



RAIPUR

**KALINGA
UNIVERSITY**

INTERNATIONAL CONFERENCE (HYBRID MODE)

ON

CURRENT PERSPECTIVES OF PHARMACOVIGILANCE IN DRUG DISCOVERY DEVELOPMENT

Dated-7th & 8th April 2022

Organized By
Kalinga University, Faculty of Pharmacy



**NAAC
GRADE B+**

Accredited University



Dr. Rajeev Kumar

Chairman, Kalinga University

On behalf of the International Conference on “Current Perspectives of Pharmacovigilance in Drug Discovery and Development” organizing committee, I am truly honored and delighted to invited delegates from all around the world to this conference at Kalinga University. It gives me pleasure and privilege to serve once again as the Conference Chair of this premier conference in this region. Pharmacovigilance is an emerging approach towards the science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other medicine/vaccine related problem. All medicines and vaccines undergo rigorous testing for safety and efficacy through clinical trials before they are authorized for use.

The International Conference on “Current Perspectives of Pharmacovigilance in Drug Discovery and Development” 2022 aims to serve as an international platform for exchanging latest research findings in the fields of current drug discovery and translational medicine, both of which incorporate PM strategy that has attracted delegates from local and abroad. The Conference will give recognition to the outstanding work of the selected participants and their sharing of expertise. It has been our greatest hope that this conference will function as an international platform to explore potential collaborations in the future.

I wish the International Conference all success.



Dr. Sandeep Arora

Chancellor, Kalinga University

It is my great pleasure and privilege to warmly invite you at the International Conference on “Current Perspectives of Pharmacovigilance in Drug Discovery and Development” organized by the Faculty of Pharmacy, Kalinga University New Raipur. The Conference is designed to provide and share latest information and developments in the field of Pharmacovigilance which has been a fundamental to the field of pharmacy and drug development. Events of the last decade which included more thorough safety documentation and reviews for drug approvals, increase in warnings and awareness on adverse actions of drugs have made Pharmacovigilance a top issue for consumers and regulators taking this opportunity we are glad to invite you for this intellectual summit.

We look forward to welcome you to this enriching Conference and meeting all of you in person for a fruitful outcome.

All the good wishes for successful conference.



Dr. R. Shridhar

Vice Chancellor, Kalinga University

As a Vice Chancellor of Kalinga University I am honored and pleased to welcome you at the International Conference on “Current Perspectives of Pharmacovigilance in Drug Discovery and Development “from 7th - 8th April 2022 organized by the Faculty of Pharmacy, Kalinga University New Raipur. The Conference is timely in view of tremendous importance of Pharmacovigilance and its importance of the Pharmaceutical industries, in particular with the manufacturing of drugs and their adverse reactions. The future of PV Outsourcing provider scan help organizations address the increasing volume and complexity of regulatory requirements, add scalability to accommodate growing product port folios and economies of scale to help achieve aggressive cost targets in a globalized world.

I hope that the Conference will be of professional and personal benefit to all of us as we proceed with our work towards Pharmacovigilance playing a crucial role in pharmaceutical industries that are expanding with time to face more and more complex changes.

My best wishes for successful conference.



Dr. ByjuJohn

Director General, Kalinga
University

Dear all,

On the behalf of the International Conference on “Current Perspectives of Pharmacovigilance in Drug Discovery and Development “from 7th-8th April 2022 organizing committee I am extremely delighted to welcome all the experts and academics from all over the world. While much encouragement and progress is going on these days in Pharmacovigilance it becomes important to understand the theme of the Conference which focuses on the PV Model and its key components which includes Adverse Event Case management, aggregate reporting and can drive competitive advantage by developing a stronger benefit-risk profile and improved identification of at risk patients. In future PV must achieve global coverage and meet diverse, market specific regulatory frameworks.

As a Director General of Kalinga University, it's my pleasure and privilege to welcome you to the wonderful and dynamic campus of the University.

My sincere thanks to the organizing committee to host this landmark event.



Dr. Sandeep Gandhi
Registrar, Kalinga University

Greetings!

As Registrar of Kalinga University, New Raipur, it is with great pleasure welcome you to the International Conference on “Current Perspectives of Pharmacovigilance in Drug Discovery and Development “from 7th-8th April 2022 hosted by the Faculty of Pharmacy, Kalinga University. I would also like to thank all of you who have worked on putting this successful summit together.

The Conference through its theme will focus upon role of Pharmacovigilance in detecting and monitoring adverse drug reactions, adverse events, detecting potential signals throughout the drug life cycle and also tracking trends in consumer’s sentiments regarding particular product overtime. The main objective behind PV techniques in Pharmacy is to monitor and improve an existing product's risk and benefit and manage the risk of the new products in a better way.

The Conference looks forward to be filled with enlightening interactive sessions on the topic by bringing together renowned speakers and scientists across the globe which will surely make it a memorable event.

I am extremely thankful to the organizing committee for this wonderful enriching event.

All the best for the successful of conference.



Dr. Sandip Prasad Tiwari
Principal & Convener

Dear all,

On behalf of the organizing committee, I welcome all Pharmacy professionals to the signature event of the year; International Conference on “Current Perspectives of Pharmacovigilance in Drug Discovery and Development” on 7th - 8th April 2022. The theme for the International Conference is a breakthrough for Pharmaceutical field as it reflects serious concern on the adverse effects of the drugs. Kalinga University Faculty of Pharmacy has been recognized by Adverse Drug Reaction Monitoring Centre a Pharmacovigilance Program run by Government of India under the aegis of National Coordination Centre, India Pharmacopoeia Commission Ghaziabad. I, being the Chair person of the Department has always gained valuable support from Ms. Rajni Yadav, Co-ordinator and Dr. Bhumika Chandrakar, Deputy Coordinator. Through the Conference we hope he adding towards a golden future of Pharmacy with excellent views shared worldwide. My best wishes for the successful and fruitful meet and my sincere regards to the organizers. Good luck to all!!!!!!!.



Ms. Rajni Yadav

Convener, International
Conference

Dear Colleagues,

I am honored and delighted to welcome you to the International Conference on “Current Perspectives of Pharmacovigilance in Drug Discovery and Development “from 7th -8th April 2022 hosted by the Faculty of Pharmacy, Kalinga University.

I am extremely happy that the Conference will offer a comprehensive range of sessions on Pharmacovigilance and its wider scope in the Pharmaceutical Industry.

I hope you to enjoy arrange of illuminating sessions to connect with expertise from scientific and pharmaceutical community along with influential entrepreneurs through their lectures and presentations who will put forward many thought-provoking strategies and innovations on the topic.

We are looking forward to meet all of you in Kalinga University for this wonderful session.

ORGANIZING COMMITTEE



Mr. Sudeep Mandal
Co-Convener



Mr. Deependra Soni
Co-Convener



Dr. Bhumika Chandrakar
Co-Convener



Mr. Pranjul Shrivastava
Joint Organizing Secretary



Ms. Sonam Chhipane
Joint Organizing Secretary



Ms. Khushboo Gupta
Joint Organizing Secretary



Ms. Srishti Namdeo
Joint Organizing Secretary

It is a matter of great pleasure for giving this message for a 2 days International Conference on "Current Perspective of Pharmacovigilance in Drug Discovery and Development" Organized by Faculty of Pharmacy, Naya Raipur, Chhattisgarh, Indian association with Indian Pharmacopoeia Commission Ghaziabad, IPA (State branch), APTI (State branch), Nirmala College of Pharmacy, Guntur, Andhra Pradesh, Publication Partner Global Pharmacovigilance Society and supported by Journal of Pharmacovigilance and Drug Research. This is a great opportunity for students, research scholars and academicians to present their innovative ideas and research work on an international platform. We are glad to be a part of a hybrid mode conference, providing insights on pharmacovigilance. This hybrid mode conference will add to our understanding of this current status. We wish the international hybrid mode conference all success.



Dr. S. Karmakar

Director General, CG Cost
Chhattisgarh

As Director General CG Cost, I am delighted to welcome all knowledge heads to the for the coming International Conference on “Current Perspectives of Pharmacovigilance on Drug Discovery and Development ”from 7th-8th April 2022. The conference is organized around the major theme of Pharmacovigilance and its role in pharmaceutical industries, drug discovery, manufacturing and its development. It will feature some of the notable key speakers all over the world who will be sharing their valuable views on a common platform. We will also witness eminent researchers all over the world. Additionally, it aims to provide a unique opportunity for researchers, policy makers, and development practitioners to answer some of the challenges in the respective field and to outline new solutions for developing them.

The conference is organized around a competitive call for sessions and papers. The main theme of the Conference includes inter related issues, each of them calling for a variety of disciplinary approaches.

We are excited and honored to have a chance to work with all the co-hosts, discussants, chairs, and moderators of this conference.

Though I will not be physically present due to an important professional concern, still I hope that this unique international and multi-disciplinary conference will provide our participants with a truly trans formative experience through a variety of knowledge and perspectives so that the complex problems in our society can be improved.

All the best!!!!

**INTERNATIONAL CONFERENCE
(HYBRID MODE)
ON
CURRENT PERSPECTIVES OF
PHARMACOVIGILANCE IN
DRUG DISCOVERY & DEVELOPMENT**

Dated - 7th & 8th April 2022

CONTENTS

- 1. Scientific Program Schedule**
- 2. Speakers**
- 3. Abstracts of Authors**
- 4. About the University & Department**

INTERNATIONAL CONFERENCE (HYBRID MODE) ON CURRENT PERSPECTIVES OF PHARMACOVIGILANCE IN DRUG DISCOVERY & DEVELOPMENT

Dated -7th & 8th April 2022

Day1 Program Schedule

DATE & DAY	TIME SLOT	CHAIR PERSON DESIGNATION	SPEAKER DESIGNATION
Thursday 07/04/2022	10:30-11:10 AM		Dr. Jai Prakash Keynote Speaker
Thursday 07/04/2022	11:15-12:00 PM	Dr. Chanchal Deep Kaur Principal Rungta College Of Pharmaceutical Sciences & Research, Raipur.	Dr. Maya Sharma Pharmacovigilance in Oncology
Thursday 07/04/2022	12:15-01:00 PM	Dr. Anshita Gupta Soni Principal Shri Rawatpura Sarkar Institute of Pharmaceutical Sciences, Kumhari.	Mr. Gurpreet Singh Pharmacovigilance: Current trends, Challenges & Opportunity.
Thursday 07/04/2022	01:00-01:40 PM	Dr. Shekhar Verma Principal University College of Pharmacy, Pt. Deendayal Upadhyay Memorial Health Sciences, Raipur	Dr. Irene R Fermonte How real-world data have impacted vaccination programs world wide : Israel as a case study.
Thursday 07/04/2022	03:15-04:00 PM	Dr. Manju Rawat Singh Professor University Institute of Pharmacy, Pt. Ravi Shankar Shukla University, Raipur.	Ms. Giset Lopez importance of Risk Management Plans Evaluation from the National Authority of Drugs.
Thursday 07/04/2022	04:00-04:45 PM	Prof. Amit Roy Principal Columbia Institute of Pharmacy, Raipur.	Dr. Amer Ahmed Syed Innovative Approaches of Artificial Intelligence in Pharmacovigilance & Patient Safety

INTERNATIONAL CONFERENCE (HYBRID MODE) ON CURRENT PERSPECTIVES OF PHARMACOVIGILANCE IN DRUG DISCOVERY & DEVELOPMENT

Dated-7th & 8th April 2022

Day 2 Program Schedule

DATE & DAY	TIME SLOT	CHAIR PERSON DESIGNATION	SPEAKER DESIGNATION
Friday 08/04/2022	10:00-11:00AM	Dr. Yogesh Vaishnav Professor Shri Shankara Technical Campus, Junwani, Bhilai	Ms. Katherine Daneri Challenges in the PV Implementation for Pharmaceutical Companies in Latin America
Friday 08/04/2022	11:00-11:45AM	Dr. D. K. Tripathi Principal Rungta College of Pharmaceutical Sciences & Research, Bhilai.	Dr. Paul Perez Vasquez Depakine, the Scandal
Friday 08/04/2022	11:45-12:30PM	Dr. Trilochan Satapathy Professor University College of Pharmacy, Pt. Deendayal Upadhyay Memorial Health Sciences, Raipur	Dr. Chinmaya Mahapatra Role of ADR Monitoring Centers in India and Importance of Articles Related to PV.
Friday 08/04/2022	12:30-01:15PM	Dr. Satyabrata Bhanja Principal RITEE College of Pharmacy, Raipur.	Dr. B. Mamtha Nair Review of Lack of Therapeutic Cases in Aggregate Reports.
Friday 08/04/2022	02:15-03:00PM	Dr. Ravindra Pandey Professor Columbia Institute of Pharmacy, Raipur.	Ms. Denise Rodrigues Delima Comparison of PV System in Brazil with other LATAM Countries.
Friday 08/04/2022	03:00-04:00PM	Valedictory Session	Kalinga University, Auditorium

DAY1SPEAKERS



Dr. Jai Prakash

Senior Principa Scientific Officer &
Officer-in-Charge

National Coordination Centre
Pharmacovigilance Programme of
India Indian Pharmacopoeia
Commission, Ghaziabad, Uttar
Pradesh, India



**Dr. Maya
Sharma**

Medical Director,
WinMedicare, Modi Mundi Pharma,
Signutra, India



**Mr. Gurpreet
Singh**

Senior Director,
PV Operations, Parexel, India



**Dr. Irene R
Fermonte**

Chair person,
ERANIM, Israel



Ms. Giset Lopez

Pharmacovigilance Specialist,
CECME, Cuba



**Dr. Amer Ahmed
Syed**

Associate Director,
Pharmacovigilance,
Clinical Development programs,
Rocket Pharmaceuticals, Inc., USA.

DAY2SPEAKERS



Ms. Katherine Daneri

Pharmacovigilance Manager,
Vigilantia Healthcare, Lima, Peru



Dr. Paul Perez Vasquez

President,
Peruvian Society of
Pharmacovigilance (SOPERFAR), Peru



Dr. Chinmaya Mahapatra

Founder President, Global
Pharmacovigilance Society,
India



Dr. BMamtha Nair

Director,
Aggregate reports,
Pfizer, India



Ms. Denise Rodrigues DeLima

Manager, Ultragenyx
Pharmaceutical Inc, Brazil

On

“Current Perspectives of Pharmacovigilance in Drug Discovery and Development”

Clinical Trial: A Complete Review

Shreya Singh¹ Roshni Sharma¹

¹Rungta College of pharmaceutical science and Research, Raipur, C.G. Pin code – 492009

ABSTRACT- ICCPPDD 01

A clinical trial is based on research study that involves treatment or therapy tested in people to see it's safety and efficacy. The information obtained from clinical trials helps to improve medical care and give it's contribution to the understanding of diseases and the conditions. Each trial has a protocol, which is a written, detailed plan that explains why the study is necessary, what it is intended to do, and how it will be conducted. The protocol is written by the trial's principal investigator (the person in charge of the trial). This article summarizes the steps that are involved in research and results of clinical practice. The very first step defines the study of population and determines whether these patients are similar to those patients who are seen in clinical practice in aspects such as their demographics, disease type, and disease severity. There are different phases of clinical trial through which a drug has to pass through. Phase I involves study of pharmacokinetics, safety, gross effects are on selected patients, by clinical investigators. If the proposed drug passes the test, it enters in phase II testing, which involves study of pharmacokinetics, safety, therapeutic efficiency on human volunteers by clinical investigators, if passes this phase, hundreds of selected volunteers are now studied in phase III, It primarily focuses for safety and efficacy by clinical investigators. If this stage is passed by the drug, it is approved for marketing Even after it is marketed, a review form physicians from different hospitals and clinics are taken regarding the drug, about it's ADR, it's efficacy in phase IV.

Keywords: Clinical practice, safety, Efficacy, pharmacokinetics, clinicians

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**International Conference
On
“Current Perspectives of Pharmacovigilance in Drug Discovery and Development”**

Relevance of Pharmacovigilance In Drug Discovery

Lokesh Chandra Mahat¹, Soumik Bhattacharjee², Arghya Bhattacharya³, Sudipa Hazra³

¹Department of Pharmaceutical Technology, Maulana Abul Kalam Azad University of Technology, Haringhata, Nadia, West Bengal

²Department of Pharmacology, Dr. B.C. Roy College of Pharmacy & A.H.S, Durgapur, West Bengal

³Department of Pharmacology, Calcutta Institute of Pharmaceutical Technology and A.H.S, Uluberia, Howrah, West Bengal.

ABSTRACT- ICCPPDD 02

Pharmacovigilance is a term used in the medical field to describe the thorough testing of therapeutic medications in order to improve patient care by lowering the risk of harmful side effects and as a result, pharmacovigilance plays an important role in drug development. Pharmacovigilance is an important and unavoidable aspect of the drug research and discovery process. It will necessitate extensive documentation and strict monitoring at every stage of drug development, including pharmacovigilance inspection and audit, risk management, and reporting of ADR medicinal drugs, periodic safety update reports, post-authorization safety studies, additional monitoring, and safety communication, as well as pharmacovigilance inspection and audit, risk management, and reporting of ADR medicinal drugs. As a result, it is critical to establish good pharmacovigilance practices for improving understanding of drug safety issues during drug development and after approval, so that attrition rates can be reduced and patients can be provided with safe and effective innovative medicaments to meet their medical needs. Health-related organizations, patients, and health professionals can better watch the full product life-cycle, including clinical data, observational data, and spontaneous reports, by developing a complete perspective of the interrelated nature of pharmacovigilance. Clinical trials and real-world usage differ not only with regard to the intended and actual use of medications, but also in respect of the patient population, as real-world use includes pregnant women, children, the elderly, disabled, and persons with co-morbidities. It is too expensive to produce such a diverse patient population throughout development. The requirement for active post-market surveillance of real-world therapeutic performance is crucial to our understanding of medicine, and the data generated needs to be more widely disseminated and used by health professionals across all disciplines.

Keywords: ADR medicinal drugs, periodic safety update reports, post-authorization safety studies, additional monitoring.

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Pharmacovigilance: A Fundamental to Pharmaceutical Safety Assessment Around the Global

*Priyanshu Lodhi*¹, Khushboo Gupta¹*

¹Faculty of Pharmacy, Kalinga University, Naya Raipur, 492010.

ABSTRACT- ICCPPDD 03

The mechanisms for monitoring and evaluating ADRs are referred to as pharmacovigilance, and it is an important part of good drug control systems, clinical practise, and public health programmes. This would take into account contentious and serious drug safety issues that could have a negative impact on public health beyond national borders. Recently, pharmacovigilance has been limited, mostly to the detection of previously unknown or poorly understood adverse medication events. Many pharmacovigilance centres are working for drug safety monitoring in this global pitch today, but pharmacovigilance faces enormous problems at the turn of the millennium in terms of improving drug safety and monitoring. The Indian Pharmacopoeia Commission, which serves as the National Coordination Center (NCC) for India's Pharmacovigilance Program, makes it a priority to promote safe medication usage (PvPI). Currently, 179 adverse drug reaction (ADR) monitoring centres submit ADRs to the National Center for Complementary and Alternative Medicine (NCC). India's current contribution to the global safety database is 3%, with a completeness score of 0.93 out of 1. NCC is taking a number of steps to improve patient safety, including strengthening capacity for monitoring and surveillance, collaborating with national health programmes and other organisations to promote ADR reporting, and ensuring that PvPI is a valuable resource for Indian regulators. In the year 2015, the Central Medications Standard Control Organization issued key safety label modifications for drugs including carbamazepine and piperacillin tazobactam.

Keywords: Pharmacovigilance, Pharmacopoeia, Adverse Drug reaction

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Reporting of Adverse drug reaction In India: A Review on current prospects

*Komal Chandrapaxi*¹*

Apollo college of Pharmacy, Anjora, Durg, 491001

ABSTRACT- ICCPPDD 04

Pharmacovigilance {PV} aims to monitor the safety & efficacy by ensuring adverse drug reactions {ADR} and Adverse drug event {ADE} in medicines and vaccines. Accurate detection of ADR and its reporting is the backbone of the pharmacovigilance. Indian Pharmacovigilance Commission {IPC} & National Coordination Committee {NCC} regulates the programs to boost the PV activity in India. Pharmacovigilance Programme Of India {PvPI} was started by the Government of India on July 2010. Research shows inadequate knowledge, awareness and insufficient training to recognize ADRs among health professionals and clinicians are the major obstacle in the PV reporting system. Anyone can report ADRs by calling on toll-free number filling Medwatch, Yellow Card, Central Drug Standard Control Organization {CDSCO} form, etc. available online or offline. These are the protocols forms of ADR collections and reports. This will include discussion of how the ADR reports are handled. COVID-19 pandemic has created an unprecedented global challenge for reporting of ADRs in PV also. The aim of this review is to familiarize the reader with process for ADR and ADE reporting of drugs in India. Current prospects of PV are discussed.

Key words: Pharmacovigilance, IPC, NCC, awareness, reporting of ADRs

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Role of Pharmacovigilance in India

*Shivam K Yadav*¹, Sandip P Tiwari¹*

¹Kalinga University, Faculty of Pharmacy, Near Mantralaya, Naya Raipur, 492101.

ABSTRACT- ICCPPDD 05

Pharmacovigilance (PV) plays a key role in the healthcare system through assessment, monitoring, and discovery of interactions amongst drugs and their effects in humans. Pharmaceutical and biotechnological medicines are designed to cure, prevent or treat diseases; however, there are also risks particularly adverse drug reactions (ADRs) can cause serious harm to patients. Thus, for safety medication, ADRs monitoring is required for each medicine throughout its life cycle, during the development of drugs such as pre-marketing including early stages of drug design, clinical trials, and post-marketing surveillance. PV is concerned with the detection, assessment, understanding, and prevention of ADRs. Pharmacogenetics and pharmacogenomics are indispensable parts of clinical research. Variation in the human genome is a cause of variable response to drugs and susceptibility to diseases is determined, which is important for early drug discovery to PV. Moreover, PV has traditionally been involved in mining spontaneous reports submitted to national surveillance systems. The research focus is shifting toward the use of data generated from platforms outside the conventional framework such as electronic medical records, biomedical literature, and patient-reported data in health forums. The emerging trend in PV is to link premarketing data with human safety information observed in the post-marketing phase. The PV system team obtains valuable additional information, building up the scientific data contained in the original report and making it more informative. This necessitates an utmost requirement for effective regulations of the drug approval process and conscious pre and post-approval vigilance of the undesired effects, especially in India. Adverse events reported by the PV system potentially benefit the community due to their proximity to both population and public health practitioners, in terms of language and knowledge, enabling easy contact with reporters electronically. Hence, PV helps the patients get well and to manage optimally or ideally, avoid illness is a collective responsibility of industry, drug regulators, clinicians, and other healthcare professionals to enhance their contribution to public health. This review summarized objectives and methodologies used in PV with a critical overview of existing PV in India challenges to overcome, and future prospects with respect to the Indian context.

Keywords: Adverse drug reaction; Clinical trials; Data mining; Indian Pharmacopoeia Commission; Pharmacogenomics; Pharmacovigilance.

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A review on accessing Drug safety/Pharmacovigilance for Ayurvedic preparations

Akansha Tamboli¹, Ankita Damahe¹

¹Apollo college of Pharmacy, Anjora Durg , 491001

ABSTRACT- ICCPPDD 06

“Ayurveda” is accredited to Dhanvantari, the physician to the Gods as per concept of Hindu mythology. These concepts were set out in the portion of the Vedas known as the Atharvaveda (1000-900 BCE). Ayurvedic medicine has a rich history and great impact in health care system of ancient India since long. It is believed as safest medicine by the majority of its consumer. In the present scenario, Ayurveda system also increases its globalization worldwide but the major concern is its safety, efficacy and acceptability. The major problem with regards to its safety is related to standardization of manufacturing practices including presence of contamination, heavy metals beyond acceptable limits, harmful microbes and pesticides residue which can be very toxic to the human body. As per research maximum adverse drug reactions (ADRs) were reported in the Panchkarma procedure (Detoxification therapy) which is integral part of Ayurveda therapy. In the Ayurveda treatment, some of the common ADRs reported in the studies are skin rashes, diarrhoea, stomach upset, nausea and vomiting. The magnitude of ADRs is under and poorly reported in Ayurveda practice and research. To tackle these safety issues, the World Health Organisation (WHO) therefore prevail the Department of AYUSH, Ministry of Health and Family Welfare, Government of India, to established a pharmacovigilance program for Ayurveda, to ensure the safety and efficacy of Ayurvedic medicines. After a year of due diligence, the national Pharmacovigilance program was launched on 29 September 2008 for Ayurveda, Siddha and Unani drugs. In this review will focus on standard protocol and awareness for using Ayurveda preparation to robust its pharmacovigilance practice in India.

Key words: Ayurveda, safety, efficacy, skin rashes, WHO, pharmacovigilance, awareness

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An Overview of Pharmacovigilance Program in India

*Ayush Jain*¹, Rajni Yadav¹*

¹Kalinga University, Faculty of Pharmacy, Naya Raipur, 492101.

ABSTRACT- ICCPPDD 07

Pharmacovigilance is one of a broad sector in the whole world of pharmacy pre-clinical studies and clinical trials are the major goldmines in the field of Pharmacovigilance as we can monitor the effect of drugs and therapeutic agents in both animals as well as in humans or in simpler terms we can say that Pharmacovigilance is a big and a major step towards drug discovery and development. In clinical trials there are mainly two types that is observational and experimental clinical trials and which are mainly classified into cohort, case controlled, cross sectional trials for observational clinical trials and randomized and non-randomized for experimental clinical trials. The regulatory body known as PVPI (Pharmacovigilance Program of India) has many goals but the primary target of the authority is to find out and answer to the drug safety issues. The other works done by PVPI mainly includes receiving reports of adverse drug events and to give proper solutions by taking necessary actions to rectify the issues arised. The program seeks to motivate a culture and some social aspects of reporting problems due to effect of drugs. PVPI along with ICH mainly aims to create a harmony between a participant, and investigator and a sponsor to run a full flagged and a successful clinical trial. A clinical trial in consent with PVPI mainly invites persons from different fields like from medical and pharmaceutical sciences, The Judicial Department of India and some philosophers and lay persons. This work aims to highlight some important facts about pharmacovigilance program in India.

Key words: Pharmacovigilance, PvPI, drug discovery and development.

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Cancer Immunotherapy for Drug Discovery and Development

*L. Revati*¹, Anjali Singh¹, Shourya Sahu¹, Rajni Yadav¹*

¹Kalinga University, Faculty of Pharmacy, Naya Raipur, 492101.

ABSTRACT- ICCPPDD 08

Immunotherapy is now evolving into a major therapeutic option for cancer patients. Such clinical advances also promote massive interest in the search for novel immunotherapy targets, and to understand the mechanism of action of current drugs. It is projected that a series of novel immunotherapy agents will be developed and assessed for their therapeutic activity. In light of this, in vivo experimental mouse models that recapitulate human malignancies serve as valuable tools to validate the efficacy and safety profile of immunotherapy agents, before their transition into clinical trials. Clinically, different approaches are adopted worldwide for the treatment of cancer, which still ranks second among all causes of death. Immunotherapy for cancer treatment has been the focus of attention in recent years, aiming for an eventual antitumoral effect through the immune system response to cancer cells both prophylactically and therapeutically. The application of nanoparticulate delivery systems for cancer immunotherapy, which is defined as the use of immune system features in cancer treatment, is currently the focus of research. Nanomedicines and nanoparticulate macromolecule delivery for cancer therapy is believed to facilitate selective cytotoxicity based on passive or active targeting to tumours resulting in improved therapeutic efficacy and reduced side effects. Today, with more than 55 different nanomedicines in the market, it is possible to provide more effective cancer diagnosis and treatment by using nanotechnology. Cancer immunotherapy uses the body's immune system to respond to cancer cells; however, this may lead to increased immune response and immunogenicity. Selectivity and targeting to cancer cells and tumours may lead the way to safer immunotherapy and nanotechnology-based delivery approaches that can help achieve the desired success in cancer treatment. The concept of immunotherapy is serving as a new field of research and drug discovery and development for the cancer treatment. This work will aim to focus on the concept of immunotherapy with respect to new drug molecule development.

Keywords: Immunotherapy, drug discovery and development, cancer treatment.

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Drug Development for Uterine Fibroids

*Isatou Drammeh*¹, Rajni Yadav¹*

¹Kalinga University, Faculty of Pharmacy, Near Mantralaya, Naya Raipur, Chhattisgarh, 492101

ABSTRACT- ICCPPDD 09

Uterine fibroids (leiomyomas) are made of muscle cells and other grow tissues grow in and around of the wall of the uterus. Uterine fibroids benign tumours in women reproduction age worldwide. Many are discovered incidentally on clinically examination. Approximately 30% of women with uterine fibroids will present with severe symptoms, which can include abdominal uterine bleeding, anaemia, pelvic pain and constipation. Infertility and recurrent miscarriage may also be symptoms of fibroids, depending on their location and size, especially for sub mucous and intramural myelomas distorting the uterine cavity. Current option for symptomatic fibroid treatment include expectant medical and surgical management radiology procedures. Ultrasound can be done, when a patient is symptomatic of uterine fibroids. Fibroids are generally classified by their location; intramural fibroids, subserosal fibroids, submucosal fibroids. The cause of uterine fibroids is unknown, But research and clinical experience proposes that genetics, hormonal imbalance, other growth factor and extracellular matrix accumulation could be the contributing factors .Although uterine fibroids are usually not dangerous, they can cause discomfort and lead to complication such as, drop in red blood cell (anaemia) which causes fatigue from heavy bleeding. Our aim is to highlight the new treatments and advancements in treating uterine fibroids. Later we have also highlighted the future advancements and innovations that are used in developed countries for same.

Keywords: Uterine fibroids, drugs for uterine fibroids, treatment and advancements in uterine fibroids.

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Overview of Pharmacovigilance and Clinical Trials

*Bipasha Mandal*¹, Rajni Yadav¹*

¹Kalinga University, Faculty of Pharmacy, Mantralaya, Naya Raipur, 492010

ABSTRACT- ICCPPDD 10

It is the studies that monitor the effect of drugs in a particular body. Important drug safety issue that has the potential to adversely affect public health adversely beyond national boundaries. Drug development process involves 5 steps which are Discovery and development which means (research for a new drug begins in the laboratory). Preclinical research which means (drugs undergo laboratory and animal testing to answer basic question about safety) Clinical research which means (Drugs are tested on people to make sure they are safe and effective). FDA drug review which means (FDA review teams thoroughly examine all of the submitted data related to the drug or device and make a decision to approve or not to approve). FDA post–market safety monitoring which means (FDA monitors all drug and device safety once products are available for use by the public). PV in clinical trials is necessary for healthcare professionals and consumers to update the potential risks of medications. The drug company may facilitate post marketing drug safety surveillance to observe the product’s safety and effectiveness in the real world as it is not possible to predict all possible adverse effects of a drug based on pre-approval studies. The pharmacovigilance program is mainly regulated and run by a committee known as PVPI. PVPI stands for pharmacovigilance program in India. And this program is mainly under the supervision of WHO. The headquarters of PVPI is in Ghaziabad. The main aim or objective of PVPI is to solve the issues and problems aroused in the phase 4 of clinical trials and also to have a look at the safety and efficiency of a drug molecule and chemical substance in the human body and to counter the side effects or adverse effects.

Keywords: Drug development process, FDA post–market safety monitoring.

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Process of Drug Discovery and Development

*Joseph Galgano*¹, Rajni Yadav¹*

¹Kalinga University, Faculty of Pharmacy, Naya Raipur, 492101.

ABSTRACT- ICCPPDD 11

The process of discovering, testing and eventually gaining approval for selling a drug is a very long process where as it involves a lot of stages and here we are going to look at the different stages involved and the approximate length of the time that each stage takes to eventually arrive at an approved drug that can be given to patient. The first stage involves the part of research and development where by it takes approximately 3-6 years to be completed. Drug development begins long before clinical setting where as it starts with the identification of a target of a drug to work upon then the identification of compounds that could particularly hit the desired target. In target identification the most paramount thing to be considered is all about what will be the drug effect and furthermore understanding of the causes of disease or conditions and this will help researcher know process or pathways of a drug to treat the condition needed to be able to target. Right away from this, compound screening is done where by about 10000+ compounds undergo screening in the laboratories tests for their ability to affect the identified target. They are also screened to check that they do not interfere with related target. The outcome of screening compound is that the leading compounds are identified and are taken for further tests in the laboratories though screening is unlikely to discover the perfect drug candidates, promising compounds can be identified hence the structures of these molecules can be modified to try and improve their activity by applying the principle of Structure Activity Relationship(SAR). Preclinical studies is the second stage in drug discovering process in which it takes approximately one year and up to 10,000 compounds which were found with promising features in compound screening and only 250 are taken to preclinical testing where by efficiency and potential risks are evaluated before human trials . This work will emphasize basically on the stages of drug discovery and development which will give a nice overview of it.

Keywords: Drug Discovery and development, process of clinical trials.

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Protective effect of *Valeriana wallichii* in amelioration of ICV STZ induced dementia in rats via GABAergic modulation

Shilpa Vishwakarma¹, Abhishek Dewangan^{1*}, Rohit Goyal¹, Varun Gupta¹, Kanaya Lal Dhar¹

¹School of Pharmaceutical Sciences, Shoolini University, Solan, Himachal Pradesh, India

ABSTRACT- ICCPPDD 12

Valeriana wallichii DC, Caprifoliaceae, is used to have anti-epileptic, memory enhancer, anti-anxiety, anti-rheumatic, and sedative activities. Valeric acid, found in *V. wallichii* appears similar in structure to the neurotransmitter GABA. The present study aimed to investigate the neuroprotective effect of *V. wallichii* containing valeric acid and its possible mechanism of action in amelioration of intra cerebroventricular streptozotocin induced neurodegeneration in Wistar rats. The rhizomes of *V. wallichii* were powdered coarsely and extracted by percolation method using dichloromethane. Wistar rats (220–250 g) of either sex were divided into 5 groups, comprising 6 animals each. Valeric acid was isolated from plant extract and characterized using FT-IR. Picrotoxin (2 mg/kg) was used as GABA-A antagonist. Intracerebroventricular streptozotocin administration caused significant ($p < 0.05$) increase in escape latency, retention transfer latency on morris water maze on 17th, 18th, 19th and 20th day and elevated plus maze on 19th and 20th day respectively, as compared to normal untreated rats. Treatment with *V.wallichii* extract 100 and 200 mg/kg and valeric acid 20 and 40 mg/kg significantly decreased the escape latency and retention transfer latency, as compared to intra cerebroventricular-streptozotocin group. Plant extract and valeric acid also decreased the level of lipid peroxidation and restored glutathione level in rat brains. Administration of picrotoxin significantly reversed the effects produced by plant extract and valeric acid in intra cerebroventricular-streptozotocin treated rats. The findings may conclude that valeric acid present in *V.wallichii* has significant GABAergic effect in amelioration of experimental dementia.

Keywords: Valeriana, Valeric acid, Dementia, GABA, Streptozotocin

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Formulation, Characterization and Evaluation of Planterosome of Herbal Plant of Lawsonia inermis for Skin Application

Rudra Pratap Singh Rajput^{1}, H. V. Gangadharappa², Anshita Gupta Soni¹*

¹ Shri Rawatpura Sarkar Institute of Pharmacy, Kumhari – 490042, Chhattisgarh, India.

²JSS Academy of Higher Education & Research, Mysuru - 570015, Karnataka, India

ABSTRACT- ICCPPDD 13

Background: Lawsonia inermis L. (Lawsonia) was reported to contain carbohydrates, proteins, flavonoids and phenolic compounds, alkaloids, terpenoids. The plant has also been reported to have hepatoprotective, anti-inflammatory, antiviral, antifungal and anticancer properties.

Objective: Lawsonia has low bioavailability because it is less soluble in water and it is rapidly eliminated from body. The aim of this study was to prepare and evaluate the Planterosome containing lawsonia.

Methods: The Planterosome (P1 – P4) containing different molar ratios (1:1, 1:2, 2:1 and 2:2) of lawsonia and soya lecithin were prepared by the antisolvent precipitation technique. The Planterosome were evaluated for % yield, particle size analysis, % EE and characterized by FTIR, DSC and SEM. Antifungal activity of Planterosome of lawsonia was evaluated on Candida albicans (NCIM 3471) fungi by using ketoconazole as standard drug. The in-vitro permeation study was carried out on rat skin. The anti-inflammatory activity was evaluated in male wistar rats.

Results and Discussion: The Planterosome of lawsonia P1 and P2 showed better % yield, drug content, particle size and entrapment efficiency as compared to other Planterosome P3 and P4. The infra-red (FT-IR) and Differential Scanning Calorimetry (DSC) studies of Planterosome of lawsonia revealed that there was no interaction between the plant drug and phospholipids. SEM data showed that Planterosome of lawsonia P1 has irregular size vesicles consisting of soya lecithin and it was found to be intercalated in the lipid layer. Antifungal activity of Planterosome P1 (1:1) showed the better zone of inhibition as compared to Planterosome P2 (1:2), drug lawsonia and standard drug ketoconazole after 3 days. In-vitro permeation study of Planterosome gel of lawsonia (PG) through excised rat skin showed 92.91% of drug permeation up to 6 h.

Conclusion: The anti-inflammatory activity of gel of Planterosome of lawsonia showed significant anti-inflammatory activity as compared to gel of drug lawsonia at 4 h ($P < 0.001$).

Keywords: Planterosome, Lawsonia, Soya lecithin, Anti-solvent precipitation technique, In vitro study.

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Pharmacological Evaluation of Anti-Fungal Activity of Brassica rapa Extracts

*Jhakeshwar Prasad*¹, Ritika Singh², Trilochan Satapathy³, Parag Jain⁴*

¹Shri Shankaracharya College of Pharmaceutical Sciences, Bhilai – 490020, Chhattisgarh.

²Rungta College of Pharmaceutical Science and Research, Raipur – 492009, Chhattisgarh.

³University College of Pharmacy, Pt. Deendayal Upadhyay Memorial Health Sciences and Ayush University, Raipur – 493661, Chhattisgarh, India.

⁴Chhatrapati Shivaji Institute of Pharmacy, Durg – 491001, Chhattisgarh, India.

ABSTRACT- ICCPPDD 14

Objective - To evaluate the activity of Ethanolic and Aqueous extracts of leaves of Brassica rapa against three fungal strains i.e. Candida albicans MTCC 4748, Candida glabrata MTCC 3814, and Candida tropicalis MTCC9038 in-vitro.

Materials and Method - Phytochemical analysis of Brassica rapa belonging to family brassicaceae was examined using Ethanolic and Aqueous extracts. Ethanolic and Aqueous extracts of leaves of Brassica rapa were investigated individually for anti-fungal activity by Agar well diffusion method. Both the extracts were tested against selected fungal strains i.e. Candida albicans MTCC 4748, Candida glabrata MTCC 3814, and Candida tropicalis MTCC9038 to find the inhibitory activities of fungal growth at the dose level of 50 and 100µg/ml.

Results - The phytochemical analysis of ethanolic and aqueous extracts confirmed the presence of phenolic compounds, glycosides, tannins, carbohydrates, proteins, amino acids, tannins, reducing sugar, non-reducing sugar and inorganic compounds such as calcium, magnesium, iron, carbonate & sulphates. Ethanolic extract of Brassica rapa showed considerably high antifungal activities against selected microorganisms than aqueous extract.

Conclusion - Although the active components were not isolated but antifungal active plant principles such as flavonoids, glycosides and tannins were observed in the extract. Ethanolic extract of Brassica rapa possess effective antifungal properties for selected fungal strains i.e. Candida albicans MTCC4748, Candida glabrata MTCC 3814, and Candida tropicalis MTCC 9038.

Keywords: Anti-fungal; Brassica rapa; Candida; Ethanolic; Methanolic; Micro-organisms; Mycosis; Fungal infections.

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Synthesis & Biological Activity of Some New Substituted Alkoxy Containing Benzimidazole Derivatives

Rohini Armo^{*1}

¹Shri Rawatpura Sarkar Institute of Pharmacy Kumhari, Durg.

ABSTRACT- ICCPPDD 15

Benzimidazole derivatives have played a vital part in the development of hetero cyclic compounds. The methods for the synthesis of benzimidazole have become a focus of synthetic organic chemists, as they are useful building blocks for the development of important biological action in medicine. In this present work, a series of benzimidazole alkoxy containing derivatives (1, 2a-2f,3,4a-4f) have been synthesized by chemicals reaction. The reaction progress of the synthesized compound was checked by TLC. The structures of the newly synthesized compound were confirmed by FTIR, ¹NMR, ¹³NMR, Mass Spectroscopy techniques, Elemental test spectral data. Benzimidazole derivatives play vital role in biological field such as antimicrobial, antiviral, antidiabetic, and anticancer activity. Therapeutic significance of these clinically useful drugs in treatment of microbial infections encouraged the development of some more potent and significant compounds. With the purpose of finding new chemical entities with enhanced antimicrobial activity, a series comprises 12 new substituted alkoxy containing benzimidazole derivatives were synthesized. In Particular, some compound displayed antimicrobial activity against various resistance Antibacterial and Antifungal drugs, Strains with Minimum Inhibitory Concentrations (MICs) comparable to the widely the standard drugs used for evaluating antibacterial activity in the present study are Gentamycin, Amoxicillin, Ciprofloxacin. Amphotericin-B, Fluconazole, Ketoconazole are used as the standard drugs for evaluating antifungal activity. Investigation of antimicrobial activity of the compounds was done by disc diffusion method using Gram-positive (Staphylococcus Aureus, Streptococcus Mutans, Bacillus Cogulans), Gram-negative (Escherichia Coli, Pseudomonas Aeruginosa, Salmonella Typhimurium) bacteria and fungus Candida Albicans, Candida Tropicalis, Aspergillus Niger. Some derivatives showed remarkable activity comparable to that of standard against Gram-positive and Gram-negative bacteria and fungus. The compound Gram +ve 2a, 2f and 4a, 4d & Gram +ve 2a, 2d and 4b, 4e shows good anti- bacterial activity and the compound 2a, 2d, 2e and 4a, 4d shows good anti- fungal activity.

Key Words: Benzimidazole derivatives, Spectral analysis, Anti- Microbial activity.

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Pharmacological Activities of *Valeriana Wallichii* (valerianaceae) :A review

Varsha Sahu^{*1}

¹Shri Rawatpura Sarkar Institute of Pharmacy Kumhari, Durg.

ABSTRACT - ICCPPDD 16

Valeriana wallichii DC, belongs to family valerianaceae an Indian medicinal plant, is distributed in the temperate tropical areas and it is one of the most important traditional drug in ayurvedic system of medicine. Valerian is the common name given for the various species of valeriana. It consists of various chemical constituents in which Valerenic acid is one of the most important active principles. Various other bioactives are also reported like flavonoids, sesquiterpenoids, hesperidins, iridoids and volatile oil. *Valeriana wallichii* is also reported for various pharmacological activities like antioxidant activity, antimicrobial activity, anti-inflammatory activity, hypnotic activity, radioprotective activity, anxiolytic and antidepressant effects, effects on stress, effects on performance and alertness, effect on orofacial dyskinesia, antispasmodic and blood pressure lowering effects, anticonvulsant activity & developmental toxicity. The aim of the article is to give a brief study on various pharmacological activity of the *Valeriana wallichii* as it is used in treatment of various diseases and ailments.

Key Words: *Valeriana wallichii*, Valerenic acid.

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A Review: Wound Healing Activity of Some Medicinal Plants In Impaired Conditions

*Deepa Shrivastava*¹*

¹Millinium College of Pharmacy.

ABSTRACT - ICCPPDD 17

Wounds with various shape and sizes on patients develop a significant burden for better wound healing. Healing of acute wounds follows systematic cycle of overlapping, network producing for physiological processes. Various factors i.e. risk factors and characteristics information, both positive and negative, responsible for wound healing behaviors. The reviewed work describes factors that are associated with better wound healing. They provide coordinated care to provide better conclusion in the management of patients with wounds during impaired conditions. The impaired conditions include oxygenation, infection, age and sex hormones, stress, diabetes, obesity, medications, alcoholism, smoking, and nutrition. Some are numerous risk factors i.e. one is regulating (such as stress, smoking, inappropriate alcohol consumption, malnutrition, obesity, diabetes, cardio-vascular disease, etc.) and other is non- regulating (such as genetic diseases and ageing) strongly causative to the impaired wound healing. A better understanding of the influence of these factors on repair may lead to therapeutics that improve wound healing and resolve impaired wounds. Impaired wound healing following oncological irradiation is a common complication affecting cancer patients. So, plant with good antioxidant and antimicrobial potential would prove to be best therapeutic wound healing agent which can accelerate the wound healing process and prevents its complications, thereby improving the quality of life of patients.

Key Words: Wounds, wound healing process.

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Diabetic Neuropathy: A Review

Parveen Nehra^{*1}

¹Rungta College of Pharmaceutical Sciences and Research, Raipur.

ABSTRACT- ICCPPDD 18

Diabetic neuropathies are the most prevalent chronic complications of diabetes. Diabetic neuropathy (DN) refers to symptoms and signs of neuropathy in a patient with diabetes in whom other causes of neuropathy have been excluded. Distal symmetrical neuropathy is the commonest accounting for 75% DN. Distal symmetrical sensory polyneuropathy with little motor involvement but frequent, and potentially life threatening, autonomic dysfunction. Asymmetrical neuropathies may involve cranial nerves, thoracic or limb nerves; are of acute onset resulting from ischemic infarction of vasa nervosa. For diagnosis of DN, symptoms, signs, quantitative sensory testing, nerve conduction study, and autonomic testing are used; and two of these five are recommended for clinical diagnosis. Management of DN includes control of hyperglycaemia, other cardiovascular risk factors; a lipoic acid and L carnitine. For neuropathic pain, analgesics, non-steroidal anti-inflammatory drugs, opioids, antidepressants, and anticonvulsants are recommended. This heterogeneous group of conditions affects different parts of the nervous system and presents with diverse clinical manifestations. The early recognition and appropriate management of neuropathy in the patient with diabetes is important.

Keywords: Diabetic neuropathy, Management.

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**Phytochemical Screening and Evaluation of Anti-Hyperlipidemic Potential of *Desmostachya Bipinnata*
Extract in High Fat Diet Induced Rats**

Harish Gupta*¹, Girendra Kumar Goutam²

¹Department of Pharmacy, Bhagwant University, Ajmer, Rajasthan, India

²Shri Ram College of Pharmacy, Mujaffarnagar, Uttar Pradesh, India.

ABSTRACT- ICCPPDD 19

In the current study, the phytochemical screening of *Desmostachya bipinnata* ariel part along with antihyperlipidemic activity in high fat diet induced albino rats has been performed. Preliminary phytochemical screening showed the presence of alkaloids, glycosides, flavonoids, steroids and phenols. Ethanolic and hydroalcoholic extracts of aerial parts were evaluated for antihyperlipidemic activity. High fat diet induced male albino rats were kept for weeks to induce hyperlipidemia, which are divided into 5 groups with 6 animals in each group. Animals were grouped into normal control (Group-I), high fat diet (Group-II), high fat diet with standard drug Atorvastatin 1.2 mg/kg (Group-III), and test group (Group-IV) received ethanolic extract of *Desmostachya bipinnata* with dose 500 mg/kg while test group (Group-V) received hydro-alcoholic extract of *Desmostachya bipinnata* aerial parts with dose 500 mg/kg. In diet induce model, blood was withdrawn from retro-orbital plexuses and determined the lipid profiles such as cholesterol, triglycerides, HDL, LDL and VLDL. The result obtained from lipid profile suggested that ethanolic and hydroethanolic extract significantly reduce the lipid profile as compared to diet control. Our results demonstrated that hydroethanolic and ethanolic extract of *Desmostachya bipinnata* aerial parts possessed significant antihyperlipidemic activity so it could be a potential herbal medicine as adjuvant with existing therapy for the treatment of hyperlipidemia.

Keywords: *Desmostachya bipinnata*, antihyperlipidemic, atorvastatin, phytochemical.

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A validated and stability indicating method development for the determination of metronidazole in presence of povidone iodine in dermatological formulation by first order derivative UV spectrophotometric method

*Fulzele Pratiksha*¹*

¹M J College Bhilai, Chhattisgarh.

ABSTRACT: - ICCPPDD 20

Background: The motive of the study is to develop a stability indicating method for the determination of metronidazole in the presence of povidone iodine in dermatological formulations by first order derivative UV spectrophotometric method.

Material and methods: stability indicating method is run through the various factors such as time, temperature, acid/bas stress testing, photo degradation, pH variation in the presence of degradation product therefore first order derivative method are much suitable for the determination of changes through UV spectrophotometer and found λ_{\max} 319nm of metronidazole and 235nm for povidone iodine. Detection wavelength has been taken 298nm and 221nm respectively.

Result: Beer's law was obeyed in distilled water at concentration range of 5 μ g/ml- 45 μ g/ml having R² value of metronidazole and povidone was found to be 0.999 and 0.999 respectively.

Conclusion: The developed method was validated on various parameters such as accuracy, precision, robustness, sandell's sensitivity, LOQ and LOD. From results it can be seen that there is a minimum intraday and interday variation. Sample recovery using this method was in good aspects with their labeled claim; first order derivative method is simple and reproducible for the future studies.

Key words: Stability indicating method, first order derivative, povidone iodine, Metronidazole, spectrophotometer.

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Transethosomes: A Novel Approach for enhanced Transdermal Delivery of Drugs

Sandhya Mishra^{1}, Ravindra Kumar Pandey¹, Shiv Shankar Shukla¹*

¹*Columbia Institute of Pharmacy, Tekari, Raipur, C.G.*

ABSTRACT- ICCPPDD 21

The most commonly used route of administration is the oral route but reduced bioavailability due to first pass metabolism, gastric irritation and unpalatable taste are few of its drawbacks. Researchers then focused on transdermal route which can overcome these limitations. Transethosome is one of the ultra-deformable vesicles (UDV) with improved penetration through the skin thus eliminating the drawbacks of liposomes that accumulates in upper stratum corneum. Transethosomes are highly elastic UDV which can encapsulate the drugs of both low molecular and high molecular weight and is a combination of both transferosomes and ethosomes. Transethosomes also eliminated the disadvantage of transferosomes and ethosomes i.e. difficulty to load hydrophobic drugs and skin dehydration respectively. Transethosomes are lipid-based vesicles containing phospholipids, ethanol, edge activator (surfactant) and water. The drug molecules can be delivered through the skin with the help of Phospholipids (or non-ionic surfactants). Phospholipids can easily interact with stratum corneum, improve tissue hydration and amalgamate with lipids of the stratum corneum. Hydrophilic (polar) head as well as hydrophobic (non-polar) tail, both are present in phospholipids. Edge activator (biocompatible surfactant) is a bilayer softening agent. Flexibility and permeability is improved by using this softening agent. Transethosomes can be used to load different variety of drugs such as anticancer, anti-psoriasis, proteins and peptides, analgesics, anti-hypertensive, anti-gout and many more. This review concludes that the transethosomes can be a prominent tool in the field of pharmaceutical nanotechnology and herbal medicine for transdermal delivery of many drugs. There is a wide scope of research in this field of nanotechnology to make this carrier system a commercial success.

Keywords: Transethosomes, Ultra-deformable vesicles, Nanotechnology, Transdermal delivery.

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Monitoring of stability under different stress conditions in Flunarizine and study of its degradation kinetics

Swati Pandey¹, Shiv Shankar Shukla² Ravindra Kumar Pandey³

¹Assistant Professor, SIRT-Pharmacy, SAGE University, Bhopal, M.P.

² Department of Pharmaceutical Analysis and Quality Assurance, Columbia Institute of Pharmacy, Tekari, Raipur, C.G.

³ Department of Pharmacognosy, Columbia Institute of Pharmacy, Tekari, Raipur, C.G

ABSTRACT- ICCPPDD 22

Background: A stability-indicating method (SIM) stipulates the testing of the drug product and drug substances under the stressed conditions that shall imply a clear notion about the stress conditions that would affect the drug in its finished dosage form. Furthermore, manufactures can clearly define the state at which the drug is unstable and present its storage conditions. **Objective:** The present paper deals with the stability testing and degradation kinetic studies of Flunarizine.

Method: The method of analysis was UV visible spectroscopy which is a most convenient and reliable method for the analyst. A method was developed and validated according to the ICH Q2 guidelines along with the amendment in 2018 (ICH Q14). **Results:** The study denotes that the drug is extremely unstable in presence of dry heat and then follows the oxidative and basic degradations. The acidic, neutral and photolysis did not show notable degradations.

Conclusion: The chemical kinetic studies were carried out to more clearly understand the mechanism of degradation and present the order of reaction, rate of reaction and reaction half time. **Highlights:** The application of a spectrophotometric method in the development of a stability-indicating method and study of degradation kinetics is much handier and cost-effective.

Keywords: Flunarizine, UV visible spectroscopy, degradation study, chemical kinetics study.

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Development and Evaluation of Anti-Filarial Drug for Better Absorption

S R Rashmi¹, Deependra Soni¹, Sandip Prasad Tiwari¹

¹Kalinga University, Faculty of Pharmacy, Mantralaya, Naya Raipur, 492010.

ABSTRACT- ICCPPDD 23

This study was aimed to fabricate, optimize and evaluate the mebendazole loaded solid lipid nanoparticles (SLNs) to overcome the issue of poor solubility and bioavailability of the drug, which is formed by Temperature Modulated Solidification Technique (TMST) intended for improvement of treatment of various anthelmintic and also possesses antineoplastic effects. The purpose of the study was to investigate the particle size and physical nature of Solid Lipid loaded nanoparticle by using transmission electron microscopy (TEM), DCS and X-RD studies revealed and confirmed drug and polymers are compatible. The preparation of SLNs was confirmed by various characteristics like Physical stability through zeta potential and particle size. The in-vitro release study showed biphasic release pattern with initial burst effect followed by sustained release up to 24 hours. This study thus demonstrate that mebendazole loaded SLN are promising for the treatment of diseases which having low permeability.

Key words: Transmission electron microscopy (TEM), DCS and XRD, Temperature Modulated Solidification Technique (TMST).

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Formulation and Characterization of Taste- Masking Dosage Form Of Ondansetron Hydrochloride

*Amit Dubey*¹, Om Prakash Agrawal¹*

1Patel College of Pharmacy, Madhyachal Professional University, Ratibad-462042, Bhopal

ABSTRACT- ICCPPDD 24

Ondansetron hydrochloride is an intensely bitter anti-emetic drug used to treat nausea and vomiting following chemotherapy. The purpose of the present work was to mask the taste of Ondansetron hydrochloride and to formulate its patient-friendly dosage form. Complexation technique using indion 234 (polycyclic potassium with carboxylic functionality) and an ion-exchange resin was used to mask the bitter taste and then the taste-masked drug was formulated into an oral dispersible tablet (ODT). The drug loading onto the ion-exchange resin was optimized for mixing time, activation, effect of pH, mode of mixing, ratio of drug to resin and temperature. The resinate was evaluated for taste masking and characterized by X-ray diffraction study and infrared spectroscopy. ODTs were formulated using the drug-resin complex. The developed tablets were evaluated for hardness, friability, drug content, weight variation, content uniformity, friability, water absorption ratio, in vitro and in vivo disintegration time and in vitro drug release. The tablets disintegrated in vitro and in vivo within 24 and 27 s, respectively. Drug release from the tablet was completed within 2 min. The obtained results revealed that Ondansetron HCl has been successfully taste masked and formulated into an ODT as a suitable alternative to the conventional tablets.

Keywords: Indion 234; Ondansetron Hydrochloride; Orodispersible Tablet; Sodium Starch Glycolate; Taste Masking.

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HR-LCMS of Phytoconstituents, Antidiabetic Properties Of *Scoparia Dulcis* Whole Plant - Invitro Study

Segu Prathyusha^{1, 2}, Malarkodi Velraj¹*

¹Department of Pharmacognosy, VELS Institute of Science, Technology & Advanced Studies, Chennai, Tamil Nadu.

²Department of Pharmacognosy, School of Pharmacy, Gurunanak Institution Technical Campus, Ibrahimpatnam, Randa reddy (Dist.), Hyderabad, Telangana.

ABSTRACT- ICCPPDD 25

The current study was aimed to investigate the phytochemical profile and in vitro antidiabetic potential of hydro alcoholic extracts of *Scoparia dulcis* whole plant. High Resolution Liquid Chromatography - Mass Spectrometry (HR-LCMS) was used to identify the phytochemicals present in the extract. The α -amylase and α -glucosidase inhibition assays were used to analyze the in vitro antidiabetic potential of the extract. The results of HR-LCMS showed the presence of 15 phytochemical compounds. Picolinic acid, Coumarin, Arecoline, Salsolinol, Sedanolide, β -Asarone, Radicinin, Muscone, Ellagic acid, Quercetin, Taxifolin, Docosatrienoic acid, Cholecalciferol, Betulin, Gallic acid are the main compounds identified. The inhibition of enzymes like α -amylase and α -glucosidase delay the rate of glucose absorption thereby blunting blood glucose levels in the experimental models. The present study demonstrated that the plant had significant in vitro α -amylase and α -glucosidase inhibitory activity, which might be due to the presence of secondary plant metabolites like phenolic compounds, flavonoids, tannins. Thus current study confirm that hydro alcoholic extracts of *Michelia Champaca* bark had remarkable antidiabetic activity and hence holds future potentials as nutraceuticals in treatment of diabetes and related ailments.

Keywords: HR – LCMS, Antidiabetic, *Scoparia dulcis* whole plant, Flavonoids, quercetin.

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**Development of Novel Topical composition to provide sustained and prolonged therapeutic effect in
rheumatoid arthritis.**

Deependra Soni¹, Sandip Prasad Tiwari¹

¹Kalinga University, Faculty of Pharmacy, Mantralaya, Naya Raipur, 492010

ABSTRACT- ICCPPDD 26

Background: Rheumatoid Arthritis affects 15% people i.e. over 180 million people in India. This prevalence is higher than many well-known diseases such as diabetes, AIDS and cancer. In our state. The proposal exploits the vast potential of natural antirheumatic drugs of Chhattisgarh origin to be used in combination to provide sustained and prolonged therapeutic effect in rheumatoid arthritis patients to improve their life style.

Objective: The objective behind the study was to evaluate the usefulness of the combinational drug system where boswellic acid and eugenol was found to reduce the complications associated with rheumatoid arthritis disease and multipathway approach will help to treat the disease much efficiently. The topical composition was fabricated into such a formulation which can fight against Rheumatoid arthritis synergistically i.e by reducing the inflammation and pain, by relaxing the muscles and by maintaining the level of antioxidants at the site of joints.

Material and Methods: Pure isolated compound of *Boswellia serrata*, i.e, Boswellic acid was taken along with pure isolated plant active Eugenol derived from *Eugenia caryophyllus* as muscle relaxant. Thereafter, NLCs (Nanolipid carriers) was prepared by modified emulsification–ultrasonication method (Singh et.al, 2014). The developed nanocarriers was optimized using design expert software in order to achieve nanocarriers with maximum entrapment efficiency and minimum particle size. The prepared NLCs of the drugs were analyzed for Percentage yield, Entrapment efficiency, Drug release, In vitro cellular uptake study using cell lines. Further

Result: The result of the study showed that the prepared formulation was optimized in size, shape and drug entrapment efficiency was also found high with minimal side effects, higher skin retention time and longer duration of action. The formulation was found non greasy on application and reduced the biomarkers release at a remarkable rate, remains easy to apply and impart patient comfort.

Novelty: The work presented here encompasses utilization of both the natural drugs which are of indigenous to Chhattisgarh State and none of the formulation has been developed yet exploring their potential against rheumatoid arthritis. The delivery system was fabricated contemplating the cost, stability, ease in scalability and most importantly, ensuring sustenance of anti-inflammatory drug and muscle relaxant drug within the painful joints and muscles which could restore the vitality of the bones and terminates the clinical failures of the disease by imparting patient comfort.

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Development of Eutectic Mixture to improve Oral bioavailability

Rinkee Verma¹, Chanchal Deep Kaur¹, Vijendra Suryavanshi², Ritika Singh¹

¹Rungta collage of pharmaceutical science and research, Raipur, C.G., 492009.

²MJ Collage of pharmacy, Bhilai, C.G., 490020.

ABSTRACT- ICCPPDD 27

The present work investigated the permeation enhancing effect of fatty acids on poorly absorbed active pharmaceutical ingredients across the intestinal epithelium. Several synthetic compounds have been revealed to modify the epithelial barrier and although the research has broadened to cover a role natural permeation enhancer. To determine permeation effect of fatty acid on quetiapine used as model drug. A eutectic mixture was prepared with fatty acid (PA and MA). The formation of eutectic system was determined by the binary phase diagram and Tamman's triangle was constructed using differential scanning calorimetry (DSC) data of prepared mixture from 0.2 to 0.8 molar ratios of quetiapine with myristic acid and palmitic acid respectively. The *in-vitro* permeation rate of quetiapine through cellophane membrane was determined in Franz diffusion cell at 37^oC using UV spectrophotometer. All the formulations were subjected to FTIR study to confirm compatibility of fatty acids with drug, and perform contact angle study to determine wettability of eutectic system. The permeation profile of prepared formulation was compared with a marketed drug. The *in - vitro* permeation studies indicate that formulation containing fatty acid was able to deliver more than 90% drug within 24 hours, while marketed formulation delivered 71% only. Optimized formulation quetiapine and PA ratio 6:4 was further evaluated for DSC study. The thermogram showed that a small change in melting isotherm of quetiapine was observed, indicating that there was no significant interaction between drugs and the fatty acid. The overall results suggest that fatty acid might be used as a permeation enhancer for oral drug delivery system as well as hydrophilic drugs.

Keywords: Quetiapine, Fatty acid, Eutectic mixture, Permeation Enhancer, permeability.

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A Review on Hybrid Carbazole With Diverse Biological Activities

*Divya Sahu^{*1}, Sagar Sahu², Vishal Raj Bharti³, Preeti Patel¹, Vijay K. Patel⁴,
Harish Rajak⁴*

¹Rungta college of pharmaceutical science and Research, Raipur, C.G. Pin code – 492009

²Columbia Institute of Pharmacy, Raipur, C.G. Pin code-493111

³ISF College of Pharmacy, Moga, Panjab Pin code-142001

⁴Department of Pharmacy, Guru Ghasidas University, Bilaspur, C.G. Pin code-495005

ABSTRACT- ICCPPDD 28

Carbazole forms an essential class of heterocycles. Carbazole is a tricyclic compound with a coal tar carbon skeleton. The carbazole ring system is a structural feature of several compounds used in electronics for the manufacture of polymers or dyes and electroluminescent materials, due to its fluorescent character. It has been stated that various biological activity has antimicrobial, antitumor, antiepileptic, and antihistaminic, antioxidant, anti-inflammatory, antidiarrheal, analgesic, neuroprotective, or pancreatic inhibitory properties. Some carbazole derivatives were synthesized like carbazoles with N-substitution, benzocarbazoles, furocarbazoles, pyrrolo-carbazoles, imidazo-carbazols, etc. N-substitution derivatives have attracted attention from researchers because of their therapeutic potential against neurological disorders and cell proliferation.

Keywords: Neuroprotective, Antimicrobial, Anticancer.

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A Review on Covid-19 Drug Repurposing & Research

*Dwarika Sinha*¹, Rajni Yadav¹*

¹Kalinga university, Faculty of Pharmacy, Kotni, Naya Raipur, Chhattisgarh,492010

ABSTRACT- ICCPPDD 29

COVID-19 has now been affirmed pandemic and novel therapies are immediately desirable as we arrive outside containment. Because COVID-19 is now becoming pandemic and in the nonappearance of known authenticated efficient therapy, efforts of laboratories and medical teams have focused on repurposing FDA sanctioned drugs to treat the most severe cases of infection. Developing novel drugs from is a long-lasting process, consequently unfeasible to face the instantaneous world-wide challenge. Drug repurposing (also termed drug profiling re-tasking) is an approach for recognizing new usages for official or new drugs that are separate the opportunity of the unique medical indication. Drug repurposing is a developing approach where prevailing medicines, having previously been tested safe in humans, are reorganized to combat difficult-to-treat diseases. Although using like repurposed drugs separately may eventually not yield an important clinical benefit, carefully combined combinations could be very operative, the current question now being which combination. In this present review we are trying to shedding light on the numerous previously well reported and recognized drug which can be mostly used as repurposed medicament in the management of COVID-19 pandemic.

Keywords: Containment, repurposing, separate, clinical benefits,

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Emerging Disease: Advancement in the treatment of Sickle cell anemia/ Sickle cell disease

*Kavita Bhattacharya*¹, Ankita Damahe¹*

¹Apollo college of Pharmacy, Anjora Durg, 491001

ABSTRACT- ICCPPDD 30

Sickle cell anemia/Sickle cell disorder (SCA/SCD) is one of the well-known single-gene disorder which have been affecting millions of people worldwide due to inheritance point mutation in DNA (beta globins) genes resulting abnormal production of hemoglobin. This change in the structure and production of hemoglobin leading to hemolysis and vaso occlusive events followed by red blood cell membrane damage, low hemoglobin level, severe pain and discomfort ,pulmonary complications, heart failure and end- organ damage,. For the treatment of SCA/SCD very fewer drugs and therapies have been reported in the past two decades like Hydroxyurea, blood transfusion, and opioids analgesics. Despite of these therapies' patients with SCA/SCD still experience vaso-occlusive event,severe pain and even premature death. In this review we will focus on the recent therapies and drugs for SCA/SCD including new USA FDA approved drugs L-glutamine,voxelotor,, gene editing or therapy, monoclonal antibodies (Crizanlizumab), antiplatelets (ticagrelor) and some antioxidants.

Keywords: Sickle cell anemia, Vaso occlusive events, Hydroxyurea, Pharmacotherapy.

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Formulation of Sugarless Medicated Lozenges For Diabetic Patients

¹Renjil Joshi, ¹Anshita Gupta

¹Shri Rawatpura Sarkar Institute of Pharmacy, Kumhari, Durg.

ABSTRACT- ICCPPDD 31

The main objective of the present study is to develop sugar free medicated lozenges for diabetic patient to treat the dryness of mouth and control glucose level by the using different herbal drugs. Mouth dryness is very common symptoms in diabetes. Dry mouth, or xerostomia, caused when a person's salivary glands do not produce sufficient saliva to keep the mouth moist. Mouth dryness can be a symptom of diabetes and also a side effect of the medication that treats diabetes. Mouth dryness is the most common problems that people living with diabetes experience. The formulations of medicated lozenges contain stevia natural sweetener and different therapeutically active compound like Gymnamic acid, cinnamon oil, liquorice Giloy extract which are effective in control dryness of mouth as well as control the glucose level in diabetic patients. This formulation contains flavoring agent such as menthol, acacia and guar gum as a gum base. Preservative are used for prevent unconditional growth of bacteria. Sugar free lozenges have bright future as a novel method of delivering drugs for local action and systemic effect.

Keywords: Sugarless, Xerostomia, Diabetes, Lozenges.

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Alteration in memory cognition due to activation of caveolin-1 and oxidative damage in a model of dementia of Alzheimer's type

Ankita Gupta¹, Manish Acharya^{1*}, Ashish Sharma¹, Anil Kumar¹, Rohit Goyal¹
School of Pharmaceutical Sciences, Shoolini University, Solan, Himachal Pradesh, India

ABSTRACT: - ICCPPDD 32

Objective:

The present study aims to investigate the role of caveolin-1 in dementia of Alzheimer's type using intra cerebroventricular streptozotocin (ICV-STZ)-induced neurodegeneration model in rats.

Materials and methods:

Male Wistar rats (220-260 g) were employed. STZ 3 mg/kg via ICV route was given once to cause neuronal injury. Daidzein – a caveolin inhibitor at 0.2, 0.4, and 0.6 mg/kg, s.c. were given daily whereas minoxidil – a caveolin activator was given at 0.45 mg/kg, *i.p.* on alternate days for 28 days. STZ was also given at its submaximal dose 1.5 mg/kg to minoxidil group only.

Results:

ICV-STZ control animals exhibited cognitive and neurological deficits on the Morris water maze, elevated plus maze, and balance beam tests ($P < 0.0001$). Treatment with daidzein significantly restored memory impairments and decreased oxidative damage whereas minoxidil potentiates the effect of STZ causing significant impairment in memory. Significant oxidative stress such as lipid peroxidation and glutathione ($P < 0.0001$) were also observed due to ICV-STZ administration resulting in neuronal damage which was significantly prevented by treatment with daidzein in brain tissues.

Conclusion:

The findings from the present investigation may conclude that the caveolin-1 from caveolae at the cell membrane induces memory deficits and oxidative stress phenotype that resemble the neurological phenotype of Alzheimer's disease. Further studies are warranted to gauge the effect of caveolin dyshomeostasis on the amyloidogenic cascade.

Keywords: Alzheimer's, amyloid, caveolin, memory, streptozotocin.

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Development and QbD-BASED optimization of Nanogel for Topical Delivery of Diacerein

Disha Kesharwani^{1}, Swarnali Dash Paul², Rishi Paliwal³, Trilochan Satapathy⁴*

¹Columbia Institute of Pharmacy, – Tekari, Raipur, Chhattisgarh, India

²FPS-SSTC-SSGI, Bhilai, C.G, India

³IOP, Indira Gandhi National Tribal University, Amarkantak, M. P, India

⁴Ayush University, Raipur, C. G. India

ABSTRACT- ICCPPDD 33

The aim of this study was to develop a nanogel and study its potential for the topical delivery of diacerein. The nanogel was prepared by emulsion solvent diffusion method. The concentrations of eudragit RSPO, and Carbopol 940 were taken as independent variables and the particle size, % entrapment efficiency, in- vitro drug permeation at 24 hours were the response variables selected. The average size, zeta potential, and polydispersity index for the diacerein were found to be in the range. Scanning electron microscopy study revealed that prepared NLC was, uniform, <200 nm in size, with a spherical shape. Optimized formulation F 14 entrapped the drug with 83 % entrapment efficiency and the in-vitro drug permeation was found about 90.13%. These results show that the prepared diacerein nanogel has high potential to improve the penetration of the drug through the stratum corneum, with enormous retention and with minimal skin irritation, which is the prerequisite for topically applied formulations.

Keywords: Nanogel, zeta potential, scanning electron microscopy, entrapment efficiency.

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Role of GSK-3 β signalling in metabolic syndrome induced by mild alcohol intake in rodents

Yamini Chauhan¹, Nicky Singh^{1}, Rohit Goyal¹, Shaila Khah¹, and Pyare Lal Sharma²*

¹Department of Pharmacology, School of Pharmaceutical Sciences, Shoolini University, Solan, HP, India

ABSTRACT- ICCPPDD 34

Metabolic syndrome is characterized with abdominal obesity, insulin resistance, dyslipidemia and hepatic dysfunction. Glycogen synthase kinase-3 β (GSK-3 β) expression has been observed in adipose tissues in obese and diabetic humans, and in rodents. The aim of study was to investigate role of GSK-3 β in modulation of metabolic alterations in alcoholic fed rats. Male Wistar albino rats (180–220 g) were used. High fat diet (HFD) for 8 weeks and alcohol (2%) from third to eighth week were given. Lithium chloride (LiCl), a GSK-3 β inhibitor (60 mg/kg) was used orally from third to eighth week. HFD treatment caused significant ($p < 0.05$) increase in the percentage of body weight gain, BMI, Lee index, different fat pads, liver weights, serum glucose, leptin, triglyceride, LDL, VLDL, cholesterol, alanine transaminase, aspartate transaminase, tissue thiobarbituric acid reactive substances, nitrate/nitrite and significant decrease in food intake (g), serum HDL and tissue GSH in HFD control rats, as compared to normal control (NC). Administration of alcohol (2%) ad libitum potentiated the effect of normal and HFD, respectively, in NC and HFD control rats, respectively. Administration of LiCl produced significant amelioration in biochemical and pathological changes caused in the form of metabolic syndrome in HFD alone and HFD and alcohol-treated rats. The histological observations also showed similar findings in liver tissue. It may be concluded that inactivation of GSK-3 β consequently leads to increased leptin and insulin sensitivity as evidenced by the reversal of alterations caused due to metabolic syndrome in rodents fed with HFD and mild alcohol.

Keywords: Alcohol, high fat diet, GSK, metabolic syndrome, obesity.

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Isolation and characterization of D-Ononitol a cyclitol from the leaves of the traditionally used herbal plant

Bauhinia variegata

***Priyanka Dewangan*^{*1}**

Royal College of pharmacy, Raipur.

ABSTRACT- ICCPPDD 35

Herbal Medicine is the best gift of nature to the mankind. It's a medicinal reservoir through history. Rakta Kanchan (*Bauhiniavariegata*) belongs to Leguminosae family used as medicines for many health problems and diseases. In this research isolation of a phytoconstituent D- Ononitol was carried out from the ethanolic extract from the leaves of *Bauhinia variegata*. The compound isolated through column chromatography and characterization of chemical constituent was done by various analytical techniques viz. TLC, MP, ¹H-NMR, ¹³C-NMR, 2D-NMR IR & LC-MS spectroscopy. This investigation is may be useful in establishing a relationship between chemical constituent of the leaf extract and previously reported pharmacological activities on literature of *Bauhinia variegata*. Ononitol is the first time reported from the ethenolic crude extract of *Bauhinia variegata*.

Keywords: *Bauhinia variegata*, column chromatography, Leguminosae, ¹H-NMR, D- Ononitol.

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Ethnomedicinal Study of Plants Used For Rheumatoid Arthritis In Mahasamund District, Chhattisgarh

*Rahul Singh*¹*

¹M.J. College, Kohka Road, Junwani, Durg, CG, India

ABSTRACT- ICCPPDD 36

Rheumatoid Arthritis (RA) is a inflammatory autoimmune disease which leads to joint deformity associated with progressive disability, systemic complications, characterized by synovial inflammation and swelling and destruction of bones. Its exact cause is unknown and its affects peoples of all age groups. Mahasamund district is situated in Western region of Chhattisgarh with an altitude varying from 300m to 330 m sea level. This region of Chhattisgarh provides an important example which demonstrates the role of local and traditional knowledge in the treatment of RA. Many local healers have been using several plants for medicinal preparations and these medicines are known as ethnomedicines. It is estimated that around 200000 plant species are known all over the world. The World Health Organization has listed 21 000 plant species possessing medicinal properties in the world. In India about 2500 plant species are used for medicinal purposes by traditional healers. *Ethnopharmacological relevance:* This study provides you the ethnomedicinal and ethnopharmacological data to contribute to an understanding of local and traditional plant usage in Mahasamund district related to treat rheumatoid Arthritis.

Keywords: Rheumatoid Arthritis, inflammatory autoimmune disease.

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Pharmacological Study and Phytochemical Study of *Celastrus paniculatus* Seed

Shinde Tejashri Sunil^{*1}

¹Pravara Rural College Of Pharmacy, Loni-413713, Maharashtra, India

Abstract- ICCPPDD 37

Celastrus paniculatus wild mentioned in Ayurveda as Tree of life, belonging to family Celastraceae .It is used to treat brain related disorders and to enhance learning and memory. *Celastrus paniculatus* show many activities along with main activity i.e memory enhancing effect. Its reported activities are antiviral, antibacterial, sedative, analgesic, hypolipidemic. It is reported to be a good antidote for opium poisoning.

Keywords: Ayurveda, *Celastrus paniculatus*.

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Synthesis and Biological Evaluation of Alcohols Obtained from Substituted Phenoxyacetophenones

*Chauhan S. Nityapal*¹*

¹Shri Rawatpura Sarkar Institute of Pharmacy, Kumahri, Durg, Raipur (C.G.).

ABSTRACT- ICCPPDD 38

Background

Phenoxyacetophenones has been reported to show a broad spectrum of biological activities including antibacterial, antifungal, and anti-inflammatory.

Objective

Synthesis and Biological Evaluation of Alcohols Obtained from Substituted Phenoxyacetophenones.

Methods

A series of novel reduced alcohol derivatives as a potential anti-inflammatory and antimicrobial agent were synthesized by reduction of substituted phenoxyacetophenones derivatives with sodium borohydride. In vitro antimicrobial activity was evaluated by disc diffusion (cup plate) method at different concentrations for the entire newly synthesized compound against three gram positive organism (*S.aureus*, *S.mutans*, *B.coagulants*), one gram negative organism (*E.Coli.*), and one fungal strain (*Candida albicans*). Amikacin & Fluconazole were used as reference standard for antibacterial and antifungal activity respectively. Anti-inflammatory was evaluated by carrageenan induced rat paw edema for all the newly synthesized compounds and indomethacin was used as standard drug for comparison.

Results and conclusion

All synthesized compounds were characterized on the basis of melting point, TLC, analytical IR, ¹H NMR, ¹³C NMR spectral data. All the synthesized compounds exhibited variable antimicrobial activity against all tested microbial strains. It was observed that majority of synthesized compounds showed zone of inhibition against all microbial strains. Anti-inflammatory activity revealed that all the test compounds protected rats from carrageenan induced inflammation and showed mild to good anti-inflammatory.

Keywords: Phenoxyacetophenones, sodium borohydride, acetophenones anti-inflammatory, antimicrobial.

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The Stages of Drug Discovery and Development Process

*Ahmad Husain Jolha*¹, Sandip P Tiwari¹, Rajni Yadav¹, Vinay Mishra¹*

¹Kalinga University, Faculty of Pharmacy, Near Mantralaya, Naya Raipur, 492101.

ABSTRACT- ICCPPDD 39

Drug discovery is process which aims at identifying a compound therapeutically useful in curing and treating disease. This process involves the identification of candidates, synthesis, characterization, validation, optimization, screening, and assays for therapeutic efficacy. Once a compound has shown its significance in these investigations, it will initiate the process of drug development earlier to clinical trials. New drug development process must continue through several stages in order to make a medicine that is safe, effective, and has approved all the regulatory requirements. The drug discovery process is sufficiently long, complex, and expensive so that many biologicals targets must be considered for every new medicine ultimately approved for clinical use and new research tools may be needed to investigate each new targets From initial discovery to a marketable medicine is a long, challenging task. It takes about 12-16 years from discovery to approved medicine and requires an investment approximately US \$1 billion. On an average , a million molecules screened but only a single is explored in late stage clinical trials and is finally is obtainable for patients.

Key words: Lead optimization, clinical trials, target validation, identification, drug, discovery, new drug.

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Pharmacovigilance: Role, Importance and Future Aspects

*Venu Anand Das Vaishnav*¹*,

¹Department of Pharmacy, Guru Ghasidas Central University, Bilaspur (C.G.), INDIA

ABSTRACT- ICCPPDD 40

Background and aims: Despite significant advances in the Pharmacovigilance as a carrier. Pharmacovigilance can be described as a systematic process encompassing these steps: Collecting information about the nature, severity, clinical characteristics, and outcomes of adverse effects of medicinal products, • Documenting and analyzing the collected adverse-effects data to detect a causal link between the medicinal product and adverse effect, • Taking remedial actions to eliminate (or minimize) hazards posed by adverse effects of medicinal products, and • Monitoring the impact of any such remedial actions and so on. The terms adverse effect, adverse drug reaction, side effect, and others are used interchangeably in clinical practice. There also exists marked variation in the definitions of medication-safety-related terms among various professional bodies and healthcare systems

Methodology: The two methods were expressed in common terms to simplify identifying similarities and differences, some extensions to both methods were provided, and the empirical Bayes method was applied to accumulated experience on a new antihypertensive drug to elucidate the pattern of adverse-event reporting.

Results: Revealed the basic components of Pharmacovigilance processes are summarized as Data generation and Case evaluation with their reporting. Results suggested a wide scope of Pharmacovigilance in advancement of Adverse events, seriousness and severity, and expectedness.

Discussion: It provides a better enrollment of patient safety and efficacy in pharmacovigilance as a carrier and opportunities which arise the harmonization of event terms.

Conclusion: Pharmacovigilance is continuous process requiring active participation of patients, pharmacists, other HCPs, medicinal product manufacturers, and regulatory authorities. Educating pharmacy students and professional pharmacists about pharmacovigilance on an ongoing basis is likely to improve their participation in this process.

Keywords: Pharmacovigilance, Patient Safety, Adverse drug reaction, Post marketing Surveillance.

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ADR Vis-À-Vis ADR: Emerging Issues and Challenges

*Prof.(Dr.) Krushna Chandra Dalai*¹*

¹*Kalinga University, Department of Law, Near Mantralaya, Naya Raipur, 492101.*

ABSTRACT- ICCPPDD 41

With the evolution of civilization “living law” has a continuous search the upcoming challenges. In various dimensions the society is changing, in a changing and dynamics society where policy and law laid down by the legislature are unable to keep pace with the social, political, economic and technological realities and the needs and expectations of society. The Indian pharmaceutical industry is one of the leading sectors contributing towards country’s economic growth. The practices followed in the pharmacy industry have wide impact both from the consumer and the market perspective, being a sensitive sector. The primary concerns of the industry revolve around protection of its research and development (“R & D”) and innovative products developed, which to a large extent are protected by virtue of the intellectual property (“IP”) legislations. It is also ensuring flow of innovative drugs. The crucial aspect to be tested is whether the protection vested amounts to pharmacy companies assuming a The growth of pharmaceutical industry though numerous therapeutic advances, the existing system suffers from major problems: a lack of directionality to meet key needs, inefficient collaboration, high prices that fail to reflect the public contribution, and an overly-financial zed business model. Any harmful of seriously /unpleasant effects occurring at doses intended for therapeutic or diagnosis effect requires reduction of dose or withdrawal of drug & forecasts hazard from future diagnosis. This monopoly situation in the market, leading to huge price margins and substantial market power. In India almost every second there is a case of medical negligence which is seen. It is seen in the big as well as in the small hospitals, clinics, dispensaries etc. Due to this a number of people are suffering in our country. The pharmacists prescribed clinical arrangements and prescribe drugs to the patients as availed in their drug house topics ranging from health law and policy, to the legal, ethical and economic aspects of medical practice, research and education. Every ill there is a pill but every pill there is a ill due to chemical composition of drugs. Doctor does not give immediate treatment when required (may be that the doctor is 'over busy'). The author tried his best explored the reasons for ADR and ADR for compensation for victimizations.

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Pharmacovigilance: Emerging Field in Pharmacy

*Saurav Priyadarshani*¹, Sandip P Tiwari¹, Rajni Yadav¹*

¹Kalinga University, Faculty of Pharmacy, Near Mantralaya, Naya Raipur, 492101.

ABSTRACT- ICCPPDD 42

People are using more potent drugs with various medical conditions. Pharmacovigilance helps in safe and convenient use of pharmaceutical drugs. Voluntary recording of adverse drug reactions (ADRs) is a chief component of pharmacovigilance. Adverse drug reactions have become a dominant health related problem in developing countries like India. The main objective of pharmacovigilance is the assessment of benefit-risk profile of drug for better potency and safety in patients. In terms of volume India pharmaceutical industries is third largest in the world so India has a core of clinical research and drug design & development. This review article explains the need of pharmacovigilance in pharma companies, the growth of pharmacovigilance in different centuries and current status of pharmacovigilance in the country. Pharmacovigilance supports safe and appropriate use of drugs. Spontaneous reporting of adverse drug reactions (ADRs) is an essential component of pharmacovigilance. However, there is significant underreporting of ADRs. Adverse drug reactions have become a major problem in developing countries. Knowledge of pharmacovigilance could form the basis for interventions aimed at improving reporting rates and decreasing ADRs.

Keywords: Pharmacovigilance, Thalidomide Disaster, anti-inflammatory drugs.

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Pharmacognostical and Phytochemical Investigation of Methanolic Extract on Leaves of Cucurbita Pepo

Sonia singh¹, Manmohan Singh Jangdey¹, Khomendra Kumar Sarwa²

¹Shri Rawatpura Sarkar College of Pharmacy, Shri Rawatpura Sarkar University, Raipur.

²Department of Pharmacy, Government Girls Polytechnic, Byron Bazar, Raipur.

ABSTRACT- ICCPPDD 43

Cucurbita pepo belongs to the Cucurbitaceae family it is used for both medicinal and ornamental used. It is also used as a food source because of their high nutritional value. The present study was aimed at the pharmacognostic and preliminary phytochemical screening of methanolic extract on leaves of Cucurbita pepo. The pharmacognostic investigation included organoleptic, macroscopy, microscopy, and physicochemical parameters including detection of ash value, and extractive value. The preliminary phytochemical screening of methanolic extract on leaves shows the presence of alkaloids, flavonoids, tannins, phenols, triterpenoids, and saponins, the result of the plant Cucurbita pepo gives the basic information judging the authenticity of the plant and also differentiate the drug from its allied species.

Keywords: Cucurbita pepo, Cucurbitaceae, Standardization, WHO guideline, Phytochemical Screening, Transverse section.

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An Overview in Stability Indicating Method

*Preeti Chandrakar*¹*

¹Rawatpura Sarkar Institute of Pharmacy, Kumhari, Durg (C.G).

ABSTRACT- ICCPPDD 44

Stability is defined as the capacity of a drug substance or drug product to continue within established specifications to maintain its identity, strength, quality, and purity throughout the re-test or expiration dating periods. It is also called forced degradation method. Forced degradation studies show the chemical behavior of the molecule which in turn helps in the development of formulation and package. In addition, the regulatory guidance is very general and does not explain about the performance of forced degradation studies. Stability indicating method is an active substance or finished product provides proof on how the quality of a drug product or drug substances differs with time. It is also called forced degradation method. All stability study guidelines are mentioned in ICH, FDA, WHO and EMEA. With the arrival of International conference on harmonization (ICH) guidelines, the condition of establishment of stability-indicating assay method (SIAM) has become more clearly directed. The object of stability indicating is to establish degradation pathways of drug constituents and drug products and detect impurities related to drug substances or excipients. Stability indicating generates a degradation profile that mimics what would be observed in a formal stability study under ICH conditions. There are different types of methods for stability indicating, such as hydrolytic degradation, thermal degradation, oxidation degradation and photolytic degradation. After the degradation studies, drug products and drug substances are analyzed using UV and HPLC.

Keywords: Stability indicating, forced degradation, oxidation, hydrolytic, photolytic, ICH, FDA, EMEA, WHO, UV, HPLC.

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An Overview of the Indian Pharmacovigilance Program

*Prabhat Jha*¹, Khushboo Gupta¹*

Kalinga University, Faculty of Pharmacy, Naya Raipur, 492101.

ABSTRACT- ICCPPDD 45

The science and activities relating to the detection, assessment, understanding, and prevention of adverse effects or other drug-related problems are known as pharmacovigilance. It play an important role in the healthcare system through monitoring and interaction of drugs and there effects in both animals as well as in humans or in simpler terms we can say that Pharmacovigilance is a big and a major step towards drug discovery and development. In this the article includes good manufacturing practises (GCP) and (ICH) guidelines for pharmaceuticals for human use are examined as an important aspect in the transformation of clinical trial to the objective of pharmacovigilance. In terms of volume India pharmaceutical industries is third largest in the world so India has a core of clinical research and drug design & development. The regulatory body known as PVPI (Pharmacovigilance Program of India) has many goals but the primary target of the authority is to find out and answer to the drug safety issues. The program seeks to motivate a culture and some social aspects of reporting problems due to effect of drugs. Pharmacovigilance plays a major role in meeting the challenges posed by the ever-increasing range and potency of medicines. But the pharmacovigilance system in India is still not well developed. Disfavor of recent implementation of a well-structured pharmacovigilance program in India in accordance with the objectives and recommendations of WHO by CDSCO, desired success is still a distant dream.

Keywords: Pharmacovigilance, Pharmaceutical, Healthcare.

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An Please Outline Of Pharmacovigilance Components

*Swati Mahakul*¹, Khushboo Gupta¹*

¹Kalinga University, Faculty of Pharmacy, Naya Raipur, 492010.

ABSTRACT- ICCPPDD 46

Pharmacovigilance combines the terms pharma (drugs) and vigilance (monitoring). Pharmacovigilance is the technique of monitoring medications and the inside effects through the use of pharmaceutical products. A major emphasis of pharmacovigilance is Adverse Drug Reactions. The Pharmacovigilance Program of India is an Indian government agency whose goal is to improve patient safety by monitoring drug safety. The following are some of the most important aspects of pharmacovigilance. Retrospective study is another term for a case-control study. It's a sort of observational and comparative research that focuses on the factors that are linked to diseases. The outcomes of two groups of persons are compared and then analyzed. A prospective study (also known as a cohort study) is an on experimental study in which the outcome of interest is unknown from the outset. They are specifically chosen based on the individual's exposure status as well as a few other components such as population statistics, intensive event reports, signal intelligence, and soon.

Keywords: Retrospective, Cohort, intensive, correlate.

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**A Universal Security System for Pharmaceutical Drugs Real time monitoring: Excellent overview of
pharmacovigilance**

*David Kisku*¹, Khushboo Gupta¹*

Kalinga University, Faculty of Pharmacy, Naya Raipur, 492010.

ABSTRACT: - ICCPPDD 47

Adverse Drug Reactions are among the top 10 leading causes of death in most of the country. In order to eliminate the emergence of further complications ADRs must be explored, prevented or minimised. A close and effective monitoring is required to assess the risk associated with medicine; this is achieved only when stakeholders work collaboratively. Like Government, WHO, Poison and Medicine Information Centre Consumer Media. During 16th world assembly in 1968 program for International Drug Monitoring was conducted. Initially 10 countries took the initiative. Drug safety and pharmacovigilance remains a dynamic clinical and scientific discipline. Pharmacovigilance is defined by the World Health Organization (WHO) as 'the science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other drug-related problem. However, despite all their benefits, evidence continues to get those bigger adverse reactions to medicines which are common, yet often preventable, cause of illness, disability and even death. In 2002, more than 65 countries have their own pharmacovigilance centre's. Membership of the WHO for International Drug Monitoring is coordinated by the WHO Collaborating Centre for International Drug Monitoring, known as the Uppsala Monitoring Centre (UMC). Pharmacovigilance continues to play a crucial role in meeting the challenges posed by the ever-increasing range and potency of medicines, all of which carry an inevitable and some- times unpredictable potential for harm.

Keywords: Pharmacovigilance, Drug safety, Uppsala Monitoring Centre.

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International Conference
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“Current Perspectives of Pharmacovigilance in Drug Discovery and Development”

Investigation of ethanolic extracts of leaf and bark of *Buchanania lanzan* Spreng for the treatment of Oral Mucositis

Bhushan Muley¹, Neeraj Mishra¹, S.Gupta¹, Anshita Gupta¹
¹Shri Rawatpura Sarkar Institute of Pharmacy, Kumhari, Durg.

ABSTRACT- ICCPPDD 48

Tribal people of Jharkhand and Chhattisgarh are using *Buchanania lanzan* Spreng. (Family :- Anacardiaceae) mainly for wound healing, antidiarrheal, analgesic and antiulcer but no scientific study has been carried out regarding its Oral Mucositis pharmacological activity yet. Ethnobotanical Literature survey reveals that folklore medicines are used by tribal people from long time for Oral Mucositis, oral disorders etc. Currently global market of mouth ulcer treatment is rising by 3.8% from 2019-2026 to reach US Dollar 1.5 billion by 2026. Literature indicates bark and gums are reported in the tooth ache, pain and inflammation. So investigation of leaf and bark extracts of *Buchanania lanzan* Spreng for the treatment of Oral Mucositis may prove the traditional claims. The anti-Oral Mucositis activity can be possible and different extracts may supports the Ethno medicinal claim about the use of traditional *Buchanania lanzan* in the treatment of oral disorder like tooth ache, wound, ulcer, pain, inflammation etc. . Filter paper discs of 4 mm soaked in glacial acetic acid were applied to left buccal mucosa for 40 seconds. This induces an immediate tissue necrosis producing a single crateri form ulcer in each of the experimental animals two days later. The ulcers normally would remain for 14 days.

Keywords: Oral mucositis, Creteriform ulcer, extracts of *Buchanania lanzan*, tooth ache.

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A Review Article on Herbal Cosmetics

Pragati Baghel¹, Dr. Neeraj Sharma²

¹Research Scholar, Bhagwant University, Sikar Road, Ajmer, Rajasthan, India.

²Principal, Bhagwant University, Sikar Road, Ajmer, Rajasthan, India.

ABSTRACT- ICCPPDD 49

Based on health science, India is a focus for the development of herbal cosmetics and other natural herbs (AYUSH). In the future, the Ayush Pharmaceutical industry has a lot of potential and potential for herbal cosmetics and development. Natural beauty is a blessing, and cosmetics aid in presenting and enhancing human beauty and personality. Herbal cosmetics are preparations that serve as a cosmetic base and contain active ingredients from Ayurveda, Siddha, and Unani (ASU) drugs (which reference are readily available in schedule 1st book of Drug and cosmetic act 1940 and rule 1945). People used to use various lepa, Alepa, Pralepa, Udavartan, Prakshalan, and other herbal cosmetics in the traditional era. Nature has provided a means to maintain that parity. Herbs are one example. An herb is a plant or plant extract that contains nourishing and healing elements such as leaves, bark, berries, roots, gums, seeds, stems, and flowers. Cosmetics alone are not sufficient to care for the skin and other body parts; a combination of active ingredients is required to reduce skin casualties and ageing. Herbal cosmetics have grown in popularity among the general public. Herbal cosmetics products are claimed to have efficacy and intrinsic acceptability due to routine use in daily life, while avoiding the adverse effects and chronic diseases that are common in synthetic products.

Keywords: Herbal cosmetics, skin.

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Current Targets In Alzheimer’s disease

*Lokkanya Dewangan*¹*

¹Shri Rawatpura Sarkar Institute of Pharmacy, Kumhari, Durg, Chhattisgarh, India.

ABSTRACT- ICCPPDD 50

Alzheimer’s disease (AD) is a widespread progressive neurodegenerative disorder in which the brain cell death leads memory loss and cognitive decline. The exact cause of neurodegeneration in AD are not known but several pathological condition contributes the progression of AD, such as low levels of the neurotransmitter acetylcholine (ACh), amyloid-beta (Ab) aggregation, hyperphosphorylated tau-protein deposition, oxidative stress and activation of monoamine oxidase (MAO). Currently there are few drug applicants available in market from which only symptomatic relief is achieved and also not capable to stop neurodegeneration in Alzheimer patient. The greatest challenges in development of drug for the treatment of Alzheimer are the number of biological pathways and proteins involved in the pathogenesis of disease, the complexity of the affected organs. Thus, it is necessary to develop new methodology for design of novel molecule. In this study summarizes the current therapeutic targets for the treatment of AD, in vivo active agents against AD and future prospects of the docking with particular emphasis on AD. From the thorough study it is concluded that by inhibiting cholinesterase enzyme, amyloid beta aggregation, tau protien hyperphosphorylation and generation of oxidative stress is current target to treat Alzheimer disease and exploring the area of design and development of new drug.

Keywords: Alzheimer’s disease (AD), acetylcholine (ACh), amyloid-beta (Ab) aggregation, hyperphosphorylated tau-protein (t) deposition, oxidative stress, monoamine oxidase (MAO).

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Cardiotonic activity of Petroleum Ether and alcoholic extract of Seeds of Cassia Tora Linn

*Neelima Janardan*¹*

¹Shri Rawatpura Sarkar Institute of Pharmacy, Kumhari, Durg, Chhattisgarh, India.

ABSTRACT-- ICCPPDD 51

Cassia Tora Linn (Caesalpiniaceae) is a small annual herb of under shrub growing as common weed in Asian countries. It has been used as a liver protective, hypertensive activity & many medicinal properties such as antimicrobial, antihepatotoxic & antimutagenic activities attributed to this plant. Phytochemical studies have revealed the presence of flavonoids, glycosides, Saponin, bufadienolide, anthraquinone glycosides, phenol, and steroids. The present study was undertaken to evaluate cardiotonic activity of alcoholic and petroleum ether extract of Cassia Tora Linn seeds by using isolated guinea pig heart perfusion technique. Calcium free Ringer Locke solution was used as a vehicle for administration of alcoholic and petroleum ether extract of Cassia Tora Linn as a test extract and digoxin as a standard. A significant increase in height of force of contraction (positive inotropic effect) and decrease in heart rate (negative chronotropic effect) at a very low concentration (0.25 mg/ml) was observed with test extract as same dose like standard digoxin. The present results indicated that a significant increase in height of force of contraction with decrease in heart rate was observed as the dose of both the test extract increased however, alcoholic extract of Cassia Tora Linn produced little more positive inotropic effect than petroleum ether extract. The present preliminary studies confirm the cardiotonic activity of Cassia Tora Linn seeds which is similar to digoxin. Further studies can confirm the reduced toxicity & this will be the advantage of Cassia Tora Linn over digitalis. **Keywords:** Cardiotonic activity, Digoxin, Calcium free Ringer lock solution, isolated guinea pig heart.

Keywords: Cardiotonic activity, Digoxin, Calcium free Ringer lock solution, isolated guinea pig heart.

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Alternative Medicines As A Preventive Option For Covid-19

*Neeraj Sahu*¹*

¹Shri Rawatpura Sarkar Institute of Pharmacy, Kumhari, Durg, Chhattisgarh, India.

ABSTRACT- ICCPPDD 52

The COVID-19 pandemic has met our nation health systems with a low level of preparedness and emergency response. The pandemic spread to various states and union territories including the state of Chhattisgarh. The first case was recorded in this region on 19 March 2020. Till now about 4.3 cr people have been infected with this covid 19 disease out of which approx 5.21 lakh people have lost their lives in the country. Initially there were no new registered medicines that can effectively treat the coronavirus infection. However, a number of ongoing clinical trials are investigating the efficacy and safety of the medicines which have already registered and used for the treatment of other diseases in the treatment of coronavirus infection. Some of them are Paracetamol, doxycycline, azithromycin, ivermectin, fabiflu etc. Apart from this Steroids has shown benefits in Covid-19 patients in observational studies that hypothesized early use of corticosteroids, low dose, in mild disease, can decrease the progression to respiratory failure and death. It causes many side effects like hyperglycemia, secondary infections, psychiatric effects, avascular necrosis etc. So there is a need to find out a new herbal formulation or alternative treatment which may be less toxic for covid patient and simultaneously it boost their immunity so in the present review we searched some herbal formulation which are claimed to be effective in covid 19 patients. However, nature has provided us with a large number of herbs, which have disease preventive, as well as have medicinal properties. We have reviewed several of these plants (ginger, clove, tea, black seed, tulsi, neem, giloy, cinnamon, turmeric, ajwain), some vitamins (vitamin C and vitamin D) and zinc, and some herbal formulation like Ayush kwath and herbal tea, kadha which have antiviral, anti-inflammatory, antioxidant, and anti-asthmatic properties with scientific evidence. These herbal drugs have been used as an alternative source of medicines to prevent the infection of corona virus. Beside this steam inhalation, taking hot water, avoiding glucose, maintaining social distancing are some preventive measures.

Keywords: COVID-19, SARS-CoV-2, Coronavirus, Alternative medicine, Herbal and allopathic medicines, Preventive measures.

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A Brief Study On Food & Drug Administration Associated With Pharmacovigilance

*Yashwant Verma*¹*

¹Kalinga University, Faculty of Pharmacy, Naya Raipur, 492101.

ABSTRACT- ICCPPDD 53

The safety profile of newly approved drugs and therapeutic biologics is less well developed by premarketing clinical testing than is the efficacy profile. The full safety profile of an approved product is established during years of clinical use. The FDA has relied on the voluntary reporting of adverse events by healthcare practitioners and patients to help establish the safety of marketed products. Epidemiologic studies, including case series, secular trends, case-control and cohort studies, are used to supplement the investigation of a safety signal. Ideally, active surveillance systems would supplement the identification and exploration of safety signals. The FDA has implemented a number of initiatives to help identify safety problems with drugs and continues to evaluate their efforts. Pharmacovigilance is the science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other medicine/vaccine related problem. The FDA has expectations in relation to reporting serious adverse drug reactions (ADR), there are not mandatory requirements on the specifics of postmarket surveillance. The main focus of the FDA regarding GVP is guidance on the documentation of safety signals and development of high-quality case reports. The FDA also recommends exploring causal relationships between the use of a drug and the ADR, and using data-mining to identify potential product-event combinations.

Keywords: ADR, detection, assessment, understanding and prevention of adverse effects.

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Current Obstacles and Opportunities in Drug Discovery

*Imran Alam*¹, Khushboo Gupta¹*

¹Kalinga University, Faculty of Pharmacy, Naya Raipur, 492101.

ABSTRACT- ICCPPDD 54

One overall theme of our article is that the process is sufficiently long, complex, and expensive so that many biological targets must be considered for every new medicine eventually approved for clinical use and new research tools may be needed to investigate each new target. The efficiency of the development process can be improved by studies that contribute to the resolution of any of the many scientific and operational issues that arise during the process. Being aware of these challenges enables for the early introduction of actions that will improve the chances of success. The development of a new medicine starts when basic scientists learn of a biological target (e.g., a receptor, enzyme, protein, gene, etc.) that is involved in a biological process thought to be dysfunctional in patients with a disease such as Alzheimer's disease (AD). We're talking about discovering and developing completely new medicines, ones that have a different mode of action than already approved medicines and are intended for a clinical indication that isn't addressed by existing medicines. Better medicines that are iterative improvements on current medications are valuable as they may offer benefits over existing medications in terms of potency, safety, tolerability, or convenience, but they usually do not involve the manipulation of biological targets different from those directly affected by existing medications.

Keywords: Drug, Discovery, investigate, Target.

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Hepatoprotective Activity of Scopoletin on Diabetic Rats

*Anchal Verma**¹

¹Shri Rawatpura Sarkar Institute of Pharmacy, Kumhari (C.G.)

ABSTRACT- ICCPPDD 55

The study was undertaken to investigate the hepatoprotective effect of scopoletin in streptozotocin induced diabetic rats. Animals were randomly divided into five different groups. Group I and Group II were administered normal saline water p.o, Group III and Group IV were administered scopoletin (1 mg/kgp.o) once a day and two times a day respectively, Group V were administered glimepiride (0.11 mg/kgp.o). At the end of the experiment plasma SGPT and SGOT level were measured. The finding of the present investigation showed that the scopoletin at 1mg/kg dose have favorable effect in hepatoprotective activity.

Keywords: Scopoletin, Streptozotocin, Serum Glutamic Oxaloacetic Transaminase (SGOT), Serum Glutamic Pyruvic Transaminase (SGPT).

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Current Scenario of Oral Cancer In Chhattisgarh State

*Roushan Kumar Jha*¹*

¹Shri Rawatpura Sarkar Institute of Pharmacy Kumhari Durg Chhattisgarh.

ABSTRACT- ICCPPDD 56

Cancer is a disease of cell characterized by abnormal, progressive, purposeless and uncontrolled growth of tissue. Oral cancer begins in the mouth (oral cavity). This region of the body includes the inside lining of the lips and cheeks, the teeth, the gums, most of the tongue, the bottom of the mouth, and roof of the mouth. It can also develop in the throat. Cancer can develop in any part of the oral cavity. Because each part of the oral cavity is different, oral cancer encompasses a wide variety of cancer types that are treated in different ways. India has one of the highest incidences of oral cancer. OC ranks number one among men and number three among women in India. The use of tobacco and alcohol are established etiological factor in the development of OC. Tobacco is generally consumed in smoking and smokeless forms. In Chhattisgarh state oral cancer is happen mostly due to unhygienic behaviour of the people not washing of mouth properly and consumption of gutka and gudakhu which lead mouth cancer. As per a report it found to be Carcinoma buccal mucosa is the most common site (37.64%) followed by tongue (35.52%). Majority were in age group 25-29 years (45.4%). Treatment options available for OC are:-chemotherapy, surgery, Immunotherapy and using medicine i.e Cisplatin, 5-fluorouracil, Hydroxyurea, carboplatin apart from these Alternative treatment is also used like Ayurvedic treatment focus on maintaining health using Rasayana treatment, it not only focuses on treating karkat arbuda but also helps in increasing the immunity of the patient. Ayurveda treatment also involves meditation and yoga which helps in increasing will power of the patient, that is mind wellbeing treatment basically and every patient can bear this treatment and shows good results in treating cancer patients. The herbal drugs have been used in treatment of cancer are Guggul, Kaanchnar, Guduchi etc.

Keywords: OC, Carcinoma, Alternative medicine, Oral mucosa, herbal and allopathic medicine.

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Roles and responsibilities of Pharmacovigilance

*Mohit Kumar Thakur*¹*

¹Kalinga University, Faculty of Pharmacy, Naya Raipur, 492101

ABSTRACT- ICCPPDD 57

The science and activities relating to the detection, assessment, understanding and prevention of adverse effects or any other drug related problems. Pharmacovigilance (PV) plays a key role in the healthcare system through assessment, monitoring and discovery of interactions amongst drugs and their effects in human. Pharmaceutical and biotechnological medicines are designed to cure, prevent or treat diseases; however, there are also risks particularly adverse drug reactions (ADRs) can cause serious harm to patients. Responsibilities of pharmacovigilance. PV is the science of collecting, monitoring, researching, assessing and evaluating information from healthcare providers and patients on the adverse effects of medications, biological products, blood products, herbals, vaccines, medical device, traditional and complementary medicines with a view to identifying new.

Keywords: Responsibilities of pharmacovigilance.

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Chronobiology & Chronotherapeutics Applications to cardiovascular Medicine

*Mukta Madhavi*¹*

¹Rungta Institute of Pharmaceutical Sciences Bhilai.

ABSTRACT - ICCPPDD 58

The concept of homeostasis, i.e. consistency of milieu interne, has the teaching, research & practice of medicine during the 20th century. According to this theory, biological functions & processes are maintained in relative constancy over time. The emerging concepts of chronobiology, scientific discipline of biologic rhythm study, & the finding from research cardiovascular in this field challenge the construct of Homeostasis. Advances in the chronobiology of cardiovascular disease have proceeded diagnostic procedures are conducted & interpreted. 24 Hrs ambulatory BP monitoring & Holter monitoring reveal the marked rhythm in BP in Hypertensive patients & electrocardiographic events in patients with IHD. Chronotherapies indications formulated to deliver varying of drug at different times during the 24h period to correlate with biologic need – theoretically could offer improved efficacy. A chronotherapy for cardiovascular disease already exists in the form of the evening administration for Lipid lowering medications. The Chronotherapy for HTN & IHD is forthcoming. Cardiovascular drugs may be useful include HTN, Angina Pectoris (chest pain resulting from inadequate blood flow through the coronary arteries to the heart muscle), heart failure (inadequate output of the heart muscle in relation to the needs of the rest of the body.)

Keywords: Chronotherapeutics; Chronobiology; Ischemic heart disease; Treatment; Chrono pharmacology; Circadian rhythm.

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Status of PCOD in Chhattisgarh State & Herbal Remedies To Cure

*Ankur Agrawal*¹*

¹Shri Rawatpura Sarkar Institute of Pharmacy Kumhari, Durg, Chhattisgarh

ABSTRACT- ICCPPDD 59

Polycystic ovary syndrome (PCOS) is a heterogeneous disorder characterized by hyperandrogenism and chronic anovulation it is a condition in which the ovaries produce an abnormal amount of androgens, male sex hormones that are usually present in women in small amounts. The name polycystic ovary syndrome describes the numerous small cysts (fluid-filled sacs) that form in the ovaries. However, some women with this disorder do not have cysts, while some women without the disorder do develop cysts. Ovulation occurs when a mature egg is released from an ovary. This happens so it can be fertilized by a male sperm. If the egg is not fertilized, it is sent out of the body during your period. In some cases, a woman doesn't make enough of the hormones needed to ovulate. When ovulation doesn't happen, the ovaries can develop many small cysts. These cysts make hormones called androgens. Women with PCOS often have high levels of androgens. This problem affect one in ten women of child bearing age. Depending on diagnostic criteria 6% to 20% of reproductive aged women are affected. This can cause more problems with a woman's menstrual cycle. And it can cause many of the symptoms of PCOS are irregularity in menstrual cycle, Heavy bleeding, Hair growth, Acne, Weight gain, Darkening of the skin, Headaches, etc. Treatment for PCOS is often done with medication. This can't be cure, but it helps reduce symptoms and prevent some health problems. PCOS in Ayurveda was correlated with Aarthava Kshaya. PCOS treatment in Ayurveda recommends Virechana (Detoxification), Nasya, Shirodhara, and Uttar Basti for PCOS along with Diet and lifestyle modification. Along with that, yoga helps revive the reproductive system. Asanas such as Dhanurasana, Uttanpadasana, Badhakonasana, Ushtrasana, Vrikshasana, and Vajrasana are among those yoga asanas that are ideal for women to help them develop a regular and healthy menstrual cycle.

Keywords: Polycystic ovary syndrome, treatment, Herbal medication, yoga.

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***Alangium salviifolium* a Novel Medicinal Plant Used For The Treatment Of Various Diseases**

Nitish Patra¹, Deependra Soni¹, Sandip Prasad Tiwari¹

¹Kalinga University, Faculty of Pharmacy, Mantralaya, Naya Raipur, 492010.

ABSTRACT- ICCPPDD 60

Alangium salviifolium (AS) is a novel medicinal plant used for the treatment of various diseases including helminthiasis by the traditional healers of Chhattisgarh. *Alangium salviifolium* (L.f.) Wang (Dhera in hindi) (AS) is a small tree, with more or less spine scent branches. Leaves 7.6-15.2 cm long, narrowly oblong or ovate-lanceolate, glabrous. Flowers few in axillary fascicles. Fruits small, nearly globular, purplish-red when ripe, crowned by persistent calyx-limb. As per the traditional knowledge Plant pacifies vitiated pitta. It is anti-hypertensive, antidote for several poisons especially for rabies. Roots are useful for external application in case of rheumatism and inflammation. Fruits are used in treatment of hemorrhages. Root bark is emetic, febrifuge, purgative, anthelmintic, diaphoretic, antipyretic; useful in fever and piles. It is also used in leprosy, syphilitic and other skin diseases. Leaves are useful as poultice in rheumatic pains. Fruits are laxative, expectorant, carminative, anthelmintic, alexiteric; useful in inflammation, burning of the body, spermatorrhoea, gleet, acute fever and lumbago. Based on this concept and as per my search for natural source as anthelmintics, a suitable plan has been designed to explore methanolic extract of this plant scientifically as anthelmintic agent. So, an attempt has been taken to explore it scientifically for better therapeutic study.

Key words: laxative, expectorant, carminative, anthelmintic, alexiteric.

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Formulation and Evaluation of Novel Drug Delivery System: Pharmacosomes

Deepa Sahu¹, Deependra Soni¹, Sandip Prasad Tiwari¹

¹Kalinga University, Faculty of Pharmacy, Mantralaya, Naya Raipur, 492010.

ABSTRACT- ICCPPDD 61

The objective was to plan the protocol for development, characterization of novel drug delivery system pharmacosomes. After planning the protocol, literature review on selection of herbs, proper method of extraction with suitable medium and selection of an appropriate drug delivery system was done for prostate cancer treatment. And finally, pharmacosomes were selected as the choice of delivery system on the basis of their advantage as beneficial for prostate cancer. Then pharmacosome was prepared of phytoconstituents. After preparation of pharmacosome, we carried out different characterization parameters such as particle size analysis, surface tomography, drug entrapment efficiency, drug loading, in-vitro drug release, along with the TEM of pharmacosomes. The pharmacosomes formulations were more spherical with stable zeta potential and mono-disperse with no clumping. So from the study it was confirmed that pharmacosomes formulation of pure drug showed a good entrapment efficiency and better stability profile as compared to extract.

Keywords: Pharmacosomes, Novel Drug Delivery System.

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**International Conference
On
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Formulation and Evaluation of Microsphere loaded Anti-Fungal Cream

Maniram¹, Deependra Soni¹, Sandip Prasad Tiwari¹

¹Kalinga University, Faculty of Pharmacy, Mantralaya, Naya Raipur, 492010.

ABSTRACT- ICCPPDD 62

Present research work focuses on the development of microspheres of an antifungal drug Econazole nitrate and its characterization. This led to overcome the limitation of poor aqueous solubility and bioavailability. Formulated microspheres were characterized for its entrapment efficiency, surface morphology, and FTIR spectroscopy. The microspheres were spherical with smooth surface. In future in-vivo animal study and in-vitro drug release study will be performed to achieve better result.

Key words: Entrapment efficiency, surface morphology, and FTIR spectroscopy.

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**International Conference
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An Overview on Tumor Markers for Cancer Diagnosis

*Komal Bhawnani*¹, Falguni Patel¹, Harish Bhawanani¹*

¹Kalinga University, Faculty of Pharmacy, Near Mantralaya, Naya Raipur, Chhattisgarh.

ABSTRACT- ICCPPDD 63

Tumor Markers comprise a wide spectrum of bio macromolecules synthesized in excess concentration by a wide variety of neoplastic cells. The markers could be endogenous products of highly active metabolic malignant cells or the products of newly switched-on genes, which remained unexpressed in early life or newly acquired antigens at cellular and sub-cellular levels. The appearance of tumor marker and their concentration are related to the genesis and growth of malignant tumors in patients. An ideal tumor marker should be highly sensitive, specific, and reliable with high prognostic value, organ specificity and it should correlate with tumor stages. However, none of the tumor markers reported to date has all these characteristics. In spite of these limitations, many tumor markers have shown excellent clinical relevance in monitoring efficacy of different modes of therapies during entire course of illness in cancer patients. Additionally, determination of markers also helps in early detection of cancer recurrence and in prognostication.

Key words: Tumor Markers, Malignancy, Carcinogenesis, Cancer progression, Prognostic Value

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On

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About the conference

Our goal is to assist scientists whose research may be relevant to drug discovery and/or development in framing their research report in such a way that their findings are appropriately placed within the drug discovery and development process, thereby facilitating the effective translation of preclinical research to humans. One of the key topics of our conference is that the approach is lengthy, convoluted, and expensive enough that for any new medication to be authorized for clinical usage, several physiological sites must be studied, and new scientific methods may be necessary to investigate each new target. The efficiency of the development process can be improved by studies that contribute to the resolution of any of the many scientific and operational difficulties that arise during the process. Being aware of these challenges enables for the early introduction of actions that will improve the chances of success.

Conference Objectives

1. Raise public awareness about the need for improved pharmacovigilance and public health
2. Encourage the safe, effective, and rational use of medicines
3. Raise awareness of the role of clinical pharmacists in the safe use of drugs among pharmacy students and pharmacists.
4. The implementation of adequate pharmacovigilance, including its requirements, challenges, and limitations, as well as the process for improving it.
5. To improve patient care and safety in the use of medications and all other therapeutic interventions.

About Kalinga University

Kalinga University, Raipur is a NAAC B+ accredited University and the Only Private University in Chhattisgarh ranked in Top 151-200 Universities in NIRF Ranking 2021 and has emerged as a centre of excellence of higher education in Central India. Strategically located in the Smart City of New Raipur, this University has started carving a niche for itself in the education domain and is rising as a shining star on the horizon of quality education.

Infrastructure - Kalinga boasts of World Class Infrastructure and student facilities with student centric approach. Highest attention is paid to hands on learning approach and students are encouraged to come up with innovative ideas for projects and practical's. The University has more than 75 laboratories and workshops, all well equipped with the latest, state of the art apparatus and tools. Special emphasis is given to the development of communication skills through the language lab. More than 1000 computers are available for the use of the students.

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About the conference

About Raipur – Raipur is the Capital of Chhattisgarh and New Raipur is the New Capital of Chhattisgarh in the making. New Raipur is the fourth planned city of India with wide roads and miles of greenery and is pollution free. It is the first Integrated and Smart City of the country. A cosmopolitan city which is also the hub of higher education hosts IIM, IIT, IIIT, National Law University, CIPET, NIT and AIIMS. In addition it also hosts most National and International brands of Food and Retail Outlets.

Establishment - Establishment - Established in 2013, this University has been able to win the confidence of over 7000 students. Meritorious students from all over the country and various foreign countries like Afghanistan, Angola, Bangladesh, Cameroon, Gambia, Ivory Coast, Kenya, Lesotho, Liberia, Malawi, Namibia, Nepal, Nigeria, Papua New Guinea, South Sudan, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe etc. have chosen this University for their education and career.

Schools of Excellence - A center for Doctoral research programmes in various fields. Currently the University is serving the student community through various UG and PG programs namely Engineering, Law, Pharmacy, Arts & Humanities, Science, Commerce & Management, Biotechnology, Information Technology, Library Science, Fashion Design & Interior Design.

Faculty of Pharmacy

Our mission as Faculty of Pharmacy of Kalinga University is to raise qualified pharmacists and scientists, who have conceived principles and ethical concept of pharmacy profession, have owned top-level international fit out that can serve as first-step health advisor in community health, and have earned property of pursuing the latest scientific and technological progresses in this profession. To contribute to the scientific research in our scope at universal and regional levels. To use the obtained knowledge for benefit of the community through pharmacy professional service. To become the best and most respected faculty of pharmacy in our region under the roof of a faculty which is able to pass on knowledge necessary for obtaining employment in international drug industry and the other branches of this profession.

Our vision is to grow excellent individuals, who are appropriate with universal criteria of pharmacy profession, respectful to his/her job, conscientious, helpful to society, owning analytical thinking, inclined to teamwork, and who have earned internationally top-level education and instruction in the scope of pharmaceutical sciences, as well as to serve to exact science and community health. The Faculty has student laboratories equipped with the latest technological and educational infrastructure necessary for pharmaceutical sciences.

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