PHP148
SELF- ASSESMENT OF HEALTH PROFESSIONALS' COMMUNICATION SKILLS WITH PATIENTS
Jocic D, Krajnovic D, Tadic I
*University of Belgrade – Faculty of Pharmacy, Belgrade, Serbia and Montenegro*
**OBJECTIVES:** Effective communication helps us to clearly understand patients or situation and enable us to make differences, build trust and respect. If a health professional does not have communication skills, it may reduce compliance and decrease the quality of health care. The aim of this study was to self-assess the communication skills during daily work in delivering care to patients by pharmacists and physicians at community settings. **METHODS:** This study is a pilot project of an ongoing Research Project aiming to investigate social and behavioral insights of pharmaciesy and physicians working in community settings in Serbia, started in November 2011. The rating scale is used to test pharmacists' skills and in-patient communication designed for the needs of the research consisted of 31 claims. **RESULTS:** The questionnaire completed 157 health professionals (physician, pharmacists) from the southeastern and central part of Serbia (75.3 % of which were females). The average age of participants were 40.42±9.38 and the average years of work experience were 12.92 ± 9.10 years.There is a correlation between the age of pharmacists and the following variables: assertiveness ($r = 0.456$, $p < 0.01$), active listening skills of patient ($r = 0.443$, $p < 0.01$), questioning patient ($r = 0.455$, $p < 0.01$), rhetoric skills ($r = 0.540$, $p<0.01$). ANOVA examined the effects of age on empathy ($F(4.64) = 1.52$, $p = 0.01$), assertiveness ($F(4.64) = 3.54$, $p = 0.01$), rhetoric skills ($F(4.64) = 2.48$, $p = 0.01$) and adherence to ethical principles ($F(4.64) = 1.53$, $p = 0.01$). **CONCLUSIONS:** Elder health professionals with greater empathy are more assertive having better rhetoric skills and adherence to ethical principles in communication. There is a need to improve the communication skills of young health professionals.

PHP149
REGULATORY AND GENERAL EPIDEMIOLOGICAL KNOWLEDGE ABOUT RARE DISEASES AND ACCESS TO TREATMENT FOR RARE DISEASES: HEALTH PROFESSIONALS' VIEW IN SERBIA
Krajnovic D[1], Jocic D[1], Arsic J[2], Petrova G[3], Tadic I[1], Tasic L[1], Jocic-Milosavljevic B[4]
[1]*University of Belgrade – Faculty of Pharmacy, Belgrade, Serbia and Montenegro,* [2]*Apoteka Vranje, Vranje, Serbia and Montenegro,* [3]*Medical University in Sofia - Faculty of Pharmacy, Sofia, Bulgaria,* [4]*Apoteka Pancevo, Belgrade, Serbia and Montenegro*
**OBJECTIVES:** To assess the knowledge of health professionals about epidemiological and national regulatory issues concerning rare diseases (RD) and access to orphan drugs. **METHODS:** This paper reports some of the results from an ongoing KAP study on rare diseases and orphan drugs in the Republic of Serbia (RS). A prospective cross-sectional study was conducted from May to June 2013, on a convenient sample of licensed pharmacists and physicians from two, large cities' and its suburbies in the central parts of RS. A specially designed KAP instrument in a form of three-part questionnaire was applied and these results were related to the assessment of concerning knowledge (8 multiple-choice questions) and self-assessment of the participants (one question). **RESULTS:** The study population included 214 health workers (151 pharmacists and 63 physicians); the average age of participants was 40.80±9.45 and the average years of professional practice was 13.14 ± 9.68. Majority of the participants (57%) knew the true prevalence of RD and slightly less than third of the samples (26.2%) responded correctly to the question of the extent of European population suffering from RD. There are major differences in regulatory knowledge about access to treatment for rare diseases, as participants answered correctly in a wide range of 21% to 67.4%. Most of the health professionals self-estimated that possessed little (31.3%) or enough (43.5%) knowledge related to general epidemiological and legislative issues concerning RD and orphan drugs. The average level of overall knowledge assessment for all questions and self-assessmentin general was 3.53 ± 1.58 and 2.04± 0.87 respectively. **CONCLUSIONS:** The majority of respondents estimated that possess less knowledge on RD (general information) and drugs to treat RD, or insufficiently. The average level of respondents' knowledge on RD and drugs to treat RD was below the average.

PHP150
TIMING OF DISCHARGE MAKES A DIFFERENCE: THE EFFECTS OF LENGTH OF STAY AND DAY OF DISCHARGE ON 30-DAY READMISSIONS
Flaks-Manov N[1], Shadmi E[2], Bitterman H[3], Balicer RD[4]
[1]*Clalit Health Services, Tel-Aviv, Israel,* [2]*University of Haifa, Haifa, Israel,* [3]*Clalit Health Sevi, Technion City, Haifa, Israel,* [4]*Clalit Health Services, Tel Aviv, Israel*
**OBJECTIVES:** The evidence on the influence of timing of discharge on readmission risk is inconsistent, showing that both increased length of stay (LOS) and early discharge are associated with an increased risk of readmission. We aimed to test whether LOS and day of discharge (i.e., weekend vs. work days) are associated with the risk of 30-day emergency readmission. **METHODS:** Data on first admission to internal medicine departments during January – March 2010 was retrieved from Clalit Health Services' data warehouse. Inclusion criteria: LOS of >= 2 nights, age 18+, readmitted to an internal medicine demartment or ICU. Predictors: LOS, ACG morbidity categories, age, socioeconomic status, and prior health care use. Logistic regression was used to model the effect of discharge day and LOS on 30-day emergency readmission, controlling for known risk factors. **RESULTS:** After adjustment for morbidity, clinical and demographic factors, there is an increased risk for 30-day readmissions associated with increased length of stay (OR=1.56 when LOS is 8+ days vs. 2-3 days, p<0.001). Focusing on 2-7 day hospitalizations, the same association is found (OR=1.47 for LOS > 5 days, p<0.001). Being discharged over the weekend increases the odds of readmission by 11% (p=0.04), controlling for all known risk factors. Modeling for an outcome of readmission or death, or for a 7-day readmission outcome, resulted in similar findings. **CONCLUSIONS:** Our study showed that contrary to some of the evidence, longer hospital stays were associated with increased risk of unplanned readmission. Being discharged over the weekend incurs mild additional risk for readmission, especially at shorter LOS. These findings suggest that despite short LOS in Israel, increasing LOS as a readmissions reduction strategy may be ineffective, unless the specific need and care content of these additional days is assured.

PHP151
MEDICATION ERRORS-INCIDENCE, CAUSES AND POSSIBLE PREVENTION STRATEGIES IN INDIAN HEALTH CARE SETTING
Patel H, Parthasarathi G, Shashank C, Adithyanath B, Shwetha D, Doney J
*JSS College of Pharmacy, JSS University, Mysore, India*
**OBJECTIVES:** Medication errors (MEs) frequently contribute for patient's morbidity and mortality in health care settings. The present study was aimed to identify and assess the pattern of occurrence of MEs and to develop strategies to prevent these MEs. **METHODS:** It was a prospective study conducted in a teaching hospital over a period of 6 months. Trainee clinical pharmacists followed the patients admitted to general surgery (GS) wards. MEs occurred and the cause for ME was identified by reviewing medical records, interviewing patients and concerned health care professionals (HCPs). All identified MEs were documented electronically and were evaluated for its nature, extent, cause and outcome. Prevention strategies were developed accordingly. **RESULTS:** A total of 417 MEs were identified in 313 patients from 1125 patients followed. Calculated incidence of MEs in GS wards was 27.8%. The majority of them were prescribing errors (60.4%), followed by administration errors (38.6%) and dispensing errors (9.8%). The common reasons observed for MEs were omission error (25%), incorrect drug selection (14%), wrong frequency (10%), poor patient adherence to medicines (7%), drug use without indication (7%), improper dose (6%), wrong administration (4%) and wrong time (3%). Pantoprazole (27.5%), Ceftriaxone (9.8%), Piperacillin-Tazobactum (6.7%), Diclofenac (6.4%) and Tramadol (6.2%) were drugs commonly involved in MEs. Majority of MEs (96%) that reached to patients were not harmful but 32% of them needed monitoring/intervention to ensure patient safety. Around 60% of MEs were due to inappropriate prescribing by clinicians followed by patient non-adherence to therapy (14%), improper follow up by ward clinical pharmacists (15%) and nursing workload (11%). Strategies were designed to prevent commonly identified MEs. **CONCLUSIONS:** MEs can be minimized if patients are monitored correctly on time. Appropriate team work from all HCPs can certainly reduce the occurrence of MEs.

PHP152
THE RELATIONSHIP BETWEEN SCIENTIFIC RESEARCH, CLINICAL TRIALS AND FDA DRUG APPROVAL
Burgon J[1], Hamerslag L[2]
[1]*Costello Medical Consulting Ltd., Cambridge, UK,* [2]*Costello Medical Consulting Ltd., Cambridge, UK*
**OBJECTIVES:** An important aim of medical research is often to identify potential novel therapeutic targets for disease treatment. Here we investigated whether the amount of scientific research (measured as papers published) in a given disease area correlated with the number of clinical trials, and whether an increased amount of research in a disease area resulted in a higher number of FDA approved drugs. **METHODS:** FDA drugs approved between 2000-2013 were identified using the online database 'CenterWatch', and the number of papers and clinical trials for each disease area was established by running comprehensive searches on PubMed from 1975-2013, and ClinicalTrials.gov from 1999-2013, respectively. The total numbers of approved drugs, published papers and clinical trials were compared for each of 17 disease areas and, to analyse the correlations between these factors, simple regression analyses were performed. **RESULTS:** Analysis for correlation between the number of papers published and the number of clinical trials per disease area revealed a strong correlation between these two variables (R square: 0.69, $p<0.001$); thus, increasing numbers of published papers were associated with increasing numbers of clinical trials. Further analyses were carried out to investigate the relationship between the number of papers published, or clinical trials, and the number of drugs approved by the FDA. Interestingly, these analyses revealed that both clinical trials (R square: 0.05, $p=0.41$) and published papers (R square: 0.09, $p=0.25$) correlated poorly with the number of FDA approved drugs per disease area. **CONCLUSIONS:** These data suggest that the amount of research significantly correlates with the number of clinical trials in a given disease area. However, neither research nor clinical trials correlated with the number of drugs approved by the FDA. This may suggest that some disease areas could face a bottle neck at the drug approval stage, perhaps through difficulties in demonstrating efficacy.

PHP153
EFFECTS OF CHANGING HEALTH POLICY ON PHARMACOECONOMICS AND HEALTH OUTCOME STUDIES FROM 2000 TO 2012 IN TURKEY
Kockaya G[1], Daylan Kockaya P[2], Ergin G[1]
[1]*Health Economics and Policy Association, Ankara, Turkey,* [2]*Zirve University, Gaziantep, Turkey*
**OBJECTIVES:** Health policy chances may effect the conducted studies in all fields. Pharmacoeconomics dossiers for the reimbursement applications for new medicines were not mandatory before year 2008. New molecules need to show cost-effectiveness and possible budget effect with their applications for reimbursement to Social Security Institution from 2008. This policy changing may effect pharmacoeconomics and health outcome studies in Turkey. The aim of the study is to evaluate the improvement of pharmacoeconomics and health outcome studies which are specific for Turkey in years. **METHODS:** Database of ISPOR Outcome Research Digest were searched online from the begining of database (1998) to 2011 with the key words "Turkey" and "Turkish". The inclusion criteria were taken as study must be specific for Turkey and first author must be from Turkey. Included abstract evaluated for increasing in years, distribution in study topics and diseases areas. **RESULTS:** 121 abstracts were matched with inclusion criteria. First abstracts were published in 2000. There were only 16 abstracts in total until 2008. After year 2008, published abstracts numbers were increased year by year and reached up to 40 per year in 2012. 58.7% of all abstracts were Cost Studies(CS). It was followed by Health Care Use & Policy Studies(HP) (15.7%) and Patient Reported Outcomes & Preference-Based Studies (PRO) (12,7%). 49.3% of all Cost Studies were Cost-Effectiveness studies.