





### 5<sup>th</sup> ANDHRA PRADESH PHARMACOLOGISTS SOCIETY NATIONAL CONFERENCE APPSCON – 2023 September 29th & 30th

## SOUVENIR

THEME: SCOPE OF PHARMACOLOGY - EXPANDING FRONTIERS



## Organized by Deparment of Pharmacology

## Dr. PINNAMANENI SIDDHARTHA INSTITUTE OF MEDICAL SCIENCES & RESEARCH FOUNDATION

Chinna Avutapalli, Gannavaram Mandal, Krishna District - 521 286, A.P., India. (Sponsors: Siddhartha Academy of General & Technical Education, Vijayawada)









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Dr. Supriya Priyambada

It is with great pleasure and excitement that I extend a warm welcome to each and every one of you to the 5th APPSCON 2023 on the theme "Scope of Pharmacology - Expanding Frontiers." As the host of this prestigious gathering, I am truly honored to stand before you today and mark the beginning of what promises to be an enlightening and transformative experience.

Pharmacology, the science of drugs, has long been at the forefront of medical advancements. It is a field that continually evolves, offering new opportunities and avenues for exploration. With the theme "Expanding Frontiers," we aim to celebrate not only the rich history of pharmacology but also the endless possibilities it presents for the future.

I want to sincerely thank the organizing committee, our speakers, and everyone else who helped make this event possible. This conference would not have been feasible if it weren't for your commitment and support. To all our attendees, I encourage you to actively participate in the sessions, engage in discussions, and make the most of this unique platform. Whether you are a seasoned professional, a budding researcher, or simply someone passionate about the world of pharmacology, your presence here is valued, and your contributions are vital.

Thank you, and let us make these days ahead both productive and memorable.

Sincerely,

Sypriya Crîyambada Dr. Supriya Priyambada



#### Dr.Chadalavada Nageswara Rao MBBS,MS, FRCSC, FACS

\*From the Desk of the President\*

On behalf of SIDDHARTHA ACADEMY OF GENERAL AND TECHNICAL EDUCATION, I would like to extend a warm greeting to all of you as we hold the APPSCON 2023 with the theme "Scope of Pharmacology - Expanding Frontiers."

As we gather here today, we celebrate not only the progress that has been made in the field of pharmacology but also the limitless potential it holds for the future. The congress signifies collective commitment to explore uncharted territories, innovate, and embrace change. It is a testament to our belief that the scope of pharmacology extends far beyond what we currently know, and it is our responsibility to push those boundaries further.

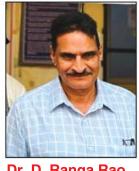
Our academic institution has always been at the forefront of promoting excellence in education, research, and healthcare. Hosting this conference is a testament to our unwavering dedication to the advancement of knowledge and the development of future leaders in the field of pharmacology.

As we embark on this journey to expand frontiers, let us remain committed to the highest standards of research, ethics, and education. Together, we have the power to shape the future of pharmacology and improve the quality of life for countless individuals around the world.

Thank you for being a part of this extraordinary journey.

Sincerely

President



#### Dr. D. Ranga Rao

\*From the Desk of the Principal\*

As we gather together to host the APPSCON 2023 at the Dr. Pinnamaneni Siddhartha Institute of Medical Sciences & Research Foundation, with the encouraging theme "Scope of Pharmacology - Expanding Horizons," it is my great pleasure and privilege to convey a warm and heartfelt welcome to all of you.

Pharmacology, as the cornerstone of healthcare and scientific discovery, has been instrumental in revolutionizing the way we understand and treat diseases. The theme "Expanding Horizons" beautifully encapsulates the essence of this conference—an exploration into the boundless opportunities and frontiers that pharmacology presents. It underscores our shared commitment to not only acknowledge the achievements of the past but to boldly venture into the limitless possibilities that lie ahead.

At Dr. Pinnamaneni SIMS &RF, we have always strived for excellence in education and research. It is our hope that this gathering will serve as a catalyst for transformative breakthroughs and foster collaboration among brilliant minds. May this conference be a source of inspiration, enlightenment, and collaboration, propelling us to new heights in the field of pharmacology.

Thank you for joining us on this extraordinary endeavor.

Sincerely,

Principal



Dr. K. Sankar

\*From the Desk of the President\*

It is with great pride and a deep sense of enthusiasm that I extend a warm and heartfelt welcome to all of you on behalf of Andhra Pradesh Pharmacologists society as we come together for the APPSCON 2023 on the theme "Scope of Pharmacology Expanding Frontiers."

As the president of APPS, I take immense pride in our long-standing dedication to promoting excellence in research, education, and the dissemination of knowledge. The opportunity to learn from some of the most renowned pharmacology professionals and academics will be provided by this conference. Their ground-breaking work and priceless ideas will not only motivate us but also enable us to expand the boundaries of our field.

As we embark on this remarkable journey to expand the frontiers of pharmacology, let us remain steadfast in our commitment to rigorous research, ethical practice, and holistic education. Together, we possess the potential to redefine the future of pharmacology and positively impact the health and well-being of people around the world. May this conference be a wellspring of inspiration, enlightenment, and collaboration, propelling us to new and uncharted horizons in the field of pharmacology.

Thank you for joining us on this extraordinary and meaningful endeavor.

Sincerely,

k Sankas

Dr. K.Sankar



### SCIENTIFIC SCHEDULE



(FRIDAY)	REGISTRATIONS	Dr. K.Umamaheswara Rao, MD Professor & HOD, SVIMS, Tirupati	Dr. Sushil Sharma, MBBS, MD Prof essor & HOD Dept of Pharmacology AIIMS Mangalagiri	INAUGURATION & TEA BREAK	Dr. Ch. Prabhakar Reddy, MD,DM Additional Professor, NIMS, Hyderabad	Dr. P. Rama Mohan,MD,DM Professor, Dept. of Pharmacology, NMC, Nellore	LUNCH BREAK	<b>Dr. Madhav Rao C, MD</b> Associate Professor, AIIMS, Mangalagiri	Dr. B.Madhavulu, MD Professor & HOD, GITAM Institute of Medical Sciences & Research, Visakhapatnam	1 II
SCIENTIFIC SESSION DAY-1 29/9/2023 (FRIDAY)		Current Pharmacogenomics For The Development Of Precision Medicine	Medication safety in polypharmacy and transitions of care		Current Good Clinical Practice (GCP) Updates	Therapeutic Drug Monitoring – Concepts & Clinical Applications		Fundamentals of Research Ethics in Indian Context	Novel Strategies of Self-directed Learning in Pharmacology Curricula	ORAL & POSTER PRESENTATIONS
	8:00 - 9:00 AM	9:00 - 9:45 AM	9:45 – 10:30 AM	10:30 - 11:30 AM	11:30 – 12:15 PM	12:15-7:00 PM	1:00 - 2:00 PM	2:00 - 2:45 PM	2:45 – 3:30 PM	/3:30 - 5:30 PM

:023 (SATURDAY)	<b>Dr. Subhrojyoti Bhowmick, MD</b> Professor, Dept of Pharmacology, KPC Medical College, Kolkata	<b>Dr. Padmaja Udaykumar, MD</b> Professor & HOD, Fr. Muller Medical College, Mangalore	EAK	Dr. Subodh Sirur, MBBS, DVD, DNB; LL.M, FIIII Clinical Dermatologist, Mumbai	<b>Dr. B. Ramesh, MD</b> Additional Professor & I/C Head, AIIMS, Madurai, Tamil Nadu	REAK	Dr. K. Sankar, MD,DTCD Professor & HOD GMC, Guntur	EST PAPER & POSTER	FUNCTION	
SCIENTIFIC SESSION DAY- 2 30/9/2023	NABH guidelines on medication management	Anti- Microbial Stewardship Programme – Perspectives & Challenges	TEA BREAK	<b>TEA BF</b> Artificial Intelligence Ethical Quandary in Academic Writing & Therapeutics	Proteomics & Metabolomics: Concepts & Applications in Medicine	LUNCH BREAK	Life Style Disorders – Role of Carbohydrates & Fats & Intermittent Fasting	PRESENTATION OF THE BEST PAPER & POSTER	VALEDICTORY FUNCTION	
	9:00 – 9:45 AM 9:45 – 10:30 AM		10:30 – 11:00 AM	11:00 – 12:00 PM	42:00 – 1:00 PM	1:00 - 2:00 PM	2:00-3:00 PM	3:00 4:00 PM	4:00 - 5:00 PM	





### PAPER PRESENTATION

**ABSTRACTS** 





Dr.Gousia banu<sup>1</sup>, Dr.D.Syamala<sup>2</sup>, Dr.K.Srinivas<sup>3</sup>

<sup>1</sup> Postgraduate, <sup>2</sup> Professor and Head, <sup>3</sup>Assistant professor Department of Pharmacology, Andhra medical college, Visakhapatnam.

## AN OBSERVATIONAL STUDY ON ANTIBIOTIC USAGE PATTERN IN PATIENTS UNDERGOING EMERGENCY LAPAROTOMY IN SURGERY DEPARTMENT IN TERITIARY CARE HOSPITAL

**Background:** Every year 60 to 70 million people are affected by the gastrointestinal disease. In this 15 million people are admitted to hospitals for emergency gastrointestinal surgeries. Prophylactic use of antimicrobials and other preparation before surgery have shown a significant reduction in infectious complications. The essential spectrum for coverage in gastrointestinal surgery is decided by the flora found within the patient's large intestine. This is a mixture of both anaerobic and aerobic bacteria along with the introduction of bacteria from the patient's skin or the operating room, so antibiotic choices that protect against both anaerobic and aerobic bacteria showed the best results.

**Methods:** An Observational study was conducted, to assess the antibiotic usage in the patients admitted for emergency laparotomy, in the surgery Department in a Tertiary care hospital.

**Results:** Out of 100 patients,76% (n=76) were male, and 24% (n=24) were female, we observed that majority of cases in this sample were between the age group 31 to 40(31%), Out of the 100 cases posted for emergency laparotomy, patients who are operated on for acute appendicitis are 35(35%), Intestinal perforation 29 (29%), Intestinal Obstruction 18 (18%), hemoperitoneum 11 (11%), and Peritoneal abscess 7 (7%). Higher utilization of Cephalosporins (86%) and Aminoglycosides (64%) was noticed.

**Conclusion:** Antibiotics are a key component of infection management and prevention. In conclusion, All the antibiotics used were according to their standard adult doses and frequencies. In this study, we found that Cephalosporines, Penicillin's, Aminoglycosides, and Nitroimidazole were mostly used classes of drugs.

**KEY WORDS**: Emergency Laparotomy, Antibiotic usage, Tertiary Care Hospital.



N. Sunil Kumar<sup>1</sup>, M. Triveni<sup>2</sup>, K. Sankar<sup>3</sup>, Govind<sup>4</sup>.

1<sup>st</sup> Yr. Postgraduate<sup>1</sup>, Associate professor<sup>2</sup>, Professor& Head<sup>3</sup>, Pharmacovigilance Associate<sup>4</sup>.

Guntur medical college, Guntur.

### A RETROSPECTIVE ANALYSIS OF ADVERSE DRUG REACTIONS TO ANTICANCER AGENTS REPORTED TO AMC IN A TERTIARY CARE HOSPITAL.

BACKGROUND & OBJECTIVE: One of the leading causes of death in both developed and developing countries is cancer. Drugs having narrow therapeutic index like anticancer medications are more prone to adverse drug reactions (ADRs). Early recognition & early intervention of ADRs occurring with anticancer drugs enhance the quality of life and reduce the cost of ADR related hospitalization among cancer patients. So, the present study's objective is to evaluate and assess the pattern of ADRs occurring with anticancer drugs in cancer patients in a tertiary care hospital, Andhra Pradesh.

**METHODOLOGY:** A retrospective & analytical study was carried out at ADR monitoring center, Government General Hospital, Andhra Pradesh, from January 2020 to January 2023 after getting prior approval from the Institutional Ethics Committee & PvPI (IPC) Ghaziabad, India.

**STATISTICAL ANALYSIS**: Data collected was analyzed using descriptive statistics. MS excel was used to express graphs and tables wherever necessary.

RESULTS: Totally 373 ADRs for anticancer agents were reported to AMC.57.89%(216) ADRs were reported among Males. Early Adulthood age group (20-39yrs) has reported more ADRs. Among various Cancerous conditions, ADRs were reported by patients with Breast cancers (47.72%), followed by Lung Cancers(17.69%), Oral cavity cancers (4.56%), Renal cancers (4.29%), and Colon cancers(3.49%). The most common ADRs observed were Fever(8.84%), Vomiting(5.09%), Headache (4.82%), Generalized body pain (4.28%), Skin rash (3.22%), Itching (2.94%), Chills (2.41%) and Alopecia (1.88%). Though rare, bleeding, hypoglycemia, hematochezia & electrolyte abnormalities were reported. The most common drug associated with ADRs was Ribociclib succinate (24.93%) followed by Certinib (9.11%) & Paclitaxel (7.50%). he outcomes were analyzed as Recovered/Resolved(56.83%), followed by unknown outcome(28.15%), Recovering/Resolving(8.31%). Only 7.77% of ADRs were serious. As per WHO-UMC causality scale, 95.5% ADRs reported were probable & the severity was assessed using Modified Hartwig & Siegel Scale, most of the reactions were of moderate grade.

**CONCLUSIONS:** This study highlighted the common ADRs of anticancer drugs reported to AMC as well as their pattern, incidence, seriousness and outcomes. Prior knowledge about these ADRs to anticancer drugs will improve management & outcomes.



Dr.Sk.Moinuddin<sup>1</sup> Dr.D.Syamala<sup>2</sup> Dr.K.Hima Bindu<sup>3</sup> Dr.S.Vinutha<sup>4</sup>

<sup>1.</sup>Postgraduate,<sup>2</sup>Professor & Head,<sup>3</sup>Professor,<sup>4</sup>Associate Professor
Department of pharmacology, Andhra Medical College, Visakhapatnam.

### A STUDY ON ASSESSMENT OF KNOWLEDGE, ATTITUDE & PRACTICE OF NUTRIVIGILANCE AMONG MEDICAL POSTGRADUATES.

**BACKGROUND:** Nutrivigilance is defined as "the science and activities relating to the detection, assessment, understanding, and prevention of adverse effects related to the use of a food, dietary supplement, or medical food." Use of nutraceuticals has gained importance in recent times owing to COVID-19 pandemic and overall focus on health. This has led to overthe-counter use of health supplements. This warrants a need for physicians to be updated about nutraceuticals, their use, adverse effects and regulations.

**AIM:** To assess the knowledge, attitude and practice of nutrivigilance among medical postgraduates.

MATERIALS AND METHODS: This is an observational study, done in 150 participants who are postgraduate students in various departments of Andhra Medical College, Visakhapatnam. This study was done in August-2023. A structured questionnaire is prepared and given to the participants and their responses are collected. The data is analysed with Microsoft Excel-2021 and represented in counts and percentages.

**RESULTS:** Total 122 postgraduates responded to the given questionnaire. Among the participants 73.8% were aware of the concept of nutrivigilance. On average only 35% of postgraduates gave correct responses for knowledge-based questions. Their attitude towards nutrivigilance is positive, 93.4% participants believe there should be post marketing surveillance for nutraceuticals. 86.9% of participants said they haven't encountered any case of ADR with nutraceuticals, while 8.2% participants encountered ADRs of Gastro-intestinal system.

#### **CONCLUSION:**

This study shows that awareness about nutrivigilance is less among postgraduates. This calls for conduction of sensitisation programmes about use of nutraceuticals and nutrivigilance for medical postgraduates. There is also need for similar studies with larger sample size.



Tabreez ahamed P<sup>1</sup>, R. Kavitha<sup>2</sup>, S. Ramya<sup>3</sup>, K Punnagai<sup>4</sup>
1.Post graduate, 2. Professor&hod, 3. Associate professor,
Department of pharmacology, SRMC & RI, Chennai,
4.Professor&HOD, Department of Pharmacology, Tagore medical
College, Chennai

## "AN IN-SILICO AND IN-VITRO EVALUATION OF CYTOTOXICITY AND APOPTOTIC ACTIVITY OF SARSASAPOGENIN IN HUMAN COLORECTAL CANCER CELL LINE HT-29"

#### 1.INTRODUCTION

Colorectal cancer is the most common gastrointestinal malignancy and the second leading cause of death in cancer patients with third-highest global incidence accounting for 10.7% of all cancers, and it is still on the rise. We are in need with newer agents having good efficacy and safety profile. Sarsasapogenin is a natural steroidal sapogenin molecule obtained from Anemarrhena asphodeloides, a rhizome with anti-inflammatory, neuroprotective, anti-diabetic effects and limited studies have been done in cancer. This study was done to evaluate the anti-cancer effect of Sarsasapogenin in Human Colorectal Cancer cell line HT-29.

#### 2.METHODS

HT-29 cell line was procured from National Centre for Cell Science (NCCS), Pune, Sarsasapogenin and other reagents for the assays were purchased from Sigma Aldrich, USA. The 3-D protein structure of EGFR & KRAS were obtained from Protein Data Bank (PDB ID: 1M17, 8AZV). Intermolecular interactions of Sarsasapogenin with EGFR & KRAS were assessed using DOCK6 software package. Cancer cells viability was assessed by MTT assay and IC50 was determined. Annexin V assay was done for apoptosis analysis with flow cytometry.

#### 3.RESULTS

The docking showed the binding affinity with docking scores for -32.5 kcal/mol and -21.1kcal/mol for the selected target proteins.MTT assay showed cell cytotoxicity and IC50 concentration was found to be 34.51(ug/ml). The Annexin-V assay demonstrated the proapoptotic activity with majority of cells in late apoptotic phase.

#### **4.CONCLUSION**

The docking study revealed that Sarsasapogenin had binding affinity to the selected targets such as EGFR & KRAS. The results of cytotoxicity study performed by MTT assay suggests that the given test compound was cyto-toxic in nature on Human colorectal HT-29 cell line. Annexin-V analysis showed that Sarsasapogenin-induced cell apoptosis. However, further studies need to be conducted to delineate the molecular mechanism behind anti-cancer properties of the test compound.



# V.ALEKHYA, <sup>2</sup> P.USHA KIRAN, <sup>3</sup>R.SRINIVASA RAO <sup>1</sup>2<sup>nd</sup> Year Postgraduate, <sup>2</sup>Professor&Head, <sup>3</sup>Professor Department of Pharmacology, Rangaraya Medical College, Kakinada, Andhra Pradesh.

## AN OBSERVATIONAL STUDY OF QT PROLONGATION WITH ORAL BEDAQUILINE REGIMEN IN DRUG-RESISTANT TUBERCULOSIS PATIENTS AT DISTRICT TUBERCULOSIS CENTRE

**BACKGROUND:** The most recent anti-microbial agent for drug-resistant tuberculosis is bedaquiline. A renewed focus has recently been placed on new and repurposed anti-TB drugs. The QT interval is not a constant and it varies depending on several factors, including gender, heart rate (HR), rhythm and conduction defects, and the physiologic and metabolic state of the patient.

**AIM**: The primary objective is to measure and analyze the QTc interval prolongation pattern in response to bedaquiline regimens for drug-resistant tuberculosis.

**METHODS:** After receiving approval from both the DTC centre and the institutional ethics committee, this retrospective observational study was started. The research period is from May 2022 to July 2023, and the sources of data are TB patients' voluntarily supplied ADR data to the AMC or ADR monitoring centre.

**RESULTS:** A total of 100 patients receiving treatment at DTC for drug-resistant tuberculosis experienced 86 (86%) ADRs, of which 8 involved QTc interval prolongation. The prevalence of males was higher among them (7, or 87%) than females (1, or 13%). Age groups 45–55 years (50%) and 55–65 years (13%) had increased QTc interval prolongation rates, with 7 cases falling into grade 2 QTc prolongation.

**CONCLUSION:** This study found that drug-resistant TB patients receiving Bedaquiline-based regimens have a higher risk of QTc prolongation. Torsade de pointes must be avoided, so it must be watched. This prevalence of QTc prolongation in drug-resistant tuberculosis necessitates effective pharmacovigilance surveillance to enhance patient care and drug safety.



#### A.P. Sunprakathi<sup>1</sup>, V. Gowri<sup>2</sup>, K. Kranthi<sup>3</sup>, Kavitha.R<sup>4</sup> Department of Pharmacology, SRMC&RI, Chennai

#### "EVALUATION OF CHLOROGENIC ACID IN PARKINSON'S DISEASE MODEL: AN IN-VITRO STUDY IN 6-OHDA INDUCED SH-SY5Y CELL LINE"

**KEYWORDS:** Chlorogenic acid (CGA), invitro, SH-Sy5Y, Parkinson's disease, MMP, Cytochrome C.

**INTRODUCTION:** Parkinson's disease (PD) is the most common neurodegenerative movement disorder. Pharmacological agents used in PD are primarily for motor symptoms and no disease modifying therapies have been approved. So novel therapy is the need of the hour. The Mediterranean Diet with grapes as a key ingredient has been shown to prevent pathologies associated with aging. This study aims to evaluate Chlorogenic acid (CGA), a phenolic acid present in grape leaves for their neuroprotective effect against PD in 6-OHDA(6-hydroxy dopamine) induced SH-Sy5Ycell line by invitro assay.

**METHOD**: The human neuroblastoma cell line SH-Sy5Y is induced using 6-OHDA. The activity of Chlorogenic acid against cytotoxicity on 6-OHDA induced Human Neuroblastoma cell line SH-SY5Y was evaluated using MTT assay using different concentrations (3.125uM, 6.25uM, 12.5uM, 25uM, 50uM). Its antioxidant properties are evaluated using flow cytometric analysis of ROS assay. The mitochondrial membrane potential is evaluated using flow cytometry. The anti-apoptotic activity is evaluated using Cytochrome C immunofluorescence by confocal microscopy.

**RESULT :** Chlorogenic acid exhibits the maximum protective concentration on 6-OHDA induced SH-SY5Y cell line at 25uM. The percentage of cell viability on SH-Sy5Y cell line by chlorogenic acid at 25uM is 43.06%. The results for antioxidant assay is preliminary and shows activity against 6-OHDA induced oxidative stress in SH-Sy5Ycell line.

**DISCUSSSION:** The findings provide evidence that Chlorogenic acid has anti-PD activity. CGA may exert anti-PD effect through its action on oxidative stress, mitochondrial dysfunction and release of pro-apoptotic factors. The observed action on neuronal cells makes Chlorogenic acid a potential candidate for anti-PD treatment.



## K. Urmila<sup>1</sup>, L. Meenakshi<sup>2</sup>, K. Sankar<sup>3</sup> <sup>1</sup>2<sup>nd</sup> year Postgraduate, <sup>2</sup>Assistant Professor, <sup>3</sup>Professor and HOD Department of Pharmacology, Guntur Medical College, Guntur.

## ANALYSIS OF ANTIMICROBIAL PRESCRIPTIONS IN SURGICAL WARDS OF A TERITARY CARE HOSPITAL USING WHO AWARE CLASSIFICATION

**BACKGROUND:** Antimicrobial resistance (AMR) is one of the major public health threats worldwide. Hence, Surveillance of antimicrobial consumption (AMC) is essential to control irrational use of antibiotics. In 2019, WHO has developed 'AWaRe' (Access, Watch, Reserve) classification to improve the quality of hospital antibiotic use and to combat antimicrobial resistance. The present study assessed the pattern of antibiotic consumption in relation to AWaRe classification in surgical wards of tertiary care hospital.

**METHODS:** After approval from Institutional Ethics Committee, antibiotic consumption from surgical wards was collected retrospectively from hospital medical records over a period of 6 months (January to June 2023). Patient demographics, indications and reasons for antimicrobial use, and details of antimicrobial used were recorded from each patient receiving antimicrobial therapy. To describe overall antibiotic use, WHO AWaRe classification and the number of Defined Daily Dose (DDD) and DDD/100 bed days were used for quantifying antibiotic use.

RESULTS: A total of 1124 patients (1898 drugs) who received antibiotics were included in the study, out of 1209 patients admitted during the study period. Males 785 (69.8%) received more antibiotics than females. Their mean age was 49±10.8 years. Most common indications were Hernia(20.2%), followed by Abscess(7.6%) & Appendicitis(6.4%). Based on WHO "AWaRe" classification, the "watch" group antibiotics (60.8%) were the most commonly prescribed, followed by "access" group (36.9%) and reserve group (2.2%). Most commonly prescribed antibiotics in watch-group was third generation cephalosporins (ceftriaxone-26.4%), access group (Metronidazole-24.1%) and reserve group (Linezolid-2.2%). 92.9% of patients received antibiotics as empirical therapy followed by prophylactic therapy (30.9%). Average length of stay of patient in hospital was 9.84±5.95 days. Ceftriaxone with 5.39 DDD/100 bed days was the most common antibiotic used.

**CONCLUSIONS:** The present study shows that there is a higher proportion of prescribing of Watch-group antibiotics over access group which indicates the need for local adaption of WHO AWaRe classification to prevent Antimicrobial Resistance. Regular antimicrobial stewardship interventions in the hospitals helps to minimize the level of inappropriate antibiotic prescribing and facilitate rationale prescribing of antibiotics.

## Dr. Pavani Chinnapaka, PG 2<sup>nd</sup> year Department of General Medicine Kamineni Institute of Medical Sciences Narketpally, 508254.

Comparison of Atorvastatin (10mg) and Rosuvastatin (10mg) in achieving the treatment goals of dyslipidemia in Medical College Hospital, Narketpally, Telangana

**Introduction:** Atherosclerosis and coronary artery disease are both caused by dyslipidemia, which has been identified as the primary cause. The statin medication class is the most often recommended therapy for dyslipidaemia. Among these, atorvastatin and rosuvastatin, a relatively new medication, are more commonly recommended. The goal of the study was to evaluate the efficacy of rosuvastatin and atorvastatin in the treatment of dyslipidemia.

Methods and Material: Patients with dyslipidemia between the ages of 30 and 72 were eligible. One of two therapy groups was allocated to the patients. A total of 250 patients were randomly divided into two groups, each with 125 patients, and labelled Group I and Group II. For 12 weeks, Group I was given rosuvastatin (10 mg tablet OD) while Group II was given atorvastatin (10 mg tablet OD). The lipid profile low-density lipoprotein cholesterol (LDL-C), high-density lipoprotein cholesterol (HDL-C), total cholesterol (TC), non-high-density lipoprotein cholesterol (non-HDL-C), triglycerides (TG), and very-low-density lipoprotein cholesterol (VLDL-C) were measured before the start of therapy and after 12 weeks. Percentage changes from baseline were calculated and adverse effects were recorded.

**Results**: The levels of serum TC and LDL-C are decreased by 38.01% and 47.55 % respectively with the use of rosuvastatin (Group-I) after 12 weeks. atorvastatin 10 mg/day ((Group-II)for 12 weeks resulted in a statistically significant fall in levels of serum TC and LDL-C by 23.50 % and 29.79 %.

**Conclusions**: Generally, medication of Rosuvastatin could reach a better lipid-reducing effect and yield a higher attainment rate of LDL-C and TC than Atorvastatin in the same dose in high-risk hyperlipidemic Indian patients.



Dr. Dhruv J Chaudhari<sup>1</sup>, Dr. P. Usha Kiran<sup>2</sup>, Dr. R. Srinivasa Rao<sup>3</sup>

<sup>1</sup>Second year Junior Resident, <sup>2</sup>Professor & HOD, <sup>3</sup>Professor

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Kakinada

ASSESSMENT OF PRESCRIPTION QUALITY IN A COMMUNITY HEALTH CENTRES USING NATIONAL HEALTH MISSION INDIA'S PRESCRIPTION AUDIT GUIDELINES: A PROSPECTIVE STUDY

#### **BACKGROUND:**

A problem that is prevalent globally is irrational prescribing. Prescription mistakes are widespread and can effect anywhere from 4.2 to 82% of prescriptions, according to previously available information. Prescription errors can be caused by system-related or subjective causes. Through the prescription audit, inaccuracies in prescriptions can be identified and prevent adverse events. Prescription auditing is a process for improvement that, when done consistently, assures that patients receive high-quality care that is equitable, economical, and efficient.

#### **METHODOLOGY:**

According to the National Health Mission India's Prescription Audit Guidelines, a number of core indicators were developed to evaluate the completeness, legibility, and rationality of prescriptions. A prospective cross-sectional, outpatient-department study with a total of 100 prescriptions was carried out at two community health centres in the Kakinada district.

#### **RESULT:**

27 distinct variables were taken into account in total, and the results revealed an average of 3.68 drugs prescribed per prescription. Even though all prescriptions were written in accordance with the facility's antibiotic policy and the state EML/Formulary in 100% of cases, follow-up advice and precautions (16%), mentioning of allergy status (0%), illegible handwriting (10%), and the date of the next visit (6%) were some of the major concerns.

#### **CONCLUSION:**

An action plan should be constructed based on the results and suggested recommendations in order to carry out corrective and preventive actions to enhance the opportunities that have been discovered.



#### Dr.Y.Bala Prashanth Jr-1, MD Pharmacology Gandhi medical college, Secunderabad.

### A CLINICAL STUDY OF COLLAGEN DRESSING IN SUPERFICIAL AND SUPERFICIAL PARTIAL THICKNESS BURNS

**BACKGROUND**: As burn injuries are common in developing countries, there is a need for a method by which these injuries heal early with less pain, discomfort, and scarring. Dressing plays a vital role in the management of burns.

**AIM**: To observe the effectiveness of collagen dressing and outcome in Superficial and Superficial partial thickness burns.

**MATERIALS AND METHODS:** A total of 22 patients with superficial and superficial partial thickness burn wounds were included and applied collagen dressing. The variables analyzed were fever, Subcollagen collections, need for collagen removal, need for resurfacing, patient complaince. After receiving the patients the wound is cleaned and wet collagen is applied and allowed to dry. The required parameters are noted at regular intervals

**RESULTS**: Out of 22, 18 patients were applied collagen on day one, two patients were applied on day 4 and two patients were applied on day 5. Patients with delayed application of collagen got infected(two pts on day 4 and two pts on day 5 of application). Five patients who were with Superficial partial thickness burns developed fever & sub collagen collection. Two patients who were with superficial partial thickness burns warranted removal of the collagen sheet(one patient for cellulitis and other for persistent collection).SSG was done for 1 patient with superficial partial thickness burns on day 29.Primary wound Healing in 90% and patient compliance noted to be 95%. None of the cases shown any adverse reaction to collagen

**CONCLUSION:** Collagen sheet promotes healing, decreases need for analgesics, reduces the incidence of associated complications like infection. Because of the simple application and good tolerance of the membrane, collagen can be advocated as a temporary biological dressing material in superficial and Superficial partial thickness burns.



<sup>1</sup>Dr.K Ramakrishna, \*<sup>2</sup>Dr.Ushakiran.P <sup>3</sup>Dr.P SreeNagamani
 <sup>1</sup>1stYear PG, <sup>2</sup>Professor& H.O.D, <sup>3</sup>Associate Professor
 Department of Pharmacology, Rangaraya medical college, Kakinada

A PROSPECTIVE RANDOMIZED DOUBLE-BLIND COMPARATIVE STUDY ON THE EFFICACY OF TAB DEXAMETHASONE VERSUS TAB ACECLOFENAC TO CONTROL POSTOPERATIVE PAIN, TRISMUS AND SWELLING AFTER THE SURGICAL EXTRACTION OF IMPACTED SECOND MOLARS

**OBJECTIVES**: To compare the efficacy of Tab Dexamethasone versus Tab Aceclofenac to control postoperative pain, trismus and swelling after the surgical extraction of impacted second molars.

**METHODS:** After getting the Institutional Ethics Committee's approval, the study was conducted on patients attending dental OPDs in the government general hospital, Kakinada. These patients were randomly allocated to two groups (n=20) each. After obtaining informed consent from the patients, Group A patients were administered Dexamethasone 4 mg twice a day after food, while Group B patients with Aceclofenac 100 mg twice a day after food. Evaluation of the post-extraction pain was made on a standard 100 mm visual analogue scale (VAS). Trismus was evaluated by three finger index method. Furthermore, swelling at the extraction site was measured by the Tape measuring method. These were measured before the procedure and the same were measured after 72 hours.

**RESULTS:** The reduction in pain is noted in 18 patients (90%) of Group A and 14 (70%) patients of Group B. Trismus reduced in 80% of Group A and 50% of Group B patients (p=0.045). Swelling decreased in 95% of Group A and 65% of Group B patients (p=0.0177).

**CONCLUSION:** Based on the above observations it can be concluded that Dexamethasone 4 mg twice a day has more efficacy than aceclofenac 100 mg twice a day in the management of post-surgical extraction of impacted second molar.

**KEYWORDS:** Dexamethasone, Aceclofenac, trismus, impacted.



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STUDY OF PRESCRIPTION PATTERN OF FIXED DOSE DRUG COMBINATIONS IN PRIMARY, SECONDARY AND TERTIARY HEALTHCARE CENTRES: A CROSS-SECTIONAL STUDY

#### INTRODUCTION:

Fixed Dose Combination (FDC) is a combination of drugs that includes two or more active pharmaceutical ingredients combined in a single dosage form. Irrational use of FDCs may lead to unnecessary exposure to drugs, and adverse drug reactions. Government of India had issued a ban notification for few FDCs. Aim of this study is to evaluate the prescription pattern of FDCs among primary (PHC), secondary (SHC) and tertiary health care (THC) centres in Srikakulam.

#### **METHODS:**

After ethics approval, this descriptive cross-sectional study was conducted in PHC, SHC, THC centres in Srikakulam district. Systematic random sampling was used to collect 500 prescriptions from each healthcare setting. Prescriptions were collected by taking photograph. The National List of Essential Medicines (NLEM) 2022, the WHO Model List of Essential Medicines 2021 was used to check the prescription pattern and the medicines listed in these sources were considered rational. Data were entered in Epi Info and analyzed using SPSS 25. P value < 0.05 was considered as significant.

#### **RESULTS:**

Of the total drugs prescribed at PHC, SHC, THC, FDCs comprised 28%, 31% and 35% respectively. At PHC, antimicrobials (Amoxicillin + Clavulanic acid) were the most prescribed FDCs (38%). At SHC and THC, vitamins, minerals and dietary supplements were the most prescribed FDCs (38% and 63% respectively). Few FDCs like anti-retroviral drugs (13%), anti-tubercular drugs (4%), anti-leprotic drugs (0.4%) were prescribed only at THC. All the FDCs were from NLEM 2022.

#### **CONCLUSION:**

This study revealed that FDCs prescribed by the doctors were rational and from NLEM probably because all of them were Government centres.



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## DRUG UTILIZATION STUDY BASED ON WHO CORE DRUG USE INDICATORS IN THE PAEDIATRIC DEPARTMENT OF TERTIARY CARE TEACHING HOSPITAL

**INTRODUCTION:** Irrational use of drugs is major health concern affecting morbidity, more so in paediatric population.

**AIM:** This study was undertaken to measure performance of Paediatric healthcare facilities related to utilization of drugs based on WHO/INRUD indicators.

**OBJECTIVES:** To evaluate drug utilization pattern in Paediatrics by assessing prescribing indicators, patient care indicators, facility indicators and Complementary indicators.

**MATERIAL AND METHODS:** This cross-sectional study was carried out for a period of 1 week (August 2023), in paediatric department of GMC Srikakulam, after taking approval from Institutional Ethical Committee (IEC). All the prescriptions of paediatric patients in O.P, I.P and I.C.U were included in study for prescribing and complementary indicators. Data analysed as frequency and percentages using SPSS25 version.

**RESULTS:** Regarding prescribing indicators, average number of drugs prescribed per patient was 3, percentage of drugs prescribed with generic name was found to be 98%. Most commonly prescribed drugs were antibiotics (19%) followed by NSAIDS (11%), percentage of injections prescribed were 42%. 100% of drugs were prescribed from National List of Essential Medicines 2022, India. Among patient indicators, average consulting time was 11 min, average dispensing time was 1 min and 98% of drugs prescribed were dispensed. For the facility indicator, there was a copy of EDL displayed in the hospital. Among complementary indicators, prescriptions without drugs were 2%, while the mostly frequent diagnosis was 'Fever with cough and cold' (22%).

**CONCLUSION**: Rational usage of drugs was observed. Our study revealed optimum utilization pattern of drugs as per the observed indicators. Specifically noteworthy was minimal use of antimicrobials. Essential Drugs were prescribed, mostly with Generic names.



### Dr. Shaik. Nagma Shaheen Osmania Medical College, Hyderabad

## KNOWLEDGE, ATTITUDE, AND PRACTICE ON OVER-THE-COUNTER DRUGS AMONG NURSING AND MEDICAL STUDENTS IN TERTIARY CARE TEACHING HOSPITAL IN TELANGANA.

**INTRODUCTION:** Self- medication with over- the- counter drugs is more common among medicine and health science students. For safe use of OTC medications, students are expected to have proper Knowledge, Attitude and Practice (KAP) towards OTC medications and subsequent adverse drug reactions (ADRs).

#### **MATERIALS AND METHODS:**

- Study Tool: Questionnaire on knowledge, attitude and practice
- Study design: Cross sectional comparative study
- Study Subjects: Undergraduate students.
- Inclusion Criteria: Under graduate students who are willing to participate in study.
- **Exclusion criteria**: Under graduate students who are not willing to participate in study.
- Sample size: 220 undergraduate students.
- **Period of study**: 3 months after institutional ethical committee approval.
- Methodology:
- A cross- sectional study to be conducted at Osmania medical college, Hyderabad.
- A pre validated questionnaire to be circulated among under graduate students. Data to be collected, analysed and present in a tabulated form.
- Statistical Analysis: The observations and data are tabulated and percentages are calculated using SPSS software.

**RESULTS & DISCUSSION**: Out of 220 respondents, 78%were MBBS and 20% were BSc nursing undergraduates. 91.9% responded that OTC drugs are easily accessible and can be taken for minor illnesses.

**CONCLUSION**: Young medical students are among the most vulnerable to self-medication because of their higher educational level and ability to find information about medications through the Internet. Beside this, the other reasons for the practice of self-medication are like: suffering from a mild illness, having previous experience in treating similar illnesses, economic, advertising of drug manufacturers, excessive accessibility and availability of OTC medications. Chances of medication errors are high by use of OTC drugs if proper knowledge is not there.



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### A RETROSPECTIVE STUDY ON PRESCRIPTION AUDIT IN A TERTIARY CARE TEACHING HOSPITAL, HYDERABAD, TELANGANA.

**INTRODUCTION:** According to WHO, "Rational use of drugs requires that patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements for an adequate period of time.

**OBJECTIVES:** 1) Assessment of quality of medical care. 2) Quantifying and describing the appropriateness of medical care by measuring the WHO core prescribing indicators. 3) Assessment of rational prescription pattern.

#### **MATERIALS & METHODS:**

**Study design**: Retrospective observational study.

Study Subjects: 200 random inpatient department prescriptions were included.

**Inclusion Criteria**: Prescription records of 200 patients admitted in IPD of medicine, Surgery wards were collected

Exclusion Criteria: Out-patient department prescription records of medicine, surgery

Sample Size :200 IPD prescriptions

**Duration of study**: 3 months after institutional ethical committee approval

Place of Study: Osmania General Hospital , Koti , Hyderabad.

**Methodology**: After obtaining permission from institutional ethics committee, consent from Superintendent of Osmania General Hospital was taken to go through records at Medical Records Department. The inpatient case records of 200 patients selected randomly were analysed for the demographic data and prescribing patterns. The data from each prescription were recorded methodically on an excel Sheet

Statistical Analysis: Data were analysed by Microsoft excel

**RESULTS & DISCUSSION:** Data was randomly collected. A Standard checklist was used for the Audit process. The study shows that out of 200 prescriptions, percentage of compliance in respect of (a) consultant name mentioned 95%, (b)patient name, age, date of admission ,provisional diagnosis mentioned 100%(c)drug compliance 76.8% (d)drugs written in capitals, dosage, strength, route of administration mentioned were 46.5%,89%,67%,90%,96% respectively.

CONCLUSION: By doing prescription audit we identified the errors in prescription cards and the actual cause of the errors, and provide outline the rational use of drugs



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### INVITRO ANTIOXIDANT PROPERTY AND ANTI CANCER PROPERTY OF DIFFERENT TRIHYDROXY FLAVONES AN EXPERIMENTAL STUDY

**BACKGROUND AND AIM:** Antioxidant and anticancer properties of several new Trihydroxy flavones have to be explored. Hence this study was conducted to assess the above properties of newer compounds like 3,7,3'Trihydroxy flavone, 7,3',4'Trihydroxy flavone and 6,3'4'Trihydroxy flavone.

**METHODS:** This study was approved by IEC and conducted in the department of Pharmacology in Meenakshi medical college Hospital and Research Institute during the March to July 2023. 2,2-diphenyl-1-picrylhydrazyl (DPPH), 2,2'-azino-bis(3-ethylbenzothiazoline-6-sulphonic acid (ABTS) and Cell viability (MTT) assay were performed to assess the antioxidant and anticancer properties. The data were presented as Mean and the values for IC50 were derived from the plots of the linear regression using SPSS 21 version. To evaluate mean differences at the p < 0.05 as significance, two-way ANOVA was utilised.

**RESULTS:** Based on the DPPH, ABTS scavenging effect and percentage of inhibition were found to be respectively high compared with the standards. In24 hours MTT assay compared with control all three compounds exhibited statistically significant difference at concentrations of 100, 150, 200, 250 and 300g/ml and at 50g/ml concentration the 3, 7', 3'Trihydroxy flavone alone was found to be similar to control.

**CONCLUSION:** We conclude that all three compounds are effective as anti oxidant and anti cancer agents.

#### Dr. S. Shravanthi.

#### Osmania Medical College, Hyderabad

A STUDY TO ASSESS KNOWLEDGE, ATTITUDE AND PRACTICE ON DRUG INTERACTIONS AMONG POST GRADUATES IN A TERTIARY CARE TEACHING HOSPITAL, TELANGANA.

**INTRODUCTION:** Drug interactions are responsible for 6-30% of all adverse drug reactions and 2.8% of all ADR related hospital admissions per year.

Thorough drug H/o of the patient, re-evaluate polypharmacy in elderly, newer approach's to check drug interactions by using online softwares can help prevent ADR resulting from drug interactions.

AIM: To assess knowledge ,attitude,Practice of drug interactions among Post graduates

Primary objective is to assess the awareness about identifying and reporting of drug interactions among Postgraduates

Secondary objective is to assess the knowledge among Postgraduates about methods to prevent Drug interactions.

METHODOLOGY: A cross sectional questionnaire based study was conducted at Osmania general hospital after Ethics approval .Prevalidated questionnaire was circulated among 120 Postgraduates of medicine , psychiatry, general surgery and ENT departments.A total of 30 questions included demographics,6 knowledge,7 attitude and 17 practice based questions .From Google spreadsheets, data was made to Excel sheets and then analysis was done using EPI INFO software.Chi square test and 't' test were used to compare variables with p value less than 0.05 was considered statistically significant.

**RESULTS:** Out of 106 responses 58.5% were females,41.5% were males, mean age-28.45 years, 91.5% of postgraduates had good knowledge,88.7% had positive attitude and 58% had good practice skills. Awareness of identifying & reporting of drug interactions is more among medical and psychiatric departments. Overall only 47% of postgraduates had knowledge about the methods to prevent Drug interactions.

**DISCUSSION:** Poor knowledge about the methods to prevent drug interactions and moderate practice skills were observed among the postgraduates.

**CONCLUSION**: Drug interactions monitoring program should be initiated and strengthened

Educational interventions should include seminars, CMEs, Workshops on drug interactions among postgraduates for better safety and patients well being .



## Dr Asma Fathima, Post graduate, Kamineni Institute of Medical Sciences, Narketpally, Nalgonda,

### DRUG UTILIZATION STUDY IN POST OPERATIVE WARD PATIENTS IN DEPARTMENT OF SURGERY IN A TERTIARY CARE HOSPITAL.

**INTRODUCTION:** Drug therapy is one of the main components for the patient care management in health care settings. Drug utilization study is a structured process which is used to assess the quality of drug therapy by engaging in the evaluation of data on drug prescription and patient use. The main aim of drug utilization research is to facilitate the rational use of drugs in the population.

**OBJECTIVES:** The main objective of our research was to evaluate the drug utilization patterns according to World Health Organization (WHO) indicators in post operative ward patients in the surgery department.

**METHODS:** A prospective observational study was conducted in the post operative patients in the surgery ward of a tertiary care hospital. Prescriptions from medical records of 50 post operative patients from POD 0 – POD 4 were analysed with the help of WHO core indicators. The results were tabulated.

**RESULT:** Largest proportion of patients were male. The average number of drugs per encounter was 7.04 with a range of 3-12. Most commonly prescribed drugs were pantoprazole (97.8%), metronidazole (54%), ceftriaxone (42%), cefixime (34%), paracetamol (68%), normal saline and ringers lactate.

**CONCLUSION:** Our study gave an in general pattern about the use of drugs in post operative patients in the surgery department. Over utilization of antibiotics was noted. Generic drug prescribing was low and needed improvement. Prescribing from EDL was good in this hospital.

**KEY WORDS:** Drug utilization study, Post operative ward, Surgery department, WHO indicators.



## Dr Neeraj Sadiq Associate Professor Deccan College of Medical Sciences

### KNOWLEDGE, ATTITUDE AND PRACTICE OF HEALTHCARE PROFESSIONALS TOWARDS MATERIOVIGILANCE

**INTRODUCTION:** Materio-vigilance is the coordinated system of identification, collection, reporting, and analysis of any untoward occurrences associated with the use of medical devices and protection of patient's health by preventing its recurrences.

Adverse drug effects which occur due to a drug are recorded as pharmacovigilance, there was no system to record adverse effects due to medical devices till recently

The aim of the study was to assess the knowledge, attitude, and practice (KAP) of materiovigilance among health care professionals.

**METHODS**: this was a cross-sectional observational, questionnaire based study conducted among MBBS students, interns, faculty members, technicians, nurses.

Study period: May 2023-August 2023. A structured based questionnaire in the English language was prepared to collect the relevant data of the study variables. The questionnaire contained a total of 15 questions related to KAP aspects of the materiovigilance. The questionnaire was distributed to the study participants and also google form based questionnaire in a tertiary care teaching hospital and medical college in Hyderabad and their responses were collected after taking consent.

Inclusion criteria: all health professional who voluntarily participated

Exclusion criteria: all those who were absent and did not answer all the questions. Descriptive statistics was calculated using R language. Satistical significance was also calculated.

**RESULTS:** the questionnaire was distributed to out of 250 health professionals 230 participated, consent was taken earlier and participation was voluntary

The majority of the participants 75% believed that medical device can cause adverse events. very few 30% have reported it during their practice.the results showed health professionals need to improve their skills in persuit of knowledge, attitude and practice of Materiovigilance

**DISCUSSION**: for ages medical devices have been used and the concept of Materiovigilance is relatively new and we need to create awareness .In a study done by Krutika and Rajendran The transition of adequate knowledge and positive attitude to good practice of MDAE reporting was lacking among the study participants.

KEYWORDS: materiovigilance ,questionnaire, medical students, medical device, adverse effects



### Dr.Guduru Narayana Prudhvi Raj Osmania Medical College, Hyderabad

## ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE OF UNDERGRADUATE MEDICAL STUDENTS TOWARDS ANTIMICROBIAL STEWARDSHIP IN A TEACHING HOSPITAL IN TELANGANA

**INTRODUCTION:** Antimicrobial stewardship describes the practice of promoting the selection of the appropriate drug, dosage, route, and duration of antimicrobial therapy. In an era of increasing prevalence of multi-drug resistant bacteria and with a substantial amount of inappropriate antimicrobial use, there is a need for rational antimicrobial prescribing. Thus, future medical professionals have to be prepared appropriately in order to face the challenges of antimicrobial use in everyday clinical practice.

#### **MATERIALS AND METHODS:**

**Study Tool**: A Pre-validated questionnaire on Knowledge, Attitude, Practice in a google form.

**Study design**: Cross sectional comparative study **Study Subjects**: Medical Undergraduate Students.

Inclusion Criteria: Medical Undergraduate Students who are willing to participate in the

study.

Exclusion criteria: Medical Undergraduate Students who are not willing to participate in the

study.

**Sample size**: 240 undergraduate students. **Period of study**: 3 months after IEC approval.

Methodology:

- A Cross sectional study was conducted at Osmania Medical College, Hyderabad.
- A pre validated questionnaire was circulated among the under graduate students.
- Data was collected, analysed and presented in a tabulated form.
- Statistical Analysis: The observations and data are tabulated and percentages are calculated using SPSS software.

**RESULTS & DISCUSSION**: Out of 240 respondents, 91.8% have proper knowledge about antibiotics and resistance; while small number of responders showed confusion about use during viral infection, during cough & cold. 31.5% of responders were taking antibiotics as a self-medication.

**CONCLUSION**: This study revealed that most of the undergraduates were well aware about the emerging problem of antimicrobial resistance. However, responses related to their attitude and practices were quite varied. Hence, further educational interventions are needed to improve their practices towards antibiotics use.



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## DRUG UTILISATION STUDY OF CORTICOSTEROIDS USE IN DEPARTMENT OF DERMATOLOGY IN A TERTIARY CARE TEACHING HOSPITAL – CROSS-SECTIONAL STUDY

**INTRODUCTION:** Corticosteroids are used to treat a variety of disorders including urticaria, pemphigus vulgaris, FDE, eczema, psoriasis, and atopic dermatitis by reducing inflammation and inhibiting immune system. They are widely used alone or in combination with other medications. The modern era of dermatotherapy began with the introduction of topical corticosteroids. Despite their wide role in treating dermatological diseases, improper and prolonged use, puts a patient at risk.

**NEED OF THE STUDY**: Drug utilization is one of the tools to provide an insight to the prescriber regarding various disease patterns in the region & trends in their utilization. As a result, the present study aims at observing the prescriptions, in relation to 1) demographic details and disease conditions. 2) To observe the concomitant drugs used with steroids and steroid FDCs.

**METHODOLOGY:** A Cross-sectional study from dermatology OP was conducted for 3 months after getting approval from IEC. Prescriptions with Purposive sampling method have been collected. I created WhatsApp group for all the 4 units of PGs, they used to post the prescriptions. Prescriptions with corticosteroids specifically for dermatological conditions has been included. Exclusion criteria - systemic diseases.

**RESULTS:** A total of 126 prescriptions analysis, 60% prescriptions are females of which 33% belongs to 19-40 yrs age group. Total no. of steroids prescribed were 154 for diseases majority for eczema followed by dermatitis, miliaria, hypersensitivity etc. 87% found to be topical steroids in which cream formulations are widely prescribed & 15% constitutes FDC's. Avg no. of steroids per prescription were 1.5%, 86% of prescriptions included 3-5 drugs.38 % steroids are prescribed for a duration of 2weeks. Major class of potency prescribed were of medium (mometasone). Concomitant medications majorly prescribed are antihistaminics.

**CONCLUSION:** DUS provides an insight into the dermatological disease pattern and is mainly focused on drug prescribing pattern of corticosteroids in dermatology. In this study majority medium class of potency are used for a duration of 2 weeks which minimises the risk of adverse effects. This study had some limitations regarding defined daily dose for oral steroids which can be expressed with the extension of study.



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# RETROSPECTIVE CHART ANALYSIS OF ANTIBIOTIC UTILIZATION PATTERNS IN PAEDIATRIC PATIENTS WITH URINARY TRACT INFECTION

# **INTRODUCTION:**

Urinary tract infections (UTIs) are common and recurrent in paediatric patients. Often, children receive antibiotics empirically for pyuria, without adequate evaluation for UTI. The objectives of this study were to evaluate the empirical antibiotic utilization in children younger than 15 years of age with UTI.

### **METHODS:**

The records of 60 children aged 1 to 15 years who attended the paediatric department with UTI were evaluated. Data on age, gender, clinical diagnosis, and antibiotic usage were analysed.

# **RESULTS**:

Of the 60 children with UTI, 22 (36.6%) were younger than 5 years old and 38 (63.3%) were older than 5 years old. There were 28 (46.6%) males and 32 (53.3%) females. Of the children with UTI, 12/60 (20%) had a positive urine culture report. E. coli was the most common organism seen in the cultures. The antibiotic utilization patterns observed in this study were amikacin 21%, Cotrimoxazole 25%, cefotaxime 13%, ofloxacin 24% cases.

# **CONCLUSION**:

In conclusion, this study found that the most common antibiotic utilization patterns in children with UTI were amikacin, cotrimoxazole, ceftriaxone, and ofloxacin. E. coli was the most common organism seen in the cultures. The results of this study suggest that there is a need for more targeted antibiotic use in children with UTI.

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# A STUDY ON ASSESSMENT OF KNOWLEDGE, ATTITUDE & PRACTICES RELATED TO EVIDENCE-BASED MEDICINE AMONG MEDICAL POSTGRADUATES

# **BACKGROUND**

Evidence-based medicine (EBM) is defined as "the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients." It is a widely accepted scientific advancement in clinical settings that helps achieve better, safer, and more cost-effective healthcare. The knowledge and attitude of healthcare providers towards EBM have an essential effect on their practice of EBM.

**AIM:** To assess the knowledge, attitude and practices related to Evidence-Based Medicine among medical postgraduates.

# **MATERIALS AND METHODS:**

This is an observational study, done in 250 participants who are postgraduate students in various departments of Andhra Medical College, Visakhapatnam. This study was done in August 2023. A pre-structured, validated questionnaire - Noor Evidence Based Medicine questionnaire - was given to the participants and their responses are collected. The data was analysed with Microsoft Excel 2021 and represented in counts and percentages.

### **RESULTS**

Total 183 postgraduates responded to the given questionnaire, with a response rate of 73.2%. The overall mean scores of knowledge, attitude and practice of EBM were 65.12%, 70.29% and 50.86%, respectively. The participants displayed low level of awareness of resources and statistical terms used in EBM.

# **CONCLUSION**

From our study, we could conclude that medical postgraduates have moderate knowledge, neutral attitude and poor practices in terms of Evidence-Based Medicine. This calls for conduction of sensitisation programmes and improved access to high quality resources to shift from opinion-based practice to evidence-based practice.



# POSTER PRESENTATION

ABSTRACTS





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# A STUDY TO ASSESS KNOWLEDGE ATTITIUDE AND PRACTICE OF MATERIOVIGILANCE AMONG HEALTH CARE PROFESSIONALS IN GANDHI HOSPITAL, TELANGANA.

# **Background and Objective:**

Adverse events involving medical devices (MDAEs) are known to have serious consequences, hence post-marketing surveillance is essential in order to ensure the quality and monitor the performance and safety of medical devices. The first step in achieving this is for health care workers to be aware of Materiovigilance and MDAEs. Although Materiovigilance program in India was started years ago, there were underreported adverse events occurred due to medical devices So, the current study was conducted in order to evaluate KAP of Materiovigilance among health care professionals.

### Materials and methods:

This is a cross-sectional study conducted among health care professionals (PG &UG medical students, Senior Residents & Nurses). A self-administered, validated questionnaire consisting of 20 questions was distributed to them. Details and purpose of the study were explained to the health-care professionals and questionnaire was sent to the participants through Google forms link. The KAP of health care professionals were statistically analysed by using SPSS software.

### **Results:**

Out of 353 participants a total of 216 participants responded. Nearly 64.4% of the participants had an idea about MVPI. Most of the participants do not know how to report an adverse event occurred due to medical device. <2% of the participants had reported the events occurred due to medical devices. Whereas, 85.9% of the participants were willing to report a medical device induced adverse event in future to enhance patient safety.

### **Conclusion:**

Participants in the current study showed optimism despite having insufficient knowledge about reporting of adverse events due to medical devices. There is a need to hold regular seminars, workshops, CMEs and training sessions to encourage doctors to practice spontaneous reporting. Additionally, Materiovigilance needs to be incorporated into undergraduate or graduate curriculum to strengthen nation's healthcare and welfare systems.



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KNOWLEDGE, ATTITUDES AND PRACTICES RELATED TO SELF MEDICATION WITH ANTIBIOTICS AMONG NURSING STUDENTS IN A TERTIARY CARE HOSPITAL.

# **BACKGROUND**

Antibiotics are invaluable tools in modern medicine, effectively combating bacterial infections and saving countless lives. However, the misuse and overuse of antibiotics have led to the development of antibiotic-resistant bacteria, a global health crisis that threatens the effectiveness of existing treatments. One significant contributor to this issue is the practice of self-medication with antibiotics, where individuals use these drugs without proper medical guidance or prescription. Nursing students, as future healthcare professionals, play a pivotal role in curbing antibiotic misuse both as potential perpetrators and as advocates for responsible antibiotic usage.

**AIM:** To assess the knowledge, attitude and practice of self medication with antibiotics among nursing students.

# **MATERIALS AND METHODS:**

This is an observational study, done in 120 participants who are nursing students of Government Nursing College, Visakhapatnam. This study was done in August 2023. A structured questionnaire is prepared and given to the participants and their responses are collected. The data is analysed with Microsoft Excel 2021 and represented in counts and percentages.

### **RESULTS**

Total 120 nursing students responded to given questionnaire. Among them 79.1% were practicing self medication with antibiotics. On average 85% of nursing students gave correct responses for knowledge based questions, which shows they have adequate knowledge about use of antibiotics. Their attitude toward self medication practices is positive, 43.4% believe that self medication practice is not safe. Their practices toward self medication is concerning, 79% are self medicating with antibiotics. The reason being convenience(60%).

# **CONCLUSION**

This study shows that awareness about self medication with antibiotics is less among nursing students. This calls for conduction of sensitisation programmes about self medication with antibiotics as it can lead to resistance. There is also need for similar studies with larger sample size.



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# KNOWLEDGE, ATTITUDES AND PRACTICE REGARDING ANTIBIOTICS USE AMONG MEDICAL STUDENTS IN GOVERNMENT MEDICAL COLLEGE, SIDDIPET

**Background:** The present study aims to investigate the knowledge and attitudes towards antibiotics among medical students in government medical college, siddipet. The influence of knowledge and attitude on the propensity to use antibiotics without a prescription need to be investigated.

**Methods:** Students were enrolled in the study during the 2023–2024 academic year. Study participants were asked to complete an online questionnaire that measured their knowledge, attitudes and practice (KAP) towards antibiotic use and antibiotic resistance. The KAP of students were statistically analysed using Kruskall-Wallis statistics, Mann-Whitney U statistics, and Spearman's rho. The influence of knowledge and attitude on the propensity to use antibiotics without a prescription were investigated.

**Results:** In total, 144 students completed the survey, 65% of which were female. The mean age of the students was 21.5 years. The results showed that medical students were significantly knowledgeable about antimicrobials but were lacking in their effectiveness against various pathogenic organisms. Medical students were well aware of how antibiotic resistance develops but were not knowledgeable on their role as healthcare personnel in implementing measures against resistance. Appropriate antibiotic use among the student community correlated with study year, highlighting the importance of knowledge and education in the prevention of antibiotic resistance. Attitude was found to be a contributing factor in students tendency to use antibiotics without a prescription.

**Conclusion:** This study emphasises the significance of including antimicrobial knowledge in the education of future physicians.

Keywords: Knowledge, Attitudes, Personality, Students, Antibiotics, Survey



# Dr. T Phani Kumar Dunga<sup>1</sup>, Dr. P. Usha Kiran<sup>2</sup> <sup>1</sup>Second year Junior Resident. <sup>2</sup>Professor & HOD Department of Pharmacology, Rangaraya Medical College, Kakinada.

# A CASE REPORT ON ORBITAL MYOSITIS DUE TO IRRATIONAL USE OF POST-CYCLE THERAPY FOR ANABOLIC STEROIDS

**Introduction:** Post-cycle therapy (PCT) is a combination of drugs used to reduce the effects of anabolic steroids and assists in the restoration of testosterone to a natural level, reduction of estrogen levels, and keeping muscle mass and gain. In the PCT tab. Clomiphene citrate 50mg OD, tab. Tamoxifen 20mg OD, inj. hCG 2000 Units (weekly twice intramuscularly) were used for 4 weeks. Orbital myositis is a rare ocular manifestation that represents a subgroup within idiopathic orbital inflammatory syndrome where single or multiple extra ocular eye muscles are involved and present with painful eye movements and protrusion of the eyeball.

Case report: A 22-year male gym trainer came to ophthalmology outpatient department on 15<sup>th</sup> July 2023 with chief complaint of pain and protrusion of the left eye for 4 months. He had a history of illegal use of anabolic steroids for 5 months (Oct-2021-Feb-2022) followed by irrational use of post-cycle therapy for 1 month (Dec-2022). On examination, Nafziger's sign is positive and there is an increase in margin-to-reflex distance and palpebral fissure height, with normal intra-ocular pressure and fundus examination. MRI Brain and Orbit suggested myositis involving the left superior rectus and left superior oblique with mild changes of cellulitis which is more inflammatory than infective. Now, he is on Tab. Prednisolone 30mg andBD.

**Discussion:** Orbital myositis is a very rare complication with an unknown pathophysiology observed with post-cycle therapy drugs. To date, 601 eye disorders were reported with clomiphene citrate and 1924 cases with tamoxifen to WHO vigiacess but no case was reported for orbital myositis. According to World Health Organization's causality assessment scale, it is a "possible" association.

**Conclusion**: Illegal use of anabolic steroids should be avoided and adverse events after using steroids and PCT should be educated to all athletes.

**Keywords:** Post-cycle therapy, orbital myositis, clomiphene citrate, Tamoxifen.

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A QUESTIONNAIRE-BASED STUDY ON PHARMACOGENOMICS AWARENESS AMONG THE MBBS STUDENTS, INTERNS, POST GRADUATES AND PHYSICIANS; A CROSS SECTIONAL STUDY FROM ANDHRA PRADESH, TAMILNADU AND TELANGANA.

**Background:** Pharmacogenomics (PG) is a modern tool of personalising treatment protocols to improve the efficacy and safety of drug prescriptions. These benefits are offset by a slow uptake in clinical application due to a host of physician factors, patient factors and/or health system factors. Pharmacogenomics (PGx) is essential for optimizing drug therapy and reducing unwanted drug side effects. Our aim was to determine the knowledge, attitude and practice among MBBS students, Interns ,Post Graduates and physicians.

**Methods:** A descriptive, cross-sectional study was conducted. A pre-validated questionnaire was sent through Google forms to 400 participants A validated and pilot-tested structured questionnaire was administered to respondents to assess their knowledge, attitude, and practice regarding PGx. A scoring system for each dimension assessed was calculated and presented using means. Mean scores were compared by sociodemographic and professional variables. Descriptive statistics and multivariate logistic regression model were used to describe the results of the study. A *p*-value of less than 0.05 was considered statistically significant.

**Results:** Among 400 participants till 213 were responded .Still more responses are yet to receive..Till now 48% respondents are from Andhra pradesh ,31% are from Tamilnadu and 21% are from Telangana.46% Post graduates ,41% MBBS students and interns and 13% physicians have responded till now . Among the responders 69.7% are between 26-30 yrs of age . There is significant differences in responses by seniority levels evident (P = .03).

**Conclusion:** This study states that medical students ,interns ,Post Graduates and physicians have average knowledge and strong attitude towards pharmacogenomics. So we strongly recommends adopting a comprehensive educational strategy that aims to integrate PG concepts into medical curricula, and promote the culture of continuous medical education about PG among practitioners.



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# PERCEPTION OF TELEMEDICINE AMONGST INTERNS AND RESIDENTS IN A TERTIARY CARE HOSPITAL

**Background:** During Covid-19 pandemic, telemedicine has gained importance as it delivered long-distance healthcare services to patients using web based resources, due to quarantine restrictions. Hence, the present study assessed the attitude and practice of interns and residents towards telemedicine.

**Materials and methods:** After obtaining the approval from Institutional Ethics Committee, a Cross-sectional and questionnaire-based study was conducted over a period of 2 months among the interns and residents working in a tertiary care hospital. A validated, questionnaire consisting of 25 questions was administered. Descriptive statistics and chi-square test were used to analyse the data.

**Results:** Among 150 interns and residents, 111 responded with 74 % response rate. Majority (57.6%) were males. Interns were 61.8% and 38.8% were residents. Even though, majority of the participants in both the groups were aware of applications, advantages and disadvantages of Telemedicine, only very few (16% of the residents) were aware of the guidelines pertaining to telemedicine. Majority of interns (83.5%) and residents (70.4%) believed that telemedicine provides the same level of quality of care as traditional medicine. Very few residents (31.8%) used telemedicine services during Covid 19 pandemic in view of avoidance of physical contact. Only 23.8% of interns and 41% of residents have received formal education on Telemedicine.73.1% of interns and 65.9% of residents were willing to refer telemedicine applications to friends and peers.

**Conclusion:** Although majority of the study participants were aware of the applications, advantages, disadvantages of telemedicine, only a very few of them were aware of the guidelines and have utilised the telemedicine services properly due to lack of formal education and training. Hence there is a need to inculcate telemedicine into undergraduate curriculum and conduct periodic CMEs and workshops for residents and interns.

Key words: Telemedicine. Covid -19 Pandemic, Residents, Interns



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# ANALYSIS OF THE NATIONAL LIST OF ESSENTIAL MEDICINES 2022: HITS AND MISSES

**Introduction:** Essential medicines are those that satisfy the "priority health care needs" of the population. Essential Medicines are selected based on efficacy and safety and comparative cost-effectiveness with due regards to public health relevance. The essential medicine list (EML) was created with the intention of ensuring that certain medications are accessible in sufficient quantities, in the proper dosage forms and strengths, and with guaranteed quality. For a country like India, with limited resources this is obviously important.

**Materials and Methods:** In this article, we analyzed the recently approved National list of essential medicine (NLEM) 2022 of India NLEM 2022, which had quite significant changes as compared with NLEM 2015.

**Results:** As compared to NLEM 2015, 26 drugs were deleted while 34 drugs were newly added making the NLEM 2022, a list of 384 drugs. The list of drugs that were deleted and Added. In NLEM 2015, there were 30 therapeutic sections, which have been reduced to 27 sections in NLEM 2022.

**Discussion:** The creation of NLEM 2022 followed a process which is like that adopted for NLEM 2015 includes numerous rounds of meetings with subject matter experts, various stakeholders, including non-governmental organizations (NGOs), patient groups, civil societies, the pharmaceutical industry, manufacturing associations, concerned government departments and organizations. The NLEM 2022 has been modified with new sections and subsections being added, thus helping in better classification of therapeutic classes of drugs.

Conclusion: NLEM 2022 guides the public sector in terms of drug procurement and supply and influences prescribing trends globally. While thorough reviews involving numerous stakeholders may enhance evidence-based policies, keeping up with new research involves developing a system that is technologically sound and can guarantee that the EML is updated on a regular basis.

**Keywords:** Cost-effectiveness, National List of Essential Medicine, National Pharmaceutical Pricing Authority



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# EFFICACY AND SAFETY OF NANOCRYSTALLINE SILVER WITH COLLAGEN CREAM BASE IN PATIENTS WITH SUPERFICIAL BURNS - A CASE STUDY

**BACKGROUND:** Burns are major public health issue with high mortality. Conventional burn wound dressings have been proven to promote the development of bacterial resistance and impair re-epithelization. Advances in the field of nanotechnology helped us to provide a new form of silver delivery system. Nanosilver particles have no local and systemic toxicity and it facilitates the phagocytosis of microorganisms, adding collagen as a cream base may improve antibacterial effect and wound healing.

**AIM:** To Study the effectiveness and safety of nanocrystalline silver with collagen cream base for superficial burn wounds at a tertiary care hospital.

**METHODOLOGY:** A 55 year old male patient was admitted with superficial and superficial partial thickness electrical burns about 30% TBSA. The burns were cleaned, and then a cream containing nanocrystalline silver and collagen was applied. After carefully cleaning the wound, the same measures were carried out each day until the wound was healed. Serial images of the wound were taken during the study period.

**RESULTS:** From our observations, by third day, there had been a reasonable level of debridement. On day 10, necrotic debris had been cleared from the wounds, and on day 14, some epithelialization had begun to appear. Healing of the burns was achieved within 21 days. No adverse events were observed.

**CONCLUSION:** These findings suggest that the addition of collagen cream base to nanocrystalline silver improved both antibacterial activity and wound healing.



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# KNOWLEDGE, ATTITUDE AND PRACTICES OF MATERIOVIGILANCE AMONG HEALTH CARE PROFESSIONALS – A COMPREHENSIVE STUDY

**Background:** There is a rising importance of medical devices in health care delivery for diagnosis and treatment. But, as the Postmarketing surveillance for medical devices is not adequate, India has established its own post marketing surveillance system under Materiovigilance Programme of India (MvPI). Health Care Professionals (HCPs) play a significant role in reporting Medical Device associated Adverse Events (MDAEs) but various studies done on materiovigilance have shown an underreporting of MDAEs by HCPs. Present study aims at assessing the current knowledge, attitudes and practices of reporting MDAEs among Health Care Professionals at a tertiary care hospital.

Materials & Methods: A cross sectional, questionnaire based study with a total of 38 questions on knowledge, attitudes and practices of materiovigilance was done among Medical Faculty, Post Graduates and Nursing staff working at a tertiary care hospital.

**Results:** The questionnaire was administered to 160 Health Care Professionals out of which 133 responded constituting an 83.12% response rate including medical faculty (n=42), residents (n=46) and nursing staff (n=45). The mean knowledge score of medical faculty, residents and nursing staff was 6.5, 5.9 and 5.1 respectively. 78.4% (n=104) of the participants believed that HCPs are obliged to report MDAEs; however, only 18.91% (n=25) of them have reported it during their practice.

**Conclusion:** Due to lack of adequate knowledge and practices of MDAE reporting among study participants, there is a need to conduct periodical workshops and training sessions for HCPs to make them aware of the materiovigilance and to enhance their reporting of MDAEs.

# **Keywords:**

Medical Device-associated Adverse Events, Health Care Professionals, Reporting.



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### ACECLOFENAC-INDUCED FIXED DRUG ERUPTION.

### **Introduction:**

Aceclofenac is an oral non-steroidal anti-inflammatory drug with anti-inflammatory & analgesic properties. It acts by inhibiting the activity of cyclooxygenase 1 (COX -1) & cyclooxygenase 2 (COX-2) by inhibiting the synthesis of prostaglandin E2 (PGE2), prostacyclin's, and thromboxanes. Among the NSAIDs, the most common adverse reaction caused by Aceclofenac is fixed drug eruption. Fixed drug eruption (FDE) is a recurrent well-defined lesion that occurs at the same site each time the offending drug is taken.

# Case report:

A 40-year-old female took the tablet Aceclofenac 500mg for myalgia twice a day. On the second day of treatment, she came to dermatology OPD with multiple hyperpigmentation all over the body. Multiple itchy hyperpigmentation over the upper lip, hard palate & right knee. Dechallenge test was positive. Rechallenge test was not done due to ethical constraints. Tablet aceclofenac was stopped she was treated with a tablet of prednisolone 20 mg OD, a tablet Pantoprazole 40 mg OD, Tablet Cetirizine 10 mg OD. A total of 114 cases of Aceclofenac-induced FDE were reported to WHO. It comes under "Probable" according to the WHO UMC causality assessment scale. This reaction was reported to AMC with report number IN-IPC-300812188 & uploaded through Vigiflow.

### **Conclusion:**

FDE is a severe Dermatological adverse reaction mostly triggered by NSAIDs. Before prescribing NSAID physicians should be aware of patients' history & also be concerned about the adverse events of Aceclofenac to avoid prescription error. We can prescribe other safer drugs like selective Cox 2 inhibitors to avoid adverse events.

Keywords: fixed drug eruption, NSAIDs, Aceclofenac.



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ASSESSMENT OF KNOWLEDGE, ATTITUDE, AND PRACTICES REGARDING RATIONAL DRUG UTILIZATION AMONG UNDERGRADUATE MEDICAL STUDENTS AT GOVERNMENT MEDICAL COLLEGE SURYAPET, TELANGANA.

**Introduction:** Rational drug use refers to the precise administration of medications, including appropriate dosage, duration, clinical relevance and affordability. This study aims to assess the Knowledge, Attitude, and Practice (KAP) related to the rational utilization of medications.

**Methods:** The study involved 300 undergraduate medical students from Government Medical College Suryapet. Demographic information and KAP regarding medicine use were gathered through a structured questionnaire. Descriptive statistics, including percentages and frequencies, were used for data analysis.

**Results**: Socio-demographic data featured 18-20 years (60%), 20-23 years (30%), and >23 years (10%) age groups. Gender distribution was 45% male and 55% female. Year of study distribution was 30% 2nd year, 40% 3rd year, and 30% 4th year.

Knowledge: Seventy percent of students familiar with over the counter (OTC) medicines, only 40% were aware of OTC medicines can be safely taken with prescriptions, and 55% acknowledged price disparities among different brands of the same medicine. Notably, 65% knew precautions for geriatric medicine use. Approximately 75% were informed about medicine expiry periods.

Attitude: Sixty percent disagreed that costlier medicines are superior to cheaper ones, and 55% disagreed that medicines from foreign multinational companies are better. 70% disagreed that mass communication is ineffective for educating people about medicines, while 15% believed doctors can solely rely on pharmaceutical industry-provided information.

Practice: Eighty percent sought medical consultation before discontinuing medication, while 70% followed doctor's advice diligently. Merely 10% acquired medicines through direct-to-consumer advertising, and 15% reused prescriptions for comparable ailments in others.

**Conclusion:** The evaluation unveiled varying KAP levels concerning rational medicine use among undergraduate medical students. Thus, results emphasize the need for curriculum improvements and interventions to address gaps in their understanding and behaviours, contributing to better patient care.



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# ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICES OF ECOPHARMACOLOGY AMONG SENIOR RESIDENTS & POSTGRADUATES IN A TEACHING HOSPITAL

**Background:** Ecopharmacology is defined as study of the health hazards posed by discarded / used medicinal products in the environment. Improper disposal of these unused medicines has led to environmental contamination to an alarming extent and is a globally emerging issue. There are guidelines for pharmaceutical waste management (GMP, FDA) for manufacturing units, pharmacists & consumers. This study aims to assess the knowledge, attitude & practice of ecopharmacology among resident doctors of Guntur medical college

**Materials & Methods:** After prior approval from Institutional ethics committee & informed consent from participants, a Crosssectional study was conducted on a convenient sample of 250 residents, through a pre-validated structured online questionnaire. Statistical analysis was done and expressed in percentages

Results: Present study showed that 61.9% respondents had heard of term ecopharmacology (n=241). The fact that drugs appear in human excreta was known to majority (81.3%, n=196) but surprisingly not many students knew the fact that it could be a threat to environment and community, can be a reason for antibiotic resistance and cumulative toxicity. 96.2% (n=232) have positive attitude. The most common method of disposal was with household waste 52.6%(n=127), whereas 15.7% (n=38) dispose them in toilet. 63%(n=152) of residents reported stockpiling of drugs, most common reason was excess purchase of medicines. Many of the residents wereoff the opine that there should be strict implementation of guidelines for safe disposal of expired and unused drugs by the government & Creating awareness campaigns all over social media, setup of units and separate wing that take care of drug disposal

Conclusion: Poor level of knowledge about Ecopharmacology poses direct hazard to environment and indirect hazard to community. Attitude of medical personnel was very empathetic, but this is not transforming into practices. Gaps exist in knowledge and practices. Initiatives should be taken to spread awareness among medical professional by conducting workshops, conferences, seminars, CME, group discussion & newsletter. Government/Institution intervention for Drug take back programmes (returning of unused/Expired medicines to the pharmacy) is an absolute necessity

# **Keywords:**

Ecopharmacology, unused medicines, drug disposal



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# A STUDY OF PREVALENCE OF SELF MEDICATION PATTERN AMONG MEDICAL STUDENTS FOR PRIMARY DYSMENORRHEA

**INTRODUCTION:** Primary dysmenorrhoea, a common gynaecological disorder affecting nearly 50% of menstruating women is characterized by painful menstruation in the absence of any underlying pelvic pathology.

# **METHODOLOGY:**

Study design: Cross sectional descriptive study.

**Study Subjects**: Medical Undergraduate female Students.

**Inclusion Criteria**: Who are willing to participate in the study and give consent for the same, aged between 18-22 years, with at-least 4 painful menstrual cycles during the preceding six months.

**Exclusion Criteria**: Females aged <18 years or >24 years, with <4 painful menstrual cycles during preceding six months, with Secondary menorrhea Subjects receiving concomitant medications including antipsychotics, antidepressants, sedative hypnotics.

Duration of study: 3 months after institutional ethical committee approval

Place of Study: Osmania Medical College, Koti, Hyderabad.

**Method:** A Cross sectional descriptive study using a self-developed, objective and structure questionnaire as a tool, was conducted among medical students with Dysmenorrhoea and in the age group of 18-22yrs. Statistical analysis was done using Chi-Square test.

**RESULTS:** Out of 203 respondents 30% were self-medicated by using over the counter drugs and 70% were treated themselves by non-pharmacological methods like taking rest, applying hot fomentation on abdomen. Among the over-the-counter drugs 56% of them used single drug and 44% used combination of drugs. Most commonly used single drug was Mefenamic acid and most commonly used combination of drugs was mefenamic acid + dicyclomine hydrochloride. Out of those respondents taking OTC only 5% seeked gynaecologist advises. Significant number of students were taking rest losing attendance in their academics.

**CONCLUSION:** Primary Dysmenorrhoea is affecting young girls irrespective of regularity of cycles. The prevailing self-medication pattern is inappropriate, substantial proportion of girls have inadequate knowledge regarding treatment and need of gynaecologist consultation.



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ASSESSING KNOWLEDGE, ATTITUDE, AND PRACTICE OF PHARMACOVIGILANCE AND ADVERSE DRUG REACTION REPORTING AMONG UNDERGRADUATE MEDICAL STUDENTS: A CROSS-SECTIONAL STUDY

### **Introduction:**

Pharmacovigilance means detecting, assessing, and preventing adverse drug reactions (ADRs). This study examines the knowledge, attitudes, and practices (KAP) of medical undergraduates towards pharmacovigilance and ADR.

**Methods:** A cross-sectional survey evaluated 300 undergraduate medical students at Government Medical College, Suryapet, focusing on demographics and KAP regarding pharmacovigilance. Data interpretation employed descriptive statistics.

# **Results:**

Demographics: Participants were primarily aged 18-20 (62.3%) and 21-23 (37.7%), with a gender distribution of 48.3% males and 51.7% females. Most were in their 2nd or 3rd year (72.7%).

Knowledge: A significant 81.7% correctly identified ADRs. Pharmacovigilance's role in post-marketting surveillance was understood by 76.3%. Awareness of the National Centre for ADR Monitoring in Ghaziabad was at 71.8%. Most (95%) acknowledged the fatality risk in severe ADRs and healthcare professionals' reporting role (92%).

Attitudes: A strong inclination for mandatory ADR reporting (69.7%) and its positive impact on patient safety (86%) was evident. High percentages (95.3% and 91%) viewed ADR reporting as a professional obligation and an area where medical students can contribute.

Practices: Difficulties in ADR reporting were encountered by 62.7%, out of which one is unavailability of forms (35.7%) and other one is doctor-patient communication (27%). Awareness of immediate cessation of drug for severe ADRs was high (78.7%), and 66.3% had reported ADRs. Preferred reporting methods were via email or website (44.7%), with 42.3% prioritizing patient management over reporting.

### **Conclusion:**

The study revealed varying degree of knowledge, attitude, and practice in undergraduate medical students concerning pharmacovigilance and ADR reporting. Favourable views towards ADR reporting were noted. Tackling obstacles and improving education are crucial for equipping future healthcare workers to contribute meaningfully to patient safety.



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# EVALUATION OF HEALTH RELATED QUALITY OF LIFE (HRQOL) IN PATIENTS WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE IN A DISTRICT HOSPITAL

**BACKGROUND:** Chronic obstructive pulmonary disease (COPD) is a chronic inflammatory lung disease which causes obstructed airflow from the lungs and it is the fourth most frequent disease globally. It progressively impairs breathing capacity leading to impairment of daily activities, there by affecting health related quality of life (HRQOL). The present study determines the quality of life in COPD patients using and St George's Respiratory Questionnaire (SGRQ) and severity of airflow limitation by BODE index (Body mass index, Airflow obstruction, Dyspnoea and Exercise capacity)

**MATERIALS & METHODS:** A Prospective, Cross-sectional and observational study was carried out with 80 stable COPD (with post bronchodilator FEV1/ FVC < 70%) patients recruited over 2 months at a District hospital, Tenali. After performing spirometry, BODE index was used to calculate severity of airflow limitation for each patient and St George's Respiratory Questionnaire (SGRQ) to assess HRQOL.

**RESULTS:** It was observed that males (71%) were predominant and majority (72%) of the patients were in the age group 55-70yrs with moderate obstruction. Average BODE index score was found to be  $5.5 \pm 0.9$ . Diabetes Mellitus (76%) was the most common comorbidity. There was a significant increase in the symptom, activity and impact component scores and the total scores of the participants with worsening of COPD grade. The activity, impact component scores and total score showed an increasing trend with age. It was observed that frequent exacerbations, severity and duration of COPD with comorbidities (Hypertension, Diabetes mellitus and cardiovascular diseases), tobacco smoking, less physical activity which ultimately reduced the health related quality of life index of patients.

**CONCLUSION:** The current study shows that HRQOL is impaired in patients with COPD, and it deteriorates with increasing severity of the disease. Frequent exacerbations, advanced airway obstruction, and dyspnea severity had negative impact on HRQOL. These findings suggest that treatment of underlying comorbidities, increased physical activity and encouraging smoking cessation will assure better Health related quality of life for patients.

**KEYWORDS:** Chronic obstructive pulmonary disease, Quality of life, SGRQ, Forced expiratory volume.



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# A STUDY ON THE EFFECTIVENESS OF COMPUTER ASSISTED LEARNING AMONG II MBBS STUDENTS

**Introduction**: Laboratory based animal experiments is the basis of experimental Pharmacology. Ethical issues with animal use and rapid development of information technology have led to innovative teaching and learning methods such as audio-visual aids and Computer Assisted Learning (CAL). The present study aims to assess the effectiveness of CAL among II MBBS students in the experiment of "The effect of drugs on Rabbit's eye

**Methodology:** Pre-test and post-test questionnaire along with feedback was prepared and validated by the faculty of Pharmacology. All the II MBBS (n=200) students were given pre-test questionnaire after demonstrating the experiment by conventional teaching method and post- test questionnaire along with feedback after demonstrating with CAL. The response of the students was collected and analyzed. Feedback response was assessed using Likert scale and the analysis was done using Epi info (version 3.4.3)

**Results**: Out of 200 students ,90% have responded (n=180). There was statistical difference (P< 0.05 with 95% CI) in the average pretest (11.13±2.47) and post-test (13.40±1.56) scores. 90% of the students agreed that CAL was more interesting, 93% agreed that they had good visual impact and helps in the understanding the experiment, 87% agreed that CAL is more interactive and can be performed multiple times as per the necessity. 83% considered that CAL was better simulation to animal experiment.

**Conclusion**: Integrating conventional and CAL teaching methods improves the understanding ability, visual impact, and makes the session more interesting as well as interactive to students. It mainly improves the cognitive domain, and have not only advantages but few disadvantages like more expensive, technical issues like backing up and frequent upgrading.

**Keywords**: Computer Assisted Learning, Pharmacology, animal experiments, teaching methods

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# HYPOGLYCEMIC EVENTS AND RENAL FUNCTIONS WITH VILDAGLIPTIN VERSUS TENELIGLIPTIN IN DIABETIC PATIENTS: A PROSPECTIVE OBSERVATIONAL STUDY IN TERTIARY CARE HOSPITALS

**Introduction**: Dipeptidyl peptidase-4 (DPP-4) inhibitors, such as vildagliptin and teneligliptin, are commonly used for treating type 2 diabetes mellitus (T2DM). However, limited evidence exists comparing their effects on hypoglycemic events and renal function. This prospective observational study aimed to evaluate and compare the impact of vildagliptin and teneligliptin on hypoglycemic events and renal function in patients with T2DM.

**Materials and Methods**: A total of 500 patients with T2DM were enrolled and divided into the vildagliptin group (n=250) and the teneligliptin group (n=250). Baseline characteristics, including age, gender, duration of diabetes, BMI, HbA1c levels, and renal function parameters, were recorded. Changes in the incidence of hypoglycemic events and renal function were assessed as primary outcome measures.

**Results**: The mean age of participants was  $57.5 \pm 9.5$  years, with a mean duration of diabetes of  $8.4 \pm 3.4$  years. After a 24- week follow-up, both vildagliptin and teneligliptin significantly improved glycemic control, as evidenced by reduced HbA1c levels (p < 0.001). However, there was no significant difference in the change in HbA1c levels between the two groups (p = 0.284). Regarding hypoglycemic events, the incidence of hypoglycemia was low in both groups, with no significant difference between vildagliptin and teneligliptin (p = 0.679). Additionally, no significant differences were observed in renal function parameters, including serum creatinine levels (p = 0.424) and estimated glomerular filtration rate (eGFR) (p = 0.512), between the vildagliptin and teneligliptin groups.

**Conclusion**: Both vildagliptin and teneligliptin demonstrated comparable efficacy in glycemic control and renal safety profiles in patients with T2DM. Furthermore, the incidence and characteristics of hypoglycemic events were similar between the two treatment groups. These findings support the use of both vildagliptin and teneligliptin as safe and effective treatment options for patients with T2DM.



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# ANTI TUBERCULAR THERAPY INDUCED ERYTHRODERMA-A CASE REPORT IN TERTIARY CARE HOSPITAL

# INTRODUCTION

- Tuberculosis is a highly prevalent disease in india
- Anti Tubercular Therapy is the mainstay of treatment for tuberculosis.
- Inspite of implementation of DOTS under RNTCP, its prevalence rate is high in india
- In this report, we will discuss a case of 50 yrs old male patient diagnosed with erythroderma induced by Anti Tubercular Therapy.

### CASE REPORT

- A Male patient of 50yrs old, who is a known case of Pulmonary Tuberculosis on Anti-Tuberculosis Treatment since 60 days
- Patient was presented with redness, scaling and itching all over the body
- He was reported to the Dermatology OPD,GGH,Rangaraya Medical College,Kakinada
- No similar episodes in the past
- The case was diagnosed as Drug induced ERYTHRODERMA.Dechallenge was positive
- He was treated with tab Prednisolone,inj Avil and External application of Fusidic Acid and liquid paraffin
- In this case, Adverse Reaction with Anti Tubercular Therapy comes under possible, according to WHO Causality Assessment Scale
- This case reported to AMC with Report No-RMC-AMC/FEBRUARY-23/03 and uploaded to Vigiflow under expedited report.

# **DISCUSSION**

- 72 skin and subcutaneous adverse srug reactions related to Anti Tubercular Therapy were reported till now.
- Erythroderma is a severe inflammation of most of the body's skin surface. It causes redness and scaling of the skin
- Other drugs causing erythroderma pyrazalone derivatives, carbamazepine, hydantoin derivatives, cimetidine.

# **CONCLUSION**

- Anti tubercular therapy is used to treat tuberculosis.
- Health care professionals, patients must be educated about adverse reactions due to Anti tubercular therapy



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# EXPLORATION OF SELF-MEDICATION: EXAMINING KNOWLEDGE, ATTITUDES, AND PRACTICES AMONG UNDERGRADUATE MEDICAL STUDENTS – A CROSS-SECTIONAL STUDY

**Introduction:** Self-medication is widespread among medical students, impacting health outcomes. Understanding knowledge, attitudes, and practices (KAP) on self-medication among this population is essential to guide interventions for responsible medication use.

**Methods:** A cross-sectional study was conducted among 300 undergraduate medical students at Government Medical College Suryapet to assess their KAP towards self-medication using a structured questionnaire. Descriptive statistics were employed to analyse the data

**Results:** Demographic: The sample comprised 150 males and 150 females. Age distribution: 35%, 42%, and 23% were aged 18-20, 21-23, and above 23. Year of study distribution: 31%, 36%, and 33% in 2nd, 3rd, and 4th year. Approximately 3% reported that they have chronic medical illnesses.

**Knowledge:** Fifty four percent accurately defined self-medication. 62% acknowledged potential adverse effects in all medications. Furthermore, 57% stressed the importance of basic drug knowledge was essential for self-medication. While 65% correctly identified age-based self-medication limitations.41% suggested discontinuation if adverse effect appears. 73% comprehended risks associated with using medications with unknown substances

**Attitude:** Fifteen percent endorsed that all dosage ranges posed risks, and 20% strongly agreed that self-medication was unsafe across age groups. Further, 53% endorsed close symptom monitoring during self-medication, while 64% believed self-medication drugs could interact with other drugs and food. Additionally, 45% considered certain self-medication drugs unsafe during pregnancy.

**Practice:** Twenty nine percent admitted consuming medication without reading package inserts, 17% shared prescriptions with symptomatic peers. Additionally, 38% self-medicated without medical knowledge, and 21% extended self-medication without medical oversight. Cost-saving motivated 25%, while 18% were uncertain about prescription necessity. Moreover, 12% reported adverse effects from self-medication.

**Conclusion:** This study emphasizes the diverse KAP regarding self-medication among undergraduate medical students, with demographic-specific targeted educational interventions that can cultivate responsible self-medication practices, ensuring safe and effective medication use



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# QUETIAPINE INDUCED DYSTONIA – A CASE REPORT IN TERTIARY CARE HOSPITAL

# INTRODUCTION

- Quetiapine is a atypical nueroleptic and dopamine receptor antagonist.
- Used in the treatment of Schizhoprenia-effectively treats both the positive and negative symptoms of Schizhoprenia.
- In this report, we will discuss a case of 35 year old male patient clinically diagnosed with Quetiapine induced Dystonia

### CASE REPORT

- Patient had schizhoprenia, for which Quetiapine was given in government general Hospital, Kakinada, after few days developed Acute Dystonia. He was reported to Psychiatry OPD, GGH, Rangaraya Medical College, Kakinada..
- The case was diagnosed as Drug induced Acute Dystonia. Dechallenge was positive.
- Further Rechallenge with Quetiapine is not done in the interest of the patient safety and due to ethical constraints.
- He was treated with Inj Promethazine.
- In this case, Adverse drug reaction with Tab Quetipaine comes under Possible, according to WHO Causality Assessment Scale.
- The case reported to AMC with Report No RMC-AMC/AUGUST- IP no-202339042 and uploaded to Vigiflow under expedited report.

# **DISCUSSION**

- 531 cases of Dystonia associated with use of Quetiapine were reported to WHO,
- Acute Dystonia is one EPS characterized by involuntary contractions of muscles of the extremities, face that lead to abnormal movements.
- The potential cause of drug induced dystonia is the development of hypersenstivity.

# **CONCLUSION:**

- Quetiapine is commonly used in the treatment of Schizhoprenia-predominantly reduces symptoms of Schizhoprenia.
- Because of emerging side effects due to Quetiapine, care must be taken while prescribing this drug.
- Health care professionals and patients must be educated about adverse reactions due to Quetiapine.

**Key Words:** Adverse drug reaction, Pharmacovigilance.



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# EVALUATION OF KNOWLEDGE, ATTITUDE AND PRACTICE AMONG HEALTHCARE PROFESSIONALS TO ADVERSE DRUG EVENT REPORTING IN A TERTIARY CARE TEACHING HOSPITAL SIDDIPET, TELANGANA

# **Introduction:**

Pharmacovigilance (PV) is the science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other medicine/vaccine related problem. The adverse drug reaction (ADR) or adverse drug event (ADE) is a health concern that is not rigorously observed and discovered by medical professionals. India has an ADR reporting rate of 1%, which is significantly lower than the global ADR reporting rate of 5%. Since there is poor reporting of ADRs, this study was aimed to assess the knowledge, attitude and practice of Pharmacovigilance among healthcare professionals.

### Aim:

To study the knowledge, attitude and practice of healthcare workers towards Adverse Drug Event reporting and Pharmacovigilance Program of India.

**Methods:** A Cross sectional survey was conducted using a pre tested, validated questionnaire on 299 healthcare workers to assess their knowledge, attitude and practice towards ADR reporting. The questionnaire consisted of 3 parts, 15 questions assessed the knowledge towards ADR reporting while the next 5 questions assessed the attitude and the last 5 questions assessed the practice of ADR reporting among healthcare workers. All the participants were given 30 minutes to answer the questionnaire. The data was collected and analysed using SPSS software and descriptive statistics were used.

**Results:** 299 healthcare workers responded to the questionnaire which included 69 doctors,34 nurses ,99 medical students, 81 nursing students and 16 pharmacists. While most of them have shown positive attitude towards ADR reporting, there was a lack of knowledge which may have lead to poor ADR reporting practice.

**Conclusion:** The current study demonstrates that there is a knowledge gap which is resulting in subpar ADR reporting inspite of healthcare professionals having positive attitudes towards ADR reporting. Hence, more sensitisation programmes must be conducted to increase ADR reporting culture among healthcare professionals.

Keywords: Adverse Drug Reactions, Healthcare workers, Pharmacovigilance.



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# AWARENESS, ATTITUDE AND USAGE OF GENERIC MEDICINES AMONG PRESCRIBERS AND PATIENTS IN A TERTIARY CARE TEACHING HOSPITAL:

# A CROSS-SECTIONAL STUDY

# **Background**

Generic Medicines were introduced in India to make available quality medicines for everyone at affordable costs. Efforts are in place to increase the awareness and remove the misconception that the low-priced generic medicines are of inferior quality or less effective.

# Aim & Objective

To assess and compare the awareness, attitude, and usage of generic medicines among prescribers and patients

### Methods

A cross-sectional study was carried out among prescribers and patients attending a tertiary care teaching hospital during the month of August 2023. Written informed consent was taken from all the participants. Data was collected using hard copies of prevalidated questionnaire consisting of a total of 35 questions and analyzed using EPI info version 7.0. Data comparison was done using Chi-square test and a p value of <0.05 was considered statistically significant.

# **Results:**

A total of 78 participants - 39 physicians and 39 patients completed the study. There is statistically significant difference in the awareness among the physicians and the patients for all the seven questions assessing the awareness, 8 of the 19 questions assessing the attitude towards the generic medicines, in the quantity of generic medicine usage and preference for changing the prescribed brand name medicine to generic medicine.

### **Conclusions:**

The awareness and attitude towards use of generic medicines is high among the physicians but their usage pattern is comparatively lower than that of patients. This suggests that there is a need to increase the public awareness about generic drugs, availability of branded generic medicines and the advantages of using them through educational intervention programs. Promotional events emphasizing the quality assurance measures placed on the sale and production of generic medicines may boost the confidence among the physicians to use and in turn prescribe the generic medicines.

Keywords: Pradhan Mantri Bhartiya Janaushadhi Kendras, Branded Generics

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# A STUDY ON ASSESSMENT OF KNOWLEDGE, ATTITUDE & PRACTICES RELATED TO SAFE INJECTION PRACTICES AMONG HOUSE SURGEONS

# **BACKGROUND**

A Safe Injection is defined as "an injection that, does no harm to the recipient (e.g. no abscess formation), does not expose the health worker to any risk (e.g.: needle stick injuries) and does no harm to the community (e.g.: unsafe disposal of waste)." Unsafe injections expose patients to risk of disability and death. The majority of therapeutic injections are unnecessary. The knowledge and attitude of healthcare providers towards safe injection practices have an essential effect on their practice of the same.

**AIM:** To assess the knowledge, attitude and practices related to Safe Injection Practices among house surgeons.

# **MATERIALS AND METHODS:**

This is an observational study, done in 200 participants who are house surgeons in various departments of Andhra Medical College, Visakhapatnam. This study was done in August 2023. A structured questionnaire was given to the participants and their responses were collected using a 5 point Likert scale. The data was analysed with Microsoft Excel 2021 and represented in counts and percentages.

# **RESULTS**

Total 156 house surgeons responded to the given questionnaire, with a response rate of 78%. The overall mean scores of knowledge, attitude and practices related to Safe Injection Practices were 62.54%, 78.64% and 58.76%, respectively.

### **CONCLUSION**

From our study, we could conclude that house surgeons have moderate knowledge, positive attitude and poor practices in terms of Safe Injection Practices. This indicates the need to include Safe Injection Practices in the undergraduate curriculum and implementation of institutional policies to ensure good and safe injection practices.



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# A STUDY ON ANTIBIOTIC USAGE PATTERN IN NEONATAL SEPSIS IN A TERTIARY CARE HOSPITAL

**Background:** The most common cause of mortality and morbidity in the NICU is neonatal sepsis. It is normal practice to start empiric antibiotic therapy in suspected instances following prompt sepsis screening while awaiting the findings of investigations in order to prevent death from neonatal sepsis, which can be fatal very rapidly. Such empirical antibiotics are typically chosen based on the pattern of antibiotic susceptibility and most common organisms found in the specific region.

**Methods:** Cross sectional observational study was conducted on Neonates admitted in Neonatal Intensive Care Unit to asses the antibiotic usage in Paediatric Department of Tertiary care hospital

**Results:** Out of 50 neonates,58% (n=29) were male, and 42% (n=21) were female the maximum number of subjects belong to the age group between 1 to 7 days, which were 90% the maximum number of subjects were Term neonates, which were 60% out of 50 samples, the maximum number of samples showed no growth, which were 74%, and among culture positive samples most common pathogen found was klebsiella pneumoniae Among all the antibiotics prescribed amikacin was most commonly prescribed followed by cefotaxime and piperacillin tazobactam Most common choice of empirical antibiotic combination was cefotaxime + amikacin followed by piperacillin tazobactam + amikacin

**Conclusion:** Neonatal drug usage is a dynamic process, and the frequency of reported drug use varies from time to time. In order to minimize the development of antibiotic resistance and reduce inappropriate antibiotic use, it is crucial to evaluate antibiotic prescription pattern in neonatal intensive care units (NICUs).

**Keywords:** Neonatal Intensive Care Unit, Antibiotic usage, Tertiary care hospital.

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# STUDY OF ANTIOBIOTIC USAGE PATTERN AMONG UNDERGRADUATE STUDENTS

**BACKGROUND:** Self-medication of antibiotics is common among healthcare students due to their knowledge of pharmacology of antibiotics, which produces a false sense of confidence in self-diagnosis of disease conditions. Development of drug resistance caused by self-medication with antibiotics, can be seen as one of the growing global threats. Hence, this study was conducted to assess the practice of self-medication with antibiotics among medical students.

**METHODS:** This questionnaire based descriptive, cross-sectional study was conducted in Rangaraya Medical College, Kakinada, from May2023 to july2023 on the 2<sup>nd</sup>year MBBS Undergraduate students

**RESULTS:** Out of 200 students, 134(67%) students had practiced antibiotics self-medication. The most commonly self-medicated antibiotics were azithromycin 55(41%), amoxicillin 34(25.37%), cephalosporins 12(8.95%) and ciprofloxacin 5(3.73%) that were most commonly used for fever 25.51%, common cold 21.4% sore throat 19.32%, and cough 17.26%. The common sources for self-medication were previous prescription 82(61.19%), followed by own pharmacological knowledge 52(38.81%). Only 32(23.88%) has completed the course & 102(76.11) stopped without completing. Large number of students agreed that antibiotics self-medication was not an acceptable practice 160(80%) but 106(54%) accepted that it can lead to antimicrobial resistance.

**CONCLUSION:** More than half of the respondent medical students had practiced antibiotics self-medication. Fever was the commonest cause for it while the most commonly self-medicated antibiotic was azithromycin. Majority of them are lacking knowledge about resistance. Self-medication with antibiotics in medical students is concerning because they are future prescribers of antibiotics; who are supposed to promote rational use of antibiotics.

**Keywords:** Antibiotics; antimicrobial resistance; medial students; self-medication..

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# METRONIDAZOLE INDUCED REVERSIBLE CEREBELLAR ATAXIA - A RARE CASE PRESENTATION

BACKGROUND: Metronidazole is a 5-nitroimidazole compound widely used for treating anaerobic bacterial infections and also as first line treatment of choice for amoebiasis, giardiasis, trichomoniasis. Metronidazole is commonly known to cause gastro-intestinal adverse effects. Although symptoms like rash, dysuria, dark urine, disulfiram like reaction and neutropenia are witnessed less occasionally. But metronidazole-associated peripheral neuropathy (PN), metronidazole-induced encephalopathy (MIE) have been reported very rarely. Thus, we report a rare presentation of metronidazole induced neurotoxicity i.e., reversible cerebellar ataxia attributable to MIE with concomitant peripheral neuropathy.

**CASE PRESENTATION:** An elderly man previously diagnosed with complicated liver abscesses was being managed with oral metronidazole tablets (800mg, TID) for nearly 90 days following which he had a gradual onset of neurological symptoms. Patient presented with complaints of inability to walk and stand without support during a consecutive follow up and was evaluated.

**DIAGNOSIS:** MRI Brain suggested subtle hyperintensity in bilateral dentate nucleus in T2/Flair sequences, indicating suspected drug induced neurotoxicity along with chronic lacunar infarct in left thalamus and right cerebellum. The diagnosis of metronidazole induced cerebellar ataxia was included. Furthermore, nerve conduction study was done to assess PN which suggested motor & sensory demyelinating syndrome.

**INTERVENTIONS:** Metronidazole was stopped. Low dose steroids, gabapentin and vitamin supplements were added to treatment regimen.

**OUTCOMES:** After a week itself patient's gait improved significantly. The ataxia disappeared within 3 weeks although peripheral neuropathy persisted. Thus, confirming metronidazole induced reversible cerebellar ataxia.

**DISCUSSION:** Healthcare practitioners must be vigilant about prolonged use of high dose metronidazole use among patients being treated with metronidazole. The range of symptoms are not only restricted to gastrointestinal system but may also contribute to neurotoxicity. Thus, identification of metronidazole toxicity and dose adjustment or treatment cessation must be considered at an earlier stage to nullify the effects.

**ABBREVIATIONS**: MIE = metronidazole-induced encephalopathy, MRI = magnetic resonance imaging, PN = peripheral neuropathy, T2 = transverse relaxation time, FLAIR = Fluid attenuated Inversion Recovery

**<u>Keywords:</u>** metronidazole, metronidazole-induced encephalopathy, peripheral neuropathy, reversible cerebellar ataxia



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# PHYTOCHEMICAL ANALYSIS AND ANTIMICROBIAL ACTIVITY OF LEAVES OF *ATALANTIA MONOPHYLLA* PROTEIN EXTRACT.

**Introduction**: Atalantia monophylla (wild lime), a small shrub in the Rutaceae family, is used as an insect repellent. The extracts from its leaves have been reported to have antimicrobial and antiviral properties. This study evaluated the phytochemicals and antimicrobial activity of Atalantia monophylla protein extract.

**Methods:** Standard chemical methods, such as tannins (0.1% ferric chloride), saponins (2 mL of water), flavonoids (with NaOH), alkaloids (Drangandooff reagent), proteins (Million's reagent), steroids (10% sulfuric acid), anthraquinones (aqueous ammonia), phenols (lead acetate), terpenoids (3% sulfuric acid), and carbohydrates (Benedict's reagent), were used to evaluate the different isolates present in the Atalantia monophylla leaves extract. The aqueous protein extraction was performed using the ammonium sulfate method and quantified using the Lowry method. The disc plate method and minimum inhibitory concentration (MIC) method were used to evaluate the antimicrobial activity of the extract.

**Results**: The phytochemicals isolated from the Atalantia monophylla aqueous extract were tannins, flavonoids, alkaloids, proteins, steroids, phenols, and terpenoids. The Lowry method revealed that there were 5.73 mg of protein in 2 mL of extract. Microbiological studies with the protein extract showed inhibition of microbes comparable to the standard drugs gentamicin and nystatin.

**Conclusion:** The results of this study showed that the Atalantia monophylla protein extract has significant antimicrobial activity against a variety of microbes, including Staphylococcus aureus, Escherichia coli, Pseudomonas aeruginosa, and Candida albicans.



# Dr.Akella Krishna Sowmya Assistant professor Gayatri Vidya Parishad Institute of Health Care and Medical Technology

# A QUESTIONNAIRE-BASED STUDY TO ASSESS THE UNDERSTANDING OF CLINICAL TRIALS BY 3<sup>RD</sup> YEAR MEDICAL UNDERGRADUATES.

<u>Introduction:</u> Clinical trials are the cornerstone of evidence-based medicine, rigorously assessing the efficacy and safety of new interventions. There has been a recent surge in clinical trials and India is turning out to be an attractive hub for undertaking them. This raises the need to instil knowledge regarding clinical trials and various ethical aspects involved in clinical research from the level of under graduation itself.

<u>Aims and objectives:</u> To assess the level of knowledge and awareness of 3<sup>rd</sup> year medical undergraduates regarding clinical trials and their perception regarding participating in a clinical trial.

<u>Materials and methodology</u>: the study is a questionnaire based study. The study tool questionnaire consisted of 2 parts A and B. There are 12 questions in total targeted to assess the level of awareness, knowledge and interest among 3<sup>rd</sup> year medical undergraduates regarding clinical trials in a tertiary care hospital in South India. The data is analysed using Microsoft excel.

**Result:** 82% of the total students responded to the study, majority of the students are well aware of what clinical trials are and how important they are in drug development. 70% of them showed interest to know more about them and participate in them. At the same time a significant proportion of students believed clinical trials are risky and not needed and have no awareness on how they are regulated at various levels. 30% of them felt clinical trials are unethical and not necessary.

<u>Conclusion:</u> Undergraduates have positive attitude towards clinical trials and research field but the knowledge regarding it seemed to be inadequate. Inclusion of further knowledge regarding clinical trials and animal testing in the undergraduate curriculum than it is now would be encouraging and beneficial.

Dr Maddala Rajitha

**Associate Professor** 

# NIMRA INSTITUTE OF MEDICAL SCIENCES

# ROLE OF IODINE RICH FOOD IN SUBCLINICAL HYPOTHYROIDISM.

**AIMS& OBJECTIVES**: To study the role of intake of Iodine rich products in the sub clinical hypothyroidism.

**METHODOLOGY**: study will bt conducted in nimra institute of medical sciences, ibrahim patnam, vijayawada, krishna dist, a.p, india. participants who are willing to participate in the study with increased tsh levels more than reference range, with normal t3, t4 levels, will be considered. the participants who are not willing for the study and whose t3,t4, tsh levels are abnormal, pregnant women will be excluded. to all the participants adviced to take iodine rich products by giving the list of odine rich products and asked them to tick what they can eat and adviced them to eat minimum 150 mcg and maximum of 200 mcg iodine contained products to take.

**STATISTICAL ANALISIS:** Data will be collected and caliculated in SPSS 2021 version for the atatistical analysis.

**CONCLUSION**: Intake of iodine rich products giving a clinical and investigational improvement in suclical hypothyroidism participants.

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