strategies to improve the current PP in Pakistan are warranted. Additionally, there is a great need of patient educational programs regarding polypharmacy and the treatment they receive. Furthermore, additional studies should be undertaken in other provinces of Pakistan in order to understand the country level clinicians' prescribing practices.

PHP44

PATIENTS' PERCEPTION AND KNOWLEDGE OF ADVERSE DRUG REACTIONS ASSOCIATED WITH HERBAL MEDICINES

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OBJECTIVES: This study was aimed to know patients' awareness and knowledge about herbal medicines and their Adverse Drug Reactions (ADRs). **METHODS:** 322 patients were asked to give responses to the questionnaire which was developed, structured and validated. Random convenience sampling method was used for selecting the sample size. The study was conducted in Manipal, Karnataka, India. The data was evaluated using SPSS and represented in the form of numbers and percentages. **RESULTS:** 96 patients who have not used herbal medicines were excluded from the study. Majority of the patients' were in the age group of 25-44 (46.3%) years and 45-64 (38.8%) years out of which males (54.3%) outnumbered females (45.7%). Majority of them were using ayurvedic medicines (24.5%) and combination (37%), allopathic and herbal medicines. Reasons behind usage of herbal medicines were, more efficacious and lesser side effects (34.07%) and followed by safer than conventional drugs (26.54%). Only 39.39% were having knowledge on dose, duration of therapy, side effects and drug interactions. Main sources of information about herbal medicines were found to be friends (32.74%) and drug advertisements (32.30%). Of 226 respondents only 65 (28.76%) of them could identify or felt ADRs. Out of 65, only 16 of them have reported to physician and 49 patients have taken their own decision.18 respondents chosen an alternative therapy, 14 stopped the medication, 9 and 8 reduced dosage without consultation and continued medication respectively. **CONCLUSIONS:** Overall the respondents of this study were using either herbal or combination medicines because they were considered as efficacious and have lesser side effects. However, their knowledge related to dose, duration of therapy, side effects and drug interaction was less. They were also less aware or couldn't identify ADRs and the ones who were aware about the ADRs, decisions taken by them were found to be inappropriate.

HEALTH CARE USE & POLICY STUDIES – Equity and Access

PHP45

IMPACT OF MEDICAID MANAGED CARE EXPANSION ON ACCESS TO PROVIDERS IN MISSISSIPPI

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OBJECTIVES: The objective of this study was to evaluate access to healthcare providers before and after a significant increase in managed care (MC) enrollment in the Mississippi Medicaid program. **METHODS:** A retrospective analysis was conducted using Mississippi Medicaid fee-for-service (FFS) and MC pharmacy claims data in the period one year prior to (pre-period) and one year after (post-period) the December 2012 Medicaid MC expansion. Beneficiaries had to be enrolled for at least one month during the study period to be included in the analysis. Providers were considered to be participating in a plan (FFS or MC) during each observation period if at least one pharmacy claim bearing his/her Medicaid provider identity number was filed during the period. Distance from beneficiary to provider was calculated by computing geocodes for their respective zip-codes using the PROC GEOCODE procedure in SAS. **RESULTS:** Overall, the average distance beneficiaries had to travel to see the three closest primary care providers (PCPs) or specialists who accept either FFS or Medicaid MC plans did not change significantly from the pre- to the post-period (10.2 miles for PCPs and 7.7 miles for specialist). During the post-period in rural areas, beneficiaries in MC had slightly lower distances for PCPs (10.6 miles for MC and 10.9 for FFS) and for specialist (8.6 miles for MC and 8.9 miles for FFS). Overall, the ratio of the number of enrollees per PCP significantly decreased for FFS ($p<0.01$) and significantly increased for MC plan A and B ($p<0.01$). The number of enrollees per specialist did not significantly change for FFS ($p=0.059$) and significantly increased for MC plan A and B ($p<0.01$) from the pre- to the post-period. **CONCLUSIONS:** Expansion of Medicaid MC has not adversely affected physician participation in Medicaid and in rural areas has slightly improved access to PCPs and specialists.

PHP46

GEOGRAPHICAL ACCESSIBILITY TO COMMUNITY AND HOSPITAL PHARMACIES IN HAMILTON COUNTY

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OBJECTIVES: It is unknown if timely access to pharmacies differs based on demographic characteristics. The objective of this study was to determine if disparities exist in geographical accessibility to community and hospital pharmacies among patients in Hamilton County. **METHODS:** The Ohio State Board of Pharmacy provided a list of all the pharmacies in Hamilton County Ohio. The geographic distribution of the population in each census block group was based on data from Census 2010. The address of each active pharmacy was geocoded using ArcMap. The location of each pharmacy was used to identify the nearest pharmacy to the centroid of each census block group. Independent variables included in the study were age, gender and race, the dependent variable was travel time to the nearest pharmacy from the centroid of each block group. **RESULTS:** As of November 2014, there were 173 active community and hospital pharmacies in Hamilton County. Ninety three percent of the population had at least one pharmacy within a 5 minute drive time. Travel time was 2.57 minutes for whites, 1.96 minutes for blacks ($p=0.0016$). Males and females had almost similar travel time of 2.43 and 2.40 minutes, respectively ($p=0.80$). Travel time was 2.44 minutes for the patients younger than 65 years and 2.28 minutes for patients older than 65 years ($p=0.25$). **CONCLUSIONS:** There was no major difference in access to pharmacy based on age or gender. Blacks have statistically significantly shorter travel time than whites. Future work will examine other factors like socioeconomic status.

PHP47

ANALYSIS OF MEDICINES CENTRALLY AUTHORISED BY THE EUROPEAN MEDICINES AGENCY (EMA) IN THE CONTEXT OF THEIR REIMBURSEMENT IN POLAND

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OBJECTIVES: The aim of the analysis was to compare the medicines centrally authorised by EMA with reference to their reimbursement in Poland. In Poland, innovative drugs need to be recommended by Agency for Health Technology Assessment (AOTM) before the decision about reimbursement is taken by Minister of Health. Recommendations issued by AOTM have been based on Manufacturer`s submission and additional officially published data, including EMA's data. **METHODS:** All decisions issued by EMA since 1995 connected with new medicines registration were analyzed and categorized into therapeutic area. Then it was checked which of the drugs found in the EMA's database were reimbursed in Poland in the years 2012- 2013. **RESULTS:** It was found that till the end of December 2014 there were 563 unique active substance available in EMA's database. The analysis shows that in 2012 the reimbursement in Poland was related to 114 active substances registered in EMA, which is approx. 20% of all substances in the EMA's database. A year later 3% (23%) more active substances (131) were reimbursed in Poland. Most active substances registered in EMA and reimbursed in Poland, belongs to the group ATC: L (antineoplastic and immunomodulating medicines). Over 40% of the active ingredients of this group registered in EMA were reimbursed in Poland in 2012 and 50% in 2013. The second ATC group was A (alimentary tract and metabolism) -12% and group B (blood and blood forming organs) -11% (in both years). **CONCLUSIONS:** Not all drugs registered in EMA are reimbursed in Poland. We can conclude that anticancer drugs are the most likely to be paid from public sources, then medicines related to treatment metabolism and blood disorders. It was found that there was any drug reimbursed in Poland registered by EMA in ATC group P (antiparasitic products, insecticides and repellents).

PHP48

ARE WE REALLY MEASURING ACCESS? SYSTEMATIC REVIEW OF ACCESS MEASURES TO MEDICINES IN BRAZIL

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OBJECTIVES: Access to medicines (ATM) is a key component in enabling and measuring the performance of health systems. This study aims to determine, through a systematic literature review, the profile of studies and the results of ATM's indicators in Brazil, according with the dimensions of access proposed by Penchansky and Thomas **METHODS:** A systematic review of observational studies was performed using articles located in PUBMED, CENTRAL, LILACS and Essential Medicines and Health Products Information Portal (WHO) databases (accessed July 2014), in manual search and in grey literature. The methodological quality was assessed using the Quality Assessment Tool for Observational Cohort and Cross-Sectional Studies of NIH (National Institute of Health - USA). **RESULTS:** 1482 studies were found and 28 were included. Among these, 64% evaluated access at the municipal level, 75% in the public sector, 50% from the perspective of users, 75% the access to essential medicines, 50% evaluated more than one dimension, 82% had indicators related to availability. Among all dimensions of ATM 18 different indicators were found. The indicator with the greatest utilization rate physical availability (PA) was used in 39% of the studies. The results of the indicators were variable, ranged from 30 to 90.2% for PA and from 2.02 to 18.7 for Median Price Ratio, for example. The quality of studies included was considered adequate. **CONCLUSIONS:** Most of ATM studies in Brazil evaluated it in the public sector, assessing essential drugs and using as a data source the users. The studies had focus on availability and no studies have assessed all dimensions of ATM. The access level was variable between studies. This review raises the need to develop a guideline to evaluate ATM that foment comparisons and evaluations of the health systems performance through the time.

PHP49

ACOUNTABLE CARE ORGANIZATIONS- AN ECONOMIC SOLUTION TO PROVIDE QUALITY HEALTHCARE FOR MEDICARE PATIENTS

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OBJECTIVES: Accountable Care Organizations (ACOs) are groups of doctors, hospitals, and other health care providers, who come together voluntarily to give coordinated high quality care to their Medicare patients. The objective is to understand how the policy development and implementation is helping to solve the cost and quality of the fragmented U.S. healthcare system. **METHODS:** Knovner and Knickman (2011) textbook on Healthcare delivery in the United States elaborates on the major issues and concerns facing the U.S. healthcare system was used to evaluate the policy perspective and CMS published data was used to compare the performance of ACOs. **RESULTS:** ACO was able to deal with all the major issues and concerns pointed by Knovner and Knickman(2011) in the policy perspective. CMS published data shows that 360 Medicare ACOs has been established serving 5.6 million Americans. ACOs in Pioneer ACO model and Medicare Shared Savings Program (MSSP) generated over $417 million in savings for Medicare. Quality of Care and Patient experience showed improvements in 28 of the 33 quality measures and 30 of 33 quality measures in Pioneer and MSSP ACOs. Only 3 Pioneer ACO and 1 MSSP generated shared losses. **CONCLUSIONS:** The new program has tried to learn from