

Research and Reviews: Journal of Nursing and Health Sciences

Short Report on Intravenous Medication

Neelima K*

Department of human Resources, Andhra university, Visakhapatnam, India

Commentary

Received: 03/06/2015
Revised: 08/06/2015
Accepted: 15/06/2015

*For Correspondence

Department of human Resources, Andhra university, Visakhapatnam, India
Email;neelima1108@gmail.com,
Tel No;9885869893

Keywords: Medication errors, Preparation errors, Observational study.

ABSTRACT

Intravenous medication errors are found to be frequent events. They are connected with considerable harm and damage, however little is thought about their reasons. The goal of the study was to discover the IV medication preparation errors in medical, surgery, paediatric and ICU department of tertiary care teaching hospital.

INTRODUCTION

Now and again patients must get medication quickly. Different times, medicines must be given gradually and slowly yet constantly. In both of these circumstances, intravenous drug organization may be needed. Taking pills or fluids by mouth may not be sufficiently quick to get certain pharmaceuticals into the body. In a crisis setting, pharmaceutical must be retained rapidly. Additionally, chemicals in the stomach may separate certain fragile pharmaceuticals. Accordingly, these must be given specifically into the circulatory system.

Intravenous is a term which means "into the vein". The administration of intravenous medication occurs when a needle is inserted into a vein and medication is administered along through the needle. In Intravenous medication, the needle is typically put in a vein close to the elbow, the wrist, or on the back of the hand. Distinctive sites can be utilized if essential.

IV administration is the most essential and most normal parenteral administration course. Intravenous treatment is a complex process generally obliging the planning of the drug in the clinical ranges before organization to the patient. There have been reports of deaths and damage taking after solution slips, for example, wrong medication, measurements, diluents, and cross contamination errors with intravenous treatment. The configuration of methodology and execution of the framework for planning and managing intravenous pharmaceuticals was thought liable to be affected by national variables, for example, enactment, medicinal services framework prerequisites, proficient models, college course curricula, and conveyance of instruction and training for health awareness staff.

An intravenous medication lapse is characterized as a deviation in planning of a medication from a specialist's doctor prescription, the clinics intravenous approach, or the manufactures directions.

The vast majority of the writing on MAE's to date has concentrated on oral medications controlled amid consistent medication rounds. A couple of cases of MAE's emerging from IV bolus dosages or discontinuous implantations have been accounted for. In any case, we have not possessed the capacity to discover any data depicting the prevalence of MAE's connected with constant IV imbuelements which are typically supplanted by nursing staff, once the substance of past sacks have been imbued. This is not at all like oral/ IV bolus medicates and requires an eyewitness to be available at the purpose of arrangement.

In any hospital center nurses for the most part get ready and regulate intravenous medications recommended by specialists or doctors. Single site studies which carried out in few wards have reported errors in get ready and controlling intravenous medications of 13%-84%, a few studies utilized distinctive definitions and did not evaluate the seriousness of errors.

Despite the fact that the writing reports various studies on recognizing IV prescription mistakes in different clinics abroad, the information accessible on such circumstance in India is restricted.

Medical caretakers were seen by a solitary eyewitness for a greatest number of four times with a specific end goal to incorporate however many as diverse attendants as could be allowed. Amid the procedure of planning and directing IV medications nurses were seen by utilizing the perception list. The medical caretakers are mindful of the perception yet unconscious about genuine reason. The name of medical attendants, the quantity of perception by nurses and period of study were enrolled. Observations occurred on distinctive days of week and diverse times of day and night in every hospital ward. The spectator was available amid a present arrangement of movement, to speak to the variety of nursing hours in nursing practice.

The different types of errors were defined based on the classification by (Allan and Barker) and adapted to the data. Preparation errors included preparation of the wrong drug, the wrong dose, the wrong dosage form, the wrong preparation technique, omission errors and preparation of an unordered drug dose. Preparation error rates were calculated as percentage by dividing the sum of all recorded preparation errors by the sum of the prepared drug doses observed. Data's were expressed as percentages and kept as 95% confidence interval.

Preparation errors included arrangement of the wrong medication, the wrong measurement, the wrong dose shape, the wrong readiness system, exclusion lapses and readiness of an unordered medication dosage. the error rates in preparation as percentage by dividing the sum of all recorded preparation errors by the sum of the prepared drug doses observed. Information's were communicated as rates and kept as 95% confidence interval.

Blood clumps can form because of IV treatment, and deep vein thrombosis can be extremely unsafe. Clumps get to be stuck in imperative veins and reason tissue harm or passing.

Pharmaceuticals directed intravenously follow up on the body rapidly. Toxicity, symptoms, and unfavorably allergic responses will hence happen quick. A patient on IV prescription ought to be under perception at all times.

Before administration of any IV medications, a health care professional should follow the major six “rights” of medication administration. They are listed as follows

1. the right patient;
2. the right dose;
3. by the right route;
4. at the right time;
5. with the right medication;
6. Following up with the right documentation.

Conclusion

Now and then, an IV medication is given as a "push" or "bolus" dosage with a syringe specifically into the vein. All the more regularly, an IV "line" or peripheral venous catheter (PVC) is embedded for quick and safe access all over the time.

To embed a venous catheter, a needle is embedded into a vein, frequently close to the wrist. A slight thin plastic tube referred a catheter is then pushed over the needle. The needle is uprooted, and the tube remains. Different tubes can be associated with this one with an interfacing "hub" or "tap" that remaining parts outside the body.

At the point when an IV line is embedded an IV "drip" is typically started. A drip is a steady stream of clean fluid from a pack hanging over the patient. The fluid is regularly a saline (salt) arrangement. Different prescriptions can be added to this saline arrangement, and implanted into the blood gradually over the long haul. Infrequently a pump is appended to the IV line and pumps fluid into the catheter in a moderate, steady design.

For patients who are exceptionally sick or who are getting consistent IV treatment for chemotherapy or different reasons, a central line or central venous catheter may be embedded into a vein in the neck or midsection.

In the event that you feel anything bizarre while starting IV treatment, tell the wellbeing proficient treating you. Uneasiness and different sensations may be typical. In any case, they might likewise be an indication of an unfavorably susceptible response, harmfulness, or a muddling of treatment.

REFERENCES

1. Ozlem Ersoy and Omer Tasargol et al. Skin Necrosis in an ICU-Patient due to Accidental Extravasation of Parenteral Nutrition Solution via a Peripheral Intravenous Catheter - A Case Report. *J Anesth Clin Res* . 2015;6:522
2. Hassan Baallal et al. Intraspinial Malpositioned Central Venous Catheter. *J Clin Case Rep* . 2014;4:406
3. Juan Luis Gonzaacutepez Loacuteppez et al. COSMOS Study Microbiological Results: Bacterial Colonization and Infection of Long-Term Peripheral Catheters. *Clin Microbiol* . 2014;3: 144
4. Teoh CW et al. Recombinant Tissue Plasminogen Activator is Safe and Effective in Increasing Haemodialysis Catheter Longevity in Paediatric Haemodialysis Patients. *J Nephrol Ther* . 2014;4: 161

5. Marcello Fonseca Salgado Filho et al. Comparison between Ultrasound-Guided and Anatomic Landmark Puncture of the Right Internal Jugular Vein. *J Cardiovasc Dis Diagn* . 2013;1: 128
6. Maria T. Mascellino et al. Candidaemia in Immune-Compromised Hosts: Incidence and Drugs Susceptibility. *J Clin Exp Pathol* . 2012;2: 131
7. Amitabh Kumar et al. Folding Back of Central Venous Catheter in the Internal Jugular Vein: Methods to Diagnose it at the Time of Insertion?. *J Anesthe Clinic Res* . 2012
8. Khalid Al Saran et al. Central Venous Catheter-Related Bacteremia in Chronic Hemodialysis Patients: Saudi Single Center Experience. *J Nephrol Ther* . 2011;1: 105
9. Khaled Seidi et al. Nanomagnet-Based Detoxifying Machine: An Alternative/Complementary Approach in HIV therapy. *J AIDS Clin Res* . 2014;5: 304
10. Peter Hansen et al. The Total Lymphocyte Count is a Factor When Using the CD4 Count to Guide HIV Therapy. *J AIDS Clin Res* . 2013;4: 205
11. Nils Von Hentig et al. Personalizing HIV Therapy, Mission Impossible?. *J Antivir Antiretrovir* . 2013;5: 012
12. Awewura Kwara et al. Towards Individualized HIV Therapy: Pharmacogenetic-guided Clinical Trials are Needed Now. *J Pharmacogenomics Pharmacoproteomics* . 2012;3:e116
13. Ozkan Onal et al. Trendelenburg position does not increase cross-sectional area of the internal jugular vein of the obese patients
14. Mehdi Fathi et al. Post operative analgesia for cardiac surgery.
15. Sofia Sofroniadou et al. Catheter-related blood stream infections; where are we standing?.
16. MingYan Hei et al. Catheter-related Infection and pathogens of umbilical venous catheterization in a neonatal intensive care unit in China.
17. Matthew Ellison et al. Regional anesthesia in the parturient with Von willebrand's disease.
18. Arshia Ghaffari et al. Urgent-Start PD: How does it compare with urgent-start HD in the first year of dialysis?.
19. MingYan Hei et al. Catheter-related Infection and pathogens of umbilical venous catheterization in a neonatal intensive care unit in China.
20. Mehmet Horoz et al. Development of high-output heart failure after correction of central venous occlusion.
21. Jie Ding et al. Clinical and genetic features of Chinese families with autosomal recessive Alport syndrome.
22. Gerez Fernandes Martins et al. The effect of trimetazidine in the ischemia-reperfusion injury in myocardial revascularization surgery.
23. Eun Young Han et al. physical fitness and aerobic capacity of middle-school soccer players in OO Island.
24. Raman Garipelly et al. Evaluation of Amlodipine induced Pedal Edema (Eape) study.
25. Madhukar Reddy Patlolla et al. Drug-induced nephrotoxicity analysis in HIV therapy; case study using GOBIOM database.
26. Amer Hayat Khan et al. Acquired Immune Deficiency Syndrome (AIDS), Diabetes Mellitus and Tuberculosis a challenging scenario.
27. Anwar Mulugeta et al. Genetic variability of CYP2B6 G516T and their impact in efavirenz based HAART: A metaanalysis.
28. Jan Jacques Michiels et al. Complete Compression Ultrasonography, Clinical Score, Underlying Risk. *J Hematol Thrombo Dis* . 2015;3:193

29. Konstantinos Filis et al. Mobilisation after Lower Limb Deep Vein Thrombosis and Post-Thrombotic Syndrome. *J Nov Physiother* . 2015;5: e137
30. Yogeshwaran Elumalai et al. Comparison of Efficacy of Low Molecular Weight Heparin Versus Oral Anticoagulant in Indian Population for Prevention of Deep Vein Thrombosis in Total Knee Replacement. *Orthop Muscul Syst* . 2015
31. Pierpaolo Di Micco et al. Baseline Analysis on the Outcome of Patients with Deep Vein Thrombosis . . 2014
32. Minki Jung et al. Perioperative Management of a Patient with Hereditary Hemorrhagic Telangiectasia and Deep Vein Thrombosis: A Case Report. *J Anesth Clin Res* . 2014;5: 447
33. Angelika NF et al. Interrupted Inferior Vena Cava and Deep Vein Thrombosis - An Underdiagnosed Pediatric Disease. *Pediat Therapeut* . 2014;4: 206
34. Anastasia Dean et al. Management of Ilio-Femoral Deep Vein Thrombosis: A Hybrid Approach. *J Vasc Med Surg* . 2014;2:131
35. Carla Ceriotti et al. Correlation between Deep Vein Thrombosis Location and D-Dimer Values: A Pilot Study. *J Vasc Med Surg* . 2014;2:129
36. Metabolic and Inflammatory Proteins Differentially Expressed in Platelets from Unprovoked Deep Vein Thrombosis Patients. *J Proteomics Bioinform Vol.* 2014
37. Oluwaseyi Bolorunduro et al. Lower Extremity Deep Vein Thrombosis is Associated with Mortality among Patients Hospitalized with Congestive Heart Failure: Results from the Agency for Healthcare Research and Quality's Nationwide Inpatient Sample. 2013
38. Raj Ramakrishna et al. Combined Short Course Low Molecular Weight Heparin and Calf Compression Therapy in Prevention of Deep Vein Thrombosis after Total Knee Replacement: A Randomized Prospective Study. *J Hematol Thrombo Dis* . 2013;1:118
39. Seyed Mohammad Yousof Mostafavi Pour Manshadi et al. New Concept about Perioperative Asymptomatic or Symptomatic Deep Vein Thrombosis Prophylaxis in Coronary Artery Bypass Graft. *J Clin Exp Cardiol* . 2013;4:131e
40. Interventional Radiological Techniques and Current Devices in the Management of Iliofemoral Deep Vein Thrombosis. *OMICS J Radiology* . 2013;2: 133
41. Michael West et al. Does Deep Vein Thrombosis Usually Precede a Pulmonary Embolism. *J Trauma Treat* . 2013;2
42. Harsh Agrawal et al. Deep Vein Thrombosis /Pulmonary Embolism in a Patient with Retroperitoneal Fibrosis: A Case Report. *J Clin Case Rep* . 2012;2:154
43. Francis Brooks et al. Thromboprophylaxis in Spinal Surgery – Current UK Practice. *J Spine* . 2012;1:121
44. Antonios G Angoules et al. Baker's Cyst Rupture May Mimics Deep Vein Thrombosis. *Emergency Medicine* . 2012;2:e108
45. Rahul Kurapati et al. Catastrophic anti-phospholipid syndrome causing non-ST elevation myocardial infarction.
46. Manuela Stoicescu et al. Diagnosis traps in a rare hematologic disease: Original case report.
47. Ruth Kleinpell et al. New international guidelines for sepsis care: Implications for critical care nursing.
48. Rinku Majumdar et al. A novel role of protein S in regulating thrombosis, independent of activated protein C.
49. Tal BurstynCohen et al. New challenges in anticoagulation therapy: Protein S.

50. Muhammad Umair Khan et al. Foix-Alajouanine syndrome : Report of a case with spinal cord.
51. Clifford Bowens et al. Perioperative Optimization for the Geriatric Hip Fracture Patient.
52. Ayhan H et al. Above-knee versus below-knee graduated compression stockings for deep vein thrombosis prophylaxis after arthroplasty surgery.
53. Ibrahim Natalwala et al. in post-surgical orthopaedic patients process approach. Proceedings of . DVT
54. Friedman N Deborah et al. Randomized Controlled Trial of Short Course Intravenous Therapy for Cellulitis and Erysipelas of the Lower Limb . . 2014
55. Saad AbdelRahman Sheta et al. Intranasal premedication in dental sedation.
56. Malone M et al. Outcomes and cost effectiveness of outpatient parenteral antimicrobial therapy (OPAT) in patients with diabetic foot infection. . OPAT
57. Zahra Hosseini et al. Adherence to Anti Retro Viral Therapy: A Qualitative Study of Facilitators and Barriers among HIV/AIDS Patients in Iran. J AIDS Clin Res . 2015;6: 449
58. Haringkansson A and Medvedeo A et al. Role of Medication and Background Variables in Dropout from Opiate Withdrawal Treatment – A Retrospective Chart Review. J Alcohol Drug Depend . 2015;3:199
59. Joseph A Oluyemi et al. Factors Influencing the Practice of Self-Medication among Bankers in Selected New Generation Banks in Ilorin Nigeria. Int J Econ Manag Sci . 2015
60. Muhammad Adnan et al. Evaluation of Self-Medication Practices and Awareness among Students in Al Qassim Region of Saudi Arabia. Clin Pharmacol Biopharm . 2015;4:133
61. Mark A Malesker et al. IV Acetaminophen: Assessment of Medication Utilization Evaluation Data in Peri-operative Pain Management. Surgery . 2015;10: 4
62. Pramod B Mahajan et al. Will Pharmacogenomics Take the Pain Out of Pain Medication?. J Pharmacogenomics Pharmacoproteomics . 2015;6:e142
63. Sirichai Chayasirisobhon et al. Efficacy of Neuromodulation Therapy with Vagus Nerve Stimulator in Patients with Drug-Resistant Epilepsy on Unchanged Antiepileptic Medication Regimen for 24 Months Following the Implant. J Neurol Neurophysiol, . 2015;6:268
64. Masakazu Ishii et al. A Cyclooxygenase 2 Gene Polymorphism is a Risk Factor for the Complication of Medication Overuse Headaches in Patients with Migraines. J Neurol Disord . 2015;3: 206
65. Gail Ironson et al. Doctor-Patient Relationship: Active Patient Involvement . . 2015
66. Jhansi Rani Konduru et al. Review on Adverse Drug Reactions. Adv Pharmacoepidemiol Drug Saf . 2015;4:R005
67. Binny Thomas et al. Medication used in Nausea and Vomiting of Pregnancy - A Review of Safety and Efficacy. Gynecol Obstet . 2015
68. Sangeeta Tanna et al. LC-HRMS Analysis of Dried Blood Spot Samples For Assessing Adherence to Cardiovascular Medications. J Bioanal Biomed . 2015
69. Pernille Dam et al. Safe and Effective Use of Medicines for Ethnic Minorities - A Pharmacist- Delivered Counseling Program That Improves Adherence. J Pharma Care Health Sys . 2014;2: 1
70. Mark Gudesblatt et al. Outcomes of a Switch to Fingolimod to Treat Relapsing Multiple Sclerosis: A Patient Subgroup Post Hoc Analysis. J Mult Scler . 2012
71. Bouyou Akotet MK et al. Performances of SD Bioline Malaria Ag-P. . 2014
72. T Gangadhara Goud et al. A Study on Self Medication among College Students. Medical and Health Sciences . 2014

73. Monali A Shah et al. A Potent Pre-Medication in Periodontal Surgical Procedures - Ketorolac Tromethamine 10mg: A Randomized Controlled Trial. *Dental Sciences* . 2014
74. Tony L. Brown et al. Psychoactive Medications as Independent Risk for Heat Injury in Emergency Medical Service Workers. *Int J Emerg Ment Health* . 2015
75. Dupouy Jean Patrick et al. Effect of Sublingual Nitro-Glycerine Premedication On Image Analysis of Using 256 Multidetector Computed Tomography Coronary Angiography. *OMICS J Radiol* . 2014
76. Barnett AH et al. Systematic Review and Network Meta-analysis to Compare Dapagliflozin with other Diabetes Medications in Combination with Metformin for Adults with Type 2 Diabetes. *Intern Med* . 2014;S6: 006
77. Andrea Branvold and Maria Carvalho et al. Pain Management Therapy: The Benefits of Compounded Transdermal Pain Medication. *J Gen Pract* . 2014;2: 188
78. Gelaw BK et al. Non Adherence and Contributing Factors among Ambulatory Patients with Anti Diabetic Medications in Adama Referral Hospital. *Adv Pharmacoepidemiol Drug Saf* . 2014;3:169
79. Chuixian Zhou and Junhui Zhao et al. Dexmedetomidine versus Midazolam as Premedication in Anesthesia: A Meta-Analysis from Randomized Controlled Clinical Trials. *J Anesth Clin Res* . 2014;5: 457
80. Alban Caporossi et al. An Experience Feedback Committee for Improving Medication Process Safety: An Observational Study in a Hospital Pharmacy Department. *J Pharma Care Health Sys* . 2014;S1:010
81. Thomas Macharia et al. Antiretroviral Toxicity Leading to a Medication Change in Multiple HIV Clinics in Resource Limited Settings. *J Antivir Antiretrovir* . 2014;6: 111
82. Inga Joacutena Ingimarsdoacutettir and Gerhard Wikstromlm et al. Life Threatening Acute Heart Failure in Two Young Adults Treated with Antidepressant Medication. *J Pharmacovigil* . 2014;2:154
83. Edna C. Diacuteaz Sierra et al. Clinical and Behavioral Impact of Pharmaceutical Care Services in Community Pharmacies in Puerto Rico. *J Pharma Care Health Sys* . 2014;S1:001
84. Ana M Palacio et al. Improving Adherence to Cholesterol Lowering Medications among Minority Populations in Florida: A Randomized Trial. *J Clin Trials* . 2014;4: 189
85. Jonas De Wolf et al. Evolution of Drug Utilization in Nursing Homes in Belgium. *Clin Pharmacol Biopharm* . 2014;3:124
86. Caroline R BorjaOliveira et al. Alcohol-Medication Interactions: The Acetaldehyde Syndrome. *J Pharmacovigil* . 2014;2:145
87. Eileen Weinmann et al. A Simple Solution to Safeguarding Sedation Medications. *Occup Med Health Aff* . 2014;2:177
88. Jie Fu et al. Research Advances on the Treatment of Myoclonus-Dystonia Syndrome. *J Neurol Neurophysiol* . 2014;5:228
89. Albenacute NunesSilva et al. Exercise-Induced Inflammatory Response: To Use or Not use Anti-Inflammatory Medication . *J Sports Med Doping Stud* . 2014;4: 142
90. Hana Morrissey and Patrick Ball et al. Medication Errors: Medication Orders with Error-Prone Abbreviations. *J Nurs Care* . 2014;3:196
91. Michael A Veronin et al. Patient-centered Health Care Delivery Uniting MTM, EHRs and Patients: Opportunities for Pharmacists. *J Pharma Care Health Sys* . 2014;1: 3
92. Jonathan Evans et al. Non-Union of a Tibial Stress Fracture in a Young Female Taking Bisphosphonate Medication. *J Osteopor Phys Act* . 2014;2: 124

93. Shanaz Mohammad Gaphor and Mustafa Jamel Abdullah et al. Medical Status and Medication Use in Patients Attending Shorish Private Dental Specialty in Sulaimani City. *J Interdiscipl Med Dent Sci* . 2014
94. Maura D Iversen et al. Development and Results of a Motivational Interviewing Program for Health Education to Facilitate Osteoporosis Self-Management. *J Osteopor Phys Act* . 2014;2: 116
95. ShiroHoshida et al. Analysis of the Difference in the Pressure-Natriuresis Relationship Based on the Class of Medication Using Spot Urine Tests in Hypertensive Patients. *J Hypertens* . 2014;3: 154
96. Elena Villamanan et al. Impact of Computerized Physician Order Entry on Medication Prescription Errors in Patients Hospitalized in a Chest Diseases Ward. *Pharm Anal Acta* . 2014;5: 298
97. Joseph O Fadare et al. Medication Adherence and Patients Satisfaction among Psychiatric Outpatients in a Rural Nigerian Tertiary Healthcare Facility. *J Psychiatry* . 2014
98. Robert J. Douglas et al. Medication, Dietary Supplement, and Alcohol and Tobacco Use in Sub-Elite Australian Rules Footballers – A Snapshot. *J Sports Med Doping Stud* . 2014;4: 136
99. Todd D Molfenter and Roger L Brown et al. Effects of Physician Communication and Family Hardiness on Patient Medication Regimen Beliefs and Adherence. *General Med* . 2014;2:136
100. Huang LL et al. The Erosivity Potential Of Common Pediatric Over-The-Counter Medications And Its Reduction By Remineralising Agents. *Dentistry* . 2014;4: 241
101. Gail Webber and Bwire Chirangi et al. Please Do Not Forget Us” - Views of Women, Nurses, and Traditional Birth Attendants on Community Distribution of Medications to Prevent Postpartum Hemorrhage and Sepsis: A Qualitative Pilot Study in Rural Tanzania. *J Women's Health Care* . 2014;3: 168
102. Sur M Lucia et al. Malignancies Associated with Treatment of Rheumatic Diseases - to be or not to be. *J Bioequiv Availab* . 2014
103. Rachel Gross et al. Increased Education is Associated with Decreased Compliance in an Urban Multi-Ethnic Lupus Cohort. *J Clin Cell Immunol* . 2014;5: 215
104. Bobbie G PaullForney et al. A Physician-Directed Commercial Low Calorie Diet with Intensive Behavioral Modification Decreases Metabolic Syndrome and Medication Use. *J Obes Weight Loss Ther* . 2014;4: 221
105. Ruth E. MacRedmond et al. Fluticasone Induces Epithelial Injury and Alters Barrier Function in Normal Subjects. *J Steroids Horm Sci* . 2014;5: 134
106. Badran EF et al. Intravenous Milk Infusion; Rare Medication Error. *Pediat Therapeut* . 2014;4: 201
107. Freja Barisic et al. Prevalence of Ocular Surface Disease in Patients with Glaucoma using Topical Antiglaucoma Medications. *J Clin Exp Ophthalmol* . 2014;5: 334
108. XueQin Hao et al. Telmisartan Protect Broiler Chickens from Pulmonary Arterial Remodeling Induced by Low Ambient Temperature. *J Clin Exp Cardiol* . 2014;5:300
109. Gabriel E. Marquez et al. Eye Drop Self-medication: Comparative Questionnaire-based Study of Two Latin American Cities. *J Clin Exp Ophthalmol* . 2014;5: 330
110. Anne Kuusisto et al. medication-documentation-in-nursing-discharge-summaries-at-patient-discharge-from-special-care-to-primary-care. *J Nurs Care* . 2014;3: 147
111. 111. Sangeeta Tanna and Graham Lawson et al. Cardiovascular Drug Medication Adherence Assessed by Dried Blood Spot Analysis. *J Anal Bioanal Tech, S*. 2014;S12: 006

112. Namrata Paul et al. Comparative Evaluation of Oral Transmucosal Fentanyl Citrate and Nasal Transmucosal Midazolam Spray as Premedication in Children. *J Anesth Clin Res* . 2014;5: 379
113. Jarrod Williams et al. The Effect of D-Tagatose on Fructose Absorption in a Rat Model. *J Dev Drugs* . 2013;2:111
114. WeiTi Chen et al. Engagement with Health Care Providers Affects Self- Efficacy, Self-Esteem, Medication Adherence and Quality of Life in People Living with HIV. *J AIDS Clin Res* . 2013;4: 256
115. Kim PGM Hurkens et al. A Survey on Medication Reviews in Older Patients: Substantial Variation in Daily Practice. *J Gerontol Geriatric Res* . 2013;2: 133
116. et al. Early response or nonresponse of schizophrenia symptoms to antipsychotic medication is a predictor of long-term outcome. *Afr J Psychiatry* . 2009;
117. et al. Early response or nonresponse of schizophrenia symptoms to antipsychotic medication is a predictor of long-term outcome. *Afr J Psychiatry* . 2009;
118. VuoristoMyllys Salla et al. Predictors of Self-Reported Adherence to Naltrexone Medication in an Outpatient Treatment for Problem Drinking. *J Addict Res Ther* . 2013;4: 159
119. J Eaton et al. Ensuring access to psychotropic medication in sub-Saharan Africa. *Afr J Psychiatry* . 2008;
120. AG Parrish et al. Impact of tertiary and quaternary service funding processes on medication selection in the SA essential drugs programme. *Afr J Psychiatry* . 2008;
121. Charles Anane et al. The Impact of a Comprehensive Medication Counseling and Education on Rehospitalization and Mortality of Advanced Heart Failure Patients in Ghana. *J Cardiovasc Dis Diagn* . 2013;1: 123
122. Megan Huebner et al. A Pilot Study Evaluating the Effect of Daily Education by a Pharmacist on Medication Related HCAHPS Scores and Medication Reconciliation Satisfaction . *J Biosafety Health Educ* . 2013;1:105
123. S Mall et al. Using a treatment partner and text messaging to improve adherence to psychotropic medication: a qualitative formative study of service users and caregivers in Cape Town, South Africa. *Afr J Psychiatry* . 2013
124. Takato Hiranita et al. Role of the σ Rs for Development of Medications. *J Alcohol Drug Depend* . 2014;2:e109
125. Amy Wang and Timothy Nguyen et al. New Anticoagulation Medications for Atrials Fibrillation. *J Dev Drugs* . 2013;2:e123
126. et al. Medication Safety in Hospitals: Avoiding Medication Errors in the Medication use Process. *Adv Pharmacoepidem Drug Safety* . 2013;
127. Tomohiro Kumada et al. Modified Atkins Diet and Low Glycemic Index Treatment for Medication-Resistant Epilepsy: Current Trends in Ketogenic Diet. *J Neurol Neurophysiol* . 2013;S2:007
128. Amer Hayat Khan et al. Medical Management of Post-Operative Abdominal Infection: A Case of Well Management and Appropriate Medications. *Trop Med Surg* . 2013;
129. Abdalla M EIMowafy et al. Antioxidant Medications: Facts, Myths and Prospects. *Biochem Anal Biochem* . 2013;2: e137
130. Halimi A et al. Fixed Apparatus Medication of a Skeletal Class II Open Chomp Malocclusion with Hypomature Amelogenesis Blemished: Case Report. *J Nov Physiother* . 2013;3:137

131. et al. Driving, Opioid-maintenance, and Co-medications: A Comprehensive Assessment of 22 Cases. *J Alcoholism Drug Depend* . 2013;1:113
132. Sima Ajami and Fatemeh Amini et al. Reduce Medication Errors with Clinical Decision Support Systems. *J Inform Tech Soft Engg* . 2013;S7: e001
133. Nyasha Tirivayi et al. Clinic-Based Food Assistance is Associated with Increased Medication Adherence among HIV-Infected Adults on Long-Term Antiretroviral Therapy in Zambia. *J AIDS Clin Res* . 2012;3: 171
134. Milap C. Nahata et al. Impact of Pharmacokinetics on Dosage Requirements and Medication Safety in Pediatric Patients. *J Drug Metab Toxicol* . 2012;
135. Michael Silbermann et al. Availability of Pain Medication for Patients in the Middle East: Status of the Problem and the Role of the Middle East Cancer Consortium . . 2012;
136. Paraskevi Theofilou et al. The Effect of Sociodemographic Features and Beliefs about Medicines on Adherence to Chronic Kidney Disease Treatment. *J Clinic Res Bioeth* . 2012;3:134
137. Lindsey Asti et al. Acetaminophen and Expired Medication Storage in Homes with Young Children. *J Clin Toxicol* . 2012;2: 130
138. Amadeo Pesce et al. Medication and Illicit Substance Use Analyzed Using Liquid Chromatography Tandem Mass Spectrometry . . 2012;
139. Amadeo Pesce et al. Analytical Considerations When Monitoring Pain Medications by LC-MS/MS. *J Anal Bioanal Tech, S*. 2014;S5: 003
140. Ashfaq Akram et al. Perception of Final Year Dental Students on Pattern of Medication for Pulpitis. *Dentistry* . 2013;3: 159
141. et al. Drug Interaction in Psycho-Oncology: A Retrospective Glance over the Polymedication and Comorbidities in a Portuguese Psycho-Oncology Service . *Adv Pharmacoepidem Drug Safety* . 2012;
142. Helen Smith et al. Understanding Patients' Experiences of Hayfever and its Treatment: A Survey of Illness and Medication Cognitions. *J Allergy Ther* . 2012;S5-008
143. Thomas F. Kresina et al. International Expansion of the Use of Pharmacotherapies for the Treatment of Opioid Dependence. *Clinic Experiment Pharmacol* . 2013;S5:001
144. Nimmi Athuraliya et al. Continuity of Medication Management: Is Transition a Barrier?. *Prim Health Care* . 2012;2: e105
145. Beyazit Zencirci Kasim Zafer Yuksel and Yakup Gumusalan et al. Effectiveness of Acupuncture with NSAID Medication in the Management of Acute Discogenic Radicular Pain: A Randomised, Controlled Trial. *J Anesthe Clinic Res* . 2012;3:203
146. Emad Hammouda et al. Addressing Medication Literacy in Diabetic Geriatrics. *J Diabetes Metab* . 2012;3:184
147. Linka Griswold et al. Medication Adherence: An Important Uncontrolled Variable in Clinical Trials. *Adv Pharmacoepidem Drug Safety* . 2012;
148. et al. Caffeine Medication Error in Newborn Inducing Therapeutic Inefficiency: A Case Report. *J Clinic Case Reports* . 2012;2:112
149. Shoshana J. Herzig et al. Atrial Fibrillation at Discharge in Older Cardiac Surgery Patients: A Prospective Study of Prevalence and Associated Medication Utilization. *J Clinic Trials* . 2012;2:106

150. Benjamin Boutrel et al. Hypocretin/Orexin Receptor Antagonism and the Promise of Anticraving medications: Myth or Panacea?. *J Addict Res Ther* . 2011;S4
151. Yulian Zhao and Paul R. Brezina et al. Therapeutic Medications and Male Fertility. *J Fertiliz In Vitro* . 2011;1:e104
152. Gemma Caterina Maria Rossi et al. Effect of Glaucoma Medications on Quality of Life Examined by Generic and Vision Specific Instruments. *J Clin Exp Ophthalmol* . 2010;1: 106.