illness (RIH rate: 7.03%) of which 196 tested RSV-positive (RSVH rate: 1.76%). All RIHs were not related to palivizumab (all 196 could be ruled out) and 62 SAEs were documented in 52 infants. Fourteen events in 6 patients out of 62 SAEs were hyper-sensitivity reactions (moderate: 11; mild: 3). These were deemed possibly (n=10) or probably (n=2) related to palivizumab (rate: 0.0028 events per patient-month). The remaining 13 RIH-related SAEs were caused by bacterial and/or fungal infections not related (n=5), and unclassifiable (n=4).

CONCLUSIONS: Using an active surveillance system, a very small proportion of infants in the CARESS registry experienced SAEs that had a clear relationship with palivizumab and these cases appeared to be idiosyncratic. In routine practice, palivizumab appears to be a safe and well-tolerated antibody for RSV infection prophylaxis in high-risk children.

**PIN6**
HIGH DOSE VANCOMYCIN LOADING VERSUS LOW DOSE IS ASSOCIATED WITH DECREASED NEPHROTOXICITY IN EMERGENCY DEPARTMENT SEPSIS PATIENTS

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OBJECTIVES: To determine the incidence and morbidity among hospitalized patients with cSSSI treated with ceftaroline compared with vancomycin.

METHODS: A retrospective cohort study performed in three EDs. An electronic health record (EHR)-based clinical decision support tool provided guidance at the point of order for IV vancomycin compliant with recommendations. Inclusion criteria: age ≥ 18 years, IV vancomycin on order, and hospital admission. Exclusion criteria: no documented weight, hemodialysis-dependent, or < 2 creatinine (Cr) values. The primary outcome was incidence of nephrotoxicity within 5 days defined as at least 2 serial Cr higher than the initial measurement by at least 0.5 mg/dL or 50%. Analyses compared the incidence of nephrotoxicity and AKI between patients who received high dose (20 mg/kg) and low doses. Future analyses should distinguish between the occurrence of nephrotoxicity due to disease progression in severe sepsis versus vancomycin exposure.

**PIN7**
SAFETY PROFILE OF FLUOROQUINOLONES: ANALYSIS OF ADVERSE DRUG REACTIONS IN RELATION TO CONSUMPTION DATA USING PHARMAVIGILANCE DATABASE IN HEBEI, CHINA

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OBJECTIVES: The aim of this study was to reassess the safety profile of fluoroquinolones using the database of adverse drug reactions (ADR) Spontaneous report system of the National Medical Products Administration of China. Related data of fluoroquinolone-resistant E. coli isolated from Center for Drug Monitoring and Evaluation (CDME) of Hebei. Reports were classified by System Organ Classes with Triage Evaluation (CDME) of Hebei. Parametric data were compared using the t-test and categorical data with chi-squared tests.

RESULTS: An EHR-based query identified 2131 consecutive patients prescribed IV vancomycin over 6 months. Of these, 1330 patients met study criteria for the calculation of 1439 and 1431 patients for the sensitive and resistant exposed. Nephrotoxicity occurred in 8% of patients. High dose vancomycin was associated with a lower rate of nephrotoxicity (6% vs 11%, p<0.05) and a lower rate of AKI (8% vs 13%, p<0.05). We observed that different fluoroquinolones were characterized by different rates and types of ADRs. In current application of fluoroquinolones, clinicians did not pay sufficient attention to delayed-ADRs and ADRs resulting in glucose metabolism disorder, which might lead to more safety problems.

**PIN8**
THE METABOLIC CO-MORBIDITIES PREVALENCE AND RELATED TREATMENT COSTS BETWEEN HAART TREATED AND NOT TREATED HIV INFECTED PATIENTS IN TAIWAN

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OBJECTIVES: Highly active antiretroviral therapy (HAART) was available for HIV-infected patients in Taiwan since 1997. HAART can effectively reduce mortality and morbidity, but it may also increase the risk and related drug costs of metabolic co-morbidities. The aim of this research was to investigate the prevalence and treatment costs of metabolic co-morbidities such as diabetes, hypertension, and hyperlipidemia among HAART treated and not treated patients in Taiwan. We conducted a pharmaco-economics study using Taiwan-based version of the National Health Insurance Research Database (NHIRD) from Taiwan between 2010 and 2012. We extracted HIV-infected patients from both outpatient and inpatient with primary or secondary diagnosis of HIV (ICD codes 042-044). Prevalence and related drug costs of metabolic co-morbidities was estimated and comparison was made using SAS version 9.3. RESULTS: In the sampling database, there were 496 and 235 HIV infected patients with and without HAART treatments. They were mainly male (94.6% vs. 90.2%, p = 0.0255). HAART treated patients were older than those without (37.5 vs. 34.5, p = 0.0017). The prevalence rate among all patients were 38.8% for diabetes, 23.3% for hypertension, 23.4% for hyperlipidemia, as compared to 3.4%, 8.5% and 6.8% in patients without HAART. There were statistically significant differences for diabetes (p = 0.0294) and hyperlipidemia (p < 0.0001). The difference for hypertension was borderline statistically significant (p = 0.049). Overall mean expenditure per year of metabolic drug-related therapy for HIV-infected drug, antihypertensive drug, and sedative hypnotic drug were not statistically significant. CONCLUSIONS: Per previous literature reviews, the prevalence of metabolic co-morbidities for HIV patients with HAART was confirmed and increasing year by using the real world data in Taiwan. Good control of metabolic co-morbidities to reduce the risk of morbidity and mortality is highly recommended.

**PIN9**
INCREASING PREVALENCE OF CTX-M, TEM AND SHV BETA-LACTAMASES IN CLINICAL ISOLATES: A KATHOLIC E. COLI INFECTION CENTER'S SIGNIFICANT HEALTH AND ECONOMIC LOSSES - A PERSPECTIVE FROM PAKISTAN

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OBJECTIVES: E. coli is the most frequently encountered pathogen in clinical set up causing devastating infections irrespective of age and gender resulting in significant morbidity and mortality. E. coli isolates have been found resistant to variety of antibiotics commonly used in empirical therapy at hospitals and clinics. CTX-M, TEM and SHV type extended spectrum beta-lactamases are mainly responsible for this resistance. The aim of this study was to investigate the prevalence of CTX-M, TEM and SHV beta-lactamase in clinical isolates of E. coli and to assess the resulting economic burden on the poor population.

METHODS: E. coli isolates were collected from a tertiary care hospital between 2012 and 2013, and tested against several beta-lactams (sulbactam/ampicillin(80%), cefazolin(85%), cefpodoxime (58%), gentamycin(85%), ciprofloxacin(85%), levofloxacin(51%), chloramphenicol(38%), erythromycin(83%), amoxicillin/clavulanic acid(82%) and trimethoprim/sulfamethoxazole(91%)). The prevalence of different beta-lactamase types in E. coli isolates was CTX-M(72%), TEM(67%) and SHV(53%).

CONCLUSIONS: CTX-M, TEM and SHV beta-lactamases are responsible for such overwhelming resistance in these isolates. These enzymes are present on mobile genetic elements such as plasmids which are readily exchanged between diverse bacterial communities and leading this alarming resistance to epidemical level. More than 50% population live below the poverty line in Pakistan and cannot afford or have excess to expensive treatments, such resistance is challenging the very health care system of the country. Both infections and related deaths from antimicrobials is on the rise and is speed up by the unregulated sub-standard health practice in Pakistan. The current health and economic losses are incalculable but the more devastating consequences to the humanity and economy are not too far from reality.

**PIN10**
ANALYSIS OF RISK FACTORS OF DEATH IN H1N1 INFECTED PATIENTS IN A TERTIARY CARE HOSPITAL

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OBJECTIVES: H1N1 influenza infection associated with higher morbidity and mortality because of associated severe complications like acute respiratory distress syndrome (ARDS) and multiple organ dysfunction syndrome (MODS). This study was a retrospective study to evaluate the clinical characteristics, different complication and management strategies adopted to treat H1N1 infected patients in a tertiary care centre. To study the clinical features, complication, different risk factors affecting the outcome along with different management strategies used in the patients with confirmed H1N1 influenza infection.

METHODS: The medical records of 141 patients were analyzed retrospectively who were admitted to KMC Hospital, Manipal, from June 2012 through May 2014. RESULTS: Among the study population 51.1% were female with mean age of 32.54 years. Among 55.3% patients admitted without any significant medical history and 44.7% patients had major problems like diabetes mellitus, respiratory tract infections and bronchial asthma. Fever with headache was observed in 92.9% followed by cough (78.7%) and breathlessness (54.6%). According to severity of disease 53.2% patients were put on mechanical ventilation. All the patients were started with oseltamivir for influenza management. The co-infections were treated by beta-lactams (60.28%) and macrolides (41.11%). Diuretics were given in 32.46%, cefazidine (58%), gentamycin (85%), ciprofloxacin (85%), levofloxacin (51%), chloramphenicol (38%), erythromycin (83%), amoxicillin/clavulanic acid (82%) and trimethoprim/sulfamethoxazole (91%). The prevalence of different beta-lactamase types in E. coli isolates was CTX-M(72%), TEM(67%) and SHV(53%).

CONCLUSIONS: We observed that association was low oxygen saturation during admission, metabolic acidosis, multiple organ dysfunctions, children and anti-anxiety drugs. We also found that the complications like ARDS, sepsis and respiratory tract infections also influence the mortality rate.