined in the indicator: DDDs / 1000 inhabitants / day (DIDs). AHDs of the first-line: thiazide and thiazide-type diuretics, β -blockers, calcium channel blockers, ACE inhibitors, angiotensin II receptor blockers and the second line: α -blockers, central antiadrenergic drugs, peripheral vasodilators were analyzed. **RESULTS:** Volume of AHDs consumption increased from 60,64 DIDs in 2008 to 96,43 DIDs in 2013. About 6.08% - 9.6% of inhabitants take one DDD per day. Recalculation volumes of AHDs consumption for a total aggregate of patients with AH showed that only 23% - 36% of patients receive treatment. This testifies to the low adherence of patients to treatment. A comparison the volumes of AHDs consumption has shown that the consumption of AHDs in Ukraine is less, but stroke mortality is higher than in the developed countries. Consumption of AHDs of the first line accounts for a large share which increased from 83.7% in 2008 to 89.3% in 2013. Consumption of AHDs of the second line decreased. **CONCLUSIONS:** Structure of AHDs consumption in Ukraine indicates compliance of antihypertensive therapy to current clinical guidelines. The consumption of AHDs in Ukraine is less than in other countries, so the most urgent problem for Ukraine is to find mechanisms for increasing the adherence of patients to hypertension treatment.

PCV29

OUTCOMES, HEALTH COSTS AND USE OF STATINS IN 6,226 PATIENTS ADMITTED IN 2011 FOR AN ACUTE CORONARY SYNDROME (ACS) OCCURRING IN A LARGE COMMUNITY SETTING OF 2,989,512 SUBJECTS

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OBJECTIVES: To assess in a community setting how patients discharged alive after an ACS are treated with statins. Specifically, the rate of prescription, the dosages and 1-year adherence have been evaluated. **METHODS:** From the ARNO Observatory, we carried out a record linkage analysis of discharge records for ACS and prescription databases, which included 2,989,512 subjects of 7 Local Health Authorities from Northern to Southern Italy. The accrual period lasted from January 1 to December 31, 2011. **RESULTS:** Of the 2,989,512 subjects, 6,226 (2.1%) were hospitalized for ACS over the 12 months of observation, 58% of patients were aged more than 70 years, females accounted for 36% of the cases, diabetes was reported in 31%. In-hospital all-cause death was 4.6%. Of the patients discharged alive, 69.9% received a statin treatment at the time of discharge. High dosage of statins were used in 70.4% of cases. After 1 year follow-up, adherence to treatment was observed in 71.7% of patients. Over the 1-year follow-up, 63.3% of the patients needed to be readmitted again (50.4% for cardiovascular causes). The average yearly cost per patient for the total ACS population was 16,897€/year (drugs, 1,692€; hospitalizations, 14,198€; diagnostic and outpatient visits, 1,007€). **CONCLUSIONS:** In a community setting, the rate of prescription of statins after an ACS seems to be at least suboptimal. However, the dosages of prescribed statins suggest that the use of intensive statin treatment increased over the last few years. Prescription continuity over time was not adequately followed. Patients with ACS have high direct healthcare costs, rehospitalization being the main cost driver. There is still a gap between evidence based recommendations and what actually happens in the routine clinical practice, surely determining a high social and economical burden for the national health structures.

PCV30

PHYSICIAN'S ADHERENCE TO TREATMENT GUIDELINES IN DEEP VEIN THROMBOSIS AT AN INDIAN TERTIARY HEALTHCARE FACILITY

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OBJECTIVES: Despite the availability of effective prophylactic and therapeutic options, VTE continues to be under diagnosed and undertreated. The incidence of DVT in India, however, is comparable to that in the Western countries. This study aimed to assess the adherence of treatment guidelines in the prophylaxis of DVT and evaluated the risk factors associated with DVT. **METHODS:** The prospective study was carried out at an Indian tertiary healthcare setting where the patients were enrolled in the study as per the defined inclusion and exclusion criteria. The results are based on findings from a total of 230 patients. The patients were classified into four different categories based on the risk of DVT: low, moderate, high and highest. **RESULTS:** The results are based on data obtained from 158 female and 72 male patients. The average age of the patients was found to be 62.1±0.9 yrs. The average age of female patients was found to be statistically significantly higher than the average age of male patients. Of 230 patients, 207 patients received Enoxaparin/ Rivaroxaban/ Dabigatran for prophylaxis and 5 patients through DVT pump and limb physiotherapy. It was found that 18 patients did not receive any type of DVT prophylaxis; and, out of 18 patients, 10 were managed for DVT prophylaxis with active toe movements. The adherence to the pharmacological prophylaxis was found to be 92.2%. **CONCLUSIONS:** The results of this study have shown that the adherence to ACCP guidelines in DVT prophylaxis in this study population was high (92.2%). Further, an association between surgery (major surgery, orthopaedic surgery), age and DVT risk appears to be existent.