### Program Schedule

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<th>TIME (IST)</th>
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<td><strong>08.01.2021 (Friday)</strong></td>
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| 09:30AM-9:45AM | *Inauguration and Key Note Address*  
Lt. Gen. (Dr.) M D Venkatesh  
Vice Chancellor, Manipal Academy of Higher Education, Manipal, India |
| 10:00AM-11:00AM | Connie Kang  
Assistant Professor of Clinical Pharmacy & Director of Interprofessional Education  
University of Southern California School of Pharmacy, USA  
*California Right Meds Collaborative: Improving Healthcare Quality by Bringing Comprehensive Medication Management to Patients* |
| **11:00AM-12:30AM** | Scientific Abstract Presentation I |
| 02:00PM-03:00PM | Rohan Elliott  
Senior Pharmacist at Austin Health  
Adjunct Associate Professor at Monash University, Melbourne, Australia  
The Pharmacist's Role in Geriatrics |
| 03:30PM-04:30PM | Dennis Thomas  
Early Career Research Fellow  
Priority Research Centre for Healthy Lungs, Hunter Medical Research Institute (HMRI)  
The University of Newcastle, Australia  
Clinical Research in the COVID-19 Era: Transient Adjustment or Realignment? |
| **09.01.2021 (Saturday)** | |
| 09:00AM-10:00AM | Rajesh Nayak  
Associate Professor  
Pharmacy Administration & Public Health  
College of Pharmacy and Health Sciences, St John’s University, New York, USA  
Patient Reported Outcomes (PRO) to Improve Quality of Care: A Path Forward for Pharmacists in the Age of the Pandemic |
| 10:00AM-11:00AM | Ng Yen Ping  
Deputy Dean (Academics & International Affairs) & Head of Clinical Pharmacy, Faculty of Pharmacy, AIMST University, Malaysia  
Cardiac Rehabilitation Program by Clinical Pharmacist |
| 11:30AM-12:30AM | Scientific Abstract Presentation II |
| 02:00PM-03:00PM | Raghavendra Pai  
Director, Regional Pharmacovigilance Lead, AbbVie, Singapore  
Pharmacovigilance as Career for Pharma Graduates |
| 05:00PM-06:00PM | Thiagu Rajakannan  
Research Associate  
IMPAQ International’s Health Division, Maryland, USA  
Subthreshold Psychiatric Diagnoses and Associated Psychotropic Medication Use in Youths and Adults |
Dr Connie Kang
Assistant Professor of Clinical Pharmacy
Director of Interprofessional Education
University of Southern California School of Pharmacy

California Right Meds Collaborative: Improving Healthcare Quality by Bringing Comprehensive Medication Management to Patients

Connie Kang, PharmD, BCPS, BCGP is an Assistant Professor of Clinical Pharmacy and the Director of Interprofessional Education at the University of Southern California School of Pharmacy. She also serves as the Los Angeles County Lead for the California Right Meds Collaborative, an initiative of the USC School of Pharmacy. In these roles, she values the opportunity to work closely with students, health plans, and other healthcare colleagues to contribute to practice transformation and innovations in education. Since earning her Doctor of Pharmacy in 2005 from the University of the Pacific, she has enjoyed working in a broad range of practice settings including community, inpatient, ambulatory, and academic pharmacy. She is passionate about pharmacy education and is completing her Doctor of Pharmacy from the University of the Pacific. She values professional development and leadership, and has been involved at the local, state, and national levels as a speaker or leader.
Dr Rohan Elliott

Senior Pharmacist at Austin Health
Adjunct Associate Professor at Monash University, Melbourne, Australia

The Pharmacist's Role in Geriatrics

Rohan Elliott is a Senior Pharmacist at Austin Health and Adjunct Associate Professor at Monash University in Melbourne, Australia. Rohan worked as geriatric medicine pharmacist for 20 years, in hospitals and residential aged care. Over that time he has led many research projects related to geriatric medicine and published over 70 peer reviewed papers in pharmacy and medical journals, and two book chapters. In 2018 Rohan was awarded the Australian Clinical Pharmacy Award by the Society of Hospital Pharmacists of Australia for contributions towards improving clinical pharmacy services and medication safety for older people.
Dr Dennis Thomas is an Early Career Research Fellow at the Hunter Medical Research Institute, The University of Newcastle, Australia. He is currently involved in the design and implementation of various telehealth-based, point-of-care clinical trials in the area of respiratory medicine. His prior appointment was a Postdoctoral Research Fellow at the National Drug and Alcohol Research Centre, The University of New South Wales where he designed and implemented Australia’s largest telehealth-based non-inferiority phase-III smoking cessation clinical trial. Dr Thomas completed his PhD from the Faculty of Pharmacy and Pharmaceutical Sciences, Monash University. His PhD project included a Cochrane Systematic Review, a large multi-centre clinical trial and development and psychometric validation of Challenges to Stopping Smoking (CSS-21) scale. Before commencing PhD, he had a vast experience in clinical trials at Dr Reddy’s Laboratories Ltd., Hyderabad where his role was to design and implement clinical trials in different therapeutical areas. He has more than 25 publications in high impact journals such as Addiction, Cochrane Database of Systematic Reviews, Drug and Alcohol Review etc., and attracted over $4 million research funding. He is involved in the guideline development panel of Therapeutic Goods Administration (TGA) and working closely with the Australian regulatory authorities streamlining clinical research in Australia.
Patient Reported Outcomes (PRO) to Improve Quality of Care: A Path Forward for Pharmacists in the Age of the Pandemic

Rajesh Nayak is Associate Professor of Pharmacy Administration & Public Health at the College of Pharmacy and Health Sciences at St. John’s University, New York. A dedicated and recognized educator, Dr. Nayak has taught pharmacy for over 20 years and conducted research in the areas of health outcomes, pharmacoeconomics, pharmacy management, and pharmaceutical marketing. He has published and presented over 100 research papers in peer reviewed journals, research symposia, and conference proceedings, in addition to writing a book chapter about drug shortages. He has mentored over two dozen master’s thesis projects, and partnered on many collaborative projects with colleagues at home and abroad. Dr. Nayak was previously the Director of Graduate Studies in Pharmacy Administration; one of the founding editors of the Journal of Pharmacy Practice and Education; and an Adviser to “The Coalition for the Advancement of Pharmacy Practice (CAP)” a grassroots movement reimagining the role of pharmacists on the healthcare team in New York. He is also a regular reviewer of research for reputed journals like Journal of Managed Care Pharmacy & Specialty Pharmacy, The Journal of Clinical Psychiatry, Research in Social and Administrative Pharmacy, and the Journal of Pharmacy Practice.

Dr. Nayak is a recipient of multiple recognition awards and the University President’s Medal for Outstanding Achievement at St. John’s. He holds a visiting faculty appointment at Manipal College of Pharmaceutical Sciences, Manipal, India, and has taught pharmacy courses in Rome, Paris and Spain, as part of Study Abroad program. He received his bachelor’s and master’s degree in pharmacy (B.Pharm & M.Pharm) from College of Pharmaceutical Sciences, Manipal, India and Ph.D in Pharmaceutical Outcomes & Policy from the University of Florida.
Dr Raghavendra Pai  
*Director, Regional Pharmacovigilance Lead*  
*AbbVie, Singapore*

**Pharmacovigilance as Career for Pharma Graduates**

Raghav is a Head of Pharmacovigilance for Asia at Allergan based in Singapore. He is responsible for Pharmacovigilance and drug safety covering more than 20 countries spread across Australia to India. He has nearly 20 years of experience in Pharmaceutical industry ranging from sales, marketing, drug development, clinical research and pharmacovigilance. He is Alumni of Manipal College of Pharmaceutical Sciences and first batch student of Department of Pharmacy Practice.
Dr. Thiyagu Rajakannan is a Research Associate in IMPAQ International’s Health Division. Dr. Rajakannan has 10+ year experience in designing and conducting both quantitative and qualitative analyses for Clinical, Health Policy and Pharmacoepidemiology research using large administrative claim databases, clinical trial registries, electronic medical records, and health care survey data. Prior to joining IMPAQ, Dr. Rajakannan was a Research Fellow at ClinicalTrials.gov, National Institutes of Health (NIH), one of the world’s largest clinical trial registries that provide patients, their family members, health care professionals, researchers, and the public with easy access to information on publicly and privately supported clinical studies on a wide range of diseases and conditions. Dr. Rajakannan was involved in leading research projects, policy development and information updates on clinical trials and protocol registration and results system (PRS). Dr. Rajakannan earned his Ph.D from the Manipal University, specialized in Pharmacoepidemiology, Patient Safety and Health Policy. He received ‘Andrew McAfee Award’ from International Society for Pharmacoepidemiology (ISPE) for his research work. He has published and presented more than 50 research papers on his work.
ORAL PRESENTATIONS
Abs_00005: Patterns of Drug Use and Polypharmacy Burden in Chronic Kidney Disease Patients: An Experience from a Secondary care Hospital in United Arab Emirates

Syed Arman Rabbani, Tasneem M Osama, Martin Thomas Kurian
RAK Medical and Health Sciences University, RAK, UAE

Background: Chronic kidney disease (CKD) has become a global health burden. Prescription pattern studies in CKD patients can play an important role in improving the patient outcomes by evaluating medication burden and mapping the risks and benefits of prescribed drugs. Methods: It was a prospective observational cohort study done in a secondary care hospital in Ras Al Khaimeh, United Arab Emirates (UAE). One hundred and thirty CKD patients admitted under the care of nephrology in-patient department including those undergoing regular maintenance hemodialysis were included in the study. Electronic patient case records of CKD patients were studied and analyzed to evaluate drug use pattern and medication burden. Results: Majority of the study patients belonged to CKD stage G5 (82.3%). Hypertension was the most common (96.9%) comorbid condition in the study population. The median number of different drugs prescribed per patient was found to be 11.0. Antihypertensives (95.4%) were the most frequently prescribed medication class. Overall, calcium channel blockers (104 prescriptions) were the most frequently prescribed drugs. Among the individual agents, darbepoetin alfa was prescribed the most (101 prescriptions). Negative binomial regression analysis revealed that CKD patients with more than 4 comorbidities were prescribed 1.27 times more than patients with less than equal to 4 comorbidities (IRR:1.273, p=0.017). Patients with dyslipidemia (IRR:1.393, p<0.001) and hyperphosphatemia (IRR:1.189, p=0.048) as comorbid conditions were more likely to be prescribed more number of drugs than patients without these comorbid conditions. With every one-day increase in length of hospital stay the likelihood of drug prescription also increased 1.01 times (IRR:1.01, p=0.040). Multivariate logistic regression analysis identified older age (OR:1.07, p=0.004), higher number of comorbidities (OR:9.58, p=0.011), comorbid conditions like dyslipidemia (OR:43.7, p=0.001) and hyperphosphatemia (OR:17.18, p=0.044) as independent predictors of polypharmacy in our study population. Conclusion: Study findings highlight that medication burden in CKD patients at the study site was high and majority of them were on polypharmacy.
Abs_00008: A Study to Evaluate the Pattern of PPI Abuse in Patients Attending a Medical Teaching Hospital

Dr Janine Diana Miranda, Dr Shubha N Rao
Father Muller Medical College Hospital, Mangaluru, Karnataka

Background: Proton pump inhibitors (PPI) are a relatively new class of potent gastric acid-suppressing agents that are used in the treatment of multiple gastrointestinal (GI) disorders. As with any medication it is important that PPIs should only be prescribed when appropriate, and mainly for FDA-approved indications. The improper use of proton pump inhibitors can lead to unwanted adverse effects and increase the chances for drug induced disease, such as gastric cancer. There is some recent evidence indicating that improper use of PPI is rising. Objective: To study the improper use of proton pump inhibitors

Methodology: A questionnaire study was done on 200 patients who presented with APD symptoms to the department of surgery and its sub specialties at father Muller medical college. We collected information regarding the drugs usage and studied the pattern and use. Source of use: pharmacy / doctor / others Who recommended Pharmacy / doctor / non-allopathic / Quack / self / others How was it taken Drug schedule right yes / no Duration correct yes / no Results Source of use Pharmacy (70) / doctor (10) / others (20) Who recommended Pharmacy (70%) / doctor (10%) / non-allopathic (5%) / Quack (5%) / self (3%) / others (1%) How was it taken Drug schedule right yes (45%) / no Duration correct yes (35%) / no (65%) Conclusion: Findings from our questionnaire survey and clearly suggest that PPIs are being abused through overuse, and the various unintentional consequences of their overuse; not only to the individuals taking the medications, but also the additional cost incurred by the healthcare system.
Abs_00009: Clinical Significance of 2hr plasma concentrations of antimycobacterial drugs on daily regimen in Indian programmatic settings

Bijoy Kumar Panda, Medha Bargaje, Sathiyanarayanan L
Poona College of Pharmacy, Bharati Vidyapeeth Deemed University, Pune, Maharashtra

Background: The correlation of first-line antimycobacterial 2h plasma concentrations and clinical outcomes among patients with tuberculosis remain poorly understood. Objective: To estimate the prevalence and evaluate the clinical consequence of 2h plasma concentrations of first-line antimycobacterial drugs below the normal ranges in pulmonary tubercular patients on FDC daily DOTS under National TB Elimination Program. Methodology: A prospective cohort of newly detected pulmonary TB patients receiving FDC daily DOTS treatment, were enrolled for the study and blood samples were drawn once 2 hours post-dose. Sub-therapeutic cut-offs were: isoniazid <3µg/mL; rifampicin <8µg/mL; pyrazinamide <20µg/mL and ethambutol <2 µg/mL. Plasma estimation was carried out on validated LCMS method. OPD files were reviewed for baseline characteristics and clinical status at 2, 4 and 6 months after initiation of treatment. At a 1-year follow-up, therapy failure was defined as death or a relapse of tuberculosis. Results: Low frequency of plasma concentrations below the normal ranges were observed: Isoniazid in 25%, rifampicin in 60%, ethambutol in 10% and both isoniazid and rifampicin in 25% of the patients. The mean plasma concentrations (2h) of isoniazid, rifampicin, pyrazinamide and ethambutol were respectively 4.2±2.0, 7.3±2.8, 39.2±11.0 and 3.5±1.2 µg/ml. 25% of the outpatients had drug plasma concentrations lower than the target ranges for at least one administered drug. Discussion: Pyrazinamide was within the target range in all patients. During 1 year of follow-up, therapy failure occurred in three patients. Therapy failure (all-cause mortality) occurred when the concentrations of isoniazid and rifampicin were both below the normal ranges. Conclusion: Antituberculosis drug concentrations were often low, but treatment response was nevertheless good. Pyrazinamide optimum levels could be a contributor to the good clinical response. Patients with both isoniazid and rifampicin low plasma levels may require a dose adjustment.
Abs_00010: Knowledge on Breast Cancer and Breast Self-Examination Practice among Female University Students

Sharon Sim, Sireesha Paruchuri
Faculty of Pharmacy, AIMST University, Malaysia

Background: Breast cancer is the most typical cancer among women in today’s world. Breast self-examination (BSE), Clinical Breast Examination (CBE) and mammography screening are the 3 main activities for breast cancer screening in Malaysia. Objectives: To review the knowledge on breast cancer, BSE and CBE practices among female university students from a private university in Malaysia. Methodology: Simple random sampling method was used. An informed consent form was attached to each questionnaire to ensure respondents participate in the study voluntarily. A structured questionnaire consisting of 4 sections was used for data collection. Data obtained were analysed using SPSS (version 25). Categorical data were presented as counts and percentage whereas chi-square test was used to find the association between two different categorical variables. Results: A total of n=309 responses were collected. The mean age of the respondents was 20.58 years (SD = 1.479, range = 19 - 30). One tenth of the respondents had family history of breast cancer [32 (10.4%)]. 98.4% have heard of breast cancer. The study revealed media as the major source of information on breast cancer. 89.3% have heard of BSE. 72.5% of respondents did not practice BSE. 94.2% respondents think that BSE is a useful tool to detect breast cancer. 85.8% of the respondents knew that BSE is performed by the individual. More than half of the students [193 (62.5%)] have not been taught on how to do BSE. Only [116 (37.5%)] of the respondents correctly stated that BSE should be performed monthly. 194 respondents (62.8%) have heard of CBE. Majority wrongly identified that CBE is done by using mammography [209 (67.6%)] and ultrasound [125 (40.5%)]. Only 13.6% of respondents identified that CBE is done by hand. There was significant association between education field and awareness of CBE. Conclusion: The study shows most of the respondents are mindful of the existence of breast cancer and BSE but majority did not practice BSE as a routine and they also have lack of awareness and practice of CBE.
Abs_00012: Comparison of Clinical and Economic Outcomes in Patients with Infectious Disease Admitted in a Private and Government Hospital

Aleena Issac, Shaji George, Arya Ponnappan, Chinnu Roy, Dhanya Paul
Nirmala College of Pharmacy, Muvattupuzha, Kerala

Background: Public and private hospitals play a crucial role in the management of infectious illness in Kerala. Increasing Antimicrobial use and poor health outcomes are becoming a major concern. Objective: To compare the clinical and economic outcomes in patients with infectious diseases admitted in a secondary care private and government hospital. Methodology: A 6-month prospective comparative study was conducted in patients diagnosed with infectious disease in a government and private hospital. Clinical outcomes like readmission to hospital within 30 days, all-cause mortality, Switchover to higher antibiotics, Referral to higher Centre and Titrate to lower antibiotic were obtained from patient medical records and data concerning the economic outcomes from Pharmacy Store Drug Index. Statistical analysis was done with One-way ANOVA and Descriptive frequencies (p<0.05 and CI 95 %) Results: Descriptive analysis reveals better clinical outcome in government sector as the titration to lower antibiotic was more while referral and readmissions were comparatively less. Analysis showed statistically significant difference only in referral to higher Centres (p=0.024). There were only a few all-cause mortalities in private sector with no statistical difference (p=0.276). Readmission to medical wards (p=0.889), switch over to higher antibiotics (p=0.254) and titrate to lower antibiotics (p=0.440) had no statistically significant difference. Mean length of stay (LOS) was found greater in government (7days) than private (5days). Overall drug acquisition cost was different in private and government. Conclusion: Better clinical outcome and economic outcomes were reflected in public sector than the private sector.
Abs_00020: Adverse Drug Reactions in Stroke Patients Need for Continuous Monitoring

Dr Sathvik B Sridhar, Hadil Ezzat, Ammar Alomar
RAK Medical and Health Sciences University, RAK, UAE

Background: Drug-related problems are common in stroke patients. Earlier studies have reported different drug-related problems among hospitalized stroke patients. One such commonly reported drug-related problem is adverse drug reactions (ADRs). Objective: To evaluate the incidence and pattern of ADRs to different medications used in managing stroke. Methodology: This was a prospective, observational study conducted in a secondary care hospital's neurology setting for eight months. Stroke patients admitted in the inpatient setting were monitored from the day of admission until the day of discharge for the occurrence of adverse drug reactions. All ADRs noted by the physician and reported by patients were documented and assessed according to causality, severity, and preventability scales. Results & Discussion: 110 patients were included during the study period. The majority, [69(62.7%)], were males. A higher prevalence [81(73.6%)] of ischemic stroke was documented. Seventy-one ADRs were documented. The incidence of suspected ADR's among the study population was 34.5%. The most common class of prescribed drugs was antiplatelet drug [9 (99.1%)] followed by lipid-lowering agents [93 (84.5%)]. Aspirin [24(33.8%)] was the most commonly involved drug responsible for suspected ADR, followed by tablet atorvastatin [10(14%)]. Raised serum creatinine was the most commonly documented suspected ADR [14(19.7%)]. The majority [45(64%)] of the suspected ADRs were possible type by WHO probability scale assessment. The severity assessment by Hartwig severity scale reveals that most of the suspected ADRs [49 (69%)] were mild. A good number [60 (85%)] of the ADRs were of predictable type. Polypharmacy [(p=0.004; OR=5.058; 95% CI= (1.674 -15.285)] and total number of medical conditions [(p <0.01; OR 3.196; 95% CI= (1.729 -5.909)] were the significant predictors of occurrence of ADRs. Conclusion: The Knowledge of the severity of different ADRs will help clinicians and prescribers monitor patient safety through regular monitoring of adverse drug effects in the future.
Abs_00029: Evaluation of Perceived Barriers in providing Pharmaceutical-care by Community Pharmacists and recommendations to overcome the Barriers

Sunita Pawar, Dr Atmaram Pawar
Poona College of Pharmacy, BVDU, Pune, Maharashtra

Background: Indian community pharmacists are mainly involved in dispensing medicines. They have an opportunity to improve the healthcare of the population, however, important barriers to the provision of pharmaceutical care exist, including lack of proper education and training of pharmacists, weak implementation of existing laws, and lack of recognition of the pharmacy as a profession by the other healthcare professionals. Objectives: This study was designed to assess the perceived barriers in providing pharmaceutical care services by pharmacists in their settings. Based on the outcomes, structured recommendations can be devised to overcome the barriers, so that patient care can be implemented in the community successfully. Methodology: A qualitative survey aiming at community pharmacists from various Government and Non-Government sectors of Maharashtra was conducted using a structured questionnaire including 26 components about barriers in providing pharmaceutical care. Face-to-face administration of the questionnaire was done to collect the information on demographics and questionnaire responses of participants and data was analysed descriptively. Results: A total of 200 questionnaires were distributed during three months to pharmacists from various settings. Of these, 175 were completed and submitted (response rate of 87.5%). The respondents were primarily males (78.85%) having a mean age of 37.03 years ±7.325 and D. Pharm qualification (84%), with average work experience of 12.48±5.595yrs. Except for the attitude parameters, maximum pharmacists quoted 25 main barriers collectively. Conclusion: The main and highest barriers challenging pharmaceutical care provision were lack of time, insufficient skilled and trained staff, and lack of motivation or vision on professional services. These barriers are needed to be addressed individually and strategically overcome to implement patient care services in the community successfully.
Abs_00035: Impact of Pharmacist-Supervised Intervention on Medication Adherence and Clinical Outcomes of Newly Diagnosed Diabetics in a Tertiary Care Hospital of Nepal: A Pre-Post Design

Dinesh Kumar Upadhyay, Mohamed Izham Mohamed Ibrahim, Pranaya Mishra, Vijay M Alurkar
Faculty of Pharmacy, AIMST University, Malaysia

Introduction: Medication non-adherence and poor metabolic control is common among diabetics due to polypharmacy and a lack of knowledge about disease and its management. Objective: To examine the impact of pharmacist-supervised intervention on medication adherence and clinical outcomes of newly diagnosed diabetics visited to the medical out-patient clinic of Manipal Teaching Hospital, Pokhara, Nepal. Method: A pre-post comparison study was conducted for 18-months among 162 newly diagnosed diabetics with three treatment arms who were enrolled by consecutive sampling method and randomized into control group (CG), test 1 group (T1G) and test 2 group (T2G). T1G patients received pharmacist’s intervention about disease and its management using educational materials, whereas T2G patients received diabetic kit demonstration in addition to pharmacist’s intervention. CG patients deprived of pharmacist’s intervention and only received care from attending physician/nurses. Patients’ medication adherence by pill-counts method and clinical parameters (HbA1c, FBG, PPBG, SBP and DBP) were examined at baseline, 3, 6, 9 and 12-months. Descriptive and non-parametric tests were used to analyse the patient’s data at p=0.05.

Results: Mann-Whitney U-test determined a significant difference in medication adherence between T1G and T2G at 6, 9 and 12-months (p<0.001, p=0.010 and p<0.001) and clinical parameters at 3-months (A1c: p=0.039, FBG: p=0.010, PPBG: p=0.004), 6 months (A1c: p=0.008, FBG: p=0.009, PPBG: p=0.007, SBP: p=0.043, DBP: p<0.001), 9-months (A1c: p=0.010, DBP: p<0.001) and 12-months (A1c: p=0.005). However, no significance differences were observed in medication adherence and clinical parameters between CG and test groups patients at 3-12-months. Conclusion: Pharmacists intervention significantly improved the medication adherence and clinical parameters among test groups compared to CG patients. However, diabetic kit demonstrations to T2G patients strengthen their disease understanding and clinical outcomes compared to T1G patients.
Abs_00039: Development and Validation of Patient Information Leaflet on Breast cancer

Nandakumar U P, Juno J Joel, Jayaram Shetty K, C S Shastry, C H Krishna Bhat
NGSM Institute of Pharmaceutical Sciences, Nitte, Mangaluru, Karnataka

Background: Patient Information Leaflets (PILs) are those which contain specific information regarding the medical condition, medication as well as the lifestyle modifications required to be followed by the patients. Objective: To develop, validate, translate and assess the readability of patient information leaflet for breast cancer patients. Methodology: Various primary, secondary and tertiary resources were used to develop the PIL. The content validation of patient information leaflet was done by a group of 8 members. Flesch Reading Ease (FRE) and Flesch-Kincaid Grade Level (FK GL) criteria was used to assess the readability of the prepared leaflet. Forward translation of English version of leaflet and backward translation of Kannada and Malayalam versions were performed by professional translators and language experts. PILs were assessed for the characteristics of layout and design by using Baker Able Leaflet Design (BALD) criteria. User readability testing and user opinion score was obtained for all language versions of leaflets. Results: the FRE and FK-GL score of the prepared English version of leaflet was found to be 63.5 and 7.4 respectively. BALD assessment score of English, Kannada and Malayalam versions of leaflet were 24, 24 and 22. User readability testing for English, Kannada and Malayalam versions of leaflet were carried out by 08, 22, 10 patients respectively. Pre-test scores of English, Kannada and Malayalam versions improved from 46.25± 16.85, 39.54± 20.34 and 33.0± 17.02 to 80.0± 15.11, 73.18± 16.15 and 69.0± 12.86 respectively. 90% of the total patients reported their opinion on the leaflet as good, followed by 10% patients as average. Conclusion: The overall user testing readability mean score improved from 39.25± 18.99 to 73.50± 15.28. Therefore, PILs with proper written information on various aspects of breast cancer can contribute to the improvement in patient’s knowledge.
Abs_00070: Evaluation of Antimicrobial Agents with Potential to Develop Adverse Mental Health in Geriatrics

Vaishali Shinde, Levine Wilson, Sonal Sekhar, Kavitha Saravu
Manipal College of Pharmaceutical Sciences, Manipal, Karnataka

Background: Advanced age increases the risk of infections with the use of antimicrobial agents. Due to age-related physiological changes, many of the antimicrobial agents cause adverse mental health (AMH). Therefore, we evaluated the geriatric antimicrobial prescription to determine its potential to cause AMH issues. Objectives: Evaluate the geriatric antimicrobial prescription to determine its potential to cause AMH issue. To determine antimicrobial-related AMH problems in geriatric patients. Methodology: A prospective observational study was conducted in the medicine departments of Kasturba Hospital (KH), Manipal. The geriatric patients with antimicrobial agents were selected based on the study criteria. A checklist of antimicrobial agents with the potential to develop AMH was prepared by the literature review and hospital formulary of the KH. The potential agents with AMH were identified using the checklist. Results: Out of the 115 geriatric patients, 89 (77.4%) were prescribed with 178 antimicrobial agents with potential to develop AMH. The average number of such antimicrobials per prescription is 1.5. These prescriptions comprised of 21 drugs from various classes of antimicrobial agents listed in the checklist prepared. Out of these 89 patients, 10 patients developed AMH like insomnia, agitation, delirium, anxiety, nightmares, and seizures. Female geriatric patients have 3.5 times higher risk for developing the AMH than male patients after the antimicrobial use (OR: 3.5; 95% CI: 0.71-17.27). However, the risk for AMH development in patients with renal dysfunction is 2.8 times less likely than patients with normal renal function (OR: 0.72; 95% CI: 0.08-6.15). Conclusions: The major antimicrobial classes with AMH in geriatrics are beta-lactams, tetracyclines, cephalosporins, fluoroquinolones, macrolides, sulphonamides, aminoglycosides, carbapenems, oxazolidines, antifungals, antimalarial and antivirals. The potential mechanism of toxicity differs among the agents and the etiology also remains unidentified in some cases. However, the incidences may be increased due to the presence of comorbidities, drug interaction and age-related changes.
Abs_0092: Safety Profile of Dabigatran in Elderly Population: A Retrospective Longitudinal study

Midhuna Saju, Dr Suja Abraham, Anitta Shaji, Doody Thomas
Nirmala College of Pharmacy, Muvattupuzha, Kerala

Background: Dabigatran, a novel oral anticoagulant has become popular by its preferable pharmacological dimensions. Comparative trials of dabigatran with other anticoagulants especially with warfarin held so far concluded that it is a better alternative concerning both safety and efficacy.

Objective: To evaluate the safety profile of different doses of dabigatran as well as dabigatran with an antiplatelet in elderly population.

Methodology: A retrospective longitudinal hospital-based study was conducted in which 34 patients (age=70 year) who were initiated with different doses of dabigatran for non-valvular atrial fibrillation, stroke, deep vein thrombosis and pulmonary embolism during March 2017 to March 2019 was selected and followed for a period of one year to assess the safety outcomes. Data regarding the study was collected through electronic medical records. Safety outcomes were assessed in terms of bleeding events (major and minor) and other adverse drug reactions.

Results: Out of 34 patients, 17 patients (50%) experienced bleeding episodes as major and minor bleeding. In comparison, dabigatran with antiplatelet group had higher occurrence of major bleeding (34.8%) than dabigatran group (27.3%). But minor bleeding was more evident with dabigatran group (36.4%). In both the groups 110 mg was associated with higher bleeding events than 75 mg. The dabigatran with antiplatelet group (82.6%) had an increased risk of adverse effects than other (45.45%). Electrolyte abnormalities, GI reactions, renal impairment and skin reactions were the adverse events observed commonly. Some other adverse effects such as vision impairment, impairment of liver function and esophagitis were also experienced.

Conclusion: This study was concluded that, in elderly population, dabigatran 110 mg was associated with higher risk of major bleeding and it is further increased when combined with an antiplatelet. Similar to bleeding, other complications were also higher when dabigatran is combined with an antiplatelet.
Abs_00105: A Study on Drug Related Problems among Inpatients of the Department of Psychiatry

Achsa Shekaina Abraham, Nandakumar UP, Shishir Kumar
NGSM Institute of Pharmaceutical Sciences, Nitte, Mangaluru, Karnataka

Background: Drug related problems (DRPs) frequently take place in a modern medical practice, increasing the morbidity, mortality and the cost for the health care. Objectives: The current study was undertaken to identify and categorize various DRPs among the inpatients of the department of psychiatry of a tertiary care teaching hospital. Methodology: A prospective observational study was conducted for duration of six months in which all patients, aged above 18 years, admitted in the department of psychiatry, diagnosed with a psychiatric disorder, prescribed with at least one drug were enrolled. When a DRP, as per the APS-Doc system was identified, they were brought to the notice of the concerned physicians and were analysed. Results: Out of 198 patients enrolled, 73.3% were males and majority of the patients belonged to the age group of 30-39 (31.3%) years. DRPs were categorized using the APS-Doc classification system. A total of 203 DRPs were identified in 102 patients. Among 203 DRPs, 115 were potential drug-drug interactions and 60 were adverse drug reactions. 22 belonged to the category of incorrect spelling of the trade name, 2 each belonged to prescription of an incorrect dosage form or no dosage prescribed (DOS2) and wrong dosage from prescribed (DS1) and 1 belonged to inadequate generic substitution (RX7) and 3 belonged to unintended prescription of the same drug (RX9). Risperidone (33) was the most common drug associated with the pDDI followed by Lorazepam (24). Olanzapine (32.2%) caused the most number of ADRs followed by Clozapine (16%). Conclusion: DRPs being an important and prevalent obstacle in an optimal health care delivery needs to be acknowledged and observed with judicious caution.
Abs_00113: Influence of CYP2C9 Genetic Variance on Warfarin Plasma Concentration in South Indian Patients

Krishna Kumar D, Mohan S, Hemachandran A, Sai Chandran BV, Adithan C
Karpagam College of Pharmacy, Coimbatore, Tamil Nadu

Background: Warfarin is widely prescribed oral anticoagulant for prevention of various thromboembolic events. It is a drug with narrow therapeutic index. Genetic variations in the genes encoding enzymes responsible for warfarin metabolism influence the dose requirements and plasma concentration of warfarin. Objective: To evaluate the influence of CYP2C9 genetic variants on warfarin plasma concentration in South Indian patients. Methodology: The study was conducted in the outpatient clinics of cardio thoracic and vascular surgery at Jawaharlal Institute of Postgraduate Medical Education and Research (JIPMER) hospital. Patients receiving warfarin maintenance therapy for 3 months with stable INR (2 to 3.5) were included. DNA was extracted by phenol chloroform extraction procedure from blood samples. Real-Time Thermo Cycler was used for CYP2C9 genotype analysis. The plasma concentration of warfarin was determined by High Performance Liquid Chromatography (Shimadzu LC-10AD VP) using solid phase extraction method. Results: A total of 183 patients were included for the analysis. The mean average daily maintenance dose of warfarin was calculated to be 4.8± 1.6 (SD) mg. The effect of combination of variant genotypes on maintenance dose was compared with the normal genotype combinations. Patients with both normal genotypes and carrying both variant genotypes were found to be 76% and 7%, respectively. Patients with any variant alleles CYP2C9 (*1*2 and *1*3) had lower 7 hydroxy warfarin plasma levels, than wild type CYP2C9*1*1. There was a significant difference observed in metabolic ratios between the patients with CYP2C9*1*1 and CYP2C9*1*2 or CYP2C9*1*3 (p< 0.05). In univariate and multivariate regression analysis it was observed that age, daily dose, CYP2C9*2 and CYP2C9*3 genotype were significantly (p<0.001) influenced the warfarin metabolic ratio. Conclusion: The present study provides insight of the effects of CYP2C9 genetic variants on plasma concentration of warfarin in South Indian population receiving warfarin maintenance therapy.
POSTER PRESENTATIONS

Department of Pharmacy Practice
Manipal College of Pharmaceutical Sciences
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Abs_00002: Case Based Learning Vs Flipped Classroom Teaching Model for the Improvement of Paediatric Drug Dose Calculation Skills of Pharm.D Students
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Background: Pharm D students are expected to be proficient in calculating drug dosages. Drug dosage calculations in paediatrics require much attention as infants and children respond differently to adult doses. Students must be capable of calculating accurate doses and also identify any dosing errors in the prescription. Objective: To determine the effectiveness of two teaching-learning strategies such as Case-Based Learning (CBL) and Flipped Classroom Teaching Model (FCTM), for the improvement of paediatric drug dose calculation skills of Pharm D students.

Methodology: Case Based Learning (CBL) materials and workbook for Flipped Classroom Teaching Model (FCTM) were designed. Students were divided into two equal groups and were asked to take a pre-test. The students were exposed to the two teaching-learning strategies and were then asked to take a post-test. Results: The majority of students showed positive improvement in the post-test scores. It was observed that both the strategies were effective. Statistical analysis demonstrated that Case-Based Learning showed a greater difference in the pre and post-test scores.

Conclusion: Significant improvement in students’ performance along with improvement in clinical decision making and professional thinking skills indicate the effectiveness of these two strategies for teaching drug dose calculations. It was found that Case-Based Learning had a greater impact than Flipped Classroom Teaching Model in improving the drug dose calculation skills of Pharm D students.
Abs_00003: Lamotrigine in Pregnancy- A Simulation Model Based Dosage Regimen

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Background: Lamotrigine (LTG) is the most widely used Anti-Epileptic Drug (AED) in women of reproductive age & pregnancy due to its low teratogenic potential compared to the other AEDs. However, there is an increased metabolism & clearance (CL/F) of LTG in pregnancy attributing to suboptimal drug therapy and poor disease control, prompting the need for pro-active dose adjustments. The present study aimed to simulate the steady state trough plasma concentrations (CTrough SS) of Lamotrigine in pregnancy using reported population model predicted clearance values to facilitate optimal dosage regimen recommendations in pregnancy. Methodology: A previously developed population model of lamotrigine in pregnancy that included 60 women and described the influence of gestational weeks on CL/F was adopted. Using the clearance values from this model and other pk parameters from literature, plasma concentrations were simulated for 200mg BID regimen using PUMAS version 1.40.1 for a total of 120 patients with 30 in each group of preconception stage, trimester 1, 2 and 3. The therapeutic window of 2.515 mg/L was used as reference to optimise the dosage regimen of LTG. Results: The simulated mean CTrough SS of lamotrigine in non-pregnant and pregnant women at 3 trimesters were found to be 6.79±2.14, 3.87±1.58, 2.80±0.868, 1.67±0.901 respectively, and there was a reduction of up to 75% of CTrough SS in the last trimester leading to subtherapeutic concentrations. One-way ANOVA showed a statistically significant difference between the four groups with a p value of <0.001. Based on further simulations, different dosage regimens were determined and recommended to match the CTrough SS of pre-conception stage. Conclusion: Further dose-optimisation studies have to be conducted in pregnant women treated with lamotrigine to evade adverse outcomes related to subtherapeutic plasma concentrations of AEDs in clinical settings.
Abs_00006: Prescribing Pattern and Adverse Drug Reaction in Patients Receiving Anticoagulant Therapy in Cardiac Diseases

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Introduction: Prescribing pattern and adverse drug reaction in patients receiving anticoagulant therapy in cardiac diseases

Objective: To assess the prescribing pattern and adverse drug reaction in patients receiving anticoagulant therapy in cardiac diseases.

Methodology: This was a prospective observational study conducted in the department of cardiology, SRM Medical College and Hospital and Research Center, Kattankulathur including 88 patients from August 2019 to April 2020.

Results: Out of 88 patients, majority were men (73%) compared to females (27%), the prevalence of cardiovascular disease was found to be higher in patients above the age of 40 years. Various categories of drugs prescribed to patients were antiplatelet (14.88%), anticoagulant (8.79%), anti-anginal (13.82%), antihypertensive (15.7%), antihyperlipidemic (7.83%), thrombolytics (0.68%), ionotropic drugs (2.13%), antibiotics (5.31), and other miscellaneous drugs (36.61%). The anticoagulant dosage regimens prescribed to the patients were categorized into monotherapy (9%), combination with antiplatelet (38%), and triple therapy (53%). The most commonly prescribed anticoagulant to the patients was Heparin (93.41%), followed by Warfarin (5.49%), and lastly Rivaroxaban (1.10%) respectively. From the details of prescription analysis, the average number of drugs per patients (prescribed) was found to be 11.7.

Conclusion: Heparin was found to be the most commonly used anticoagulant, combination therapy with antiplatelet and antihypertensives were observed in most of the prescription which is more effective than a single therapy. Polypharmacy were encountered in the study with an average number of 11.7 drugs per prescription. Several anticoagulant related drug interactions were identified and there were two adverse drug reaction with Heparin. The prescribing pattern can be improved by reducing the number of drugs prescribed.
Abs_00007: The Impact of Pesticides on the Health of Farmers in the Pineapple City of India

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Background: Vazhakulam, lies east of the town of Muvattupuzha in Ernakulam district and is famously known as pineapple city due to large scale cultivation of pineapple. The farmers are involved in the various phases of pesticide handling such as dilution, mixing, application, transport and storage which make them exposed to the harmful effects of pesticides. Objective: To assess the health effects of pesticides among the pesticide handlers in the pineapple city of India

Methodology: A cross-sectional study was carried out from August 2019- May 2020 in areas 15km centred from Vazhakulam, Ernakulam district in Kerala. Data was collected by face-to-face interview using pre-tested semi structured questionnaire. Pearson correlation analysis was done to analyse the association between the handling of pesticides and the acute effects experienced by the farmers. Result: Among the 290 workers selected for the study, all (100%) were directly exposed through mixing, loading and application of pesticides. 208 workers (71.7%) were not aware of the harmful effects of pesticides. 41 workers (14.13%) reported to have medical history among which the most reported were dermatitis (3.7%) and diabetes (2.75%). The acute effects experienced during and after pesticide exposure were headache (24.93%), skin rashes/redness (20.27%), excessive sweating (19.18%), itching (14.52%), difficulty breathing/cough (10.41%), runny nose/sneezing (6.3%). 27 workers (9.3%) did not experience any acute effect. Using Pearson correlation, it was found that the more proper the workers handled pesticides, the lesser were the acute effects experienced and healthier were they. Conclusion: Three-fourth of the studied population reported acute effects on pesticide exposure. It was also observed that workers who took adequate measures while handling pesticides experienced lesser acute effects comparatively, which necessitates adequate training and education among farmers to raise their awareness and thereby improve their health.
Abs_00013: Assessment of Cognitive Function in Patients Undergoing Haemodialysis

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Background: ESRD causes changes in the daily lives of patients, creates limitations to perform activities and has a great impact on quality of life. Cognitive Impairment is common in individuals with CKD particularly among the elders and those treated with dialysis. This is a poorly recognized problem which affects 16-38% of patients with ESRD. These patients may have impaired cognitive function, particularly in the domains of orientation and attention. Haemodialysis patients also have worse memory than people with non-dialysis-dependent CKD. Cognitive impairment may lead to depression, worse QOL and even mortality. Objective: To assess the cognitive function in patients undergoing haemodialysis. Methodology: Study Design: observational study. Sample Size: 90
Study Procedure: Subjects meeting inclusion and exclusion criteria were identified. Consent was obtained from the patients. A self-designed case report form was used to obtain the required information. Information related to cognitive impairment was obtained using the 6CIT scale.
Statistical Analysis: Pearson's correlation Result: A total of 90 subjects were enrolled in the study based on the inclusion/exclusion criteria. The severity of cognitive impairment among the subjects was evaluated using the 6CIT scale. Accordingly, 64(71.11%) subjects presented with normal cognitive function, 19(21.11%) subjects had mild impairment, and 7(7.78%) subjects with significant impairment. Females were found to have more significantly impaired cognitive function (12%). Memory domain was highly affected in dialysis subjects. A moderate negative correlation was observed between hyponatremia and cognitive impairment (r=-0.5) with p value 0.02 (<0.05) which was statistically significant. Conclusion: In this study it was found that, the cognitive function of haemodialysis subjects is greatly affected by various factors such as poor sleep, psychological distress, poly pharmacy, co morbidity, and complications. Also, that there will be an improvement in the QOL of subjects if there is necessary interventions & patient education in the early stages of CKD that can help in improving self-management skills of the individual subjects and prevent the progression to stage 5-CKD.
Abs_00014: Knowledge, Attitude and Practice (KAP) in Tuberculosis patients.
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Background: Tuberculosis (TB) is an airborne disease caused by Mycobacterium tuberculosis. According to the WHO Global Tuberculosis Report 2018, 10 million people developed TB disease. Deficient TB knowledge and stigmatizing attitudes towards TB may lead to delays in the diagnosis and treatment of TB. TB knowledge and awareness of medical treatment are important for the success of TB prevention and control. Objective: To assess knowledge, attitude and practice in TB patients. Methodology: It was an observational study, where the subjects diagnosed with TB, visiting the Out-patient clinic and In-patient chest and TB ward were explained about the purpose of the study. Subjects were selected based on inclusion and exclusion criteria and willingness to participate was ascertained. Data was collected in a self-designed data report form by interviewing the subjects using questionnaires and the results were analysed and interpreted using Microsoft Excel and IBM-SPSS. Results: A total of 74 subjects were enrolled in the study. The mean age was found to be 45.5 ± 13.96 years. Out of 71 subjects, 10 (14.08%) subjects were within poor knowledge range, 50 (70.42%) subjects were in moderate range and 11 (15.50%) subjects appeared to have adequate knowledge. 62 (87.33%) subjects were within high attitude range, 9 (12.67%) subjects were within moderate attitude range and none of the respondents had low attitude towards TB and its treatment. 41 (58%) subjects were reported have good practices, 27 (38%) respondents were in moderate practice range, whereas 3 (4%) respondents revealed poor practices towards TB. Statistical analysis reveals a significant and moderately positive correlation between attitude and practice with r (69) = 0.358, p = 0.002 (p < 0.05). Conclusion: The knowledge about TB among subjects was moderate whereas, many had positive attitude and practice towards TB was good. Educating patients about basic knowledge regarding the disease should be given equal importance. More awareness programs at root level need to be spread in the community regarding TB especially in our country.
Abs_00015: Safety and Efficacy of Methotrexate use in Musculoskeletal Diseases

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Background: Methotrexate is the most frequently used medication in patients with Rheumatoid Arthritis. There are fewer studies for pattern of Methotrexate therapy and its adverse effects in adults. Since, the drug is extensively used it is necessary to evaluate its safety and efficacy pattern in adults. Aim: The study is aimed at assessing the safety and efficacy of Methotrexate in Musculoskeletal diseases. Methods: A self-administered patient questionnaire was used in outpatient rheumatology clinic. Inclusion criteria included patients above 18 years with a diagnosis of RA and currently taking Methotrexate for more than 3 months. Socio-demographic, clinical and therapeutic data were collected. Results: The study was conducted over a span of 6 months, in which data of 154 rheumatic disease patients were included in the study. 84% were women with a median age of 48yrs (IQR 35-65) and 16% were male with a median age of 55yrs (IQR 45-75. The study confirmed Methotrexate dose of 12.5-20 mg or lower weekly had a significantly larger effect on tender joint count, pain, and global status. Dose toxicity was noted with gastrointestinal side effects, hair-fall, increased SGPT highest in 15-25 mg weekly dose which are managed usually precluded by the adequate use of folic acid supplementation and resolve with reduction or cessation of therapy. The effects tend to occur during the initial phases of therapy, often during the 24-48 hours post dose. Methotrexate in combination with other DMARDs appears to be more effective than mono-therapy. Conclusion: Weekly low dose Methotrexate provides an efficacious, cost effective and is generally well tolerated treatment for RA. Methotrexate therapy has helped in reducing signs and symptoms of the disease, reduce radio-graphic progression of joint damage, improve quality of life outcomes, and reduce mortality. As the drug is extensively used, assessing the safety and efficacy of methotrexate use and early detection of Methotrexate intolerance is necessary for an effective treatment.
Abs_00016: Assessment of Psychological Distress in Patients Undergoing Haemodialysis

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Background: Chronic kidney disease (CKD) or chronic kidney failure describes the gradual loss of kidney function. If kidney disease gets worse, wastes can build to high levels in your blood and make you feel sick. ESRD is the last stage of CKD that may lead to kidney failure, which requires dialysis or kidney transplant to maintain life. Psychological distress is found to be high in haemodialysis patients. Depression is a common psychological disorder that affects adults undergoing haemodialysis. Objective: The study was aimed at measuring the prevalence of psychological distress in haemodialysis patients. Methodology: An observational study was conducted in a sample of 90 CKD patients undergoing haemodialysis in Nephroplus Dialysis Unit, ESIC MC and PGIMSR, Bangalore. Study Procedure: Subjects meeting inclusion and exclusion criteria were identified. Consent was obtained from the patients. A self-designed case report form was used to obtain the required information. Psychological distress was measured using the Kessler’s 10(K10) scale. Statistical Analysis: Pearson's correlation Results: A total of 90 subjects were enrolled in the study based on the inclusion/exclusion criteria. The severity of psychological distress among the subjects was evaluated using the K10 scale. 72% of subjects were male and 28% were female. Accordingly, 62.22% subjects presented with normal psychological distress, 21.12% subjects with mild distress, and 10.00% subjects with moderate distress and 6.66% with severe distress. Females were found to have more significant psychological distress than males. 40% were normal, 28% had mild, 24% had moderate, 8% had severe psychological distress among the females. Subjects with severe psychological distress were significantly found in the age group of 56-65 years (11.5%), with moderate (13.63%) and mild (36.36%) distress between 36-45 years. Conclusion: In this study it was found that psychological distress was significant among the haemodialysis subjects. Healthcare professionals should consider the likely high prevalence of psychological distress and depression among CKD patients as well as the need for specific mental health services to confirm diagnosis and initiate management.
Abs_00017: To Assess Subject Satisfaction with TB Therapy
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Background: TB is an airborne disease caused by mycobacterium tuberculosis. Patient satisfaction is a health care quality. Since it cannot be observed directly, patient satisfaction are often used as a measuring device. It involves determining which aspects of patient satisfaction to measure, developing reliable and valid questions, randomly sampling individuals from within a patient population and using standard technique such as mail surveys, telephone surveys or face to face interviews. Hence, patient satisfaction is measured using 7 items Short Assessment of Patient Satisfaction (SAPS) questionnaire. Objective: To assess subject satisfaction with TB therapy

Methodology: An observational study was done in a sample of 74 TB patients using study tool SAPS (The short assessment of patient satisfaction) with treatment in Chest and TB Department, ESIC MS and PGIMSR, Rajaji Nagar, Bangalore. Study Procedure: Subjects meeting inclusion and exclusion criteria were identified. Consent was obtained from the patients. Data was collected in self-designed data report form of SAPS (short assessment of patient satisfaction) by interviewing the subjects using questionnaire and results were analysed and interpreted using Microsoft Excel and IBM-SPSS Statistical Analysis-Pearson's correlation

Results: About 9(12.68%) out of 51 subjects were dissatisfied and 58(81.69%) subjects were satisfied and 4(5.63%) were very satisfied with the quality of treatment given to them. Conclusion: In this study it was found that majority of the patients were satisfied with the therapy and the health care professionals should consider the patients dissatisfied with the quality of the treatment and understand the underlying problems faced to improve the patient satisfaction with treatment.
Abs_00018: Study of Maternal Outcomes in Gestational Diabetes Mellitus
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Background: Gestational Diabetes Mellitus is one of the most common medical complication in pregnancy and is severe and neglected threat to mother. Risk factors for developing GDM are obesity, family history of diabetes, high-risk ethnicities, increased maternal age, and personal history of GDM. Maternal complications in GDM are hypertensive disorders such as preeclampsia, gestational hypertension and chronic hypertension, need for caesarean section, pre-term labour, prolonged labour, shoulder dystocia, abortion, polyhydramnios, infection and maternal distress. Incidence of gestational diabetes mellitus varies globally from 2% to 14%. It may lead to maternal complications and also increase the risk of future Type 2 diabetes mellitus in mother. This study is aimed to understand the maternal outcomes due to GDM. Objective: To assess the Maternal outcomes of subjects with GDM. Methodology: Study Design: Observational Study. Sample Size: 65. Study Procedure: Subjects meeting inclusion and exclusion criteria were selected. Informed Consent was collected from the patients. A self-designed case report form was used to obtain the information. Result: The most common complication was Maternal distress 55 subjects (84.61%) followed by Caesarean Section 48 (73.84%), 36 subjects (55.38%) with other co-morbidities, 14 subjects with Lactational failure (13.4%), 12 (18.46%) subjects with Pre-Rupture of Membrane, 9 (13.85%) with Polyhydramnios and 6 (9.23%) each with oligohydramnios and infection, 5 (7.69%) subjects with obesity and 1 (1.53%) subject with anhydramnios, hypoglycaemia, Intra Uterine Growth Restricted in each category. Conclusion: In this study, it was found that the maternal distress was the most common complications. It is aimed to understand the effect of GDM in maternal outcomes. It helps us understand if it is important that every pregnant woman should be aware of GDM and controlling measures of GDM, so as to reduce the incidence of GDM and complications associated with GDM in the society. Thus, the present study concludes that, there are serious complications associated with GDM which in majority of cases, can be managed by early detection, treatment intervention and patient education regarding the disease condition and its controlling measures.
Abs_00019: To Assess Medication Adherence and Factors Influencing Adherence.
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Background: Tuberculosis (TB) is a highly contagious airborne disease caused by Mycobacterium tuberculosis that primarily affects lungs. According to the WHO Global Tuberculosis Report 2018, 10 million people developed TB disease in the year 2017. About 1.7 billion people that is around 23% of the world population are estimated to have latent TB infection. India alone accounts for about 27% of the world’s annual incidence of TB. Methodology: An observational study was done with a sample of 74 TB patients using study tool 4 item Morisky Green Levine with treatment in Chest and TB Department, ESIC MS and PGIMSR, Rajaji Nagar, Bangalore. Study procedure: Subjects meeting inclusion and exclusion criteria were taken. Consent was obtained from the patients. Data was collected using 4 item Morisky Green Levine and results were analysed and interpreted using Microsoft Excel and SPSS. Statistical Analysis: Descriptive method. Results: About 61 (86%) subjects had high adherence, 4 (5.6%) subjects have moderately adhered to medications and 6 (8.4%) subjects were poorly adherent to their anti-TB medicines. Conclusion: Assessment of medication adherence showed that most of the subjects were highly adherent to therapy. This shows that the health care workers are doing best in their part of counselling patients in about importance of proper medication adherence.
Abs_00021: Prescribing Patterns in the Management of Stroke at a Tertiary Care Hospital
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Aim: To analyse the prescribing pattern in the management of stroke at a tertiary care hospital
Method: A prospective observational study was carried out for a period of 6 months in both ischemic and haemorrhagic stroke patients with age group between 18 to 90 years. Patient demographic and other data were collected using data collection form and Modified ranking scale was used to measure severity of stroke. All data were analysed using graph pad. Findings: The prescribing patterns in the management of stroke were appropriate to the condition of the patient. It comprised of anti-platelets, anti-lipidemic, anti-coagulants and other medications for the treatment of the comorbid conditions such as hypertension, diabetes, epilepsy and other conditions. Male gender was more prone to stroke, majorly in the age group of 60-80 years of age along with the social risk factors like tobacco and smoking. Hypertension was found as a dominant past medical history in stroke patients. The duration of stay is directly proportional to the extent of disability of the patient as well as the comorbidities which invariably increases the cost of therapy.
Interpretation: Cerebrovascular stroke is a crucial public health problem and thus it is vital to monitor the prescribing patterns and its management. The need of clinical pharmacist is needed to facilitate recovery of the patient and enhance the healthcare experience along with reducing the economic burden and length of stay in hospital so as to decrease morbidity and mortality.
Abs_00022: Drug Administration Knowledge among the Patients in Medical Ward of Private and Government Hospital: A Prospective comparative study

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Background: Patients' knowledge about the prescribed medications is a key factor determining the patient compliance and ultimate outcome of the disease. Patient perception about disease and attitude towards illness are a contributing factor to affects their knowledge. Objective: To Evaluate the Drug Administration Knowledge among the Patients of Private and Government Hospital

Methodology: A prospective comparative observational study, carried out for 6 months on patient diagnosed with infectious disease admitted in the medical ward of a private and government hospital. Data were collected via face-to-face interview with questionnaires. Patients were asked to cite the drug name, indication, dose, route and other important instructions like frequency of each medication via direct patient interaction. The overall knowledge (total score-5) was calculated by giving 1 point to each component.

Results: A total of 174 patients knowledge was assessed by categorizing into 3 groups: poor knowledge (score-0.1), adequate knowledge (score 2, 3) and good knowledge (score 4, 5). In government hospital, out of 106 participants the overall knowledge assessment on medications was poor in 32.1%, adequate in 49.1% and good in 18.9%, whereas in private hospital, the knowledge was assessed as, poor category with 29.4%, adequate with 55.9 % and good with 14.7%. Knowledge category was found to have no association with economic status ($\chi^2=0.453$), age ($\chi^2=0.830$), sex ($\chi^2=0.901$) and number of antibiotics administered during therapy ($\chi^2=0.629$). Conclusion: The overall drug administration knowledge was higher in private hospital which may be attributable to the personalized care given by the physician and higher individual patient consultation time in private hospital.
Abs_00023: Comparative Study on Rationality of Antimicrobial Agents’ Selection and its Impact on Readmission in a Government and Private hospital

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Background: Choice of Antimicrobial Agents (AMA) in every infection should be based on standard treatment guidelines for successful outcomes and to prevent drug related untoward effects like antibiotic resistance and medication errors. Objective: To determine the adherence in selection of Antimicrobial Agents (AMA) with that of standard treatment guidelines and its impact on readmission in infectious ward of a Government and Private Hospital. Methodology: A six months prospective comparative observational study was carried out in 216 patients of infectious ward of a private and Government hospital. Selection of AMA was compared and verified with GOLD-2020 and ICMR-guidelines. Statistical analysis was done in SPSS version-20 and tool used was proportion analysis with correlation studies. Crosstab-verification and chi-square analysis using Fischers-Exact Test was done to identify the correlation between adherence and readmission. RESULT The common infections that was found frequently in both sectors are UTI, LRTI, COPD and dengue fever. According to ICMR-guidelines, it was found that 65% adherent cases were in both private and Government hospital for UTI. In case of dengue, no cases were found adherent in Government hospital and 29.62% are adherent in private hospital. LRTI has 100% adherence in Government hospital and 90.9% adherence in private hospital. According to GOLD-guidelines, COPD has no cases adherent in private hospital and 29.62% were adherent in Government hospital. Government hospital has more readmission cases for UTI, COPD and LRTI. Conclusion: Choice of AMA was compared and verified with GOLD-2020 and ICMR-guidelines. Government hospital showed more adherence in COPD and LRTI. Private hospital showed more adherence in dengue fever. In case of UTI, both sectors were equally adherent. Statistical analysis showed, there was no direct correlation between adherence and readmission.
Abs_00024: Assessment of Antimicrobial Use in Private and Government Hospital, A Comparative Study in Central Kerala, using WHO Indicators

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Background: Irrational use of antimicrobials can cause various unwanted events. It results in the impairment of the quality of patient care, increase in the cost of therapy and various side effects. Thus, appropriateness of antimicrobial use in hospitals plays a pivotal role in patient safety.

Objective: To analyse antimicrobial use in private and government hospital as per the WHO indicators.

Methodology: A prospective comparative observational study was carried out for a period of 6 months; the study participants were the patient diagnosed with an infectious disease admitted in the medical ward of both hospital during the study period. The data obtained from the study sites were analysed using WHO indicators described in WHO. How to Investigate Antimicrobial use in Hospitals: Selected Indicators, Feb 2012.

Result: The study involved 216 patients and the average number of antimicrobials prescribed was found to be 1.73 in private and 2.07 in government hospital, average cost of antimicrobials was found to be 86.48 INR in private and 31.04 INR in government hospital, average duration of antimicrobial treatment was 4.8 in private and 5.2 in government hospital, and the percentage of antimicrobials prescribed in generic was 32.09% in government and 88% in government hospital.

Conclusion: This study shows that the average cost of antimicrobials was more in private hospital than that of government hospital and other indicators such as number of antimicrobials per hospitalization, duration of antimicrobial treatment and the percentage of generic antimicrobials prescribed were all found to be more in government hospital.
Abs_00025: Survival rate of multiple myeloma patients treated with various therapeutic regimens

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Background: Multiple myeloma is the neoplasm of the plasma cells that affects approximately about 6.5% per lakh population and is the second most common haematological malignancy. As the incidence of MM is increasing and the number of Indian studies is less, a meticulous study regarding the survival rate of MM patients was mandatory. Objective: To find out the survival rate of multiple myeloma patients receiving various therapeutic regimens. Methodology: A retrospective clinically based cohort study in which the MM patients who received various chemotherapeutic regimens were enrolled in the study. The survival rate was analysed at the end of the study period. Results: Out of 87 patients enrolled in the study, 72 (82.80%) patients were alive at the end of the study period with a mean of 4.02 ± 2.81 years and the rest 15 (17.24%) deceased in between. 52 (59.80%) of them had Progression Free Survival (PFS) with a mean of 2.60 ± 3.08 years and the rest 35 (40.22%) of them had disease progression. The time on treatment (duration of therapy): survival time (overall survival) ratio was found to be 1:2. 82% of the cumulative survival was obtained in the mid-year of our study and on prolongation it was reduced to 78% at the end of the study period. Highest % of mortality was observed during the initial 1 or 2 years. Conclusions: It was observed that the mean survival time of MM patients was 4 years and a completely adherent chemotherapy for one year can promise a survival time not less than 2 years.
Abs_00026: A Prospective Study of Management of Anaemia in Chronic Kidney Disease Patients

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Background: Erythropoietin stimulating agents are used to improve haemoglobin levels in chronic kidney disease patients. Clinical studies have shown to increase the haemoglobin level during the treatment with these agents. Objective: The primary objective was to assess the management of anaemia using Erythropoietin stimulating agents and the secondary objective was to assess patient self-management in chronic kidney disease and the cost burden of the treatment with Erythropoietin stimulating agents. Methodology: In a prospective hospital-based study, the laboratory reports, treatment charts of the study subjects were reviewed and followed every month. Results: A total of 45 patients were enrolled in the study. Most of the patients included in the study were in the stage 4 and stage 5 of chronic kidney disease. An average time of 6 months were required for Recombinant Human Erythropoietin Alfa and Darbepoetin Alfa to increase the haemoglobin levels to the optimum level whereas average time required for Pegylated recombinant human erythropoietin to improve the haemoglobin to optimum level was 4 months. A total of 75% of the total population included showed an increase in the haemoglobin level by maximum of 1g/dl/month. The minimum cost of the erythropoietin treatment was found to be 13,660 and maximum cost was 1,59,936.00. Most of the patients did not consume proper diet. The exercise and sleep pattern were also not followed properly. Discussion: Three types of erythropoietin stimulating agents took an average of 6-7 months of therapy to reach normal level of haemoglobin. The average cost of the Erythropoietin stimulating agents was found to be Rs.62,937.00. The patient knowledge about the disease was found to be good. Conclusion: The erythropoietin stimulating agents were successful in improving haemoglobin levels. There was a need to educate the patients about proper diet, exercise during management of chronic kidney disease.
Abs_00028: Observational Study of Risk Factors, Treatment Pattern and Epidemiology of Knee Osteoarthritis

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Introduction: Osteoarthritis is the most common joint disease in India. Many cases of OA are under-reported and the delay in the treatment progresses the disease leading to permanent damage of the knee. Objectives: The primary and secondary objectives were to assess and evaluate common risk factors, treatment patterns of knee osteoarthritis by using a self-designed data collection form and to assess the intensity of pain in patients diagnosed with knee osteoarthritis using Visual Analog Scale (VAS) and the self-management practices in patients with knee osteoarthritis, respectively. Method: A prospective observational study was conducted in Sagar hospital, Banashankari, Bengaluru for 6 months. The demographic data, risk factors, treatment pattern, pain score and its self-management methods were collected. Results: Among 78 subjects 84.61% were obese, 33.65% of subjects reported to be physically inactive, 51% of people were leading a sedentary lifestyle, more than 50% were deprived of sunlight exposure, 50.94% of subjects were consuming fried/processed food, 37.73% of people were consuming low dairy diet. Almost 50% patients were associated with hypertension and a few with diabetes mellitus. 62.89% of study subjects were prescribed NSAIDs and PPIs and the rest with supplements. Most took rest, followed by applying ayurvedic oils, taking OTC medications, doing massage and physiotherapy, applying hot and cold compresses. Discussion: In the study population, females were more prone to develop osteoarthritis. This study revealed that discussion females are more prone to occurrence of knee OA. Obesity, inactivity, low sunlight exposure, sedentary lifestyle, consumption of fried food was the lifestyle risk factors. Hypertension, Diabetes mellitus were common co-morbidities. Management was primarily using NSAIDs, calcium, and vitamin D supplements and some self-management measures. Conclusion: This study revealed the risk factors for developing osteoarthritis in people living in Banashankari area of South Bengaluru. Management strategy followed in this population was NSAIDs and Calcium supplements.
Abs_00030: Analysis of Outpatient Antibiotic Prescriptions in a Quaternary Care Hospital According to WHO AWaRe (Access, Watch, Reserve) tool

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Background: In view of controlling the spread of antimicrobial resistance and to ensure the best use of available antibiotics, WHO introduced AWaRe (Access, Watch, Reserve) Tool, on the basis of their resistance potential antibiotics have been classified into three groups access, watch, reserve. WHO suggests that inclusion of AWaRe tool in antibiotic stewardship programs will be beneficial, as it’s a simple tool for the quantification of antibiotic consumption compared to existing tools in use such as DDD.

Objective: To analyse the utilization of antibiotics as per WHO AWaRe classification of 2019 in a quaternary care hospital.

Methodology: A retrospective, observational study was conducted in Aster Med city Kochi and details of antibiotics prescribed to all out-patients who received at least one antibiotic was included in the study and patients on topical antibiotic was excluded. We measured the proportion of antibiotic use as per WHO AWaRE metrics.

Result: A total of 23,088 Out Patient antibiotic prescriptions were collected from 58 departments, of which 11834 prescriptions were for males and 11254 for females. When the proportion of antibiotic use within the Out Patient department of the hospital were analysed based on AWaRe criteria, it was found that Access antibiotics constituted about 41.32% whereas for Watch it was 51.01% and for Reserve group the percentage of use was 1.19%. Amoxicillin-Clavulanic acid (Access), Azithromycin (Watch) and linezolid (Reserve) were the mostly prescribed antibiotics within the Out-Patient department.

Conclusion: Considering the overall use of antibiotics within the OP department in the hospital, we came to a conclusion that antibiotics from watch group were used to a great extent compared to that of the access antibiotics. When the AWaRe index is aligned with the local anti-bigrams, the patient will be served best by receiving the required antibiotic and it also helps in effectively tackling the emerging situation of antibiotic resistance.
Abs_00031: Study of Mortality Risk Assessment in ICU of a Tertiary Care Hospital
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Background: Intensive Care Unit provides critical care and life support for critically ill and injured patients. The physicians are challenged to predict patient outcomes when patients are admitted. It is of prime importance to have an accurate and reliable evaluation of patients in the Intensive Care Unit for their appropriate treatment. Several tools such as APACHE II and SAPS II are the most commonly used scoring systems and it involves the inclusion of data which is obtained in the first 24 hours of the patient admission in the Intensive Care Unit. Objective: The study aims to determine the influence of analytical parameters in the mortality risk assessment of patients. Methodology: A total of 215 patients were considered for the study and they were categorized into two groups: Group 1, Survivors (200 patients) and Group 2, Non-survivors (15 patients). Data collected were analysed using ROC, logistic regression, spearman's correlation, Mann Whitney test which was performed using SPSS software. Results: ROC curve analysis revealed AUROC to be 0.899 APACHE II, 0.851 SAPS II; the two scales showed statistical significance in predicting death. Hosmer leLenshow test revealed a greater calibration for the APACHE II compared to SAPS II in the ICU settings where the study was carried out. Further Multivariate binomial logistic regression analysis of the laboratory values correlated with the APACHE II revealed globulin and ESR to be independent predictors of risk of mortality. Conclusion: From our study, it was concluded that APACHE II had better discrimination and sensitivity in the ICU settings of our study centre, and further using the validated score ESR and globulin were identified as potential predictors of risk of mortality.
Abs_00032: Microbiological Pattern, Antibiotic Susceptibility, and Associated Risk Factors in Patients with Diabetic Foot Infections.

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Background and Objectives: Foot infections are the most prevalent problem in persons with diabetes. The burden of MDR micro-organisms in DFIs is rising day by day. Given that, the present study aims to determine the variety of micro-organisms isolated from the DFUs, their antibiotic resistance pattern, and associated risk factors.

Methods: A prospective observational study was conducted for seven months at the Department of Surgery, Bharati Vidyapeeth hospital, Pune, India. The specimen for microbiological studies is obtained from the deep tissue as a part of routine clinical care. All demographic, clinical, laboratory data, and ulcer culture results were collected and evaluated for each case. Anti-microbial susceptibility testing to different agents was carried out using VITEK Machine.

Results: Ninety micro-organisms were isolated from 65 specimens, with an average of 1.4 organisms per lesion. Staphylococcus species and Escherichia coli were the most prevalent Gram-positive and negative organisms isolated, respectively. MDR organisms constituted up to 42.2%, while 5.5% of the samples were XDR. MRSA accounted for up to 84.2% of the S. aureus isolates, likewise ESBL constituted about 7.7% of total isolates in our study. The prevalence of Poly-microbial infection was increasing with a higher Hba1c ratio. Peripheral neuropathy (90%) was the most common risk factor associated with DFI patients, followed by chronic hyperglycaemia (81.4%), while PVDs were present in 63% of the individuals.

Conclusion: Our research suggests that Daptomycin can be an appropriate choice as a single drug for the empirical coverage of gram-positive organisms. The most appropriate choice for Gram-negative would be Ertapenem. A crucial observation is the presence of MDR Proteus mirabilis in DFIs, which is resistant to almost all the anti-microbial, tested. Appropriate anti-microbial selection can reduce the morbidity and the emergence of MDR organisms in DFIs.
Abs_00034: Does Time Elapsed from Convulsive Status Epilepticus Onset to Anticonvulsant Administration In-Hospital Settings Deviate from the Recommended Guidelines?

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Background: Data on the time elapsed from the onset of SE to administration of the successive AEDs are very much limited. Objective: To describe and compare with recommended guideline the time elapsed from the onset of a paediatric convulsive status epilepticus (SE) to administration of antiepileptic drugs (AEDs). Methodology: A prospective observational cohort study was performed for six months in PICU. Paediatric inpatients (1 month -14 years) with convulsive SE were enrolled. To study timing of AED administration during all stages of SE the clinical case notes and time of administrations were noted and compared to the recommended time frames in the American Academy of Neurology and American Epilepsy Society guidelines. Results: Out of 40 paediatric inpatients, 28 were male. The mean age± SD was found to be 2.86 ±2.65 years. A total of 22/40 (55%) patients received at least 2 doses of benzodiazepines (BZDs) prior to escalation to other AED classes. The median (p25-p75) time until arrival of EMD was 25 (20-35) min and the median (p25-p75) time until cessation of status epilepticus was 55 (45-78.7) min. The first and second doses of BZDs were administered at a median (p25-p75) of 30 (25-37.5) and 45 (42.5-52.5) min, respectively. The first and second doses of non-BZD AEDs were administered at 65 (47.5-95) and 130 (52.5-245) min, respectively. Eight (20%) paediatrics received at least one continuous infusion at 195 (191.2-211.2) min from the seizure onset. The time from seizure onset to administration of first BZD, first non-BZD, second non-BZD and continuous infusion were delayed by 3, 3, 4 and 2.5 times respectively when compared to recommendations by American Academy of Neurology and American Epilepsy Society guidelines. Conclusion: The time elapsed from the onset of SE to administration of the successive AEDs was found to be delayed compared to recommended standard guidelines.
Abs_00036: Home Blood Sugar Level Measurement for the Management of Diabetes during COVID 19

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Since December 2019, the COVID-19 outbreak has expanded from its origin country to other countries and now it is at its global stage. COVID-19 pandemic has disputed the dietary pattern, routine clinic visits and lifestyle of patients suffering from diabetes. This article aims to provide patient-centred care via diabetes self-management education based on available literature on lifestyle changes, exercises at home and change in the eating habits, glycaemic index management and awareness regarding hypoglycaemia, nocturnal hypoglycaemia, and the feasibility of telemedicine for a better outcome in the lockdown scenario. Close coordination among patients and physician team including general physicians, endocrinologists, diabetes educators, nutritionists, ophthalmologists, and psychiatrists is needed to touch the desired success during the ongoing COVID-19 pandemic.
Abs_00037: Toxicity Profile of Various Therapeutic Regimens in Multiple Myeloma Patients

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Background: Multiple myeloma is a haematological malignancy characterized by the clonal proliferation of plasma cells. Increased toxic events can decrease the prognosis and as the incidence of MM is increasing in India and the number of Indian studies was less among these patients, a diligent study was necessary regarding the toxicity profile. Objective: To find out the toxicity profile of multiple myeloma patients receiving various therapeutic regimens. Methodology: The study was a retrospective clinically based cohort study in which the MM patients who received various chemotherapeutic drugs for treatment MM patients was graded as per the National Cancer Institute Common Terminology Criteria for Adverse Events (CTCAE) version 5.0 during the therapy. Results: Out of 87 patients enrolled for the study, a total of 575 adverse events were reported in which 250 (43.50%) events observed was Grade 1 which had mild symptoms and toxicities, 200 (34.80%) events were Grade 2 moderate toxicities, 110 (19.10%) events observed was Grade 3 severe toxicities and about 15 (2.60%) events were Grade 4 life-threatening adverse consequences. None of them died due to serious adverse effects. Conclusions: It was observed that the most commonly reported Grade 1, Grade 2 and Grade 3 toxicities were anaemia, hypocalcaemia, leukopenia, neutropenia, thrombocytopenia, renal failure, peripheral neuropathy and venous thromboembolism. Grade 4 renal toxicities and anaemia were also seen in some of the MM patients.
Abs_00040: Development of Antibiogram for Evaluation of Antibiotic Resistance pattern in Tertiary Care Teaching Hospital

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Background: Antibiograms are the important tool for healthcare providers which shows how various microorganisms are resistant and susceptible to antibiotics used in the hospital. Antibiogram is very useful for physician for selecting appropriate empirical antibiotic treatment and selection of individual patient antibiotic treatment. Thus, this study focuses to reduce antibiotic resistance, improving antibiotic treatment effectiveness, and to reduce total healthcare cost in TCH.

Objective: The main objective of the study was to find out the antibiotic resistance pattern, antibiotic usage by developing hospital antibiogram. Methods: A cross-sectional study was carried out to check the Antibiotic resistance pattern based on the inclusion and exclusion criteria at Parul Sevasharam Hospital, Vadodara, Gujarat. Total 150 sample were included in study. Patients data regarding to demographic details and prescribed antibiotics had been collected for 6 months duration from October 2019 to March 2020. Data was collected from the all-enrolled participants who had gone through culture sensitivity test.

Result: During our study periods, greater resistance found in Ceftriaxone (78%), Meropenem (71%), Azithromycin (66%), linezolid (66%), Amoxicillin + clavulanic acid (63%), Ciprofloxacin (56%) and Cefoperazone + salbactum (52%) these antibiotics. Greater susceptibility to Clindamycin (75%), Amikacin (65%), Piperacilline + tazobactum (62%), Cefoperazone (48%), ciprofloxacin (44%) was found in the population. During our study, 20 antibiotics were commonly prescribed out of which ceftriaxone was most commonly prescribed in our study. The most common isolated bacteria were found to be E. coli (61%) and it was found that most of the infection were due to gram negative organism in the hospital.

Conclusion: This study shows that there is increasing cases of antibiotic resistance and need of antibiogram to find out the local antibiotic resistance pattern and to develop antibiotic policy for the safe use of antibiotic which is helpful for to reduce the antibiotic resistance.
Abs_00041: Assessment of impact of wound on the quality of life in patients with Diabetic foot ulcer

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Background: Diabetic foot is a foot that exhibits any pathology that results directly from DM and may be defined as a syndrome in which neuropathy, angiopathy and infection will lead to tissue breakdown resulting in morbidity and possible amputations. In Indian scenario, out of 62 million, 25% develop DFU of which 50% become infected, requiring hospitalizations while 20% need amputation. DFU negatively affects patients QOL due to decreased mobility and consequently the ability to perform daily activities and increasing dependence on others. Objective: To assess the impact of wound on QOL in patients with DFU. Methodology: An observational study was conducted among 42 patients with DFU attending the Surgery department in ESICMS and PGIMSR, Rajajinagar, Bangalore. Subjects meeting the inclusion criteria participated in the study and consent was taken form them. A self-administered questionnaire was used to collect data on sociodemographic and clinical characteristics. Quality of life was assessed using two questionnaires, Diabetic foot ulcer scale and Cardiff wound impact schedule. Statistical analysis was performed using SPSS and Microsoft Excel. Results: Cardiff Wound impact schedule revealed that mean CWIS score was lower in "social life "domain with a mean score of 20.13 (SD 4.39). The "physical symptoms & daily living" domain had a higher mean score 34.77 (SD 6.13). Diabetic foot ulcer scale revealed that the domains Treatment, Daily activities and Positive attitude had lower score indicating poorer quality of life. Conclusion: DFU causes a reduction in QOL by affecting various aspects of the patient's life. It is necessary to consider factors such as age, gender, overweight, presence of neuropathy, Wagner grading, in planning for care and health care needs in these patients. The patients with DFU have received little attention so therefore addressing all aspects of the diabetic foot is probably best accomplished by establishing a multidisciplinary team to work through all stages of patient management.
Abs_00044: Vincristine Induced Adverse drug reactions in Leukaemia patients.

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Background: Vincristine is a critical component of combination chemotherapy treatment for Leukaemia and is associated with various adverse effects. There are limited Indian studies associated to adverse events of Vincristine. Objective: To determine the frequency and severity of adverse reactions associated with vincristine in paediatric leukaemia patients. Material and Method: A prospective observational study was carried out in paediatric oncology department from August 2019 to January 2020. Children of either gender undergoing chemotherapy for leukaemia were enrolled. Clinical events were recorded and Vincristine associated toxicities were assessed by the Common Terminology Criteria for Adverse Events v.5.0 (CTCAE). Result: A total of 41 paediatric leukaemia patients were recruited during the study period. In our study, 18 patients experienced 152 adverse drug events, with an average of 8 events (SD-6.34). The majority of the events were associated with the Haematological system (42.1%) followed by Gastrointestinal (21.05%) and General disorders (16.44%). The most frequent events detected were anaemia (13.1%), pancytopenia (5.9%), febrile neutropenia (5.9%), vomiting (4.6%), and abdominal pain (2.6%). Hepatotoxicity was observed in 4.6% of the total events whereas peripheral oedema (1.97%) and vision loss (0.6%) was rare findings. Causality assessment as per WHO Scale showed that nearly half of the ADRs were probable (48.68%). The severity of the ADRs revealed 54.16% as Grade 1 followed by 33.55% as Grade 2, which is mild to moderate as per CTCAE Scale. Conclusion: This study highlights that there is a high incidence of adverse reactions associated with the administration of vincristine. It is also important to promote the detection, reporting, assessment, and treatment of these ADRs for safe and effective therapy.
Abs_00046: Drug Utilization and Off Label Drug Practice in Paediatric Department of Tertiary Care Teaching Hospital

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Background: Off-label is the use of pharmaceutical drugs for an unapproved indication or in an unapproved age group, dosage, or route of administration. Off-label use is legal unless it violates ethical guidelines or safety regulation. In present study we attempted to identify the use of off-label as 1st line or subsequent line therapy due to failure or lack of standard therapy. Objective: The main objective of study is to find out most commonly prescribed off label medication in paediatric department of hospital and also to evaluate the drug use in paediatric patients. Methodology: Method: 6 Months prospective observational study was conducted on paediatric inpatient department of hospital. Demographic data, clinical history, diagnosis, and complete prescription were noted in predesigned data collection form, and prescriptions were analysed for drug utilization pattern and off-label drug use as per NFI and MICROMEDEX. Result: Out of 120 patients 95(79.01%) of patient have received off-label drug according to Micromedex and as per NFI 52(43.03%). We also found that highest no. of off-label medication was prescribed in the age group 1-3 years. The main reason for hospitalization was respiratory disorders (36.66%) followed by an allergic and bacterial infection (11.66%). The most commonly prescribed medication was Inj. Ceftriaxone (41.75%) and fixed drug combination (FDC) was amoxicillin + clavulanic acid (48.30%). During the study duration of 6 months total (n = 183) prescriptions are given in children patients and category-wise off labelled uses were reviewed. It was found that Non-FDA approval/indications (81.41 %) and Efficacy and safety (77.60 %) was most common variables of off label use during our study. Conclusion: Off label practice is most common in among paediatric patients and to ensure rational and safe use of off label medication in paediatric group require improving knowledge and quality data of off label drug use.
Abs_00047: Assessment of Use of Analgesics in Postoperative pain in a Tertiary care Hospital

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Aim: To evaluate the pattern of use of analgesics in post-operative pain, and to assess the drug related problems, medication errors, adverse drug reactions associated with the drugs used in the management of post-operative pain. Methodology: The study was prospective and interventional, conducted in a tertiary care hospital for six months. All the data were collected from patient, case records, caretaker, physicians’ interview, and direct interaction. Mean, standard deviation and P values were used for statistical analysis. Result and Discussion: A total of 318 patients were enrolled and data of 295 subjects were included. The study results show that there is an improved outcome in postoperative pain management. The mean age of the study population was found to be 48.16 years. Male predominance was observed as 172 (58%) in the study and female was 123 (42%). The majority of our study population underwent surgery for fracture (28.04%), followed by appendicitis (12.5%), and diabetic foot (10.13%). The most commonly used drugs for pain management are as follows, paracetamol IV (33.21%), tramadol IV (26.36%), diclofenac IV (22.94%), paracetamol PO (8.90%), aceclofenac with paracetamol PO (3.42%) and paracetamol with tramadol PO (1.71%). Conclusion: The intensity of pain differs from patient to patient and the type of surgery they underwent, so their management strategy. As pain is subjective, the primary pain assessment is always self-reporting. Our study draws a conclusion that postoperative pain is managed adequately in geriatrics than in adults.
Abs_00050: Monitor Adverse Drug Reactions and Assess its Economic Impact on Patients in a Tertiary Care Hospital.

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Background: Adverse Drug Reactions constitute an enormous burden for society; it is a medical complication that may affect a patient's clinical outcomes, resulting in increased morbidity, mortality, and healthcare costs. Hospital-based ADR monitoring programs identify and quantify the risks associated with using drugs. Objectives: The study aimed to detect, assess, and report the suspected and confirmed ADRs. Investigate the influence of certain risk factors and measure the economic impact of ADR monitoring and management on patients. Methodology: Patients from inpatient wards and outpatient Department in Bharati Hospital were included from August 2019 to March 2020. Clinical pharmacists recorded demographic data, drugs used, medical history, laboratory data, and daily progress notes. Suspected ADRs were analysed for their characteristics, risk factors, causality, severity, and cost burden using appropriate scales. The direct cost with ADRs was evaluated using hospital bills. A chi-squared test was used for testing statistical association of different parameters. Results: A total of 124 ADRs were detected in 96 patients during the study. The incidence of ADRs was found to have no gender predominance with significant distribution in the general ward. The severity and seriousness of ADRs revealed that 52.5% of ADRs were moderate in severity and 72.5% of ADRs were serious. Causality assessment using WHO revealed that majority of ADRs to be probable. The drug class most associated with ADRs was antibiotics with dermatological manifestations. The mean cost of ADR treatment significantly contributed to the overall direct cost incurred, i.e., INR 11,775 (US$ 154.78). The total direct cost of treating ADRs was highest with antineoplastic agents, i.e., INR 36,530 (US$ 480.07). Conclusion: More than one-third of the implemented interventions by CPs provided a complete resolution of the problems. The direct costs associated with adverse drug reactions were found to be high and could be prevented.
Abs_00055: Assessment of Usage Pattern of Intravenous Antibiotics in Critical Care Unit of Tertiary Care Hospital

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Introduction: Intravenous antibiotics are one of the most commonly prescribed antibiotics in critically ill patients. Inappropriate use of antibiotics leads to antibiotic resistance. There are only limited number of antibiotics available to treat infectious diseases, extreme care needs to be taken in using antibiotics as antibiotic resistance is a major challenge. Objective: To evaluate the usage pattern of intravenous antibiotics in critically ill patients of a tertiary care hospital and to assess the drug related problems associated with the use of intravenous antibiotics. Methodology: A prospective Interventional study was conducted in critically ill patients during the period of August 2019 to January 2020 in critical care units (ICU, MICU, PICU, SICU, MICU) of a tertiary care hospital, Mysuru. Patients who meet inclusion criteria were enrolled in the study. Consent was taken from the patient/LAR. Patient case sheets were reviewed to evaluate the usage pattern of antibiotics and their compliance with the hospital antibiotic policy and National antibiotic policy.

Results: Among 500 patients taken in the study 155 (31%) belonged to the age group >60 years and least were to the age group 1-12years. Among those 212 (42.4%), 180(36%), 108(21.6%) received prophylactic, empirical and definitive IV antibiotic therapy respectively. About 273 patients had culture sensitivity report and out of which 117(43%) patients received antibiotics based on it. Usage pattern of IV antibiotics for commonly occurring disease condition was assessed and appropriateness of therapy was evaluated based on hospital antibiotic policy and National antibiotic policy. Most commonly used IV antibiotic was found to be Meropenem and combination antibiotic was found to be Cefaperazone Sulbactam. 210 DRPs were identified and was discussed with HCPs and interventions were made appropriately. Conclusion: All the patients in the ICUs received IV antibiotic therapy and appropriateness for IV antibiotic therapy was observed to be low in some disease condition.
Abs_00056: Assessment of psychotropic medications induced adverse drug reactions in elderly patients residing at psychiatric nursing home.

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Background: Psychotropic drugs are frequently associated with adverse drug reactions (ADR) in the elderly population. Objective: To identify and categorize the ADRs in elderly patients residing in psychiatric nursing homes. Methodology: A cross-sectional study was conducted in a residential nursing home in Pune, from October 2019 to March 2020. A total of 97 elderly psychiatric residents who receive at least one psychotropic drug were enrolled in the study. The ADRs were assessed by using the Udvalg Kliniske Unders gelser (UKU) side effect rating scale. ADRs were assessed for causality and severity using the WHO-Uppsala Monitoring centre (WHO-UMC) causality assessment scale and the Modified Hartwig’s severity assessment scale. The collected data were analysed using the Statistical Package for social sciences (SPSS) version 18.0. A chi-square test was performed with the level of significance < 0.05 to find out the association between ADRs and psychotropic drugs. Results: The prevalence of psychotropic drugs induced adverse drug reaction (ADRs) in elderly patients residing in a psychiatric nursing home was found to be 94.85 %. Antipsychotics (65.1%) were mostly associated with ADRs. As per the UKU scale, the highest incidence of ADR was found to be neurologic (26.42%) of which tremor (14.47%) was the major ADR observed. Other than the UKU scale, Hyperglycaemia (3.46%) was the most seen ADR. The majority of the ADRs were assessed possible (71.38%) and mild (69.50%) in nature based on WHO-UMC and Hartwig’s scale, respectively. Conclusion: Overall, the study concludes a higher incidence of psychotropic drug use and the higher prevalence of ADRs in elderly psychiatric residential patients. Pharmacists, physicians and caregivers should work in collaboration for the betterment of patient’s health status and improved quality of life.
Abs_00057: Professional Challenges in the Management of Poisoning Cases in Rural India: A Qualitative Study of Physician’s Perspective

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Background: Poisoning is a significant public health problem in developing countries. Majority of the poisoning cases in rural areas are taken to remote clinics for initial care, staffed by non-specialists and sometimes inadequately experienced physicians. Very little is known about the provision of treatment available for poisoning cases in the context of rural health provision in India. This is the first study conducted in India which explores the perceptions of the primary health care physicians regarding the management of poisoning cases. Objective: To assess and understand the lacunas in the service of primary healthcare centres and current available resources from the physician’s perspective. Methodology: Self-designed Physician Survey Form was filled by PHC Medical officers of Pune district. PHCs with higher incidence of poisoning cases were selected for further study. Physicians were selected for interviews which were 15-20 minutes in duration. This interview employed a semi-structured theme guide, based on exploration of three distinct yet interrelated domains of enquiry: doctors experience and perceptions regarding the current treatment of poisoning patients; doctors understanding of how rural hospital setting may influence and shape current treatment of poisoning patients; and doctors’ perception of challenge and future opportunities associated with treating poisoning patients in rural hospital. Result: The survey was completed by a total of 67 respondents. The response rate was 100%. The physician’s observation and expectations illustrate the lack of a program to routinely refresh information on poisoning and emergency care. Majority of the respondents agree that poisoning is clearly a matter that needs further examination and management; however, they do not see such cases as actually their domain or as seriously impinging on their duty to provide care. Conclusion: Doctors in rural PHCs lack the necessary training and knowledge required for the management of poisoning cases. Educational & training programs may be effective in addressing the problems highlighted here.
Abs_00059: Snake Bite Management: Assessment of Approaches Adopted within a Rural Healthcare Setting

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Introduction: Snakebite remains a major cause of accidental death in modern India, and its importance for public health has been systematically underestimated. Most significantly, many patients are well known to be treated and die outside of health facilities particularly in rural areas. Rural healthcare settings can be effective in reducing mortality and morbidity associated with snake bite if they are well equipped and prepared for management of snake bite patients. Objective: To assess and understand management of snake bite patients in rural setting in relation to Standard treatment guidelines. Methodology: A retrospective, cross-sectional, observational study was conducted in Vignahar Medical Foundation working primarily in field of poisoning cases in rural areas of Pune. Retrospective data of over 196 snake bite cases was observed and reviewed. Demographic, Subjective Data, Objective Data, Laboratory based clinical data and management plan conducted for study cases were collected using Patient Profile Form. Severity assessment was performed using PSS scale. Result: A total of 196 cases of snake bite poisoning were obtained from medical record department of rural hospital. Amongst these cases in 36% of cases snake was not identified. Russel Viper and Cobra were most common snakes observed. The management of admitted snake bite cases was done by Antidote and Symptomatic treatment. Drugs used for symptomatic treatment involved the following: Anti-Microbial, Gastro protective, Tetanus toxoid, Anti-inflammatory, Vitamin Supplements, and Laxatives. Conclusion: Rapid clinical practice is not frequently observed due to remote locations, poor resources and untrained professionals. Despite these various challenges, our study site observed successful recovery of most patients as strategy adopted was to neutralize the venom toxicity by immediate infusion of ASV by establishing rapid initial control on swelling and blood toxicity factors resulting in low mortality rate. Also attempt to follow standard treatment guidelines was observed in the study.
Abs_00060: Evaluation of Paediatric Prescriptions using WHO Indicators

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Background: The study provides comprehensive insight on the use of WHO prescribing indicators in paediatric population in a tertiary care hospital. Objectives: To evaluate paediatric prescriptions and estimate the average number of drugs per encounter, number of drugs prescribed by generic name, number of encounters with antibiotics prescribed, number of encounters with injections prescribed, number of drugs prescribed from the essential drug list. Methodology: Prospective observational study conducted at paediatrics OPD of a tertiary care hospital for six months. Quantitative variables were expressed in mean, standard deviation and qualitative variables were expressed in percentages. Spearman’s Rank correlation and Mann Whitney Test was performed to evaluate whether prescribing indicators are statistically dependent on age and gender respectively.

Results: Majority of the patients were female. The mean age of the patients was 5.87(SD±4.32) years, with a range from 3 days to 17 years. According to the current study, common prevalent diseases in children were infectious diseases which included fever, dengue, cough, etc. The average number of drugs per prescription was 2.4(SD±1.022887). Most common dosage form prescribed was syrup. Only 4.21% of medicines were prescribed by generic name. Antibiotics and injections were prescribed in 7.65% and 0.23% of prescriptions respectively. Drugs prescribed from EDL were only 60.45%. Conclusion: The study necessitates the need to follow the optimal values set by WHO prescribing indicators. The percentage of prescriptions with antibiotics and injections were in the optimal range as set by WHO. However, average number of drugs per prescription, usage of generic names and prescribing using EDL were not in the optimal range. The prescribing indicator does not statistically depend on age and gender.
Abs_00061: A Study on Prescribing Pattern of Medications for Chronic Disorders in Community Setting

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Background: WHO states that chronic disorders are slowly progressive in nature. In India, NCDs are estimated to account for 63% of all death which are as follows, CVDs (27%), Communicable, maternal, perinatal and nutritional disorders (26%), chronic respiratory diseases (11%), cancer (9%), diabetes (3%), injuries (11%) and other NCDs (13%). The prescribing pattern of medication for chronic disorder will differ from one region to another region so to ascertain prescribing practice of medications among chronic disorder is essential. Objectives: To assess the prescribing pattern of medications in chronic disorder, to calculate the prevalence of DRP and to calculate the direct medication cost. Methodology: This was a prospective cross-sectional observational study which was conducted for a period of six months. All patients who met the study criteria were enrolled in the study. All the required details were collected from the prescription, on interviewing the patient, care taker, medical record and medication strip. Results: A total of 511 patients were enrolled in the study. The mean age of the study population was found to be 56.4 years. Male predominance was observed 287 (56.1%). Drugs belonging to the Cardiovascular system (51.6%) were found to be the highest followed by Alimentary tract and metabolism (32.2%). The highest number of the prescriptions had T2DM (53.4%) followed by HTN (34.05%) In T2 DM, the most commonly prescribed was combination therapy, Biguanides+ Sulfonylureas (53.8%) followed by Biguanides+DPP4 inhibitors (21.5%). In HTN, monotherapy CCB (48.27%) was the highest followed by ARBs (47.4%). A total of 125 DRP were identified, among those Drug-Drug interactions was highest and prevalence of the DRP was 24.46%. The average cost of HTN on daily basis was INR 10.02, in T2DM with insulin on daily basis was INR 24.6, T2DM without insulin on daily basis was INR 14.9. Conclusion: In chronic disorders the patient is on medication for life time so motivating them regarding the adherence, counselling on the possible side effect and correct usage of the medication are essential.
Abs_00062: Cost-Effective Analysis of Antihypertensive Drugs in a Tertiary care Hospital: A Cross-sectional Study

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Background: Hypertension is a common condition with a substantial public health burden and a high risk of cardiovascular disease. The increasing prevalence of hypertension provokes us to understand the management of the disease & its cost-effective treatment.1-3 Objectives: To evaluate the prescribing pattern of antihypertensive drugs & cost-effective therapy among the different group of antihypertensive drugs prescribed. Methodology: This is a prospective and interventional study conducted for six months. Consented patients were administered with a well-designed data collection form, consisting of demographics, drugs, cost, and necessary details collected from the inpatient records/case file the obtained data was submitted to a descriptive statistical analysis using SPSS software. Results & Discussion: Among 40 patients 55 % were male 45 % were females. More patients were at the age of 60-69 & least was 40-49 years. The BMI shows 15% underweight, 3 % were obese, and 10 % have smoking and alcoholics. The maximum length of hospital stay is four days in the corporate hospital (7.5%). The majority of the patients had HTN with comorbidities like IHD & DM. The total mean cost of disease management is 19521.98 ± 6841.87 Rs. The cost-effectiveness of the results showed metoprolol (22.83)> Losartan (25.05) > Nifedipine (26.56)> telmisartan (30.2), amlodipine (31.63)> Olmesartan (69.49), among combination therapy Amlodipine + Bisoprolol (24.44)> Telmisartan + Metoprolol (48.11). Conclusion: This study showed ARBs were the highest, followed by CCBs, Alpha-blockers, and Beta-blockers, respectively, in monotherapy. Under combination therapy, Beta-blocker + ARB and Beta-blocker + CCB were most commonly prescribed. So Pharmacoeconomic studies propose to the investors to apply in inventory control decisions, based on a timely manner in the corporate hospital settings.
Abs_00064: Methotrexate Intolerance Severity Scale and its Modifications for Indian Population

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Background: Methotrexate (MTX) intolerance is a very common problem faced by patients with Rheumatic Diseases. There are various studies on validation of MISS (methotrexate intolerance severity scale) to study severity of intolerance in adult patients of various countries but there are limited studies that validate MISS for adult patients in India. Objectives: To study validation of MISS in methotrexate intolerant adult patients with Rheumatic Diseases in Indian population and to design and validate new modifications needed according to symptoms of methotrexate intolerance faced by patients. Methodology: A self-administered patient questionnaire was used in outpatient rheumatology clinic. Inclusion criteria included patients 18 years and older with a diagnosis of rheumatic diseases and currently taking Methotrexate for more than 3 months. Sociodemographic, clinical and therapeutic data were collected. The types and severity of the intolerant symptoms were noted according to the MISS and Modified MISS scale. Result: The study was conducted over a span of 6 months, in which data of 150 rheumatic disease patients were included in the study. 84% were women with a median age of 48yrs (IQR 35-65) and 16% were male with a median age of 55yrs (IQR 45-75). The patients did not show a positive response towards the MISS scale. But the adverse reaction according to the modified scale were Hair fall faced by 55% of patients followed by Nausea 27%, Mouth Ulcers 13%, and increased SGPT 5%. The observed severity of these symptoms were 50% patients had moderate symptoms and 31% had severe symptoms. Conclusion: The modified MISS showed validity and good reliability in detecting MTX intolerant in Rheumatic patients in Indian population. Larger studies are needed to confirm these findings.
Abs_00065: Assessment of Drug Utilisation in Patients Attending Chemotherapy Day care Unit

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Background: Rational drug use for individual patient implies the prescription of a well-documented drug with the right indication and optimal dose, along with all the correct information and at an affordable price. Without the knowledge on how drugs are being prescribed and used, it is difficult to initiate a discussion on rational drug use and to suggest measures to change prescribing habits for the better. The linchpin of any auditing system depends on the information regarding the past performance of the prescriber.

Objective: Assessment of drug utilization in patients attending a chemotherapy day care unit.

Methodology: The observational study was conducted on subjects with cancer who satisfied the inclusion and exclusion criteria identified from the oncology department. The data collected and descriptive analysis was carried out to assess the drug utilisation.

Results: Out of 137 anti-cancer drugs prescribed for 80 patients, the class of platinum derivatives were prescribed the most (48, 34.53%) followed by taxanes (27, 19.42%) and monoclonal antibodies (24, 17.27%). The least commonly prescribed drugs were targeted drugs (5, 3.60%). On analysis of usage of premedication, the most commonly prescribed drug was Emset (90%) followed by dexamethasone (88%) and avil (81%). Out of the two anti-emetics that were prescribed (ondansetron and Aprepitant) aperitant was always prescribed according to the guidelines, whereas ondansetron was prescribed 57.15% of the time appropriate to the guidelines.

Conclusion: On drug utilization assessment, it was seen that platinum derivatives were the most commonly prescribed class of anti-cancer drugs, in which cisplatin specifically was contributing to the highest percentage. Targeted drugs such as Bortezomib and Carfilzomib were the least prescribed among all classes. Considering its benefits, targeted drugs could be used more often to avoid most of the side effects and improve the patients’ health status.
Abs_00066: A Study on Risk Factors of Nosocomial Diarrhoea in the Medical ICU of a Tertiary care Hospital

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Background: In an intensive care unit patient require special care. Occurrence of diarrhoea among this crowd is a significant concern. The incidence of diarrhoea in ICU ranges from 2-95%. WHO defines diarrhoea as the passage of 3 loose stools per day. A Bristol score of 6 or 7 is also classified as diarrhoea. A large number of patients who develop diarrhoea in the ICU is affected to the extent that their medical management and clinical outcomes are altered. Objective: To assess the infectious and non-infectious risk factors of nosocomial diarrhoea in the intensive care unit of a tertiary care hospital. Methodology: The study was primarily a descriptive, a cross-sectional study retrospective in nature. 82 patients developed diarrhoea after admission in medical ICU during the study period. The data was collected using data collection forms from patient case file and electronic database. Data storage and analysis were carried out using MS Excel 2010 and SPSS Version 24. Descriptive statistics like measures of central tendency: mean, median and mode, bar charts, pie and scatter plots were used to quantify and visualize the findings. Result: This study showed 31.70% infectious risk factors and non-infectious risk factor with a higher proportion of 68.3%. Among the infectious causes clostridium difficile was 53.84% and salmonella typhi was 42.30%. In terms of non-infectious risk factor, antibiotics showed 24.64% and PPIs with a close margin of 24.67% risk. A correlation between medication Vs grade showed high correlation with P value =0.0000. Conclusion: The main factors that may be associated with nosocomial diarrhoea were the irrational use antibiotics along with its combination with PPI. This might have increased the incidence and duration of nosocomial diarrhoea.
Abs_00071: Prescription pattern of anti-epileptic drugs in convulsive status epileptic paediatric patients in Paediatric Intensive Care Unit

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Background: Prescribing pattern in convulsive status epilepticus is rarely reported and change on management of seizures has occurred in recent scenarios. Objective: To evaluate the use of antiepileptics in convulsive status epileptic paediatric patients admitted in PICU. Methodology: A prospective study for 6 months carried out in PICU. The case files of convulsive status epilepticus (CSE) were scrutinized for antiepileptic drugs (AEDs). Data analysis was done using WHO prescribing indicators. Antiepileptics use was analysed between CSE with co-morbid conditions and only CSE inpatients. Results: Paediatric inpatients (40) from 1 to 14 years (mean age of 2.86 ±2.65) were enrolled. The average number of antiepileptic drugs per prescription was 60/20 i.e., 3.80% were conventional AEDs which included midazolam, lorazepam, fosphenytoin, and sodium valproate. The newer AEDs included levetiracetam and topiramate. Usage of antiepileptic drugs in co-morbid patient was midazolam 26 (22%), lorazepam 10 (8%), fosphenytoin 24 (20%), levetiracetam 12 (10%), valproate 4 (3%), and topiramate 6 (5%). Midazolam 14 (12%), Lorazepam 6 (5%), Fosphenytoin 10 (8%), levetiracetam 4 (3%), and valproate 4 (3%) were prescribed in only CSE inpatients. The majority (83.3%) of AEDs were prescribed by generic name. Out of 40, 3 to 4 AEDs were required in 22(55%) CSE with co-morbid conditions compared to 8(20%) of only CSE inpatients. Discussions: Traditional AEDs were predominantly used to control CSE compared to newer drugs. Prescribing by generic name was high. Midazolam was the most preferred AED as intranasal formulation in all patients followed by fosphenytoin and lorazepam as parenteral. SCE with comorbid inpatients required more than two AEDs to control CSE. Topiramate was least used AED and prescribed as oral. More than three antiepileptics were required to control convulsion in three fourth patients. Conclusion: Midazolam is preferred as intranasal formulation at the initial stage. Traditional antiepileptics are frequently used as parenteral except topiramate prescribed as oral. CSE with co-morbid conditions required more number of AEDs for seizure control.
Abs_00073: Evaluation of Antibiotic Consumption and Compliance to Antibiotic Policy in the Orthopaedic Wards of a Tertiary Care Hospital
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Background: India is one of the largest consumers of antibiotics. Literature proves the strong association that improper use of antibiotics leads to the emergence of resistant microorganisms.

Objective: To evaluate antibiotic consumption and compliance to hospital antibiotic policy in orthopaedic wards.

Methodology: A prospective observational study was conducted over a six-month period on inpatients prescribed with antibiotics. Data on demographic details, laboratory investigations, clinical diagnosis and current treatment were collected using the predesigned antibiotic form and evaluated using a defined daily dose per 100 bed-days. The data were evaluated for compliance and non-compliance of therapy to hospital Antibiotic Policy (version 4.0.2018). Descriptive statistics were used to analyse the data.

Results: Out of 440 patients enrolled, 67% were males and 32.9% were females. The antibiotic usage rate was observed to be 46.6%. Antibiotics were prescribed empirically in 42.9% prescriptions, as definite therapy in 6.4% prescriptions and as prophylaxis in 50.7% prescriptions. The total consumption of all antibiotics prescribed in the study was 36.4 DDD/100 bed-days. Cephalosporin class was found to have the highest consumption (12.9 DDD/100 bed-days) amongst the various antibiotics. Total compliance observed towards hospital antibiotic policy was 61.7%.

Conclusion: The antibiotic usage rate observed in the study is higher compared to the WHO standard values. Among the cephalosporins, second-generation cephalosporins were most frequently used followed by third-generation cephalosporin agents. A Scope of improvement exists to improve compliance towards hospital antibiotic policy through well-designed sensitization programs.
Abs_00075: A Study on Antibiotic Utilization Pattern and Compliance to Hospital Antibiotic Policy in the Gynaecology Wards of a Tertiary Care Hospital

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Background: The emergence of antibiotic resistance due to increasing misuse and overuse of antibiotics is documented in literature. Antibiotic prophylaxis has high impact but there is low compliance with antimicrobial guidelines in many developing countries. Objectives: To evaluate antibiotic consumption and compliance to hospital antibiotic policy in the gynaecology wards.

Methodology: A prospective observational study was conducted over a six-month period on inpatients prescribed with antibiotics. Data on demographic details, laboratory investigations, clinical diagnosis and current treatment were collected using pre designed antibiotic form and evaluated using defined daily dose per 100 bed-days. The data were evaluated for compliance of therapy to hospital Antibiotic Policy (version 4.0.2018). Microsoft Excel and descriptive statistics were used to analyse the data. Results: A total of 618 patients were enrolled in the study. 65% were males and 34.9% were females. Antibiotics were prescribed empirically in 33.4% prescriptions, as definite therapy in 3.01% prescriptions and as prophylaxis in 63.4% prescriptions. The antibiotic usage rate was observed to be 41.7%. The total consumption of all antibiotics prescribed in the study was 29.8 DDD/100 bed-days. The cephalosporin class of antibiotics was found to have highest consumption (14.4 DDD/100 bed-days). Total compliance observed towards hospital antibiotic policy was 70.8% and the rate of non-compliance observed was 20.7%. The percentage of antibiotics prescribed on the basis of bacteriological culture tests was low. Hence, efforts should be made to regularly monitor prescribing to encourage antibiotic use based on culture reports. Conclusion: Cephalosporins were preferred antibiotic and highly consumed. A fair rate of compliance was observed. There is still scope for improvement to improve compliance towards the hospital antibiotic policy. This can be achieved by routine sensitization program and interventions.
Abs_00076: Drug Utilization Study of Psychotropic Agents according to WHO/INRUD Drug Use Indicators

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Background: Psychiatric disorders contribute to be the one of the major reasons/causes for the morbidity in the populations worldwide. Inappropriate use of drugs represents a potential hazard to patients and an unnecessary expense. This necessitates a periodic review of pattern of drug utilization to ensure safe and effective treatment. Objectives: Socio demographic characteristics. Study of prescribing patterns of psychotropic drugs in comparison with drug use indicators (WHO/INRUD) Types of psychotropic drugs prescribed. Monotherapy and polytherapy. Cost effectiveness study. Methodology: Hospital based observational study. Result and Discussion: An overall of 400 patients were included in the study out of which 57.5 % are males and 42.5% females, 37.6% belonged to age group of 31-40 years, 26.5% to 21-30 years old, 14.1% of 41-50 years old, 7.4% 60 years old. 10.3% of patients were prescribed with monotherapy whereas 89.7% of patients got polytherapy. Highest number of patients were diagnosed with BPAD (17.5%) followed by Depressive disorder (15.5%), schizophrenia (12.5%), psychosis (11.8%), ADS (10%) and other psychiatric illnesses< 10%. Most prescribed class of drugs was Atypical antipsychotics (60.5%) followed by Benzodiazepines (50.5%) class of drugs. Olanzapine was the most advised drug (42.5%) followed by Lorazepam which accounted for (27%). Out of 384(400) patients only 10.7% prescribed by generic name. 73% drugs were prescribed from EDL. 39% of drugs were prescribed as injectables. The most expensive drug was found to be Bupropion (Cost/PDD: 11.9±0) whereas Chlorpromazine was cheapest drug (Cost/PDD: 0.57±0. Average cost per prescription was found to be Rs.136.5±73. The highest variation cost ratio was found to be of olanzapine 4.7%. Conclusion: Overall, it is concluded that the principles of the rational prescribing method has been followed according to WHO/INRUD drug use indicators. Though some deviations were found, this may be due to socio-economic reasons, budgetary constraints. For that clinicians may profit by the advancement of guidelines intended to furnish them with rational approach towards antipsychotic polypharmacy.
Abs_00078: Medication Errors Related to Antibiotics in the Surgery, Orthopaedics and Gynaecology Wards of a Tertiary Care Hospital: A Comparative Study

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Background: Medication errors (ME) occur frequently in hospital settings. Medication errors related to antimicrobials is a concern of adverse events and emergence of resistance. Literature shows that antibiotics are widely prescribed in surgical units like the surgery, orthopaedics and gynaecology. Thus, the study aims to document and compare medication errors related to antibiotics in these wards. Objectives: To identify and compare medication errors in the surgery, orthopaedic and gynaecology wards of a tertiary care teaching hospital. Methodology: A prospective observational study was conducted over a six-month period on inpatients prescribed with antibiotics. Data on demographic details, laboratory investigations, clinical diagnosis and current treatment were collected using a predesigned medication error documentation form. Medication errors were defined and classified as prescription errors and administration errors using American Society of Hospital Pharmacists Guidelines. Descriptive statistics and chi-square test were used to analyse the data. Results: Out of 1300 patients, medication errors were observed in 443 (34.07%) patients. A total of 738 medication errors were observed. From this, prescription errors 618 (83.7%) errors were more prevalent (p=0.02) as compared to administration errors 120 (16.2%). Prescription errors were attributed to wrong duration of therapy prescribed 478 (64.7%) (due to non-adherence to hospital antibiotic policy), illegible prescriptions 58 (7.8%), incomplete prescriptions 39 (5.2%) and drug duplication 22 (2.9%). The major causes of administration errors were due to wrong time of administration 68 (9.2%) and omission errors 33 (4.4%). Among all antibiotics, highest prevalence of medication errors was associated with cefuroxime. Errors were more prevalent in the surgery wards (64.6%) (p=0.004) as compared to the orthopaedic (18.2%) and gynaecology wards (17.1%). Conclusion: Prescription errors were more prevalent in the surgery wards. Prescription errors were highly documented compared to administration errors. These findings emphasize the need for interventions along with monitoring antibiotic prescribing and administration to reduce the occurrence of such preventable errors.
Abs_00079: Clinical response of Multiple Myeloma patients treated with various Therapeutic Regimens

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Background: Multiple myeloma is the malignant disorder characterized by uncontrolled plasma cell proliferation in the bone marrow and is the second most common haematological malignancy. As the incidence of MM is increasing and the number of Indian studies is less, a thorough study regarding the clinical response of MM patients was mandatory. AIM: To find out the response rate of multiple myeloma patients receiving various therapeutic regimens. Methodology: A retrospective clinically based cohort study was done in MM patients. The response rate after receiving various therapeutic regimens was analysed after 4 cycles and at the end of the study period. Response assessment was done by using the IMWG Criteria. Results: Out of 87 patients enrolled in the study, 10 (11.50%) of the patients showed complete response (CR), 7 (8.05%) of them showed near complete response (nCR), 16 (18.40%) of them showed Very Good Partial Response (VGPR) to the therapy and 29 (33.30%) had Partial Response (PR). 5 (5.75%) patients were stable and 20 (23.00%) patients showed progression (PD) in their disease at the end of 4 cycles. The nCR, CR, VGPR, PR and PD responses of the patients at the end of the study period was found to be 8.05%, 23.0%, 8.05%, 20.7% and 40.2% respectively. Conclusions: It was observed that the patients with Cyclophosphamide + Bortezomib + Dexamethasone regimen had better response than disease progression after 4 cycles of therapy and the final response of the patients showed a dependency with the stage at the time of diagnosis.
Abs_00080: To assess the mental health status of subjects with Congestive Heart Failure
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Background: Heart Failure is a chronic, progressive condition in which the muscles of heart is unable to pump the blood required to meet the body's need for blood and oxygen which leads to oedema. Sometimes the fluid builds up in the lungs and making breathing difficult leading to shortness of breath especially when lying, this is called pulmonary edema. About 64.34 million people that is around 51% of the world population are estimated to have Heart failure.

Methodology: An observational study was done with a sample of 75 Heart failure Patients using study tool Patient Health Questionnaire (PHQ-9) in Cardiology Department of ESIC MC & PGIMSR-SJICS &RC unit) Rajajinagar, Bangalore. Study Procedure: Subjects meeting exclusion and inclusion criteria were taken. Consent was obtained from patients. Data was collected using PHQ-9 and results were analysed and interpreted using Microsoft Excel. Statistical Analysis: Descriptive method.

Results: About 40% had moderate depression, 32% had moderately severe depression, 19% had Mild depression 7% had Minimal depression and 3 had severe depression. Conclusion: Assessment of mental status showed that most of the patient had decreased mental health status. Thus, care and support from health care professionals and family members can improve it.
Abs_00081: Assessment of Haemodialysis related acute complications
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Background: ESRD, Stage 5 chronic kidney disease is when glomerular filtrate rate is 15ml/min or less. At this stage the kidney would have lost all their function and dialysis is needed. It’s reported that Peripheral neuropathy is the most common neurological complication of CKD patients.

Objective: To find out the proportion of peripheral neuropathy in haemodialysis patients.

Methodology: An observational study was conducted on a sample of 90 CKD patients undergoing haemodialysis in Nephroplus Dialysis unit, ESIC MC and PGIMSR, Bengaluru. PROCEDURE: Subjects meeting inclusion & exclusion criteria were identified. Consent was obtained from patients. Michigan Neuropathy Screening Instrument to assess peripheral neuropathy. Statistical Analysis: Pearson correlation

Results: A total of 90 subjects were enrolled in the study based on the inclusion/exclusion criteria. The proportion of Peripheral neuropathy was obtained using MNSI. 72% were male & 28% were female. 61% of the patients had Peripheral neuropathy and 39% did not have peripheral neuropathy. There was a relationship between DM and Peripheral neuropathy, some had PN also due to DM, there were 26 patients who had DM and PN & 9 which had DM but no PN. Among the patients, 33 had no PN & DM while 22 had DM but no PN, P-value was 0.01 which shows a significant relationship between them. Conclusion: In this study it was found that the proportion of PN in haemodialysis patients is high and there was a significant relationship between DM and PN the healthcare professionals must be aware of the complication and must provide early necessary intervention and patient education to help improve self-management skills as well as alleviating the pain.
Abs_00082: Subgroup Analysis of Clostridium Difficile Induced Diarrhoea in Medical ICU of a Tertiary Care Hospital

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Background: The mortality and morbidity rate are up turned due to complications associated with Clostridium difficile induced diarrhoea and also contribute to the prolonging of hospital and medical ICU stay. Objective: To do subgroup analysis of clostridium difficile induced diarrhoea in medical ICU. Methodology: The study method was cross-sectional study and the patients who developed diarrhoea after admission in medical ICU was included in the study. The data was collected using data collection forms from patient case file and electronic database. Data analysis was carried out using SPSS Version 24. Descriptive statistics and scatter plots were used to quantify and visualize the findings. Results: In the study a total of 82 patients developed diarrhoea. Of these 14 patients were positive for CD and the mean age of patients with Clostridium difficile was 68.29. Most of the patients in our study with CD infection were females (64.29%). Out of 14 patients, 9 (64.29%) had type 6 diarrhoea (Bristol stool chart) and 7 (50%) had grade 3 diarrhoea (CTCAE version 5.0). Complications in these patients were colitis, dehydration and electrolyte abnormalities. Among 14 patients 6 of them had taken piperacillin tazobactam and 8 were on diabetic diet which might have been the cause for said condition. ICU stay and no. of antibiotics was correlated with P = 0.033 and R2 = 0.3269 i.e., ICU stay was longer for those who were on these antibiotics. Antibiotic vancomycin was given for majority (92.86%) of patients as treatment along with antidiarrheals and probiotics (64.28%). CD induced diarrhoea prolonged ICU stay in 2 patients and both ICU and hospital stay in 4 patients. Conclusion: The findings of CD in faeces of these patients alerts us the importance of adoption of universal precautions for all patients.
Abs_00084: To Assess the UTIs Symptoms and Impact in Patients with Urinary Tract Infection

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Background: Urinary tract infections (UTIs) are the infections in any part of the urinary system, which includes kidneys, bladder, ureters, and urethra. Though untreated uncomplicated UTIs rarely progress to life-threatening diseases it leads to marked impairment of the quality of life in women and anyone suffering from it. Globally, there was high prevalence of bacterial pathogens with high resistance rate to common antibiotics prescribed for treating UTI condition.

Methodology: An observational study was done with a sample size of 120 admitted in inpatient wards ESIC MC and PGIMSR Bengaluru using UTISA questionnaire

Study procedure: Subjects meeting inclusion and exclusion criteria were taken. Consent was obtained from the patients. Data was collected using UTISA questionnaire and results were analysed and interpreted using M. Excel and SPSS. Statistical Analysis: Statistical analysis was performed using Chi-square test to find the associations between the UTISA severity symptoms and the symptoms related scores at baseline and follow-up. Cronbach alpha was done to check the reliability of the UTISA questionnaire. Spearman correlation test was done to find the correlation between the UTISA severity symptoms and the impact related symptoms

Results: The UTISA questionnaire, was administered to the 120 subjects. The frequency of each severe symptom were noted. Dysuria the most severe and common symptom with frequency (58.3) %, followed by lower abdominal discomfort (51.7%) and Haematuria with (5.8%) being the least severe symptom. The frequency of each impact related symptom severity was noted. The highest frequency of impact related symptom severity was found to be: (60.8%), followed by (49.2%) and (35.0%). This indicates that Dysuria is also responsible for more severe impact on subjects life.

Conclusion: By mean of UTISA questionnaire the UTIs symptoms and their impact were identified and the most commonly identified symptoms were Dysuria, frequency of urination, low abdominal discomfort.
Abs_00085: Comparison of Lacosamide and Pregabalin Effectiveness in Patients Diagnosed with Neuropathic Pain: A Randomized Controlled, Open Label Trial
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Background: Chronic Neuropathic pain has the most complex mechanism and with already available medications, positive therapeutic outcomes has not been able to reach for most of the patients. Additionally, it produces a significant higher healthcare cost and resources. Thus, innovative therapeutic strategies are required to treat neuropathic pain. Aim and Objectives: To appraise the effectiveness and safety of lacosamide in patients diagnosed with chronic Neuropathic pain. To compare the efficacy between lacosamide and pregabalin by Numeric Rating Scale (NRS) pain score. Methodology: A randomized, controlled, prospective, open label, pilot study conducted in the neurology department of tertiary care teaching hospital for the period of six months. Patients’ details and laboratory parameters were collected. NRS scale for pain score, SF-36 Questionnaire and quality life of patient assessed at base line and end of the study. SPSS software version 16.0 performed for the statistical analysis. Results: Total number of 36 patients included and divided into lacosamide and Pregabalin group. Significant difference in the mean average of NRS pain score of both the groups across different time points (F= 126.446, p<0.001) observed. Additionally, between the group there is significant difference in the pain score (F=4.041, p=0.002) was also observed. Conclusion: Lacosamide has the ability to attenuate pain in patients diagnosed with chronic neuropathic pain more effectively than the pregabalin and successively helps to improve the quality of life of the patients as well.
Abs_00086: Effect of Ivabradine on Exercise Capacity and Plasma NT pro BNP Levels in patients with Dilated Cardiomyopathy: A Randomized Controlled Trial

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Background: Dilated Cardiomyopathy is a progressive disease of the heart muscle. It produces a significantly higher healthcare cost and resources, still are unable to reach a level of control of their symptoms. Thus, innovative therapeutic strategies are required to treat dilated cardiomyopathy. Aim and Objectives: To ascertain the efficacy and safety of Ivabradine in patients diagnosed with Dilated Cardiomyopathy. To assess the effectiveness of Ivabradine on exercise capacity and serum NT pro-BNP biomarker levels compared to standard conventional treatment. Methodology: A randomized, controlled, pilot study conducted in the cardiology department of tertiary care teaching hospital for the period of six months. Patients details and laboratory parameters were collected. Six-Minute Walk Test for exercise capacity, Borg scale for dyspnoea and fatigue, NT pro-BNP biomarker levels, MARS Questionnaire for medication adherence and quality life of patient assessed at base line and end of the study. SPSS software version 23 performed for the statistical analysis Results: Total number of 70 patients included and divided into Ivabradine and Standard Treatment group. Significant difference in the mean average of plasma NT pro-BNP biomarker levels between both the groups across different time points (p = 0.0001) observed. Additionally, between the group significant difference in the exercise capacity (p=0.001) also observed. Conclusion: Ivabradine has the ability in reducing the symptoms of dilated cardiomyopathy and improving in Exercise capacity and plasma NT pro BNP levels and quality of life.
Abs_00087: Assessment of knowledge, attitude and practice towards the foot care among subjects with Diabetic foot ulcer.

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Background: The complications of Diabetes affect millions of people all over the world and diabetic foot is one of the most common and the deadliest complication. It is estimated that 15% of the diabetic patients will develop foot ulcer in their lifetime. Objective: The study aimed to assess the KAP towards the disease among the subjects. Methodology: Subjects meeting the inclusion and exclusion criteria were identified from the Inpatient Department of Surgery. The 42 subjects were briefed about the purpose of the study and the informed consent form was obtained. The subject's demographic and clinical data were collected with the help of self-designed case report form. Subjects meeting the inclusion and exclusion criteria were identified from the Inpatient Department of Surgery. The 42 subjects were briefed about the purpose of the study and the informed consent form was obtained. Self-designed KAP questionnaire which consisted of 18 questions divided into 3 domain Knowledge (6 questions) Attitude (6 questions) and Practice (6 questions) was filled by the subject to assess the knowledge, attitude and practice. Results: Assessment of Knowledge- Out of 42 subjects, 35.71% subjects had poor knowledge about the disease, 47.62% had moderate knowledge about the disease whereas 40.77% subjects had adequate knowledge about the disease; Assessment of Attitude - Out of 42 subjects 30.95% subjects had high attitude, 69.05 subjects had moderate attitude and none of the subjects had low attitude towards DFU; Assessment of Practice- Out of 42 subjects, 45.24% subjects were found out to have good practice, 45.24% subjects were found to have moderate practice and only 9.52% subjects were found out to have poor practice towards the DFU. Conclusion: The study reveals that they had moderate knowledge, attitude and practice towards DFU. There was a moderate positive correlation found between the Attitude and Practice.
Abs_00088: Assessment of risk of stroke and risk of bleeding in patients both before and after the initiation of dabigatran therapy for its approved indications; A retrospective longitudinal study.

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Background: Novel oral anticoagulants are the cornerstone in the treatment of thromboembolic events. Dabigatran is the first oral direct thrombin inhibitor which is endorsed by FDA in the prevention of embolic events in patients with non-valvular atrial fibrillation. Dosing mainly based on CHA2DS2-VASc and HAS-BLED score which calculate the risk of occurrence of stroke and bleeding in dabigatran treated patients respectively. Objective: To determine and compare the risk of occurrence of stroke and bleeding before and after the initiation of therapy in patients prescribed with dabigatran and dabigatran along with an antiplatelet. Methodology: A retrospective longitudinal study on patients who were initiated with dabigatran in a tertiary care Hospital, during the study period (March 2017 to March 2019). Risk of bleeding and occurrence of stroke were determined based on HAS-BLED Score and CHA2DS2-VASc score before initiation of dabigatran therapy and same were repeated at 6-month intervals. Results: Out of 75 patients enrolled in the study, 42 patients were in the dabigatran with antiplatelet group and 33 were in the dabigatran group. Patients prescribed with Dabigatran and antiplatelet showed high risk of stroke when compare to dabigatran alone treated patients at both initial and six months. However, there was a significant reduction in CHA2DS2-VASc score i.e., 2.58 ±1.32 to 1.94±1.21 in dabigatran treated patients within six months. Also, score was lowered from 3.76±1.22 to 2.92±1.22 in another group. The mean value of HAS-BLED score of dabigatran at the initial period was found to be 1.15 ±0.83 and it was reduced to 0.84±0.78. Similarly, in dabigatran with antiplatelet group there was a reduction of mean score from 2.10±0.94 to 1.74±0.92 within six months. Conclusion: It was observed that within six months, both the treatment groups showed a reduction in the risk scores. In comparison with dabigatran with antiplatelet group, dabigatran group had lower risks of stroke and bleeding.
Abs_00090: Assessment of Safety and Efficacy Outcomes of Patients Receiving Dabigatran in a Tertiary Care Hospital: A Retrospective Longitudinal Study

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Background: Novel oral anticoagulants are the mainstay of management of thromboembolic events to prevent and treat deep vein thrombosis, stroke, pulmonary embolism and atrial fibrillation. Dabigatran, a novel oral anticoagulant has become renowned by its preferable pharmacodynamic as well as pharmacokinetic profiles. Comparison trials of dabigatran with other anticoagulants especially with warfarin were held across the world and found to be a better alternative in terms of safety and efficacy. Objective: To assess and compare the efficacy as well as safety outcomes associated with the different doses of dabigatran and dabigatran with an antiplatelet. Methodology: In this retrospective longitudinal hospital-based study, patients who were initiated with dabigatran for non-valvular atrial fibrillation, stroke, deep vein thrombosis and pulmonary embolism during March 2017 to 2019 were enrolled and followed for a period of one year. Using the electronic medical database, all the required information’s were collected and evaluated for the occurrence of outcomes such as bleeding events (major& minor), other adverse drug reactions and effectiveness in prevention of stroke and DVT/PE. Results: A total of 75 patients were selected in which 33 patients were categorized into dabigatran group and remaining 42 into dabigatran with antiplatelet group. From dabigatran group and dabigatran with antiplatelet ,33.3 % and 40.47% experienced bleeding respectively. Other adverse events occurrences were 45.45% and 73.80% in dabigatran and dabigatran with antiplatelet group respectively. Effectiveness in stroke prevention was 100 % in dabigatran group and 88.09 % in dabigatran with antiplatelet group. DVT/PE prevention was controlled in both the groups (100%). Conclusion: Major bleeding events were more evident with 110 mg dose of dabigatran and were higher in dabigatran with antiplatelet group. Dabigatran with antiplatelet at 110 mg dose was associated with higher number of other adverse events. Effectiveness in stroke prevention was higher with dabigatran group and DVT/PE prevention was controlled in both the groups.
Abs_00091: Drug Utilisation Pattern and Pharmacoeconomic Analysis of Drugs Prescribed at Outpatient of Private Orthopaedic Hospital

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Background: Recent data from the National Sample Survey on Health (2017-18), highlighted that in comparison to public hospitals, most Indians pay more to get treated in private clinics and hospitals. Hence, drug utilization research at private hospitals may benefit in promoting rational use of drugs. Objective: This study evaluated prescriptions using the World Health Organization (WHO) recommended prescribing indicators and analysed drug cost at a private hospital from Pune. Methodology: An observational, cross-sectional, prospective study for a period of 2 months (Oct-Nov 2020) was conducted at the outpatient department of the orthopaedic private orthopaedic hospital of Pune, Maharashtra. (CTRI no: CTRI/2020/10/028303). Results: Out of 114 patients, 51.80% (n=59) were females and the average age of patients in this study was 42.46 years. Total of 114 patients was prescribed with 589 drugs. The average number of drugs prescribed per prescription was 5.16. The percentage of drugs prescribed by generic name and from the essential drug list was 2.04% and 51.10% respectively. The percentage of prescriptions with antibiotics and injection was 7.30% and 0.85% respectively. In the current study, vitamins, antioxidants and supplements were most prescribed drugs (32.6%) and accounted for more cost burden of 74807.73 Rupees, followed by antacids (16.6%) accounted for 7246.48 Rupees and non-steroidal anti-inflammatory drugs (15.96%) accounted for 6418.89 Rupees. The percentage of fixed-dose combination drugs prescribed was 56.7% and accounted for 85431.26 Rupees. The total cost spent on antibiotics and injections was 4925.3 and 174.9 Rupees respectively. The average cost difference between drugs varied from 90.39 to 223.20 Rupees. Conclusion: The current study emphasized the deviation in prescribing practices from the WHO recommended standards. Polypharmacy was evident in the current study, and the cost of therapy was also moderately high.
Abs_00093: Prescribing Pattern of NSAIDs Among Inpatients of Orthopaedics Department
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Background: Non-Steroidal Anti-Inflammatory Agents are commonly used drugs for management of pain and inflammation with good efficacy and most widely prescribed class of medications in the department of orthopaedics. Aim and Objectives: The study aimed to analyse the prescribing pattern of NSAIDs in the department of Orthopaedics. Methodology: A prospective observational study was conducted for a period of 6 months among inpatients of the Orthopaedics department who were prescribed with at least one NSAID. Relevant details on the prescribing pattern of NSAIDs along with the dose, duration and route of administration were collected from the case sheets of the patient and was analysed by descriptive statistics. Results: Out of 370 subjects enrolled, 257 (69.5%) were males and 113 (30.5%) were females. The most frequently prescribed single NSAID was Diclofenac 82 (71.3%) and fixed dose combination was found to be Diclofenac + Chymotrypsin 88 (32.1%). A total of 348 (94%) were prescribed as monotherapy, followed by 22 (6%) combination therapy. Conclusion: The present study provides awareness to various healthcare professionals on the importance of rational prescription of NSAIDs.
Abs_00094: To assess drug related problem associated with TB therapy

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Background: TB is an infectious disease caused by mycobacterium tuberculosis. It has been in the arena of common infectious disease since a very long time. The main underlying reason for this is the poor adherence to treatment which can be attributed to drug related problems chiefly.

Methodology: An observational study was conducted in the chest and TB department of ESIC Medical college, Bangalore. The study inoculated 74 subjects of which 3 were deceased. Drug reactions were assessed using WHO Causality Assessment Scale. One ADR was classified as certain meaning that the cause of adverse event was attributed to drug alone. Two ADRs were classified as probable as they were unlikely to be attributed to disease. Two ADRs belonged to conditional group and two ADRs were labelled as unclassifiable as there was insufficient information to support the data.

Results: Causality terms

<table>
<thead>
<tr>
<th>Types of ADR</th>
<th>Certain</th>
<th>Probable</th>
<th>Possible</th>
<th>None</th>
<th>Unlikely</th>
<th>None</th>
</tr>
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<tbody>
<tr>
<td>Rifampicin induced orange colour urine</td>
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<tr>
<td>Rifampicin induced urticaria</td>
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<td>None</td>
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<tr>
<td>Alopecia and Arthralgia</td>
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<tr>
<td>Unclassifiable</td>
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All the 71 (100%) subjects experienced Rifampicin orange/red coloured urine, 2 (3%) subjects have experienced joint pain, 2 (3%) urticaria and 2 (3%) subjects has reported alopecia, 1 (1%) subject has reported vomiting and tastelessness.

Conclusion: Drug interactions are medication errors were also assessed but didn’t come out with any complications. However, rifampicin induced discoloured urine stood out with most frequent incidence. The assessment also points out the occurrence of wide range of ADR which pose a serious challenge in the implication of medical adherence and thereby pose a risk for treatment failure.
Abs_00095: WHO AWaRe (Access, Watch, Reserve) Index for analysing appropriate utilisation of antibiotics in In-Patient setting in a quaternary-care hospital

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BACKGROUND: In view to optimize the utilisation of antimicrobials, WHO updated the Essential Medicines List (EML) in 2017 and propounded a neoteric, practical metric AWaRe (Access (60%), Watch, Reserve) Tool, to tackle with the crisis of rapidly emerging antibiotic resistance. It aids the identification of areas for stewardship interventions and estimates the relative use of narrow and broad-spectrum antibiotics. OBJECTIVE: To analyse utilisation pattern of antibiotics in accordance with WHO AWaRe guidelines 2019 in hospital in patient setting. METHODOLOGY- An observational study was conducted in all In-patients who were prescribed with at-least one antibiotic, who visited the quaternary-care hospital, Aster Medcity, Kochi, Kerala during Mar 2019-Aug 2019. Data collected from the patient medical chart included the patient’s hospital ID, demographic details, department, and details regarding antibiotics prescribed. The data was then analysed for appropriateness in accordance with AWaRe guidelines using SPSS 20 and Microsoft Excel 2010. RESULT: A total 12,202 antibiotic prescriptions were collected from 51 departments, of which 6234 prescriptions were for males and 5968 for females. When the proportion of antibiotic use was analysed based on AWaRe criteria, it was found that Access antibiotics included 21.64%, while Watch included 69.05% and Reserve included 1.81%. Neonates were mainly prescribed with Access antibiotics whereas adults and elderly showed superior use of Watch antibiotics. Amoxicillin - Clavulanic acid (Access), Cefuroxime (Watch) and linezolid (Reserve) were the mostly prescribed antibiotics. CONCLUSION: WHO aims to increase Access antibiotics use greater than 60% of the total usage, but here the usage of Access antibiotics was found to be only 21.64% in IP and the use of Watch antibiotics was found to be more (69.05%). AWaRe is a greater tool to assess appropriateness of antibiotic utilisation, but constraining to adopt the AWaRe Index, especially in tertiary care setting would be questionable when used without considering the local antibiogram and the severity of the condition treated.
Abs_00098: A Study on Susceptibility Pattern of Bacteria Isolated from Patients with Diabetic Foot Ulcers

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Background Diabetic foot ulcer is a leading concern that is seen in both Type 1 as well as Type 2 diabetes mellitus. If adequate care is not given, the foot ulcer may develop and progress to severe infection/necrosis which may lead to amputation of the infected foot. Objectives To determine the antibiotic susceptibility pattern of the bacteria isolated from patients with diabetic foot ulcers.

Methodology A prospective study has been conducted for a period of 6 months in the department of general surgery. Hospitalized patients diagnosed with diabetic foot ulcers and performed with culture and sensitivity tests were enrolled in the study, to analyse the susceptibility pattern of the bacteria isolated.

Results Out of the organisms isolated majority were gram negative 113 (79.03%) followed by gram positive 30 (20.97%). Out of the isolated gram-negative organisms, majority were found to show sensitivity towards Amikacin (76.10%), followed by Meropenem (69.9%) and Gentamycin (67.25%). Of the gram-positive isolates, all the organisms showed sensitivity towards Teicoplanin (100%), followed by Tigecycline (96.67%) and Vancomycin (93.34%).

Conclusion Adequate knowledge about the microbes that causes infection helps to analyse and determine appropriate antibiotic therapy. The findings of the present study are expected to support clinicians in the development of antibiotic treatment guidelines for diabetic foot infections.
Abs_00099: A Study on Bacteriological Profile of Diabetic Foot Ulcers

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Background: Diabetic foot ulcer is one of the major complications associated with the diabetes mellitus. Though the management has become challenging, the knowledge on the trends of the bacteriological profile of the organisms isolated along with the sensitivity and resistance pattern has helped in the appropriate selection of the therapy. Objectives: The current study was undertaken to analyse the bacteriological profile among patients with diabetic foot ulcers.

Methodology: A prospective observational study was conducted for duration of six months among 102 inpatients of department of general surgery. All patients, aged above 18 years diagnosed with diabetic foot ulcer and who had cultures done were enrolled in the study. All the relevant details pertaining to the study including the bacteriological profile of patients were collected and documented in a suitably designed data collection form.

Results: Among 102 patients, growth of microorganisms was observed among samples taken from 99 patients whereas samples received from 3 patients showed no growth. Majority of the bacteria that were isolated from the culture samples were found to be gram negative (79.33%). Methicillin resistant coagulase negative Staphylococcus (9.0%) was the most frequently isolated gram-positive microorganism whereas Pseudomonas aeruginosa (21.7%) was the most commonly isolated gram-negative organism.

Conclusion: Diabetic foot ulcer can cause major health problems which require proper therapeutic intervention. The study results are expected to help the healthcare professionals in understanding the significance of choosing appropriate antibiotic agents for the treatment of infections.
Abs_00101: To assess the level of adherence to diet, fluid restrictions and medication in haemodialysis patients.

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Acharya & BM Reddy College of Pharmacy, Bengaluru, Karnataka

BACKGROUND: ESRD, Stage 5 chronic kidney disease is when glomerular filtrate rate is 15ml/min or less. At this stage the kidney would have lost all their function and dialysis is needed. It's reported that Peripheral neuropathy is the most common neurological complication of CKD patients. OBJECTIVE: To assess the level of adherence to diet, fluid restriction and medication in haemodialysis patient

METHODODY: An observational study was conducted on a sample of 90 CKD patients undergoing haemodialysis in Nephroplus Dialysis unit, ESIC MC and PGIMSR, Bengaluru. PROCEDURE: Subjects meeting inclusion & exclusion criteria were identified. Consent was obtained from patients. Assessment was done using End stage Renal disease Adherence Questionnaire

STATISTICAL ANALYSIS: All information obtained was entered in MS excel and appropriate analysis were performed. RESULTS: A total of 90 subjects were enrolled in the study based on the inclusion/exclusion criteria. The adherence of subjects to the four important domains of haemodialysis were assessed using End stage Renal disease Adherence Questionnaire was found that all the 90 (100%) subjects were adherent to haemodialysis. Attendance, but they were subjects who shortened the dialysis duration. Out of 90 subjects, 35 (38.88%) subjects were found to have shortened their dialysis duration. 35 subjects (80%) have shortened by 30 mins and (20%) by 60 mins. (73.34%) of subjects were adherent to fluid restrictions and (16.66%) were not adherent. (70%) were adherent to dietary restrictions and (30%) were not adherent. Female were more adherent to fluids restriction and less adherent to diet restriction who had equal adherent to both.

CONCLUSION: In this study it was found that most patient were moderately adherent to fluids and dietary restriction. Therefore, patients need to be educated regarding their adherence to the dialysis schedule in order to minimize their Haemodialysis associated complications.
Abs_00102: A Study on Pattern of Resistance of Bacteria Isolated from Patients with Diabetic Foot Ulcers

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Background Diabetic foot ulcers are one of the major complications of uncontrolled diabetes mellitus. Objectives To determine the antibiotic resistance pattern of the bacteria isolated from patients with diabetic foot ulcers. Methodology A prospective study has been conducted for a period of 6 months in the department of general surgery. Hospitalized patients diagnosed with diabetic foot ulcers and performed with culture and sensitivity tests were enrolled in the study, to analyse the pattern of resistance of the bacteria isolated. Results Majority of the organisms isolated were gram negative 113 (79.03%) followed by gram positive 30 (20.97%). Out of the isolated gram-negative organisms, majority were found to show resistance towards Ciprofloxacin (52.21%), followed by Imipenem (42.47%) and Cefuroxime (38.05%). Of the gram-positive isolates, most of the organisms showed resistance towards benzyl penicillin (73.34%) followed by Ciprofloxacin and Levofloxacin (66.67% each). Conclusion Adequate knowledge about the bacteria that causes infection helps to determine the appropriate antibiotic therapy.
Abs_00103: A Study on Adverse Drug Reactions in General Medicine Department of a Tertiary Care Teaching Hospital

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Background: Adverse drug reaction is a significant health issue, constituting a major cause of morbidity and mortality. To make sure the safe use of drug, use of pharmacovigilance system in every health care system is important. Objectives: To identify the pattern of adverse drug reactions among the patients in general medicine department and to assess its causality, severity and preventability. Methodology: A prospective observational study was conducted in the general medicine department for a period of 6 months. Patients who received drug therapy were enrolled based on the inclusion criteria. Details including demographics and drug therapy of the patients were recorded in a suitably developed data collection form. Causality of the ADRs identified was accomplished using Naranjo’s and WHO scale. The severity was carried out using Hartwig’s severity scale and preventability using Modified Schmock and Thornton’s scale. Results: Out of 385 patients included in the study, 34 developed adverse drug reactions. Patients aged between 40-50 years (18.1%) showed the highest incidence of ADRs. According to Naranjo’s scale, majority of the reactions (64.7%) were found to be probable, whereas (44.1%) reactions were probable as per WHO probability scale. When the reactions were assessed for its severity, most of them (55.9%) were found to be of moderate level and were probably preventable (61.8%). Conclusion: Appropriate observation of the drug effect is essential to ensure the safety of the patient. Regular ADR monitoring is required to deplete morbidity and to improve patient compliance and better life expectancy.
Abs_00104: Real-time assessment of the cardiovascular risk and validation of the ASCVD risk estimator among the Indian population: a prospective observational cohort study

Sneha Joy, Ida cherian, Shilpa K, nnachi Pepertua
JSS College of Pharmacy, JSSAHER, Mysuru, Karnataka

Background: Cardiovascular diseases (CVDs) are the leading cause of mortality in India. There are certain factors that potentiate the risk of CVDs. The risk category based on the potentiating risk factors can be calculated using Atherosclerotic Cardiovascular Diseases (ASCVD) Risk Estimator which is a companion tool to the 2013 ACC/AHA Guideline for the Assessment of Cardiovascular Risk. Aim: To estimate the 10-year cardiovascular risk among the patients admitted to Coronary Care Unit (CCU) and correlate the risk estimates with the result of angiogram. Methodology: A prospective observational cohort study (at CCU) was conducted, a 10-year ASCVD risk was calculated using the ASCVD risk estimator and based on the identified risk, patients were categorized into low (<5%), borderline (5 - <7.5%), intermediate (=7.5 - <20%) and high-risk (=20%) categories. The patients enrolled were followed to identify the coronary angiogram (CAG) findings and correlated with the estimated CVD risk. Risk factors for the high ASCVD risk were identified by using binary logistic-regression analysis. Results: Among the total patients, the majority was found to have high risk, followed by intermediate risk of CVD. The proportion of patients with the triple-vessel disease (TVD) is low when the patients are having low risk and borderline risk, respectively, and it is increased to when the patients are having an intermediate and high risk respectively. Overall, it was identified that the age, systolic blood pressure, smoking, diabetes and receiving hypertension medications are the risk factors for having intermediate and high risk of CVD. Conclusion: The current study identified that a significant proportion of patients admitted to the CCU were having an intermediate or high risk of CVD. The ASCVD risk score is correlated with the risk of having TVD among the patients admitted.
Abs_00106: Pattern of Prescription of Psychotropics among Inpatients of The Department of Psychiatry

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Background: Evaluation of prescription pattern is of paramount importance in understanding the current treatment practices and improvement in future prescribing pattern in terms of safety and effectiveness. Objective: To study the prescribing pattern of psychotropic agents among inpatients of psychiatry department of a tertiary care teaching hospital. Methodology: A prospective observational study was conducted for duration of six months in which all patients, aged above 18 years, admitted in the department of psychiatry, diagnosed with a psychiatric disorder, prescribed with at least one drug were enrolled in the study. Details including the socio-demographics, diagnosis, and information on the drug therapy including the dose, route of administration, dosage form and treatment duration were obtained in a suitably designed patient data collection form.

Results: Out of 198 patients, 73.3% were males and 26.8% were females and majority of the patients were belonging to the age group of 30-39 years (31.3%). Alcohol Dependence Syndrome was found to be the most commonly diagnosed disorder, 67 (26.1%), followed by Schizophrenia (19.1%). Antipsychotic agents and sedatives were found to be the most commonly prescribed drugs among the study population. Among the various psychotropic drugs, Lorazepam was prescribed the most 70 (14.8%) followed by Risperidone 54 (11.4%). Among atypical antipsychotics, Risperidone 54 (11.4%) was prescribed the most whereas Haloperidol 44 (9.3%) was the most commonly prescribed typical agent. Conclusion: The present study provides awareness to various healthcare professionals on the importance of rational prescription of antipsychotic agents.
Abs_00107: Evaluation of the medicine acceptability in paediatric patients treated in tertiary care hospital in India

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Objective: To map the medicine acceptability in pediatric patients treated in the tertiary care teaching hospital in India. Method: An observational, cross-sectional study was conducted in a tertiary care hospital in India. Children aged <18 years taking any form of medication, the first time or regularly with consent were included in the study and patients who are on IV/catheter-based medicine and patients/caregivers who do not consent were excluded from the study. The patients reported several aspects of acceptability for medicines they had taken recently. Acceptability scores of medicines administered to paediatric patients were obtained using an acceptability reference framework (CAST CLIN Search Acceptability Score Test®). Results: A total of 490 patients were recruited for the study including 91% urban and 9% rural area during the period of 6 months. There were 193 evaluations of different pharmaceutical products which were available in 21 different formulations. The mean age of these patients was 5.5y and 35% were girls. The majority paediatric patients were taking the medicine first time (87%) and 63% of patients had positive acceptability towards the medicine irrespective of dosage form. Oral route was the most prescribed route (91%) for medication administration and syrup (50%) was the most commonly prescribed dosage form. The other (0.2%) forms prescribed were tablets (35.7%), and others (granules, capsules, ointment (3.1%)) etc. Tablets were seen to have less acceptability than liquids. It required longer time for administration and manipulation to achieve administration. The tablets were, modified prior administration mixed with food or water (64%) and may require to be administered with a device not provided with the product. Conclusion: Oral liquid ready to use were well accepted in the younger children and no manipulation was required for ease of administration as compared to solid dosage forms. Tablets, were poorly accepted by children under the age of 3 years and required manipulation for ease of administration. These findings further emphasize the need for age-appropriate formulations especially for younger population.
Abs_00108: Prevalence, pattern and monitoring of adverse drug reaction in tertiary care psychiatry setting - a hospital-based study in south Kerala

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By and large, antipsychotic drugs offer great benefits in the treatment of various psychiatric illnesses ranging from mood disorders to schizophrenia and many more. However, this class of drugs have also been found to be equally capable of causing a wide range of adverse reactions that impairs the patient’s quality of life and leads to noncompliance, and some even fatal. A hospital based cross sectional observational study was undertaken in the Mental Health Centre, Trivandrum Kerala; it is a tertiary mental health institute under department of health, Government of Kerala with over 500 inpatient bed, over 4000 inpatients and 40000 outpatients per year. The patients were screened for psychiatric illness based on ICD-10 and all psychiatric drugs were closely monitor for adverse drug reaction Irrespective of their psychiatric diagnosis, were screened for suspected ADRs, for two fixed days in a week, barring public holidays. Subjects and their accompanying family members were interviewed, and past prescriptions and case record were reviewed. A psychiatrist was available for consultation in the event. Patients who were known substance abusers, suicide risk, terminally ill were not included in the study. Patient details (age, sex, body weight), adverse event history, history of medication suspected of having caused the ADR, and details of concomitant medication use were recorded. CDSCO Suspected adverse drug reaction reporting form will be used for the documentation of adverse drug reaction and the causality assessment of documented ADR will be done using Naranjo scale. The severity of ADR was assessed using Hartwig scale and preventability assessment using Modified schumock. A total of 442 patients were screened for the study, among them 261 (59%) were male and 181 (41%) were female. And 192 (43.4%) were diagnosed as bipolar mood disorders, 137 (31%) as schizophrenia, 23 (5.2) for schizoaffective disorders, 51 (11.5%) for psychosis, 18 (4.1%) for schizophrenia and psychosis and the remaining 4.8% (21) were diagnosed for other psychiatric illness. A total of 442 patients were screened for 134 (30.3%) 114 (25.8%) 16.3% (72) (10) 5 18.3% (81)
Abs_00111: Assessment of prescription pattern of patients presenting with Congestive Heart Failure

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Objectives: To assess the prescription pattern in subjects with CHF. To assess the compliance to pharmacological and non-pharmacological management in CHF.

Methodology: Materials and Methods: Study site: ESIC Medical College and Post Graduate Institute of Medical Sciences and Research & Model Hospital - Sri Jayadevan Institute of Cardiovascular sciences and Research Centre unit. Study Design: observational study. Sample Size: A total of 75 patients, Inclusion Criteria: a) Subjects above 18 years of age. b) Subjects with confirmed diagnosis of CHF. c) Subjects attending OP for first follow-up or admitted to IP of ESIC MC & PGIMSR-SJIC & RC. Exclusion Criteria: a) Subjects with congenital heart disease. b) Subjects diagnosed with CHF one month or more prior to the date of data collection. c) Subjects not willing to participate. Sources of Data: 1. Case report form. 2. Prescriptions. 3. Patient case sheet. 4. Lab reports. Study Tools: ICD Morrisby Green Levine Medication Adherence Scale (MGLS).

Results: The results in the prescription pattern shows that diuretics class of drug is the most administered class of drug, followed by the anti-platelet class of drugs is the next most commonly used class of drug, followed by anti-coagulants and then antibiotics. This finding was quite similar to the findings by most other researchers that were referred to while carrying out the literature review. The compliance of the patients with drugs have found to be one of the major factors in assessing the improvement in the patient’s quality of life and also the prognosis of the patient. The patient’s that were interviewed were found to be mostly compliant to the treatment. Conclusion: CHF brings a lot of difficulties in the daily life of patients. The typical drugs that are used for the treatment of heart failure were prescribed to the patients. Though most of the patients are found to be compliant, it is observed that lack of compliance leads to worsening of the symptoms and re hospitalization as well. The condition is also found to affect the socio-economic condition of the patient and their families.
Abs_00112: Evaluation of Impact of Clinical Pharmacist Education among Patients using Inhalers with Tai Questionnaire

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Background: The burden of preventable chronic respiratory diseases has major adverse effects on the quality of life and disability of affected individuals. Because of lack of knowledge and complexity of inhalation technique, a high rate of inappropriate inhalation technique has been reported from the previous studies. Objective: To evaluate the clinical pharmacist education on appropriate usage of inhalers using Test of Adherence to Inhalers - TAI Questionnaire among patients with pulmonary disorders. Methods: A prospective interventional study was conducted in a tertiary care hospital for 6 months. The basic demographics details, past medical and medication related details were collected from patient medical records. The adherence was found using TAI questionnaire form prepared from previously available literatures. In the study the patients were asked to show their current inhaler using technique with placebo inhaler. The errors in the usage of inhaler were noted and after clinical pharmacist education patients were reevaluated. Results: A total of 120 patients were included in the study, among them the majority of subjects were between the age group of 51 to 60 years (30.83%) and 61 to 70 (18.33%), the mean age was 54.4±15.4 (Mean± SD) years. Before intervention only 4.16% of patients had pulse oximetry value between the ranges of 96-100% after intervention increased to 78.3%. FEV1% was significantly improved from 38.3% to 83% (p<0.0001). After providing patient counselling, it was observed that there was a significant improvement in certain domains of TAI from the baseline scores and reduction in errors of inhaler technique. Patients were educated about usage technique of inhaler. After counselling, there was a statistically significant improvement in the TAI scores (p< 0.0001). Conclusions: Patient counselling provided by Clinical Pharmacist’s had a significant impact in improving TAI in CPDs.
Abs_00114: Assessment of Quality of Life with Patients Presenting with Congestive Heart Failure
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Objectives: Assessment of quality of life of patients presenting with congestive heart failure

Methodology: MATERIALS AND METHODS: STUDY SITE: The study was conducted at ESIC Medical College and Post Graduate Institute of Medical Sciences and Research & Model Hospital - Sri Jayadevan Institute of Cardiac sciences and Research Centre unit, (ESIC MC & PGIMSR-SJICS & RC unit), Rajajinagar, Bengaluru. STUDY DESIGN: This was an observational study over 6 months. SAMPLE SIZE: A total of 75 patients admitted in In-patient Department, satisfying inclusion and exclusion criteria during the data collection period were included in the study. INCLUSION CRITERIA: a) Subjects above 18 years of age. b) Subjects with confirmed diagnosis of Congestive Heart failure. c) Subjects attending OP for first follow-up or admitted to IP of ESIC MC & PGIMSR-SJIC & RC. EXCLUSION CRITERIA: a) Subjects with congenital heart disease. b) Subjects diagnosed with CHF one month or more prior to the date of data collection. c) Subjects not willing to participate in the study. SOURCES OF DATA: 1. Case report form. 2. Prescriptions of patients. 3. Patient case sheet/ medication chart. 4. Lab reports. The scales and questionnaire used are- EQ-5D-5L Minnesota Living with Heart Failure Questionnaire (MLHFQ) Results- Among the patients assessed, 1.3% of the patient had a Good quality of life, 24% of the patients had moderate quality of life, and 74.6% of the patients had poor quality of life. Conclusion- Heart failure brings about a lot of limitations in the day-to-day activities of a patient. This is mainly attributed due to decreased quality of life. The quality of life of patients with heart failure should be assessed and reforms in the care should be made accordingly.
Abs_00118: Care Givers Burden Associated with Patients with Congestive Heart Failure

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Objectives: To assess the care givers burden associated with patients presenting with congestive heart failure. To determine the etiology of subjects with congestive heart failure

Methodology: Materials And Methods: Study site: The study was conducted at ESIC Medical College and Post Graduate Institute of Medical Sciences and Research & Model Hospital -Sri Jayadevan Institute of Cardiovascular sciences and Research Centre unit, (ESICMC& PGIMSR-SJICS& RC unit), Rajajinagar, Bengaluru. Study Design: This was an observational study over 6months. Sample Size: A total of 75 patients admitted in In-patient Department, satisfying inclusion and Exclusion criteria during the data collection period were included in the study. Inclusion Criteria: a) Subjects above 18 years of age. b) Subjects with confirmed diagnosis of Congestive Heart failure. c)Subjects attending OP for first follow-up or admitted to IP of ESIC MC &PGIMSR-SJIC &RC. Exclusion Criteria: a) Subjects with congenital heart disease. b) Subjects diagnosed with CHF one month or more prior to the date of data collection. c)Subjects not willing to participate in the study.

Source of Data: Case report form? CBQ-HF Questionnaire? Medication history? Study Tools ICD This contains the following: Informed consent form. Patients information sheet to collect the patient’s demographics. CAREGIVER BURDEN QUESTIONANNAIRE FOR HEART FAILURE (CBQ-HF): This is a screening tool for evaluating the burden on caregiver for heart failure patients

RESULTS: Care givers burden for patients with congestive heart failure is been evaluated in four domains mainly physical well-being, emotional well-being, life style and social life and relationships. It was concluded that it has affected the caregiver in the domain of emotional well-being more compared to the other domains. Social life style and relationships was least affected. Distribution of subjects over various etiologies of CHF Distribution of subjects over various risk factors of CHF. While assessing the co morbidities associated with congestive heart failure we 64%
Abs_00119: Comparison of Treatment Outcome of Allergic Conjunctivitis with 0.1% Olopatadine Hydrochloride, 0.1% Fluorometholone & 0.03% Flurbiprofen

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Objective: To evaluate the efficacy of 0.1% Olopatadine Hydrochloride Ophthalamic Solution, 0.1% Fluorometholone & 0.03% Flurbiprofen Ophthalamic Solution for the treatment of Allergic Conjunctivitis and to identify their adverse drug reactions during the therapy. Methodology: It is a prospective observational study conducted at Department of ophthalmology, Govt. Medical college, Calicut. The study was carried out in a 6 months’ time period, this study aims for comparison of treatment outcome and ADRs observed in treatment groups. Total 82 subjects were enrolled and data was collected using specific data collection form. The itching, hyperaemia, tearing, chemosis scores noted using 4 points grading scale (0-3) of subjects were noted in the data collection form and noted for the next 2 weeks. Statistical analysis by ANOVA using SPSS. Result: A total of 82 subjects were enrolled and completed the study (48 males and 34 females). Out of them, 29 (34.5%) were treated with olopatadine, 27 (32.1%) were treated with Fluorometholone and 26 (31%) were treated with flurbiprofen therapy. There is statistical significance between the three groups over a 2 week follow up, out of these three groups olopatadine shows more statistically significant effectiveness and better treatment outcome (itching, hyperaemia, tearing and chemosis). Conclusion: Study had shown that olopatadine can be considered as the mainstay or primary option due to the proven efficacy and good tolerability for the treatment of allergic conjunctivitis. Other two drugs such as Fluorometholone and flurbiprofen can be considered as alternatives. ADRs were more in flurbiprofen therapy. Irritation was the most common side effect. Comparing the other groups olopatadine shows least adverse effects.
Abs_00045: Cilnidipine-Induced Photosensitive Reaction: A Rare Case Report

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Clinical Presentation: A 55-year-old female who was newly diagnosed with hypertension and Parkinson’s disease presented with the complaints of hyperpigmented scaly plaques on her left forearm and elbow, which she claimed to have developed after receiving 10 days of her medications Tab. cilnidipine 5 mg, Tab. rasagiline 0.5 mg, and Tab. trihexyphenidyl 2 mg. She was diagnosed with photosensitivity reaction to drugs. Investigations: On examination, her vitals were found to be normal and her laboratory investigations were found to be as follows: Haemoglobin: 13.0 gm/dL, red blood count: 4.76 million/cum, mean corpuscular volume: 82.4 fL, mean corpuscular haemoglobin: 27.2 pg., mean corpuscular haemoglobin concentration: 33.0 gm/dL, white blood cell: 10070 cells/cum, differential leukocytic counts: N/L/E/M/B: 69.5/25.8/1.0/3.6/0.1%, platelets: 4.36 lakh/cum, thyroid profile: Total T3: 1.30 ng/mL, total T4: 10.2 mcg/dL, and thyroid-stimulating hormone: 3.18 IU/mL, and biochemistry: glucose “random: 114 mg/dL, urea: 15 mg/dL, and creatinine: 0.7 mg/dL. Interventions: A clinical pharmacy opinion was sought. In accordance with the clinical pharmacist’s opinion, all her medications were de-challenged by her treating physician and she was prescribed with Tab. telmisartan 40 mg 1-0-0 and Tab. carbidopa/levodopa 110 mg 1/2-1/2-1/2 for her disease management. For the hyperpigmented scaly plaques, she was managed with 0.05% desonide cream. Outcome: On follow-up, day 8 of de-challenging, the hyperpigmented scaly plaques had reduced. The causality assessment with Naranjo criteria and the World Health Organization probability scales was found to be possible. The severity was determined using the modified Hartwig and Siegel scale and was found to be moderate (level 3) reaction. Conclusion: In our patient, we suspect cilnidipine as the offending agent as it belongs to the dihydropyridine class, which is known to be photo liable and to cause photosensitivity reaction. However, this reaction is rare in the case of cilnidipine when compared with other calcium channel blockers such as nifedipine and diltiazem. Clinicians should be vigilant regarding such rare reaction occurrence.
Abs_00048: Case report on hypersensitivity to methotrexate infusion in a paediatric acute lymphoblastic leukaemia patient.

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Background: Methotrexate is extensively used in the treatment of various malignancies and autoimmune conditions. Methotrexate is associated with several toxicities, while hypersensitivity reactions to methotrexate are unusual, but have been reported in adult cancer patients. Case Report: Hereby, we detail the case of a seven years nine months old girl with Acute Lymphoblastic Leukemia who developed a hypersensitivity reaction to high-dose methotrexate infusion (HDMTX) during the fourth cycle of HDMTX. The child was treated with BFM-based treatment protocol which includes four courses of HDMTX. The patient completed three doses of HDMTX with no side effects. During the fourth course of HDMTX, she developed acute chest pain, breathlessness, intense abdominal pain and vomiting immediately after receiving the infusion. she was initiated with 0.9 % normal saline, intravenous hydrocortisone 100 mg, intravenous pheniramine maleate 5 mg, and oxygen. The child responded quickly and vital parameters were stabilized. The child was rechallenged with another brand of methotrexate; she started complaining of itching on trunk within 5 min of infusion. Few studies have reported that desensitization has been helpful in children with hypersensitivity reactions allowing the continuation of HDMTX. However, it was decided to omit parenteral methotrexate for this child. Cranial radiotherapy was given for CNS prophylaxis. The Adverse Drug Reaction (ADR) was assessed for the Causality by Naranjo Scales and the scoring of the Naranjo scale was 10(=9 definite ADR). The ADRs severity assessment by Hartwig et al. was moderate level 3. Conclusion: Unexpected hypersensitivity with methotrexate should be anticipated during the treatment especially with high-dose infusion.
Abs_00049: Case report on Vincristine induced Rhino-orbital Mucor mycosis leading to vision loss in a leukaemia patient.

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Background: Rhino-orbital Mucor mycosis is a rare Angio invasive fungal infection with a high mortality rate. Patient’s with haematological malignancies are at high risk from Mucor mycosis. Case Report: Hereby we detail a case of 30-year-old male diagnosed with Acute Lymphoblastic leukaemia who had experienced right eye pain, swelling which further progressed to watering of both eyes, Eyelid oedema, Right eye chemosis and inability to open eye during the Induction phase of Chemotherapy after administration of Vincristine. Patient was receiving Daunorubicin (30mg/m2 IV), L-asparaginase(5000U/m2 IV) and prednisolone (60mg/m2) along with Vincristine. Patient was rechallenged with vincristine(1.5mg/m2), along with other chemotherapeutic agents, after receiving Vincristine the patient developed Rhino-orbital Mucor mycosis within 5 days and vision loss of right eye after 8 days of rechallenge which was confirmed by Ophthalmology review and CT brain. The Adverse Drug Reaction (ADR) was assessed for the Causality by Naranjo Scales and the scoring of the Naranjo scale was (6/10) Probable ADR. The ADRs severity assessment by Hartwig et al. was severe level 3. The WHOs causality assessment classified the ADR to be Certain. Vincristine causes depolarization of neurotubules by which results in neurofibrillary degeneration and impairment of axonal transport. Blindness may occur as the result of optic nerve ischemia. It is difficult to diagnose mucor mycosis because of the limited reliable detection methods, and because mucor mycosis often presents with an acute onset and progresses rapidly, particularly in immunocompromised patients. Conclusion: Early recognition and treatment are essential because it may lead to death within a few days.
Abs_00051: A Rare Case of Acute Myeloid Leukaemia (AML-M7) without Down Syndrome.

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Background: Acute Megakaryoblast Leukaemia (AML-M7) is a rare type of acute myeloid leukaemia (AML) which is uncommon in children without Down syndrome with a dismal prognosis. Case Report: A case of 2-year-old female child was admitted with a working diagnosis of fever with cytopenia. Bone marrow aspiration and biopsy showed an increased number of blasts (15%) with marrow fibrosis. Tumour lysis markers sent were raised and IHC done showed CD117 diffusely positive and repeat bone marrow confirmed secondary myelofibrosis and myeloid leukaemia. Following which she was started on Chemotherapy according to AML 15 protocol. Meropenem, Vancomycin, Amphotericin B were started because of persistent fever spikes which were further upgraded to colistin as per the advice given by Hema oncologist. Potassium and calcium correction were given in view of hypokalaemia and hypocalcaemia, she did not respond to the above measures and sepsis continued to progress to shock requiring noradrenaline along with MODS. Further, she developed episodes of desaturation followed by bradycardia. In spite of all resuscitative measures, she could not be revived and was declared dead. Conclusion: Outcomes in patients with acute myeloid leukaemia (AML-M7) without down syndrome remain to be understood. Novel targeted therapies in combination with conventional chemotherapeutic approaches may hopefully improve treatment in such patients.
Abs_00054: A rare case of Hypopituitarism secondary to Sheehan's Syndrome with Herpes Labialis and Acute GE.

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Sheehan's Syndrome is a chronic condition specific to women who have experienced postpartum haemorrhage. Though, the syndrome is a rare complication of haemorrhage, diagnosis is often delayed. This case report describes an interesting case of a 38-year-old female who presented with symptoms of Acute GE, was further diagnosed with Sheehan's Syndrome via the assessment of her laboratory tests and her past medical history of postpartum haemorrhage. Physical examination revealed small blisters around the lip which were recurrent. Biochemical Investigations revealed - Reduced Haemoglobin count: 9.2gdL (11.5-16.5g/dL), RBC count: 3.22x10^6mm3 (3.5-4.5x10^6mm3), MCV: 65.7fl (78-98fl), MCH: 18pg (27-32pg), MCHC: 26.2g/dL (32-36g/dL) and Raised WBC count: 12000cells/mm3. Thyroid Profile showed: Raised TSH: 4.31 mlU/L (0.4-4 mlU/L) and Reduced FT4: 0.21 mg/dL (0.58-1.64 mg/dL). Fertility profile showed: The observed value of cortisol was 2.13mcg/dL (6-23mcg/dL). Symptoms presented by the patient and objective analysis were consistent with the diagnosis of Hypopituitarism secondary to Sheehan's Syndrome with Herpes labialis and Acute GE. The patient was treated with Hydrocortisone and levothyroxine for her thyroid & cortisol imbalance. For her presenting complaints, she was prescribed with paracetamol as antipyretic, ondansetron as antiemetic, C. bifilac as antidiarrheal. Ciprofloxacin was given as antibiotic treatment for Acute GE. For herpes labialis the patient was treated with Acyclovir as anti-viral therapy. The patient's symptoms improved, hormone substitutes take time to show their action and thus the patient was advised for a routine check-up. She was discharged after 7 days of hospitalisation. Sheehan's Syndrome is a rare complication of postpartum haemorrhage which may lead to further complications like hypothyroidism, Addisonian crisis & morbidity. The treatment for Sheehan’s is a lifelong replacement of the deficit hormones. We shall thus advice the patient for continuous follow up that would conclude or give an insight if the patient is responding to the given therapy and if dosage adjustment is required. Also, educate on compliance or it leads to hormonal crisis which is life-threatening.
Abs_00072: Case Report on 24-year-old women with buerger's disease

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Introduction Buerger’s disease is a non-atherosclerotic Peripheral occlusive disease that is most commonly seen in western countries. It is not very common in India; it is usually found in Male smokers who are around 40 years of age. Case report: A 24-year-old female student got admitted to the ESIC Hospital with 4 days of numbness and multiple necrotic ulcers for 3 years, which is of blue colour on her left leg. Her complaint started with pain in her left leg when she was walking for few steps inside the house only. Gradually pain got aggravated and was not relieved upon taking rest. She had no history of fever, Joint pain, Gastric problems, Respiratory problems or any other systemic symptoms. Ulcers showed no response to antibiotics, she used to go to hospital and got local dressing and analgesics was used. She used to smoke around 1-2 cigarettes per day for the last 3-4 years. Skin examination showed bluish reddish dusky erythema on the surface on the left foot. Multiple necrotic ulcer which is off around 1cm size was seen on big toe, 3rd & 4th toes. Her hematologic report along with LFT and ANA were normal. ECG was also performed and showed nothing significant. Angiography was done and it showed narrowing and complete obliteration in the distal anterior and posterior tibial arteries. She was given Analgesics, Calcium Channel Blockers and Regular dressings for ulcers, but after 1 month of treatment, her symptoms didn’t seem to get improve. Hence a sympathectomy was done at surgery unit. A transverse incision made from mid axillary line to later of rectus muscle. Sympathetic chains with its ganglia were identified and three ganglia were identified and 3 ganglia from L1 to L4 were completely joined along with connecting chains. After 3-4 weeks follow up was done and there was a significant relief in pain and virtually complete healing of ulcers with scars and no further attacks of Raynaud’s phenomenon. She was followed up for 7-8 months no further attacks and painful attacks were reported. Conclusion The pathogenesis of Buerger’s disease is still not clear, as if it is an inflammatory or occlusive disease since it combines features of both. The risk factors of Buerger’s disease are not yet known. Endothelial proliferation, Ulcerations and necrosis are the pathogenic features. Various differential diagnosis is considered in patients with buerger’s disease. Though Buerger’s disease affects more commonly in males, it can also affect females as well with smoking being a common factor.
Abs_00074: A case report of myasthenia gravis associated with type 1 respiratory failure
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Case presentation: This is a case report of a 28-year-old female who came to the hospital with major complaints of severe difficulty in breathing, fluctuating weakness, difficulty in chewing and swallowing. She has been diagnosed with myasthenia gravis (MG) three years ago and has been on tablet wysolone (prednisolone). She has no allergies, no previous medical condition apart from the one mentioned. She has a normal sleep, appetite and normal habits (non-smoking, non-drinking).

Investigations: On physical examination she was dyspnoeic with abnormal respiratory rate of 34 breaths/minute, normal blood pressure of 120/88 mmHg, heart rate of 90 beats/minute and abnormal oxygen saturation in ambient air, SpO2 of 70%. Full blood count, C-reactive protein, procalcitonin, urea, creatine, and serum electrolytes were normal. Examination of respiratory system revealed vesicular breath sounds with the following arterial blood gas parameters: pH = 7.389, PCO2 = 41.2 mmHg, PO2 = 58.6 mmHg, HCO3- = 27.7 mEq/l. Neurological examination revealed generalized muscle weakness with decrease muscle strength in forearm and legs.

Differential diagnosis: The physicians concluded on a diagnosis of myasthenia gravis with type 1 respiratory failure based on the symptoms, physical examination, the laboratory investigations done and gold standard for respiratory failure diagnosis.

Management: The patient was treated with corticosteroids (tablet wysolone 10 mg once daily, tablet myestein 60 mg four times daily) and oxygen therapy. The duration of treatment was one complete week.

Outcome/ follow up: Clinical improvement of symptoms was seen after one week of initiation of therapy and she was discharged when hemodynamically stable. She was given the same medications at discharge and advised to review in the general medicine department after one month.

Clinical importance: Given the complications of myasthenia gravis on respiratory capacity, it is important that physicians give a deeper look at patients presenting with this condition and do the needful to avoid complications and death.
Abs_00077: A rare necrotizing lymphadenitis: Kikuchi-Fujimoto Disease (KFD)
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CLINICAL PRESENTATION: A 14 yr. old girl presented with c/o fever and weight loss for 5 months. She also had c/o arthralgia which subsided gradually. She was having poor appetite and had significant weight loss to 35 kg. She had bilateral axillary swelling of small size with pain not associated with pus drainage. On clinical examination she was noted to be pale with generalized lymphadenopathy, mild hepatomegaly. Blood counts showed pancytopenia with elevated inflammatory markers (CRP-193.4 mg/ml/ESR-62mm/hr). She was started on Inj. Piptaz 3.5g TID for 7 days, T. Paracetamol 500 mg and T. Pan 40 mg. Serum LDH and ferritin were markedly elevated. Peripheral blood smear showed leucopoenia, normocytic normochromic anaemia and platelet normal. USG Abdomen was done which showed minimal free fluid in the abdomen. ECHO was done which was normal. She remained afebrile during hospitalization. Serial monitoring of counts and inflammatory markers were done which showed an improving trend. Serum ferritin and LDH levels decreased drastically. DISCUSSION: KFD is an uncommon cause of lymphadenopathy which is often rare. The clinical presentation of KFD is cervical adenopathy with fever and chills, often do not respond to antibiotics and other treatment methods. Other clinical features are also present which include chills, weight loss and systemic complaints. Rare symptoms include cutaneous rash/arthromyalgias. The etiology and pathogenesis of KFD is not known. KFD is usually diagnosed by histopathological studies of lymph nodes which are characterized by focal necrosis in cortical and paracortical areas. Here Lymph node biopsy showed paracortical hyperplasia with foamy histiocytes- possible kikuchis lymphadenitis in xanthomata’s phase. Steroid therapy is recommended only in hemophagocytic syndrome, SLE or other rheumatic disorder. CONCLUSION: KFD is often a rare disease. The final diagnosis is made by lymph node biopsy. Supportive care is the treatment available for KFD disease. For severe condition corticosteroids is considered.
Clinical Presentation Meningoencephalitis is a destructive CNS infection attributed by various microorganism leading to the inflammation of brain tissue. A female patient aged 42 y was admitted with altered sensorium and 3 to 4 episodes of vomiting and seizures with loss of Babinski sign of plantar reflex with severe headache and fever. Investigations Laboratory tests were performed on the day of admission which showed a blood creatinine of 0.49 mg/dL, haemoglobin of 6.7 g/dL, MCV of 61.1fl and PCV of 22.2%. Further the patient was subjected to magnetic resonance imaging (MRI) of the brain. On the third day of admission, laboratory report showed a blood ammonia of 108.5 mol/L. Lumbar puncture was performed to withdraw CSF and the CSF evaluation showed a significant decrease in glucose level, increased protein level and Total WBC count. The culture test showed the positive results for Neisseria meningitidis. Intervention From the investigations, the patient was confirmed with bacterial meningeal infection with seizures. Hence the patient was immediately treated with empiric therapy with Vancomycin, Ceftriaxone and Meropenem as antibiotics and, Midazolam and Lorazepam were used to prevent the seizure episodes and sedative effect. As adjuvant therapy, dexamethasone therapy was started to prevent neurologic complications as possible protective role. Additionally, the patient was anaemic and treated with folic acid, ferrous fumarate with zinc and multivitamins. Since the patient was 42y old, Aspirin is used as prophylaxis treatment for DVT. Outcome About 6 days after admission, the patient’s symptoms and test results showed significant improvement after the combination treatment with antibiotics. Conclusion Although, meningoencephalitis is a rare CNS infection, prevalence of neurological symptoms is common. But prevention of seizure episodes is important to reduce the neurological damages. Clinical importance the study involves the analysis of CSF, is an unbiased method of pathogen detection for appropriate diagnosis of CNS infected patients which includes appropriate use of antibiotics.