



**International Conference on** 

# Pharmacovigilance, Pharmaceutical Care & Biomedical Research

Organized by

Sarada Vilas College of Pharmacy Mysuru

In association with

Association of Community Pharmacists of India (ACPI) SOUTH INDIA BRANCH

24<sup>th</sup> - 25<sup>th</sup> JANUARY, 2023

### HISTORY OF SARADA VILAS EDUCATIONAL INSTITUTIONS



Sri Mummadi Krishnaraja Wodeyar Maharaja of Mysore (1794-1868)





Sri Venkatakrishnaiah (Thathaiah) Mentor

The saga of Sarada Vilas Educational Institutions began in the year 1861 when His Highness Mummadi Sri Krishnaraja Wodeyar, the then ruler of Mysuru State, directed Sri RaoBahadur Bhakshi Narasappa to start an Educational Institution in Mysuru so as to make Mysuru a Centre for Education. In accordance with the wish of the King, Sri RaoBahadur Bhakshi Narasappa started a private school named "Sarada Vilas Anglo-Sanskrit School", which was housed in a temple. Later it was shifted to another building located in Makkaji Chowka.

The shift to Modern type of education came from the "Grand Old Man" of Mysore, late Sri M.Venkatakrishnaiah (Thathaiah) during 1919, by starting Sarada Vilas High School, with himself as Secretary and the late Dr. K.R. Ramaswamy as its Head Master. Today Sarada Vilas Educational Institution imparts education in various fields.

#### SARADA VILAS COLLEGE OF PHARMACY

Sarada Vilas College Of Pharmacy was started in the year 1992-93 with D. Pharm course and B. Pharm course was introduced in the year 2004-05. M. Pharm was introduced in the year 2010-11 and later Pharm.D course was introduced in the year 2012-13 and a PhD research center was established in 2021-22. Dr. APJ Abdul Kalam, the epitome of science, technology and philosophy in India inaugurated the Pharm D course. The institution is highly committed to promote excellent world class Pharmaceutical education, service and research.

Sarada Vilas Educational Institutions (R) **Sarada Vilas College of Pharmacy** Krishnamurthypuram, Mysuru - 570 004 E-mail : mysoresvcp@gmail.com web : www.svcop.org Ph : 0821-4262415, 2488612



# **ACPI OFFICE BEARERS**

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# ORGANIZING COMMITTEE

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Registration	Dr. P. K. Kulkarni Dr. Dinesh Kumar Mr. Chinta Kasi Viswanadham Dr. Srikanth M.S. Dr. Basu Venkateswara Reddy Prof. M. Dinesh Dr. Umesh M. Dr. Udaya Venkata Mateti	Dr. Ravindran A P Dr. Kanav Khera Dr. Davan B Bevoor. Mr. Jayasimha D. Mrs. Tanuja A J. Mrs. Ambika .M. S. Mrs. Sandhya Varghese	
Scientific Service	<ul> <li>Dr. V. Gopal</li> <li>Dr. Arul Kumaran</li> <li>Dr. Gampa Vijay Kumar</li> <li>Dr. V Prabhakar Reddy</li> <li>Dr. Jinesh B Nagavi</li> <li>Dr. Prasanth V V</li> <li>Dr. N. Venkat Rao</li> <li>Dr. Jijo Joji.</li> <li>Mrs. Chaithrashree N.</li> <li>Dr. Mahesh Shivananjappa</li> </ul>	Dr. Shobharani R Hiremat Dr. Rakesh Somani Dr. Nirmala Kasekar Dr. Pranay Wal Dr. Ravindra P Choudhary Mr. Subhajit Ghosh. Mr. Siddhartha H N. Mr. Harshith Kumar R. Ms. Prashobhini DP Dr. Nandini M S.	
Venue	Mr. Gokul Nanda G. Mrs. Keerthy.	Mrs. Nikitha K. Ms. Nanditha V V	
Accommodation	Dr. Nagendra R. Mr. Venkatesh.	Dr. Charan C S. Mr. Abhishek K.	
Awards, Press an Publicity	d Dr. CI Sajeeth Dr. Shaik Afsar Dr Shilpa Bhilegaonkar Dr Atul Kadam	Dr. Asim Priyendu Mr Aditya Ghuge Dr. Shalini S Dr Rahul Garg Mr.Chethan M B.	
Accounts	Dr. K. Karthickeyan Krishnan Mr. Venkatesh.	Mr. Pancendra S.	
Technical Suppor	t Mr. Prasannakumar D M	Mr. Gokul Nanda	

# **ABOUT CONFERENCE**

This conference is to bring together, a multi-disciplinary group of scientists and experts from the entire world to present and exchange break through ideas relating to pharmacovigilance, biomedical science, pharmaceutical care and drug safety. It seeks to promote top-level patient safety and to globalize quality research in general, thus making discussions, presentations more internationally competitive and focusing attention on the recent outstanding achievements in the field. Pre- clinical trials and clinical trials, ADRs, good pharmacovigilance practice, risk management, pharmacy practices and its challenges, biomedical sciences, clinical trials on various disorders, data quality management and analysis. Diversity in industrial clinical trials and clinical research, clinical research and statistics, case reports in clinical trials and drug safety, clinical database management, and business opportunities.

We're looking forward to excellent meeting with great scientists from different countries around the world and sharing new and exciting results in –International Conference on Pharmacovigilance, Pharmaceutical Care & Biomedical Research<sup>II</sup> which will be held in Sarada Vilas College of Pharmacy, Mysuru on 24<sup>th</sup> -25<sup>th</sup> Jan 2023. Don't miss out on taking part in this exciting event.





ಥಾವರ್ಚಂದ್ ಗೆಹ್ಲೋಟ್ थावरचंद गेहलोत THAAWARCHAND GEHLOT Governor of Karnataka

No. GS 08 MSG 2023

#### MESSAGE

I am happy to know that the **Sarada Vilas College of Pharmacy, Mysuru** in association with Association of Community Pharmacists of India (South India) is organizing a International Conference on Pharmacovigilance, Pharmaceutical care and Biomedical Research on 24<sup>th</sup> and 25<sup>th</sup> January, 2023 and has also proposed to bring out a Conference proceedings to commemorate the occasion.

I express my best wishes to the Organizers, Participants Souvenir team and a grand success of the event.

(Thaawarchand Gehlot)

The Principal, Sarada Vilas College of Pharmacy, Krishnamurthy Puram, , Mysuru- 570004

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ಪ್ರತಾಪ್ ಸಿಂಹ PRATHAP SIMHA MEMBER OF PARLIAMENT (LOK SABHA) MYSORE - KODAGU (KARNATAKA)



#### MEMBER :

Parliamentary Committee on ESTIMATES

- Standing Committee on DEFENCE
- Parliamentary Committee of PRIVILEGES
- Consultative Committee, Ministry of L& B
- COFFEE BOARD



# Message

It gives me an immense pleasure to know that the Sarada Vilas College of Pharmacy in association with Association of Community Pharmacist of India, South India Branch is organizing International Conference on Pharmacovigilance, Pharmaceutical care and Biomedical Research on 24th and 25th January 2023.

Community and hospital pharmacists across India have played a significant role in the fight against COVID and are continuing to contribute for a healthy nation. I am sure the galaxy of experts across the globe from Community pharmacy, Hospital pharmacy, academia, industry and research would be enriching the delegates during the two days event.

On this grand occasion, I extend my Best Wishes to the organizers and wish the event a grand success.

 Delhi Res.
 : 18, Mahadev Road, New Delhi - 110 001 | Fhone : 011-23752342

 Mysore Office : JALADARSHINI, DC-2 Cottage, Hunsur Main Road, Mysore - 570 005. Karnataka

 4269
 Phone : 0821-2444999 | Fax : 0821-2445999 | Mabile : +91-90138 69722

 E-mail : officeofprathapsimha@gmail.com | Twitter : @mepratap | Website : pratapsimha.com





രാജപ്പ് റാററ്റെ ട്രവിന്റെ മജ്ജന്റെ മച്ചുമാനും പ്രത്യായം പ്രത്യാ പ്രത്യായം പ

Dr. M.R. Ramesh M.S., FRCS.

#### Message

I am happy to learn that Sarada Vilas College of Pharmacy, Mysuru is organizing International Conference on Pharmacovigilance, Pharmaceutical Care & Biomedical Research in collaboration with Association of Community Pharmacists of India, on 24<sup>th</sup>&25<sup>th</sup>January 2023.

During the last few years, the pharmacy profession has expand significantly in terms of professional services delivery and now has been recognized as an important profession in the multidisciplinary provision of health care. The focus of profession of pharmacy has shifted from technical, product oriented, functions to patient oriented, health outcomes counselling information and professional services. The principal task of the modern pharmacist is to identify, resolve and prevent drugrelated problems.

In this background, the capacity-building of pharmacy professionals assumes a greater significance. Apart from the formal trainings, the organized learning activities such as professional conferences have been a great source of such learning.

I am hopeful that the conference will provide a learning opportunity for the participants to gain insights into the range of skills that are listed.

I wish the conference a grand success.

Dr. M.K. Ramesh Vice Chancellor

Bangalore Dated: 07.01.2022 USS ACADEMY OF HIGHER EDUCATION & RESEARCH



Dr. Surinder Singh Vice Chancellor



January 02, 2023

# MISSAGI

It is indeed a matter of pleasure that sarada Vilas Orlige of tharmacy, Mysurs in association with ACPL South India Branch is organizing a Two Day International Conference on Tharmacorogalance, Tharmacentical Core & Biomedical Research dioring 14th 24th January 2023 at Mysuria.

I am happy to note that this conference would bring together leading pharmacy professionals from academic and health care delivery to understand and learn the skills required to execute pharmacy practice services to both community and clinical settings, besides helping the building pharmacy prefessionals to develop their personality into self-reliable, skillful and perform their professional tasks with great efficiency.

On this occasion, I convey my best wishes and preetings and wish the conference a grand success.

With best withes,

Dr. Surinder Sina Vice Chancellor



Prof. Dr. M. A. Shekar Vice Chancellor



#### January, 06, 2023

#### Greetings from Adichunchanagiri University, BG Nagara

Congratulations for organising a need-of-the-hour conference on Pharmacovigilance.

In my clinical practice of patient care for the last three and a half decades, prescribing the right medicine in prevention and cure of certain disorders/diseases and promoting the quality of life, the concept of Pharmacovigilance has played a significant role. It has impacted the rationality of prescription by improving the knowledge of proper dosage, specific indication and improvement in understanding the safety profile of drugs thereby enhancing comprehensive patient care. The science of Pharmacovigilance has eminently supported the work of National Drug Regulatory Authorities in compilation and communication on updates of drug discovery and research to the medical fraternity.

I am sure the Conference will be an apt platform in the field of Medicine and Allied Sciences, for the students to learn, for researchers to showcase their work and for practitioners to fine tune their clinical acumen.

I heartily wish the very best to the Organising team of International Conference on Pharmacovigilance, Pharmaceutical Care and Biomedical Research, in conducting a successful, useful and a very meaningful meet.

Best Regards

(Dr. M.A. Shekar)

B.G. Nagara - 571448, NH-75, Nagamangala Tq., Mandya Dist., Karnataka, India. Tel: +91 82342 87285 | Email: vc@acu.edu.in, osd.vc@acu.edu.in | www.acu.edu.in



प्रो. राजेंद्र ब. काकडे सलाहकार (अनुमोदन ब्यूरो)

Prof. Rajendra B. Kakde Advisor (Approval Bureau)



अखिल भारतीय तकनीकी शिक्षा परिषद् (भारत सरकार का एक सांविधिक निकाय) (शिक्षा मंत्रालय, भारत सरकार) नेल्सन मंडेला मार्ग, वसंत कुंज, नई दिल्ली – 110070 दूरभापः 011– 26131569

All India Council for Technical Education (A Statutory Body of the Govt. of India) (Ministry of Education, Govt. of India) Nelson Mandela Marg, Vasant Kunj, New Delhi – 110070 Phone : 011 – 26131569 E-mail : <u>advab@aicte-india.org</u>



#### MESSAGE

04th January 2023

It's my immense pleasure to know that the Sarada Vilas College of Pharmacy, Mysuru is organizing an International conference on Pharmacovigilance, Pharmaceutical Care & Biomedical Research from 24<sup>th</sup> to 25<sup>th</sup> January, 2023 in association with Association of Community Pharmacists of India (South India) at Mysuru.

The theme of the International conference is *Pharmacovigilance, Pharmaceutical Care & Biomedical Research* which is a need of hour. This conference will be a place of exchange of scientific development in this field which will help in understanding and prevention of adverse effects or any other medicine/vaccine related problems as well as biomedical scientist's study of human physiology and the treatment or understanding of disease.

I am sure that the Pharmaceutical scientists, Educators, Students, Scholar, delegates attending the conference will be highly benefitted and gain knowledge from the expert lectures delivered by the reputed speakers from industries, academia & research.

I am assured that during this conference, various recently developed topics shall also be discussed, providing a substantial platform to the participants and emerging scientists to interact and share their research.

I would like to congratulate the entire organizing team of the International conference for the great initiative.

I wish the conference a grand success.

Yours,

(Prof. Rajendra B. Kakde)



Dr. Subarna Roy Scientist-G & Director

आई सी एम आर – राष्ट्रीय पारम्परिक चिकित्साविज्ञान संस्थान स्वास्थ्य अनुसंधान विभाग, स्वास्थ्य एवं परिवार कल्याण मंत्रालय, भारत सरकार

ICMR - National Institute of Traditional Medicine Department of Health Research, Ministry of Health and Family Welfare, Government of India

#### Message

11th January 2023

I am pleased to learn that Sarada Vilas College of Pharmacy is organizing an International Conference on "Pharmacovigilance, Pharmaceutical care, and Biomedical Research." There is a pressing need for generating awareness and implementation of pharmacovigilance programs in practice and pharmaceutical care to reduce the burden of adverse drug reactions and avoidable suffering of mankind. It has become imminent to assess all possible options and discuss and disseminate the knowledge & resources to collaborate and contribute for a positive health impact. In the Indian context, it is more so as there are several traditional medicine practices that coexist across the country, and there is the possibility of interactions between systems and hence needs to be monitored and awareness regarding this needs to be created.

Organizing such an event at this point of time reinforces the objective of developing an environment for the exchange of ideas toward better healthcare. I wish the conference would be able to deliberate on current issues of national and international relevance, particularly in the field of safe and rational use of medicine, antimicrobial resistance, etc.

I wish the International Conference on "Pharmacovigilance, Pharmaceutical care, and Biomedical Research" a grand success.



Dr. Subarna Roy

ಕುಲಸಚಿವರು ರಾಜೀವ್ ಗಾಂಧೀ ಆರೋಗ್ಯ ವಿಜ್ಞಾನಗಳ ವಿಶ್ವವಿದ್ಯಾಲಯ, ಕರ್ನಾಟಕ



Registrar Rajiv Gandhi University of Health Sciences, Karnataka



No. RGU/RP/32/2022-23

Date: 12.01.2023

#### MESSAGE

It gives me immense pleasure to know that Sarada Vilas College of Pharmacy, Mysuru is organizing International Conference on Pharmacovigilance, Pharmaceutical Care & Biomedical Research in collaboration with Association of Community Pharmacists of India, on 24<sup>th</sup> & 25<sup>th</sup> January 2023.

The purpose of this conference is to get on the same platform, a multidisciplinary group of scientists and experts from the pharmaceutical profession to exchange their knowledge and proficiency in the domains of pharmacovigilance, biomedical science, pharmaceutical care and drug safety. Such an exchange of ideas will promote the dissemination of practices for ensuring better patient safety.

In this background, the discussion on the focus areas of the conference has a potential to generate ideas for further research. The inclusion of pharmacovigilance as one of the themes in the conference gives impetus to the much-desired accountability aspect of healthcare.

I believe that the conference will fulfil its aims, and bring out a resolution that can be disseminated with the practicing pharmacists. = 0

I wish the conference a grand success.

A. B. BASAVARAJU, IAS REGISTRAR



#### Dr N. Ramakrishna Reddy

M.D., (Community Medicine) istrar (Evaluation)

Date: 31-12-2022

## Message

I am happy to know that Sarada Vilas College of Pharmacy, Mysuru is organizing International Conference on Pharmacovigilance, Pharmaceutical Care & Biomedical Research in collaboration with the Association of Community Pharmacists of India, on 24<sup>th</sup> & 25<sup>th</sup> January 2023.

This conference intends to bring together, a multi-disciplinary group of scientists and experts from the entire world to share their experiences in the areas of pharmacovigilance, biomedical science, pharmaceutical care, and drug safety. The purpose is to promote top-level patient safety and to globalize the quality research in general.

The role of pharmacovigilance is to determine which side effects are worth the risk to patients compared with how effective they are at treating a disease. It must measure up to the challenge of maximizing drug sofety and maintaining public confidence, which indeed has become increasingly complex.

Pharmaceutical and biotechnology companies must not only monitor, but also proactively assess and manage drug risk throughout a product's lifecycle, from development to post-market. Therefore, the theme of this conference which also focuses on Pharmaceutical Care & Biomedical Research assumes significance to bring in good pharmaceutical practices.

I am sure that the conference will fulfill its stated purpose, and serve the profession with the expertise of the resource persons. I wish the conference a grand success.

Dr. N Ramakrishna Reddy Registrar (Evaluation)

To,

Dr. Hanumanthachar Joshi, Convener, ICPPBR 2023 President, ACPI (South India Branch), International Conference on Pharmacovigilance, Pharmaceutical Care& Biomedical Research, Sarada Vilas College of Pharmacy, Krishnamurthy Puram, MYSURU - 570004

> Tel.: + 91 80 - 2960 1930 / 2960 1931 | Cell : +91 94480 65536 E.mail : registrareva@rguhs.ac.in | nrreddyre@gmail.com | Website : www.rguhs.ac.in





(Accredited by NAAC) Prof. Dr.B.Jaykar, M.Pharm., Ph.D.

Registrar



#### MESSAGE

I am delighted to greet and welcome you all for the International Conference on "Pharmacovigilance, Pharmaceutical Care & Biomedical Research (PPBR-2023)" during 24<sup>th</sup> & 25<sup>th</sup> January 2023 organised by Sarada Vilas College of Pharmacy, Mysuru. With the participation of Indian and international thought leaders in quality management, this scientific conference will offer a platform for the benefit of the pharmaceutical community to discuss best practises in pharmaceutical quality systems, the direction for quality culture, and compliance.

I would like to take this opportunity to thank the organsing committee and to send a hearty greeting to the attendees, resource persons, and delegates. I want to thank all of the delegates who have travelled here from different regions of the country and the world. Being here with you all is something I value highly. I wish everyone the very best of luck in their endeavours and the great success of this amazing event. I sincerely hope that this International Conference on "Pharmacovigilance, Pharmaceutical Care & Biomedical Research (PPBR-2023)" will be a **GRAND SUCCESS.** 

My congratulations and best wishes.

REGISTRAR

Sankari Main Road (NH - 47), Ariyanoor, Salem - 636 308, Tamilnadu, India. Phone : 0427 - 2529700 Fax : +91- 427 - 2477903 E-mail : vmtrust@vmu.edu.in Website : www.vinayakamission.com



आई सी एम आर – राष्ट्रीय पारम्परिक चिकित्साविज्ञान संस्थान स्वास्थ्य अनुसंधान विभाग, स्वास्थ्य एवं परिवार कल्याण मंत्रालय, भारत सरकार

ICMR - National Institute of Traditional Medicine Department of Health Research, Ministry of Health and Family Welfare, Government of India

#### Message



It's a great pleasure that an International Conference on the highly relevant theme "Pharmacovigilance, Pharmaceutical care, and Biomedical Research" is going to be organized by Sarada Vilas College of Pharmacy. Awareness of pharmacovigilance and implementation of pharmaceutical care in practice is the need of the hour to reduce the burden of adverse drug reactions and avoidable suffering. Against the backdrop of several traditional medicine and folklore practices in addition to the allopathic system across the country, awareness regarding the possible herb-drug and drug-drug interactions and intervention with pharmaceutical care to monitor and prevent the occurrence of adverse reactions plays a vital role in positive public health impact. It is high time to assess all possible options and discuss and disseminate the knowledge & resources to collaborate and contribute to safe and effective health care. I am sure the conference would provide a platform to deliberate on the above aspects of relevance, particularly the safe and rational use of medicine. I wish the event a grand success.



Dr.Banappa S Unger Scientist-E Department of Pharmacology & Toxicology ICMR-National Institute of Traditional Medicine, Belagavi



#### M Venkata Ramana Central Vice-President



It gives me pleasure to note that The Sarada Vilas college of pharmacy is organizing International Conference of pharmacovigilance, Pharmaceutical care and biomedical research in association with Association of community pharmacists of india(ACPI), South india branch on 24th -25th January, 2023 at Mysuru on the theme of conference that a multi-disciplinary group of great scientists from different parts of world to share and exchange novel ideas relating to pharmacovigilance, drug safety and biomedical research.

The Institute also proposes to bring out a Souvenir on the occasion of the International Conference containing the programme, oral, poster presentations and Conference proceedings with international standard publishers.

I wish all the success to the Sarada vilas college of pharmacy, Mysuru and ACPI of the International Conference.

Prof.(Dr). M.Venkata Ramana

Executive Member PCI, New Delhi Central Vice President Of APTI South Region. Managing Director Vagdevi College Of Pharmacy, Gurazala. Dr. K.R. Dakshayani Dean and Director, MMC&RI, Mysuru.



#### **Message**

The Bhagavad Gita says that "Na GyanenSadrushampavithramIhaVidyate" which means nothing is more sacred than the Knowledge(Education). Education is the mostpowerful weapon which one can use to change the world. Education moulds/transforms an individual and facilitates fostering of essential principles of humanity and reasoning. We aredelighted to pen the wishes for the International Conference on Pharmacovigilance, Pharmaceutical care and Biomedical Research being organized by Sarada Vilas College of Pharmacy in association with ACPI. South India Branch. It isunderstood that this International event which has been created to provide a forum for buddingpharmacists across the country to get familiarized with the advanced knowledge, skills andattitude to serve the ailing community.

Pharmaceutical Care, Pharmacovigilance and Patient Report outcomeare the essential complementary components of professional service to achieve intendedgoals of therapeutic practice to conserve and propagate better personal, societal and nationalhealth in particular global health at large.

On this occasion 1 heartily congratulate Organizing Committee team's relentless efforts in the success of this conference. Health profession is regarded as "Ever Green Profession". We wish all the participants of this conference would imbibe theprofessional knowledge and serve the mankind to edify their bright future.

Rysora Medical Colles P Besserch Institut Mysore **Dr. B. M. Subraya** President Sarada Vilas Educational Institutions Mysuru



I am pleased to learn that Sarada Vilas College of Pharmacy, Mysuru is conducting an International Conference on Pharmacovigilance, Pharmaceutical Care and Biomedical Research along with the Association of CommunityPharmacists of India on 24<sup>th</sup> & 25<sup>th</sup> January, 2023. As the Conference is present with Scientist and experts from various disciplines and they share their experiences in the areas of Pharmacovigilance for proper selections and safe use of drugs along with recent advances inbiomedical research also Pharmacovigilance enlighten us with opting particular drugs to consider for their therapy on par with their adverse effects to therapeutic benefits.

Biomedical research focuses light on new ways to identify the etiology and new type of remedies for the existing diseases in a different way. The Hospital pharmacists are like beacons to the patients to direct them for the proper use of drugs with safer, effective and with minimal discomfort. As a whole the conference will be more useful for the budding Pharmacists and through them to the public. At this juncture, I expect this conference be a feather in cap of Sarada Vilas College of Pharmacy. I wish the conference a grand success.

#### Dr. B M Subraya

**Sri N Chandrashekar** Hon. Secretary Sarada Vilas Educational Institutions Mysuru



I am very much pleased to know that Sarada Vilas College of Pharmacy, Mysuru in cooperation and support with Association of CommunityPharmacists of India, South India Branch is arranging an International Conference on Pharmacovigilance, Pharmaceutical care and Biomedical Research on 24th-25th January, 2023.

The Community as well as Hospital Pharmacists, experts in Pharmacovigilance and Scientists in Biomedical Research has played a pivotal role in supporting the health of Public and controlling the spread and mortality due to COVID-19.

The conference can be eye opener for the budding Pharmacists and useful for the Practicing Pharmacists also. The speakers attending the conference are experts in their fields as mentioned above will share their experiences during their journey right from the beginning to till date.

Hence the conference will be very much useful not only for pharmacy related people but also to the society through the participants. I wish this event be a mile stone in the history of Sarada Vilas College of Pharmacy, Mysuru I wish the conference with a grand success

#### Sri N Chandrashekar



Dear Fellow Pharmacist,

It's a great pleasure that an International Conference on the highly relevant theme—Pharmacovigilance, Pharmaceutical care, and Biomedical Research is going to be organized by Sarada Vilas College of Pharmacy on 24th and 25th of January 2023.

We live in an era of high risk due to irrational use of drugs, in self-medication. Our community is at great risk as we don't have updated our system of pharmacy practice and left our community at great risk. Now time has come to establish system of patient safety. In our society so far we have promoted product centric market. Now we have to change it to patients centric approach. Although the goal seems far off, if we untidily work we can achieve success soon.

I am sure the Conference will be an apt platform in the field of Medicine and Allied Sciences, for the students to learn, for researchers to showcase their work and for pharmacy practitioners to fine tune their skills.

I am sure the conference would provide a platform to deliberate on the above aspects of relevance, particularly the safe and rational use of medicine. I wish the event a grand success.

Congratulations to the organizer for conducting a need-of-the-hour conference on Pharmacovigilance, Pharmaceutical care and Biomedical Research.

#### Dr. Anantha Naik Nagappa

#### Dr. Hanumanthachar Joshi K

Convener, ICPPBR-23 Principal, Sarada Vilas College of Pharmacy, Mysuru President, Association of Community Pharmacists of India, South India Branch



#### Dear Friends

On behalf of the Organizing Committee, I am pleased to welcome you all to the City of Palaces, Mysuru, India and International Conference on Pharmacovigilance, Pharmaceutical Care and Biomedical Research, 24-25 January 2023, Organized by Sarada Vilas College of Pharmacy, Mysuru in collaboration with Association of Community Pharmacists of India, South India branch. Pharmaceutical care as a concept has moved the pharmacy profession from primarily focusing on the product (the drug itself) to the patient's drug therapy and how it should be optimized for the individual patient. It is a practice in which the practitioner takes responsibility for a patient's drugrelated needs, and is held accountable for this commitment. In the course of this practice, responsible drug therapy is provided for the purpose of achieving positive patient outcomes. However, it has always been challenging across the globe. Pharmacists are not only actively involved in the drug research, pharmaceutical care but also in Pharmacovigilance.

We are hopeful that this conference shall serve as a platform for biomedical researchers, clinical pharmacists, hospital pharmacists, community pharmacists, clinicians, teachers and students to share their ideas and discuss in the welfare of the society so that the concept—Pharmaceutical Care everywherel can be achieved. Eminent resource persons shall be delivering their talks which will be beneficial for the global family of pharmacists.

We wish the delegates a happy, memorable, pleasant and educative stay in Mysuru.

#### Dr. Hanumanthachar Joshi K

**Dr. Charan C S** Organizing Secretary, ICPPBR-23 Sarada Vilas College of Pharmacy, Mysuru



Sarada Vilas College of Pharmacy has always been a pioneer in community service and development. The current state and plight for the quality of health care at India inspires the institution to involve and conduct such effective conferences with the motive of right approach to the expected cause. The institution together with Association of Community Pharmacists of India aims to train and provide special exposure to the professionals and students of pharmacy, to acknowledge the current trends and update the skillset accordingly.

International conference on Pharmacovigilance, Pharmaceutical Care & Biomedical Research provides a platform to exhibit an arena of ideas through presentations and talks from the renowned Professionals to educate the aspiring minds to attain excellence.

We, as a team of organizers, are excited and cordially welcome all of you to join us in this journey.

Dr. Charan C S

**Dr. Jinesh b. Nagavi** Joint Organizing Secretary, ICPPBR'23 Sarada Vilas College of Pharmacy, Mysuru.



Dear Colleagues and Fellow Professionals,

As a face of the organizing committee and on behalf of each one of them, It is indeed a very great pleasure for me to welcome each one of you to the International Conference on Pharmacovigilance, Pharmaceutical Care and Biomedical Research (ICPPBR) on 24<sup>th</sup> -25<sup>th</sup> January 2023 organized by Sarada Vilas College of Pharmacy, Mysuru in collaboration with Association of Community Pharmacists of India, South India branch.

This time the responsibility to host our colleagues and fellow pharmacist has been bestowed to us. This is a big responsibility which we will leave no stone unturned to fulfill to the best of our abilities. I am lucky to have a wonderful team backing me in this mammoth task. Our preparations will complement the wonderful scientific programs by the eminent speakers. We assure an engaging conference with the latest advances and providing value to our delegates in each and every small thing that makes us this conference. Each and every member of Organizing Committee has put their best of efforts to give this conference a memorable one in all good ways! I am looking forward to meet you all in ICPPBR'23.

I would like to personally welcome each of you to the International conference. I am sure it will be an exciting time for scientists, academicians, pharmacy professionals and researchers. I welcome you, your family and friends again to this wonderful gathering at the city of Palaces. I thank each and every one of you who are contributing to the success of the conference and looking forward to seeing you all soon.

#### Dr. Jinesh B. Nagavi

<b>O</b>	Dr. Brian Caswel President, National Community Pharmacists Association (NCPA), USA	
	Dr. Isha Patel Marshall University, West Virginia, USA Principal, Research Scientist, PROWESS, Charlotteville, VA, Australia	
	Mr. Raj Vaidya Manager Hindu Pharmacy, Goa, India	
	Mr. Chandragupta Jain Managing Director, Aushad Distributors Pvt Ltd, Mysore, Karnataka, India	
	Dr. Mahadev Bhat Community Pharmacist Walgreens, Cerritos, California, USA	
	Dr. Ananth Naik Nagappa President, Association of Community Pharmacists of India	
<b>.</b>	Dr. B. G. Nagavi CEO and Senior Consultant, HESDAR Centre, Mysuru, Karnataka, India	
	Dr. Ajit Singh CEO & Co Founder CliMed Research Solutions, India	



# **PROGRAM SCHEDULE**

DAY 1 (24 <sup>th</sup> JANUA	.RY 2023)			
9:30 AM – 10:00 AM	Public Health Data Registration In Ayushman Bharath Practitioners Importance To Service Patients For Better Drug And Management			
	<b>Mr. Raghu Kiran</b> Pharmacist, Indian Institute of Public health, Bengaluru, Karnataka, India			
10:00 AM – 10:30 AM	Pharmacovigilance: Need of The Hour			
	<b>Dr .Palanisamy Sivanandy</b> Programme Director Dept.of Pharmacy Pratice, School of Pharmacy International Medical University, Malaysia			
10:30 AM - 11:20 AM	INAUGURATION			
11.20 AM - 11.30 AM	TEA BREAK			
11:30 AM – 12:00 PM	Covid-19 and Mental Health Issues Among Health Care Providers			
	Dr. Isha Patel MarshallUniversity, West Virginia, USA Principal, Research Scientist, PROWESS, Charlotteville,VA, Australia			
12:00 PM – 12:30 PN	M BIO-MEDICAL RESEARCH IN COVID AND POST COVID ERA: BESTPRACTICES, CHALLENGES AND OPPORTUNITIES			
	Dr. Praveen Kulkarni			
	Associate Professor			
	Dept. of Community Medicine & Public Health JSS Medical			
	College, JSSAHER Mysuru, Karnataka, India			
12:30 PM - 1:00 PM	ORAL PRESENTATIONS			
	Sarada Vilas Centenary Hall			
1:00 PM – 2:00 PM	LUNCH BREAK			

2:00 PM – 2:30 PM	DREAM OR PHARMACOVIG	SUPER ILANCE	DREAM:	CAREER	IN
	Dr.M.S Ganach	ari			
	Professor & He Pharmacy Practice of Pharmacy Belgaum, Karnataka	ead, Dept.of KLE College , India			
2:30 PM – 3:00 PM	CURRENT SCEN	ARIO OF PHA	RMACOVIGIL	ANCE IN INDIA	A
	Dr. Basavanna Professor & Head, D	P.L ept.of Clinical Ph	armacologyMM(	& RI, Mysuru	
3:00 PM – 3:30 PM	ROLE OF COMN PROVIDERS	AUNITY PHAR	MACIST AMO	NG HEALTH (	CARE
	Mr.Chandragu	pta Jain			
	Managing Director Aushad Distributors	Pvt. Ltd.Mysuru,	Karnataka, India		
3:30 PM – 4:00 PM	<b>ORAL PRESENT</b> Sarada Vilas Centena	ATIONS ary Hall			
4:00 PM - 4:15 PM	TEA BREAK				
4:15 PM - 5:15 PM	ORAL PRESENTATI Sarada Vilas Centenary	ONS y Hall			
5:30 PM - 7:00 PM	CULTURAL EVENTS				
7:00 PM Onwards	DINNER				

DAY 2 (24 <sup>TH</sup> JANUARY 2	2023)			
9:00 AM – 9:30 AM	PHARMACOMETRICS: THE PHARMACEUTICALCARE	NEW	HORIZON	IN
	Dr. Ajit Singh			
	CEO & Co-Founder			
	CliMed Research Solutions, India			

9:30 AM -10:00 AM	ROLE OF PHARMACIST IN PUBLIC HEALTH FACILITY
	Mr.Umesh Babu
	President
	Karnataka State Health & Medical Education
	Employees AssociationMysuru, Karnataka, India
10:00 AM – 10:30 AM	THINKING ABOUT PHARMACY AND PHARMACY PRACTICE
	Mr. Govardhan
	Chief Pharmacist Indian Railways
	Mysuru, Karnataka, India
10:30 AM – 11:00 AM	CHALLENGES AND OPPORTUNITIES IN PHARMACOVIGILANCE INCURRENT SCENARIO
	Dr. Sameer Dhingra
	Associate Professor
	Department of Phormony Protion
	NIPER Haijpur
	India
11:00 AM – 11:30 AM	PANEL DISCUSSION- I
11:30 AM -11.45AM	TEA BREAK
11:45 AM – 12:15 PM	COMMUNITY PHARMACY IN INDIA: LET US NOT LOSE HOP
	Mr. Raj Vaidya
	Manager
	Hindu Pharmacy, Goa, India
12:15 PM - 12:45 PM	COMMANDABLE COMMUNITY PHARMACY EDUCATION
	Dr BG Nagavi
	CEO and Senior Consultant HESDAR Centre
	Mysuru, Karnataka, India
LUNCH BREAK (12.	45 PM – 1.45 PM)
1:45 PM - 2:15 PM	PHARMACY CHALLENGES TO COPE UP WITH ONLINE PHARMACY
	Dr. Mahadev Bhat
	Community Pharmacist
	Walgreens, Cerritos, California, USA
2:15 PM - 2:45	SAFE USE OF MEDICINES BY PHARMACEUTICAL CARE
PM	Dr. Anantha Naik Nagappa
	National President
	Association of Community Pharmacists' of India
2:45 PM - 3:45 <b>H</b> PM	PANEL DISCUSSION-II
3:45 PM - 4:45	VALEDICTORY CEREMONY AND PRIZE DISTRIBUTION
PM	
4:45 PM Onwards	HIGH TEA

# **Scientific Abstracts**

# **COVID-19 AND MENTAL HEALTH ISSUES**

#### Isha Patel

Marshall University, West Virginia, USA Principal Research Scientist, PROWESS, Charlotteville, VA, Australia



#### ABSTRACT:

Objective: The purpose of this review is to identify prevalent trends and risk factors in depression, anxiety, and eating disorders (ED) in the adolescent population in the post Covid scenario.

Data Sources: The Information used for this research paper was extracted from various sources. We used online databases of Google and PubMed, to search for publications published in 2019 to 2022.

Methods: We chose to summarize studies published from 2019 to 2022, using bibliographic search tools. We developed criteria for selecting articles for our review using diagnostic indicators and keywords.

Results: Mental health conditions such as depression, anxiety and ED are commonly prevalent in this population and have shown increasing rates in the past 3 years. Some risk

factors associated with these diagnoses include reduction in social interaction, increased workloads, routine shifts, sleep quality, social media usage and parental involvement.

Conclusion: Routines, sleep cycles, physical activity, and social media should all be considered as a part of prevention in this population. Approaches that seem to be successful include maintaining social ties and avoiding negative social media usage with harmful content. Increased global public awareness, as well as parental awareness, through media campaigns, is critical to slowing the spread of mental health challenges in adolescents and teenagers in the post-Covid era.

# **COMMUNITY PHARMACY IN INDIA – LET US NOT LOSE HOPE**

Raj Vaidya

Chief Pharmacist, Hindu Pharmacy, Panaji, Goa, India



#### ABSTRACT:

Community Pharmacy in India has come a long way, with its ups and downs. While we are yet to be there, at the level of the developed countries in terms of professional competency, we must not lose hope. There are multiple examples of pharmacists innovating and professionalizing to keep the flag of the profession flying. And it is not only the community pharmacists, but it is also the fellow pharmacy professionals who need to be the support system to boost the profession.

There is an urgent need to change with the changing times. Use of technology to partake knowledge, and simplify the working, continuous upgradation, professional conduct, backed by legislations, systems, and implementation of the laws. There need to be in place Guidelines for professional practice and professional development, as well as backing of tactical curricular changes and a conducive teaching learning atmosphere in the colleges of pharmacy.

#### **PHARMACY CHALLENGES TO COP UP WITH ONLINE PHARMACY** Wind Blowing From West to East Get Paid For the Services You Provide

Mahadev Bhat Community Pharmacist, walgreens Cerritos, California, USA



ABSTRACT:

In practice, Pharmacy provides medication and other health products+ services to the consumer to achieve better outcome of their health.

The landscape of pharmacy practice has evolved over time to improve the health of each nation around the globe.

Online pharmacy is product-oriented price centric, dealing with price war and thengoodbye Charly!

Community pharmacy is place for community to get connected for their health need.

There are opportunities to provide BMR/brown bag medication review. HMR / home medication review. MTM / medication therapy review. TMR / targeted medication review for the better utilization and better result of a given therapy. Home Health care, Palliative care, Diabetic care, BP care, Hospital care, Long term care are the examples.

More recently vaccination has helped community pharmacy a great boon. Covid testing guidelines is another great cash business.

Here there is no written book to follow. What you consider providing as a service with a knowledge of your prescriber instruction is a billable item.

If A Doctor Can Make A House call And Get Paid For The Services Than Community Pharmacist Also Can Do That For Sure And Get Paid For The Services.

Let Us Explore To Gather How This Is Done In The West.

# SAFE USE OF MEDICINES BY PHARMACEUTICAL CARE

#### Anantha Naik Nagappa Founder President, Association of community Pharmacist of India,



#### ABSTRACT:

Pharmacy Practice is new concept and field in India. The WHO-FIP came with handbook on Pharmacy practice for developing nations in 2005. The Pharmacy Practice comprises of evaluation, interpretation and identification of prescription given by doctors. The pharmacists are empowered by pharmacy practice regulations 2015 and Pharmacy practice Regulations 2021, which clearly gives authority to registered pharmacists to dispense, compound, patient counseling, prescription evaluation, drug regimen review rights. It states no other than pharmacist shall dispense, compound and do discussion with patients about medicines to patients.

India has not evolved in matters of safe use of medicines. It is a product centred practice not patient centric care. The products are known by their brand and lots of money is spent on branding the product at the expense of patient economy. The brand medicines are expensive as lot of money is spent on marketing, packaging and detailing. Hence the answer to this menace is generic medicine. Govt of India in order to improve the accessibility and affordability of medicines have come out with Jan Aushadhi retail outlets, where medicines are available at 70% cheaper than brand medicines.

Another major problems faced by the retail pharmacy is their remuneration based on the trade margins the company allows them which is 20~30% on turnover. Here unlike indeveloped nations there is no remuneration is paid to the pharmacists or retail pharmacy. Hence pharmacists are interested in improving turnover, which leads to selling more medicines with or without prescriptions. Where in developed countries retail pharmacy and pharmacists are paid money for engaging in pharmacy practice. There is urge to update pharmacy practice so that product centric approach gets displaced by patient centric Practice.

# COMMENDABLE COMMUNITY PHARMACY EDUCATION AND PRACTICE PROGRAMS: NEED OF THE HOUR

#### BG Nagavi

Founder & CEO, Higher Education Skill Development and Research Center, Mysuru, Karnataka



#### ABSTRACT:

There are around 8, 50,000 community pharmacies (medical shops) in India and around 20, 00,000 pharmacists working with various qualifications in the pharmacies. Drug store & business management, Community Pharmacy & other courses offered at diploma, degree, PG and Pharm D need to be put under one Dept. with qualified & experienced faculty for the development. Community Pharmacy Programs (CPP) is crying for autonomy from the too slow regulatory body for their development. The courses & training offered today are far from reality & market needs. They are too theoretical without needed SMART skills training in CPP. Pharmacy education will be celebrating its centenary in 2032 as the first degree program started at BHU in 1932.However diploma is still older than 100 years as it was offered in Goa and other places in the 19<sup>th</sup> century.

We need teacher- practitioners in CP area to demonstrate the practice & service to the younger generations. Teachers must practice 2 hrs to 6 hrs per week or more after the college hrs to practice what they preach in the classrooms. We need to work closely with physicians and others to extend the necessary services to them & the needy patients and public. There is an urgent need to conduct & publish credible research articles in the area of CPP to motivate pharmacists & other health care professionals to work together. We need to transform CPP as the pharma industries have done and match with market needs – chain pharmacy, e-pharmacy, self-care pharmacy, professional services etc.

There is an urgent need to provide Pharma-care mainly patient counseling, drug information, ADR reporting and monitoring and health screening services in a community setup. With 80,000 brands & complex medicines around, we are putting patients & public at risk in the absence of counseling & other services at the CP. Let us plan & work together to provide credible CPP program for the Indian population so that India can be truly pharmacy of the world. Educators, Regulators, Industry, Businessmen, Practitioners, Researchers, Physicians and others have to plan & execute together in CPP area. We can then celebrate the centenary of Pharmacy education in 2032 proudly and satisfactorily and move far away from quackery and sub standard education and practice in CPP. Let's think about it

#### Jai Hind, Jai Pharma

## PUBLIC HEALTH DATA REGISTRATION IN AYUSHMAN BHARATH IMPORTANCE TO SERVICE PRACTITIONERS AND PATIENTS FOR BETTER DRUG MANAGEMENT

#### **Raghu Kiran**

Pharmacist, Indian Institute of Public Health, Bengaluru



#### ABSTRACT:

Public health is multifaceted field which involves epidemiology, biostatics and management of various health services. Other aspects of public health includes environmental health, community health, behavioral health, health economics, mental health, occupation related safety. Major goal of public health is to make the quality of life better by preventing and treating diseases including mental, spiritual and physical health.

Public health practices that are performed in today's modern world requires multifaceted groups of health care professionals and workers. These gigantic organizations include biostatisticians, infectious disease specialist medical staff, nurses, obstetricians, biochemists, economists, sociologists, geneticists, clinical and hospital pharmacists, data management departments and physicians, environmental health officials, public health supervisors, bioethicists, veterinarians, gender specialists, maternal health experts could be called upon for care based on the patient's need. Vital contribution of public health services involves - Identification and solution of community health issues by monitoring health status; Diagnosing and findings to be made in case of any community-wide health hazards; Information, training and empowerment of the community about various health problems are provided by pharmacists about many diseases; Develop plans and guidelines to promote individual and social health initiatives; Ensuring safety and shielding health by enforcement of regulatory guidelines; Cascading individuals to desired personal health care and assuring health care services when not available; Assessment of population based health services for effectiveness, safety, accessibility, and quality; Adding on to the existing knowledge through research and bringing out innovative effective solutions for health issues.

The role of pharmacist has expanded ahead of traditional drug dispensing, compounding and distribution. In today's world the services of a pharmacist involve higher patient-orientation, regulatory and public health functions. Various objectives of public health which can be aided through a unique set of skills of pharmacists and their expertise in pharmacotherapy, pharmacovigilance, prevention services, access to health care services, patient counselling and various other work performed by them. Pharmacists are easily available source for providing health and medication information to the patient apart from dispensing and distributing medicines. In public health the profession of pharmacist is not formally defined.

# ROLE OF PHARMACIST IN PUBLIC HEALTH FACILITY

#### Umesh

President, Karnataka State Health and Medical Education Employees Association, Mysore



#### ABSTRACT:

The Profession of Pharmacy is an integral part of the healthcare system worldwide. Pharmacies with well-organized practice can go a long way to ensure quality health care for the patient. In the past, pharmacists were responsible for dispensing medications only. Slowly, the traditional role of pharmacists is expanding and now pharmacists are playing a role as a vital team member in the direct care of patients, especially the new generation pharmacists who are Pharma graduates. Pharmacists play a major role in providing healthcare services by means of community pharmacy services in rural areas where physicians are not available or where physician services are too costly for meeting the healthcare necessities. Many reforms are yet needed to improve job satisfaction among Indian pharmacists as health care professionals and changes in the Pharma graduates and pharmacy curriculum. Our report looks at the current issues with the pharmacy profession in India and provides possible recommendations to improve job satisfaction among India pharmacists. Keywords: Pharmacy, satisfaction, India, recommendations
#### THINKING ABOUT PHARMACY AND PHARMACY PRACTICE

**Govardhan** Chief Pharmacist, Indian Railways, Mysore



#### ABSTRACT:

The Profession of Pharmacy is an integral part of healthcare system worldwide. Pharmacies with well organized practice can go a long way to ensure quality health care for the patient. In the early days pharmacist were engaged in compounding activities, the prescribed medication were appropriately compounded and dispensed to the patients. slowly, the tradition was changed and now, they are playing an important role as a vital team member in direct care of patients by providing professional services like patient counseling, drug informatiom services and there by promoting public health. Many reforms should be introduced to improve job satisfaction among indian pharmacists like higher salaries, more job opportunities in government offices, recognition of Pharmacist in the health care field and changes in Pharmacy curriculum. The report covers the current issues with the Pharmacy profession in india and provides possible recommendations to improve job satisfaction for Pharmacist across the country.

#### TRENDS IN PHARMACOVIGILANCE

#### Basavanna PL

Prof and Head, Dept. of Clinical Pharmacology,

MMC&RI, Mysore



#### ABSTRACT:

Pharmacovigilance in India was initiated way back in 1986 with a formal adverse drug reaction (ADR) monitoring system, under supervision of the drug controller of India. India joined the World Health Organization (WHO) Programme for International Drug Monitoring in 1998, but was not successful. Later, the National Programme of Pharmacovigilance was launched in 2005, and was renamed as the Pharmacovigilance Programme of India (PvPI) in 2010. In consideration of having a robust pharmacovigilance system in India, steps were taken. The National Coordination Centre was shifted from New Delhi to the Indian Pharmacopoeia Commission (IPC) in Ghaziabad. The PvPI works to safeguard the health of the Indian population by ensuring that the benefit of medicines outweighs the risks associated with their use. The culture of reporting of ADRs has achieved remarkable success, with 534 PvPI-established adverse drug monitoring centres all over India and provision of training to healthcare professionals. The programme is striving hard to build trust between the physician and the patient, thereby increasing patient safety and the confidence of people in the country's health system, in addition to the detection of substandard medicines and prescribing, dispensing and administration errors. The IPC-PvPI has now become a WHO Collaborating Centre for Pharmacovigilance in Public Health Programmes and Regulatory Services. In spite of these achievements, several challenges are faced by the PvPI, like the monitoring of generic drugs, biosimilar, and disease-specific ADRs of antidiabetic, cardiovascular and antipsychotic drugs and, above all, creating awareness, which is a continual process. At the same time, the PvPI is trying to address other challenges like counterfeit drugs, antimicrobial resistance, and surveillance during mass vaccinations and other national programmes.

The preliminary analysis of Adverse Drug Reactions (ADRs) from the PvPI database reveals that the following suspected drugs are associated with the ADRs in 2022 as given below

Ibuprofen associated with Fixed Drug Eruption, Losartan associated with Muscle Spasm, Cephalosporin Class associated with Fixed Drug Eruption, Cefuroxime associated with Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS), Iitraconazole associated with Symmetrical Drug Related Intertriginous and Flexural Exanthema (SDRIFE), Tacrolimus associated with Gingival Hypertrophy, Cefoperazone associated with Coagulopathy, Norfloxacin associated with Skin Hyperpigmentation, Minoxidil associated with Folliculitis etc.

# **BIOMEDICAL RESEARCH IN COVID AND POST COVID ERA: BEST PRACTICES, CHALLENGES AND OPPORTUNITIES**

#### Praveen Kulkarni

Associate Professor Department of Community Medicine and Public Health JSS Medical College, Mysuru



#### ABSTRACT:

The world has witnessed one of the worst health emergencies in the form of COVID-19 pandemic. The pandemic has created a major crisis in health, economic, production and developmental sectors with unprecedented threat to human lives. Though the fear of outburst continues with changing epidemiological determinants, the world is slowly adapting to live with the virus. The virus and its characteristics, etiopathogenesis of the disease, risk factors, clinical features, natural history of the disease, modes and patterns of spread of infection, diagnostic techniques, clinical outcomes, mental health related issues, preventive strategies, infodemic of pandemic, misconceptions about the diseases, sociocultural factors associated with the disease and its outcomes, acceptability of vaccination, adverse effects of vaccines, long term effects of COVID-19 disease were some of the areas commonly explored by the researchers in this pandemic. Apart from the core medical research, educational institutions conducted several education innovations in terms of e- learning, virtual mode of instructions, e-classrooms, virtual assessments etc and assessed their effectiveness and impact on student learning and achievement of educational objectives. Economic studies, mathematical model-based studies on predictions of pandemic progression, disease outcomes, utilization of technology, artificial intelligence were other areas which demanded collaborative research.

There were several challenges in conducting the research during the pandemic and post pandemic era. These include, difficulties in regulatory approval for the studies at initial times, difficulty for the researchers to move into the communities due to strict lock down measures, misconception about the disease among people, poor health seeking behavior, fear of being used as laboratory animals for the research, inadequate funding for the research activities, transportation issues for the biological samples, inadequate physical and laboratory infrastructure to conduct research studies were to name a few. But most of the researchers explored innovative and appropriate solutions to these challenges to keep the research engine moving. The research in pandemic and post pandemic era has witnessed several best practices like, collaborative research, trans disciplinary and interdisciplinary research, expedited review and approval process for conducting research projects, virtual mode of project proposal presentation and approval by the regulatory authorities and ethics committees, conversion of majority of research projects to publications, relaxation of norms for research by regulatory bodies were some of the practices which need special mention. The COVID-19 pandemic has opened several opportunities for the researchers in the areas of virology, biotechnology, vaccinology, epidemiology, clinical characterization, economic outcomes, health

system management, operations research, drug discovery, pharmacokinetics, pharmacodynamics, pharmacogenomics, alternative systems of medicines, medical devices development, entrepreneurships etc. The researchers have started looking out of box and explored collaborative, interdisciplinary and trans disciplinary research opportunities to provide immediate solutions to the challenges offered by the pandemic.

## CHALLENGES AND OPPORTUNITIES IN PHARMACOVIGILANCE IN POST-COVID-19 SCENARIO

#### Sameer Dhingra

Associate Professor, Dept. Of Pharmacy Practice, NIPER, Hajipur, INDIA



#### ABSTRACT:

Patient safety is paramount in the healthcare system to avoid harm to the population. The research and practices of pharmacovigilance are concerned with identifying, evaluating, comprehending, and avoiding any other issues involving medications or vaccinations. We are well aware that the thalidomide tragedy led to the development of pharmacovigilance. Pharmacovigilance is an essential scientific tool for the safe and effective use of medicines to identify and decrease the chances of adverse events of marketed drugs. Pharmacovigilance is required in this post-COVID-19 scenario because, during the COVID-19 pandemic, several medications, including vaccines and immune boosters were approved for emergency use without adequate clinical evidence or concluding clinical trials. The safety of drugs like remdesivir, molnupiravir, etc., and vaccinations that have been licensed for use in an emergency are now being actively monitored by regulatory organizations. The significance of pharmacovigilance has increased multiple folds to protect the population from the harmful effects of these drugs. My talk during this two-days international conference on pharmacovigilance, pharmacovigilance in the post-COVID-19 scenario.

#### DREAM OR SUPER DREAM CAREER IN PHARMACOVIGILANCE

M.S.Ganachari Professor and Head, Dept. of Pharmacy Practice KLE College of Pharmacy, Belagavi



ABSTRACT:

"Pharmacovigilance careers have well-described career paths and are extremely intriguing." In a recent report titled "Pharmacovigilance Market - Global Industry Analysis, Size, Share, Growth, Trends, and Forecast, 2014 - 2020," Transparency Market Research estimated that the global market for pharmacovigilance was close to 2,426.6 USD in 2013 and will surpass USD 6,104.1 million in 2020 with an estimated CAGR of 14.2%.

In this sector, one can advance quickly in their career, eventually landing them in respected positions with competitive pay.

Why should you pursue a profession in pharmacovigilance?

For graduates in pharmacy, pharmacovigilance is a great career path. It is a scientific field that entails documenting and evaluating drug side effects. The majority of the work done by pharmacovigilance specialists ensures that the drugs we use are safe, and any that are shown to be dangerous are removed from circulation. Pharmacovigilance specialists continuously assess the safety of both the drugs currently undergoing clinical trials and the drugs that have already been approved for sale. The Pharmacovigilance professionals immediately after a therapeutic side effect is reported and enter the event in the relevant databases, follow up with the event to gather more information, and transmit these reports to regulatory authorities.

#### PHARMACOMETRICS: THE NEW HORIZON IN PHARMACEUTICAL CARE

#### Ajit Singh

CEO and co founder of ClinMed solutions,India



ABSTRACT:

Pharmacometrics is a novel science that quantifies the interaction between drugs and patients by interlinking the biology, physiology, and pharmacology with disease condition through mathematical models. The data and information collected from different sources are linked together quantitatively. The quantitative answers are required for the questions raised during clinical use regarding safety, efficacy, and dosage regimen or more specifically to design individualized dosage regimen of pharmaceutical products. Pharmacometric analysis can provide arguably better insight than any other available tool to answer these questions when utilized by trained clinician or researcher.

Reference: Encyclopedia of Pharmacy Practice and Clinical Pharmacy, 2019

## ROLE OF COMMUNITY PHARMACIST AMONG HEALTH CARE PROVIDERS

**Chandragupta Jain** Managing Director, Aushad Distribution pvt ltd, mysuru



#### **ABSTRACT:**

#### THE PRIDE

A medical store owner or a pharmacist has a edge over other professional in society, He touches the lives of the patient, He recognizes the difficulties of a patient personally and helps the patient in taking the proper medication in the right time and He is next door doctor for small ailments and is compassionate

#### THE PERCEPTION

Trader, Profit based intention, Opportunist in making money, Medical shop owner means life is good and he/she can take of his family and generations.

#### BRIGHTER SIDE

Community pharmacist helping the society in providing the medicines within say 200 meters of the person residence / office. There are more than 80 million community pharmacist for 1.4 billion people The immediate reach has also enabled the patient to consult the pharmacist in a short time. Total availability has ensured total health taken care.

Consultation is free!!!

#### GLOOMY SIDE

The image of money making, Lack of real pharmacist at the helm, Lack of up skilling, The resources are so less – the time for counseling has vanished. So many players – Online, Insurance, Hospital based pharmacies, Google

Discount, Lot of compliances (GST, Schedule H, X, Audit)

#### ADD VALUE

Your Personal Connect Has To Be Strong And Compassionate, Help Customer Get All The Medication In One Roof, Learn Procurement, Visit Distributors Once In A Month For New Product Upgrade, Small Time For Counseling  $\rightarrow$  Less Than 60 Sec, Be An Guide For Directing The Patient To The Doctor / Hospital

#### **PHARMACOVIGILANCE - NEED OF THE HOUR**

#### **Palanisamy Sivanandy**

Programme Director, Dept. of Pharmacy Practice School of Pharmacy, International Medical University ,Malaysia

#### ABSTRACT:



The growing usage of drugs imposes enormous health issues which negatively impact one's quality of life. Multiple medications and poor knowledge of medications increase the number of drug-related problems, one among such problems is adverse drug reactions (ADRs). There are many incidents that happened in the past that alerted the healthcare fraternity to create a robust system to monitor and prevent such adverse events or ADRs. For example, the thalidomide tragedy caused limb malformations in the newborns of women who used the medication during pregnancy. This identified that the phase 1-3 clinical trials and animal studies conducted to evaluate drug safety prior to marketing do not sufficiently demonstrate safety. It is vital to monitor the safety of all medications throughout their existence in the market because ADR-related costs to the country may exceed the cost of the medications themselves.

Pharmacovigilance basically targets the safety of medicines. Ultimately, pharmacovigilance is concerned with identifying the hazards associated with pharmaceutical products and with minimizing the risk of any harm that patients can face. Signal detection is important to identify drug-related adverse effects. The field of pharmacovigilance, which is becoming more important as there are more reports of drug recalls, is concerned with the investigation of ADRs.

The WHO international drug monitoring program started in 1968; it is located in Uppsala, Sweden. Every country has a pharmacovigilance programme (PV), and in India, the Pharmacovigilance Programme of India (PvPI) is launched by the Ministry of Health and Family Welfare (MoHFW), Government of India in the year 2010 at All India Institute of Medical Sciences (AIIMS) New Delhi as National Coordinating Centre (NCC). The Programme was later transferred to the Indian Pharmacopoeia Commission (IPC) as National Coordinating Centre (NCC) in April 2011. IPC-PvPI became the NCC for the Materiovigilance Programme of India (MvPI) in July 2015. IPC, NCC-PvPI became a WHO Collaborating Centre for Pharmacovigilance in Public Health Programmes & Regulatory services from July 2017.

The program is based on voluntary ADR reporting and monitoring and is vital for maintaining drug safety. Voluntary reporting by physicians and other health providers and consumers may alert the authorities and pharmaceutical companies to possible adverse effects of drugs. It aims in reducing the risks associated with drug prescribing and administration and improving patient care, safety and treatment outcome.

According to the 2012 FIP Pharmacist Workforce Report, global sample reveals that, on average, 55% of pharmacists were found to work in community pharmacy environments, 18% in hospitals, 10% in industry, 5% in research and academia and 5% in regulation. Roughly, 73% of pharmacists work in hospital or pharmacy settings, where they can face events based on ADRs or other drug-related problems. Their involvement in pharmacovigilance systems is crucial.

Many studies showed that patients had insufficient knowledge about their prescribed drugs, although they had been using them for a while. Another problem is the ignorant use of herbs and herbal medicine. Since many herbal products contain active ingredients that can interact with prescription medicines, the WHO prepared a guideline on monitoring of herbal medicine in the pharmacovigilance systems. In most countries, pharmacists go through extensive education on medicinal plants which are used in traditional folk medicine, as well as natural and synthetic medicines. Therefore, pharmacists already have the knowledge to detect safety signals of drugs of any origin. The success of the PV programme is based on the involvement of HCPs, patients, and caregivers' involvement in reporting the suspected ADRs, and hence, educating the general public and patient population is also a crucial factor to bring the PVP system to the next level and to minimize the incidences of ADRs and improve the quality of life of the patient population.

## HOSPITAL PHARMACY

Sl.no	ABSTRACT NUMBER	PRESENTING AUTHOR	ABSTRACT TITLE
1	HP/PP/01	Meghana Krishnamurthy	Evaluation of nutrition knowledge, attitude and practice among pregnant women visiting tertiary care hospital.
2	HP/PP/02	Akshay Mohan	A prospective study on impact of clinical pharmacist intervention in patients with cardiovascular diseases in a tertiary care teaching hospital
3	HP/PP/03	Thanveer Ahammed Chonari	Assessment of medication knowledge and medication adherence among patients undergoing hemodialysis in a tertiary care teaching hospital
4	HP/PP/04	Muhammed Dahim	Assessment of knowledge, perception and willingness Towards telemedicine usage among healthcareprofessionals and public
5	HP/PP/05	Prajwal R	Type-2 diabetes mellitus and cardiovascular disease
6	HP/PP/06	Kiran M	Epidemiology and treatment of COPD
7	HP/PP/07	Chandrakala D	Effect of nausea and vomiting on the quality of life of pregnant women
8	HP/PP/08	Bijisha Baburaj Nair	Patient responsibility in safe use of medication
9	HP/OOP/01	G. Haripriya.	Menstrual disorders associated with thyroid disfunction:
10	HP/OOP/02	Rajeswari .P.	Pharmacoeconomics: basic principles, methods and economic evaluation of drug therapies:
11	HP/OPP/01	M.Maneesha	Innovations in pharmacy practice: improving patient outcomes
12	HP/OPP/02	M. Kalpana	-NSAIDS induced hallow viscous perforation
13	HP/OP/01	Bhoomika S K	Assessment of drug related problems and clinical pharmacist interventions in cardiac patients in secondarycare hospital
14	HP/OP/02	Sughosh V Handigol	Management of patient care in health system
`15	HP/OP/03	Kavya Rachamsetty	-Prevalence and risk factors of psychotropic polypharmacy in treatment of psychiatric disordersl
16	HP/OP/04	Lakshmi Totar	Identification of drug-drug interaction intprescriptionsreceived at ipd of a tertiary hospital
17	HP/OP/05	Monika Chaparala	Prevalence of drug resistant tuberculosis (rifampicin resistance)
18	HP/OP/06	Nandini H B	Prescribing pattern for the management of nausea and vomiting in pregnant women
19	HP/OP/07	Arfa.A.Sayed	A systematic kap survey of diabetes in general public Knowledge, attitude and practice about diabetes with regard to their disease in south indian population: a cross-sectional study

sl.no	abstract number	Presenting Author	Abstract title
20	HP/OP/08	Akshata P Gore.	_Assessment of knowledge, attitude and practice regarding hypertension in general public in south indian population: an observational study
21	HP/OP/09	Risha Snehal Monis	Impact of diabetic foot ulcer on the patient's quality of life in a tertiary care teaching
22	HP/OP/10	Bipin Shaji	Development validation and evaluation of communicative effectiveness of patient information leaflet on hypothyroidism with metabolic syndrome
23	HP/OP/11	Rosy Raju	Identifying ways to enhance antimicrobial stewardship activities of pharmacists serving rural primary health centres
24	HP/OP/12	G Sri Sai Anwitha	Drug prescription pattern and cost analysis of antipsychotic drugs in psychiatric outpatient department in a tertiary care teaching hospital
25	HP/OP/13	Pallavi K B	Pharmacovigilance in ayurveda

### PHARMACOVIGILANCE

Sl.N o	Abstract Number	Presenting Author	Abstract Title
1	PV/PP/01	Pankaj Khuspe	Pharmacovigilance of herbal medicines: need of an hour
2	PV/PP/02	Irshad Wani	Evaluation of the rapeutic potential of hydro alcoholic extract of proso millet in a $\beta$ 1-42 induced mice model of alzheimer's disease
3	PV/PP/03	Balda Aayushi	Evaluation of memory impairment and antiepileptic activity of gabapentin in the presence and absence of mulmina
4	PV/PP/04	Pooja Rani	Reversal of high fat diet-induced hyperlipidemia by terpinolene
5	PV/PP/05	Nikitha	A rare case of generalized tonic -clonic seizure Induced by carboplatin and paclitaxel infusion
6	PV/PP/06	Raghuveer	Dietary anthocyanins and anthocyanin-rich extracts: role indiabetes and its induced complications – A review
7	PV/PP/07	Arun M. Mahale	Formulation and evaluation of matrix tablet
8	PV/PP/08	Mercy Kerenhap R	Formulation, characterisation and invivo evaluation of antimicrobial & amp; anti-diabetic effect of novel n- acetylcysteine liposomes
9	PV/PP/09	Pavithra.N	Development of miglitol tdds for the treatment of diabetesmellitus
10	PV/PP/10	Mahananda G. Uppin	Evaluation of anti - arthritic activity of bark extract of mammea suriga kosterm in cfa induced experimental rats
11	PV/PP/11	Prajwal.y.s	Public engagement in pharmacovigilance
12	PV/OPP/01	E.R Nagasudha	The rise of antibiotic resistance: a growing threat to public health
13	PV/OPP/02	Poonam Rajendra Bramhane	Explore the dissocube technology for inhibit anti- hiv targetto cd4 -t cell by nanosuspension
14	PV/OPP/03	Kanika	Pharmacovigilance: Future Challenges and Opportunities
15	PV/OPP/04	Md Awaise Iqbal Baig	Evaluation of anti-parkinson's activity of novel glitazones on experimentally induced mouse model of parkinson's disease
16	PV/OPP/05	Y Mohammed Tausif	Prevalence and risk factors of malnutrition among children aged less than five years attending primary health center in anantapur district: A cross-sectional study
17	PV/OPP/06	Abu S Biswas	A study to evaluate the development of seizures in rat modeloh alzheimer's disease
18	PV/OPP/07	Irshad Wani	Evaluation of the rapeutic potential of hydroalcoholic extract of proso millet in $a\beta_{1-42}$ induced mice model of alzheimer's disease

Sl.no	Abstract number	Presenting Author	Abstract title
19	PV/OP/01	Rakshitha D	An insight view towards pharmacovigilance of ASU & H drugs
20	PV/OP/02	Richa Gad	Evaluation of prescribing pattern of chemotherapy drugs, monitoring and reporting of adverse drug reaction in patients undergoing chemotherapy for various types of cancers at tertiary care hospital.
21	PV/OP/03	Aishwarya Laxmikant Khatawakar	A prospective study on monitoring and reporting adversedrug reactions in admitted patients at tertiary care teaching hospital
22	PV/OP/05	Makkapati Manasa	To study the protective effect of flax (linum usitatissimum) seed oil on muscle atrophy induced by dexamethasone in rats.
23	PV/OP/06	Sahana N Bhat	Automation opportunities in pharmacovigilance :Areview.
24	PV/OP/07	Anurag R Sattigeri	Pharmacovigilance (sustainability and management)
25	PV/OP/08	Yashaswini K J	Identifying ways to enhance antimicrobial stewardship activities of pharmacists serving rural primary health centres
26	PV/OP/09	Dr.S.Anusha	Case study on propranolol induced bradycardia in mucopolysaccharidosis type I-H/S
27	PV/OP/10	Mohd.Ramish Khan	Pharmacovigilance(overview of PVPI in INDIA)
28	PV/OOP/01	Dasrao A Patil	In vitro investigation of anticancer, antidibetic and anti- inflammatory activity of ethanolic extract of terminalia cattappa red leaves
29	PV/OOP/02	Jaswant Singh	Complete ADR profiling of -medicated, regular and ayuvedic toothpastel and their ingredient for drugrepurposing
30	PV/OOP/03	Kamble Swapnil Shivaji	Post authorisation safety and effectiveness studies will complement the pre-marketing studies for vaccine for covid-19.
31	PV/OOP/04	Swati Parcha	Complete ADR profiling of marketed brands of pantoprazole for drug repurposing
32	PV/OOP/05	Mayank Dwivedi	Complete ADR profiling on marketed brands of cefiximefor drug repurposing

## **COMMUNITY PHARMACY**

Sl.no	Abstract number	Presenting Author	Abstract title
1	CP/OP/01	Anushree Deshpande	Impact of pharmacist intervention on patients knowledge of oral anti coagulation therapy
2	CP/OP/02	Rakshith H T	Prevalence of internet addiction disorder and it's association with depression and anxiety among young students.
3	CP/OP/03	Anvil Preem Rebello	Prevalence of depression and anxiety among school and college students
4	CP/OP/04	S Lohita	Development and validation of self-administered internetaddiction scale (saias-10)
5	CP/OP/05	Anupama Harigal	Assessment and evaluation of drug information service provided by pharmacy practice department based on enquirer's
6	CP/OP/06	Namratha D	To analyze the health – related quality of life and medication adherence in cardiac patients in secondarycare hospital
7	CP/OP/08	Deepak C G	Development and evaluation of patient informationleaflet for schizophrenia
8	CP/OP/09	V.Dharani	Pharmacoeconomic study of selective drugs of ppis andh2-receptor antagonists in peptic ulcer.
9	CP/OP/10	Sai Sudha Sri	Assessment of knowledge of -breast self examination (prevention of breast cancer) among college students inbangalore city
10	CP/OP/11	Neelaphar Pydala	Effect of antihypertensive agents on biochemical parameters in diabetes mellitus patients
11	CP/OOP/01	M Swetha	-Implementation of start/stopp criteria to promote appropriate use of medicines among geriatrics with common cardiovascular and respiratory disordersl
12	CP/OOP/02	Ramya Kadapa	A multi-dimensional study to estimate the behaviour of general public during covid -19 pandemic
13	CP/OOP/03	R.Harini	Antioxidant activity of a popular formulation claimed by the traditional herbal medicine practioners of puducherry to be effective in prophylaxis and therapeutic management of covid- 19
14	CP/OOP/04	Swetha Pasupuleti	Assessment of knowledge about medications use and achievement of medication adherence through structuredpatient education in patients with diabetes mellitus.
15	CP/OPP/01	Anu Philip	Health education for heart failure patients through the pictorial patient information leaflet
16	CP/OPP/02	Rashmi T	Design, synthesis, docking and antiviral activity of some new pyrazole fused with hydrazinyl pyrimidine derivatives.

Sl.n o	ABSTRAT NUMBER	PRESENTING AUTHOR	Abstract title
18	CP/PP/01	Nimna Rose Anton	Assessment of knowledge, attitude and practice towards menopausal related symptoms of women residing in rural areas of Bagalkot district
19	CP/PP/02	Shubhangini S L	Knowledge, attitude and practice towards diabetes mellitus ingeneral public of Karnataka
20	CP/PP/03	Shobhitha G K	Knowledge attitude and perception of community pharmacisttowards various medication adherence programs
21	CP/PP/04	Vikas T B	A cross sectional study on prescribing pattern of antipsychotic agents for mental illness in a tertiary care hospital
22	CP/PP/05	Supriya. H. P	The pharmacy and healthcare system: A review
23	CP/PP/06	Anju K S	Coronavirus: the mystery of low covid-19 death rates in India

### **BIOMEDICAL RESEARCH**

Sl.no	Abstract number	Presenting Author	Abstract Title
1	BR/OP/02	Mudhol Seema	Piperine-sodium caseinate loaded nano-emulsion for transdermal delivery through micro needle patch
2	BR/OP/03	DR Karthikeyan	Phytochemical screening and anti-tubercular activity of different extracts of <i>ipomoea sepiaria</i> roxb. Leaf
3	BR/OP/04	Dhinesh B	Quality evaluation of a phytopharmaceutical by high performance Thin layer chromatography & amp; herbovigilance studies
4	BR/OP/05	Pavithra V	The molecular docking study of interaction of newly synthesised benzamide appended by pyrazolone derivatives as ligand molecule with the target protien 6lu7 of novel corona virus
5	BR/OP/06	Gokul	Assessment of medication non-adherence and impact of patient counselling in rural hemodialysis patients
6	BR/OP/07	Mirudularaja	Raloxifene-in-liposomal transdermal systems for the management of postmenopasual osteoporosis
8	BR/OP/09	Krishnalekha Bandyopadhyay	Evaluation of anti-arrhythmic effect of elettaria cardamomum on experimental arrhythmias in rats
9	BR/OP/10	M.Vigneshwar	Design, development and evaluation of optimized piperine decorated curcumin liposomes for invivo & invitro anti-ulcer activity
10	BR/OP/11	Ramu Govindan	Investigation of herbal extracts and concoction against lithiasis by Weight reduction assay
11	BR/OP/12	Manasa R	Development of weaning food using barnyard millet flakes and browntop millet flakes
12	BR/OP/13	Preetham Gowda HR	Bioactive peptides and its application in the development of functional foods and nutraceuticals
13	BR/OP/14	Deepika M	Anti-microbial activity of roselle (hibiscus sabdariffa.L)
14	BR/OP/15	Gagana N K	Anti-inflammatory activity of calendula (calendulaofficinalis)
15	BR/OP/16	Rashmi S	Anti-inflammatory activity of matricaria chamomilla
16	BR/OP/17	Anitha Tendulkar C M	Cardio protective activity of lemon balm (melissaofficinalis)
17	BR/OP/18	Kusum N	Anti-inflammatory activity of saffron ( crocus sativus )
18	BR/OP/19	Manasa C	Anti-bacterial activity of manjistha ( <i>rubia cordifolia</i> )
19	BR/OP/20	Surabhi M	Antibacterial activity of mint (mentha piperita)

Sl.no	Ab39stract number	Presenting Author	Abstract Title
20	BR/0P/21	Payal R	Wound-healing activity of Rosemary (Rosmarinusofficinalis)
21	BR/OP/22	Swasthika P Y	Anti-ulcer activity of Mulethi (Glycyrrhiza glabra Linn)
22	BR/OP/23	Meghana A Nayak	Anti-oxidant Activity of Nilgiri (Eucalyptus globulus)
23	BR/OP/24	Nisarga.R	Anti- bacterial activity of Cinnamon(Cinnamomumverum)
24	BR/OP/25	Srikari K N	Protective effects of madhu tulasi [Stevia rebaudiana] in diabetes induced renal damage
25	BR/OP/26	Divya Shree S	Anti-Cancer activity of Azadirachta indica (Neem)
26	BR/OP/27	Saniya M	Anti-inflammatory activity of Aloe Vera (Aloebarbadensis)
27	BR/OP/28	Bhoomika B M	Anti-hyperglycemic activity of Turmeric (Curcuma longa)
28	BR/OP/29	Koushik G C	Hypocholesterolemic Activity of Fenugreek (Trigonellafoenum-graecum)
29	BR/OP/30	Thejashwini H M	Anti-hyperglycemic activity of garlic (Allium sativum)
30	BR/OP/31	Pooja N S	Antiviral activity of green Chiretta (Andrographispaniculata)
31	BR/OP/32	Shrunga M	Antioxidant Activity of Turmeric (Curcuma longa)
32	BR/OP/33	Vibha Ramanuja	Anti-diabetic activity of Saffron (Crocus sativus)
33	BR/OP/34	Pavan Kumar MR	Antihypertensive Activity of Hibiscus sabdariffa. L(Roselle)
34	BR/OP/35	Kavya M R	Anti hyperglycemic activity of Drumstick tree (Moringa oleifera
35	BR/OP/36	Divyashree M	Anti-Diabetic Activity of Catharanthus Roseus (VincaRosea)
36	BR/OOP/01	Sangh Priya	Mining of polyphenols and flavonoids in holy basil(Ocimum sp.): Comparison of four varieties
37	BR/OOP/03	Vallamkondu Manasa	Nanoencapsulation and characterization of apocynin and vanillic acid from Picrorhiza kurroa Royle ex Benth plantroots
38	BR/OOP/04	Sk Meheronnisha	Scientific validation and mechanistic study of ayurveda formulation: Sahacharathi thailam for its anti- Parkinson's activity in 6-OHDA lesioned rat Parkinson's model

Sl.no	Abstract number	Presenting Author	Abstract Title
39	BR/OOP/05	Suma Naduvinamani	Development of flexible micro-porous hydrogel bandages of nano zno- simvastatin composites for diabetic wound repair
40	BR/OOP/06	Seema K S	Anti-hyperlipidemic activity of divya methipachak against cafeteria diet induced hyperlipidemia in rats.
41	BR/OOP/07	Unnati G	Qualitative and Quantitative estimation of indegeneous Adiantum capillus-veneris Linn,.
42	BR/OOP/08	S Divya	A review on nano structured lopid carrier 'a boon for the lipophilic drug'
43	BR/OPP/01	Madhavi.G	Tumeric: ability to prevent breastcancer
44	BR/OPP/02	Ms.Suvarna	A new validated bioanalytical high performance liquid chromatographic method for the estimation of simvastatin in human plasma
45	BR/OPP/03	Akshada Tandale	Transdermal patch on hypertension
46	BR/OPP/04	A.S.V.L.Sruthi	3d qsar study, syntheses and antitubercular activity of some novel1,4-dihydropyridines
47	BR/OPP/05	Raghu JD	In Vitro Anthelmintic Activityof Leaf Extract of Acmellaoppositifolia
48	BR/OPP/06	Sneha Durgadi	Design and characterization of gastro retentive drug delivery systems containing famotidine and domperidone
49	BR/OPP/07	Pranali P. Yadav	Analytical Method Development and Validation of Metoprolol tartrate and Telmisartan in Bulk DosageForml
50	BR/OPP/08	Balda Aayushi	Evaluation of memory impairment and antiepileptic activity of gabapentin in the presence and absence of mulminatm
51	BR/OPP/09	Poorna Chandra S M	Development and evaluation of moxifloxicine hydrochloride loaded nanoparticle insitu gel for opthalmicdrug delivery
52	BR/PP/01	Deepika Bv	Synthesis, docking studies and evaluation of novel piperine derivatives as potential agents against breast cancer
53	BR/PP/02	Rudra Murthy B K	ANALYTICAL METHOD DEVELOPMENT AND validations FOR SIMULTANEOUS ESTIMATION OF ANTI-HYPERTENSIVE DRUGS
54	BR/PP/03	Phurbu Dolkar	A study on the safety and neuroprotective profile of Sesame lignans in sleep restricted mice
55	BR/PP/04	Thejaswiram M	An overview of asthma and it's complications associated with obesity
56	BR/PP/05	Bharath Kumar	An overview: on peptic ulcer disease and its therapy

57	BR/PP/06	B. Jayalakshmi	Evaluation of Neuroprotective activity of <i>Amaranthus Viniglis</i> L. Extract
58	BR/PP/08	C.S. Hallikeri	Synthesis and molecular docking studies of novel pyrrolyl benzimidazole derivatives as anticonvulsant agents.
59	BR/PP/09	Chetan B. Savant	Effect of co-administration of Ocimum sanctum and Atenolol : Possible pharmacokinetic mechanism in preclinical studies
60	BR/PP/10	Savita M Ullegaddi	A novel microsponge cutaneous drug delivery in diabetic psoriatic animals
61	BR/PP/11	Savita M Ullegaddi	-Studies on preliminary phytochemical investigation and synthesis of silver nanoparticles of albizia amara leavesby eco-friendly approach
62	BR/PP/12	Tenzin Deyang	Evaluation of neuroprotective effect of withanolide-A standard extract in gonadectomized sleep restricted malerats
63	BR/PP/13	Arjun Hr	A study to evaluate the efficacy of Thanga parpam in a mouse model of Parkinson's disease
64	BR/PP/14	G S Rakshanaa	Study to evaluate the role of Ezetimibe on cognition andlipid profile in high fat diet fed sleep restricted mice.
65	BR/PP/15	Akshay Javalgikar	Preliminary phytochemical screening of medicinal plants
66	BR/PP/16	Samar Patil	Formulation and characterization of nanocomposites film of an antibiotic drug
67	BR/PP/17	Prabhanjan B.H	Synthesis, Molecular Docking Study and Biological Evaluation of New 4-(2,5- Dimethyl-1H-pyrrol-1-yl)- N'- (2-(substituted)acetyl)benzohydrazides as Dual Enoyl ACP Reductase and DHFR Enzyme Inhibitors

# **Community Pharmacy**

Abstract number	ABSTRACT
CP/OP01	<ul> <li>Anushree Deshpande</li> <li>Impact of pharmacist intervention on patients' knowledge of oral anticoagulation therapy abstract:</li> <li>Background: oral anticoagulant is a therapy indicated for thromboembolic disorders, which requires close monitoring of the international normalized ratio and patient education for better therapeutic outcomes. Therefore, thestudy's objective is to compare the knowledge score of the patients about anticoagulation therapy and its impact on international normalized ratio levels in patients undergoing oral anticoagulation therapy.</li> <li>Materials and methods: a randomized controlled study among 102 patients in the cardiology department was conducted for six months (october 2019 – march 2020). Patients of greater than 18 years of both genders, from inpatients and outpatients, were enrolled. Patients on antineoplastic therapy, psychiatric disorder, pregnant and lactating women were excluded from the study. Volunteers were randomized accordingly by using envelop method. A written informed consent form was taken before enrolling the patients. Patient information leaflet and patient counseling on oral anticoagulation therapy were given as interventions. Knowledge level was assessed from the baseline and followed after the first and third months.</li> <li>Results: a total of 102 patients actively participated in the study. Considering the area of knowledge, no more significant difference was seen in either group (u=1018, p-value=0.058) during the pre-test. After the intervention, a significant difference was noticed in the intervention group (u=528.00, p=0.0001). The mean inr is significantly different between the control and intervention groups in the therapeutic range (t = -5.80, p=0.0001*) and the supratherapeutic range (t = - 3.42, p=0.002*).</li> <li>Conclusion: clinical pharmacist is essential in counseling on oral anticoagulation therapy for better knowledge, improved medication adherence, reduced risk, and maintenance of inr. Implementation of the pharmacist-led antico</li></ul>
CP/OP02	Rakshith H T Prevalence of internet addiction disorder and it's association with depression and anxiety among young students. Abstract: internet has become an important tool to study for today's children. It has advantages ,but it also has a lot of disadvantages. It has affected student's health both mentally and physically. The trend in the internet usage by today's youth is alarming with deleterious effects on health and academics. It has resulted in the emergence of an internet addiction disorder. This research primarily focused on determining the prevalence of such addiction amongst youth population using a validated semi-structured screening questionnaire. The secondary objective was to Determine the health effects associated with internet addiction among school and colleges around the campus belonging to age group of 14-24 years were chosen at random using stratified sampling. Internet addiction, depression and anxiety were measured using self-administered internet addiction scale(saias-10),patient health questionnaire(phq-9), generalised anxiety disorder(gad-7) scales respectively.95% confidence interval was used to describe the prevalence of internet addiction, disorder. Results revealed that out of 1550 students 12.6% ( n=196) had no addiction. It (n=637) had mild addiction, 36.8% ( n=571) had moderate addiction and 9.4% (n=146) were severely addicted. It was found that there was a statistically significant association between internet addiction and depressive symptoms (p<0.001).the association between internet addiction pattern amongst the youth and the need to address it with utmost importance given its consequences on their mental health.
CP/OP/03	<ul> <li>Anvil Preem Rebello</li> <li>Prevalence of depression and anxiety among school and college students</li> <li>Abstract</li> <li>Introduction:</li> <li>two of the most widespread mental disorders seen among todays school and college students are depression and anxiety. Nowadays they are occurring more often and with high severity. They detrimentally affect education, relationships and life of students to a major extent.</li> <li>Objective: the objective of the study was to determine the prevalence of depression and anxiety in school and college students as such studies conducted in rural areas are very limited in number.</li> <li>Methodology: this cross sectional community-based survey was performed on 1550 students from various schools and colleges around the campus belonging to age group of 14-24 years using stratified sampling. Depression and anxiety were measured using patient health questionnaire(phq-9) and generalised anxiety disorder(gad-7) scales respectively.</li> <li>Conclusion: the prevalence of both depression and anxiety turned out to be high even in rural area which is quite alarming. Hence initiative has to be taken to detect and treat these conditions at the earliest.</li> <li>Keywords : anxiety, depression, school and college students, prevalence</li> </ul>

CP/OP04	S lohitha
	Development and validation of self-administered internet addiction scale (saias-10)
	Abstract: Screen addiction is more menacing than drug addiction. The number of people using the internet has skyrocketed during the past two decades. Clinical instances displaying misuse symptoms have emerged in the midst of its rising popularity. The existing scales for assessing internet addiction were devised years ago and are lengthy, hence our primary objective was to develop a novel 10-item short self-diagnostic scale that can detect internet addiction disorder in addition to being simple and brief. Apart from referring to Young's Internet Addiction Test(IAT) and Chen's internet addiction scale, International Classification of Diseases(ICD-10) criteria for dependence syndrome like craving, tolerance, withdrawal, use despite harm, salience and loss of control were taken into account while developing the scale. The secondary objective was to perform its reliability and validity. The scale was administered to a total of 1057 participants(493- males,564-females) with ages ranging from 14-24years. The reliability of the scale was evaluated using test-retest methodology which was computed using Pearson's r value (0.98 )and internal consistency which was gauged using Cronbach's alpha (0.91). Six experts judged face and content validity (content validity index= 1). Analysis was carried out using SPSS Software. The participants didn't report any difficulty in understanding the questions. The SAIAS-10 is a reliable and valid tool in screening internet addiction disorder. The SAIAS-10 is expected to aid in the clinical evaluation and research in the field. <b>Keywords</b> : <i>Internet, Internet Addiction, Reliability, Validity, Scale</i> .
CP/OP05	Anupama Harigal
	Assessment and evaluation of drug information service provided by pharmacy practice department based on
	enquiries.
	<ul> <li>Abstract:</li> <li>Introduction: Drug information service (DIS) is the service that encompasses the activities of specially trained individuals to provide accurate unbiased, factual information, primarily in response to patient-oriented drug problems received from various members of the health care team. The aims of drug information services are to promote safe, effective, and economic use of medicinal products by the provision of accurate, current, independent, evaluated information and advice. The main function of drug information centre is to provide the information for improving patient care.</li> <li>Objective: Assessment and evaluation of drug information service from enquirer prospective. Drug information centre at Vivekanand General Hospital, Hubli which is a tertiary care teaching hospital.</li> <li>Methodology: A hospital based prospective study was conducted for a period of 6 months. The data was collected from Drug information centre from, Drug information request forms.</li> <li>Results: A total number of 90 queries were received during the study period. Most of the queries were received from general medicine department 62(68.88) and least were from general surgery 2(2.22%). Most of the queries were for update of knowledge 52 (57.77%) and time frame for reply was within a day 42 (46.66%), answers were given in printed format 39(43.33%). The majority of queries were regarding dose and administration of drug 56 (62.22%) and most preferred resource was Micromedex 76 (84.44%).</li> <li>Conclusion: After evaluation of the feedback questionnaires, it was found that the quality of the services provided by the centre was appreciated by majority of its users. However, there is a need to bring greater awareness about the service in the hospital and encourage the healthcare professionals to utilize the services for better patient care. It is essential to create awareness of these services among physicians, pharmacists, nurses, and patients. So that, they should come forward to take advantage of these</li></ul>
	Keywords: Drug information centre, Drug information services, Patient care
CP/OP06	<ul> <li>Namratha D</li> <li>To analyze the health – related quality of life and medication adherence in cardiac patients in secondary care hospital</li> <li>Background: Improving or maintain of health- related quality of life is one of the major objectives of health care system. Medication adherence plays a very important role in health – related quality of life in cardiac patients. Proper life style modifications and adherence medication avoids further cardiac risks and complications.</li> <li>Objective: To analyse the health- related quality of life and medication adherence in cardiac patients in secondary care hospital.</li> <li>Materials and methods: A prospective observational study was carried out in-patient cardiology department over 6 months. 77 were patients responded to SF-36 questionnaires and MMAS-8 to evaluate the HRQoL and medication adherence respectively. Statistical test Mann Whiteny U test, Mean and Standard deviation statistical tools were used to analyze collect data.</li> <li>Result: A total of 77 patients were enrolled in the study. Diabetics mellitus was found to be most common comorbidity followed by COPD. The average of Physical component summary (PCS) and Mental component summary (MCS) were found to be 45.26% and 40.43% respectively. High medication adherence was seen in 32.24% patients while 28.29% had low medication adherence.</li> <li>Conclusion: The study found that HRQoL in cardiac patient was significantly low. Majority of patients had moderate adherence, high medication adherence patients had good QoL.</li> <li>Keywords: Cardiovascular disease, Health related quality of life, Medication adherence, observational study, Secondory care hospital</li> </ul>

CP/OP08	<ul> <li>Deepak C G</li> <li>Development and evaluation of patient information leaflet for schizophrenia abstract:</li> <li>Background: Schizophrenia is a serious mental illness affecting the person's perception of reality. Lack of insight, non-adherence to treatment and poor outcomes are characteristics of schizophrenia. Research shows that schizophrenics can be benefited from knowing about their illness. Even guidelines of psychiatry state patient education must be a part of standard therapy. Proper knowledge about the illness affects treatment outcomes by reducing relapse, readmission, length of hospital stay, increasing medication adherence and quality of life. Psychoeducation can be achieved with the help of leaflets.</li> <li>Aim: The present study aims to develop and evaluate a patient information leaflet for schizophrenia.</li> <li>Method: The process of development of a patient information leaflet (PIL) involved 5 steps. First, preparation of the content for the leaflet and questionnaire for assessment with the help of primary, secondary and tertiary sources of literature. Second, the validation of the PIL and questionnaire by an expert committee using the method of content validation index (CVI). Third, the assessment of readability of validated PIL using Flesch Reading Ease (FRE) and Flesch-Kincaid Grade Level (FK-GL) scores by using MS Office 2007. Fourth, translation of the PIL was then assessed for proper layout and design by using Baker Able Leaflet Design (BALD) method.</li> <li>Results: A CVI score of greater than or equal to 0.8 is considered to have good content validity. For PIL and questionnaire, CVI scores of 0.8 and 0.9 were obtained. The FRE reading scores between 60 and 70 and FKGL grades below 5 are largely considered ascores of 29 for English and 26 for Kannada and Malayalam.</li> <li>Conclusion: Previous research showed that psychoducation through PILs can bring positive outcomes to the patients. We expect the developed PIL may show good outcomes in schizophrenia.</li> </ul>
CP/OP/09	<ul> <li>V.Dharani</li> <li>Pharmacoeconomic study of selective drugs of ppis and h2-receptor antagonists in peptic ulcer.</li> <li>Abstract:</li> <li>Pharmacoeconomics can be described as a social science concerned with the impact of pharmaceutical products and services on individuals, health system and society, the description and analysis of costs. Cost-effectiveness is dependent on the value in non-monetary terms that is placed on the outcome in relation to the cost. Decision is made on which drug is cost effective with better outcome. The objective of this study was to conduct Pharmacoeconomic study on the drugs used to treat peptic ulcer (H.Pylori negative strain) as proton pump inhibitors (Esomeprazole, Pantoprazole, Omeprazole and Rabeprazole) and H2- antagonists (ranitidine). This was a prospective randomized study, among which 42 patients were treated with proton pump inhibitors (Esomeprazole, Pantoprazole, Omeprazole and Rabeprazole) and other 42 patients were treated with H2- antagonists (ranitidine). The costs were measured in direct costs and indirect costs and the outcome was measured using health related quality of life using SF-36 questionnaire. Cost-effectiveness analysis was done by using the formula of incremental cost effective when compared to pantoprazole, omeprazole and rabeprazole and H2- antagonists (ranitidine).</li> <li>Keywords: CEA (Cost-effectiveness analysis), SF-36 questionnaire, incremental cost effectiveness ratio, non- monetary terms.</li> </ul>

CP/OP10	Sai Sudha Sri
	Assessment of knowledge of "breast self examination" (prevention of breast cancer) among college students in bangalore city
	<ul> <li>Abstract:</li> <li>Introduction: Breast cancer is one of the most frequently diagnosed life-threatening cancer in women and the leading cause of cancer death among women. Since last two decades, research related to the breast cancer has led to extraordinary progress in our understanding of the disease, resulting in more efficient and less toxic treatments. Increased public awareness and improved screening have led to earlier diagnosis at stages amenable to complete surgical resection and curative therapies. Consequently, survival rates for breast cancer have improved significantly, particularly in younger womenBreast self examination anong college students in Bangalore city.</li> <li>Objective: To evaluate the knowledge of breast self-examination among college students in Bangalore city.</li> <li>Methodology: A prospective observational study conducted on 503 students from different colleges of Bangalore for a period of 6 months. The students were provided with questionnaire to collect the data for the study. The questions consisted of information about their knowledge about breast cancer, among whom more females were more in number (male:27% and female:73%). Among the student participants in our study almost 50% the students are aware that breast cancer can be prevented (50%). The reason for the partial awareness was mostly reported to be being educated participants (45%). Most of the participants were not aware about breast self-examination (aware:21%, not aware:79%).</li> <li>Conclusion: The study found that students are aware about breast cancer but there is poor awareness and knowledge about breast self-examination (aware:21%, not aware:79%).</li> </ul>
	awareness on breast self examination.
CP/OP11	<ul> <li>Neelaphar Pydala</li> <li>Effect of antihypertensive agents on biochemical parameters in Diabetes mellitus patients</li> <li>Abstract</li> <li>Introduction: Diabetes mellitus (DM), commonly known as diabetes, is a group of metabolic disorders characterized by a high blood sugar level. Hypertension is a condition in which the force of the blood against the artery walls is too high. Diabetes with hypertension may alter the biochemical parameters of a patient.</li> <li>Objective: To observe the effect of antihypertensive agents on biochemical parameters such as lipid profile and electrolyte concentrations in patients with both hypertension and diabetes and To evaluate various prescriptions of patients who are hypertensive as well as diabetic.</li> <li>Methodology: Effect of antihypertensive agents on biochemical parameters in diabetes mellitus patients from a tertiary care hospital was studied through a prospective observational study. Patient who satisfied the inclusion criteria were enrolled in the study which was conducted for a period of 6 months. Data collected from patient case sheets, treatment chart and other relevant information from General Medicine department were used as sources of data and materials. In this study both genders and adults diagnosed with both hypertension and diabetes were included.</li> <li>Results: As per the inclusion criteria, 133 cases were enrolled. After analysis of our data, it was found that use of ACE- Inhibitors and ARBs separately have no effect on biochemical parameters while together with anti diabetic drugs affect the biochemical parameters like TC, TG, HDL, LDL, S.Cr, AST, ALT, sodium and chloride. The most common prescriptions. 7% of prescriptions contains CCB+hisulin.</li> <li>Conclusion: Our results suggest that biochemical parameters changed when anti-hypertensive agents and anti- diabetic agents were given together. As ACE-I and B-blockers result in changes in biochemical parameters like TC, TG, HDL, LDL, S.Cr, AST, ALT, sodium and entibetic agents were giv</li></ul>

CP/OPP01	Anu Philip
	Health education for heart failure patients through the pictorial patient information leaflet
	<ul> <li>Background: Heart failure (HF) is a growing epidemic that affects approximately 23 million people worldwide and 8-10 million people in India with prevalence of about 1%. There are many approaches to treat and prevent the progression of HF condition. It involves treating the comorbidities along with lifestyle changes as per the requirement of the person's disease condition. All these strategies are well known to physicians, but it requirespatient awareness, understanding, and engagement in their health care to implement these strategies. Educating the patient with patient information leaflets (PIL) is helpful to understand and be aware about the disease condition. So the study focuses on the systematic process of development, content validation, readability testing, and designing of PIL for HF patients.</li> <li>Objective: To develop, validate, and test the readability of patient information leaflet for heart failure patients Method: The process of development of a patient information leaflet (PIL) involved 5 steps. First, preparation of the content for the leaflet and questionnaire. Second, the validated of the PIL and questionnaire by an expert committee by Lawshe method. Third, the assessment of readability of validated PIL using Flesch Reading Ease (FRE) and Flesch-Kincaid Grade Level (FK-GL) scores. Fourth, translation of the PIL into Kannada and Malayalam with the help of professional translators. Fifth, the prepared, validated, readable PIL was then assessed for proper layout and design by using Baker Able Leaflet Design (BALD) method. After the development of leaflet, readability of PIL using User testing questionnaire was done.</li> <li>Results: PIL's design and layout scores were obtained by BALD criteria. The scores obtained for the English, Kannada, and Malayalam version of PLs were 29, 26, and 26, respectively. A CVI score of greater than or equal to 0.66 is considered to have good content validity. For PIL and questionnaire, CVI scores of 1 and 0.96 were obtained. The FRE readi</li></ul>
CP/OPP02	<ul> <li>Rashmi T</li> <li>Design, synthesis, docking and antiviral activity of some new pyrazole fused with hydrazinyl pyrimidine derivatives.</li> <li>Abstract</li> <li>In the present work, the molecular docking studies of pyrazole contains hydrazinyl pyrimidine derivatives carried out by <i>in silco</i> molecular modeling tool, Auto dock Vina and drug candidates tested against Pokeweed Antiviral Protein (PDB ID: 1J1S). Based on docking results the compounds 5a, 5b, 5c, 5e, 5f and 5n are having high energy levels and good binding interaction with Pokeweed Antiviral Protein. So, these compounds were synthesized from 1-(3,5- diphenyl-4,5-dihydro-1H-pyrazol-1-yl)ethanone undergoing N-acetylation and followed by Schiff's base reaction with hydrazinyl pyrimidine in the presence of glacial acetic acid. All the synthesized compounds have been evaluated for their <i>in vitro</i> antiviral activity against Herpes simplex virus-1 (HSV-1), Herpes simplex virus-2 (HSV- 2), Vaccinia virus and Adenovirus-2 in HEL* cell cultures by using CPE (cytopathic effect) reduction assay, in order to score the inhibitory effects of the synthesized compounds 3cc ording to their virus-induced CPE (cytopathic effect), 50% effective concentration (EC<sub>50</sub>), In that compounds 5b, 5c and 5n are have good antiviral activity (EC<sub>50</sub> - 15.1 to 38.1mm) than other synthesized lead molecules. All four viruses were compared with standard drugs such as ganciclovir, ribavirin and cidofovir. The compound 5b possess most potent antiviral activity (EC<sub>50</sub> value 20.1 to 29.3mm) due to presence of methyl group in meta position.</li> <li>Keyword: Pyrazole, pyrimidine contain hydrazinyl, molecular docking, Pokeweed Antiviral Protein (PDB ID: 1J1S), antiviral activity.</li> </ul>

CP/OOP01	M Swetha
	Implementation of start/stopp criteria to promote appropriate use of medicines among geriatrics with common cardiovascular and respiratory disorders"
	Abstract
	<b>Background:</b> Potentially inappropriate medications(pim's) are common in geriatrics with polypharmacy and multiple comorbidities, which further leads to negative clinical effects. screening tool of older people's prescriptions(STOPP) and screening tool to alert to right treatment (START) criteria helps in determining and reducing pim's. implementation of this criteria helps in overall decrease of negative clinical effects and increased therapeutic outcomes.
	Materials and methods: We conducted a prospective, observational study on geriatric patients in the general medicine department from November 2021 to may 2022. A sample size of 90 patients is considered, initially data is collected without implementing the criteria and later an intervention is made by implementing the criteria and the data of intervention group is collected. Study is performed by comparing the data of pre intervention and post intervention. <b>Results:</b> PIMs were found to be 55.5 percent in the pre-intervention study and 4.44 percent following the intervention, with significant p value. PPOs were determined to be 8.88% in the pre-intervention trial, 6.66% after the intervention, and the p value was not significant. ADRs were found to be 17.77 percent in the pre-intervention study and 6.66 percent after the intervention, with no significant p value. DIs were found to be 77.77 percent in the pre-intervention study and 40 percent following the intervention, with a significant p value. The preintervention TDs were 6.66 percent, the postintervention TDs were 2.22 percent, with no significant p value. <b>Conclusion:</b> we conclude that clinical pharmacist mediated implementation of START&STOPP criteria can potentially resolve different negative clinical effects like PIM's, PPO's.
CP/OOP02	Ramva Kadapa
	A multi-dimensional study to estimate the behaviour of general public during covid -19 pandemic Abstract:
	<ul> <li>Background: The first Coronavirus case in India was confirmed on 30th January 2020,. From 13th March 2020. Finally, after a 14-h long _test curfew' on 22nd March, the Central Government announced a total lockdown, from 24th March to 14th April, which has been subsequently extended by 21 days to 3rd May 2020. This was the largest lockdown announced since the beginning of the outbreak of COVID-19. During any outbreak of an infectious disease, the population's psychological reactions, mental health and sleep play a critical role in shaping both spread of the disease and the occurrence of emotional distress and social disorder during and after the outbreak. It is known that psychological factors, mental health and sleep play an important role in adherence to public health measures.</li> <li>Materials and methods: A prospective, observational study, was conducted among general public in and around government general hospital, Kadapa. The study period was about 6 months and the number of people involved in this study was about 384. Data was collected through questionares. The main aim of this study is to determine the level of anxiety, Depression and Stress by using DASS (Depression Anxiety and Stress scale) among general public during COVID – 19 pandemic and To estimate the sleep behavioural changes during lockdown</li> <li>Results:</li> <li>Our survey showed that females, uneducated respondents, experienced depression, anxiety, and stress. Married and employed respondents experienced anyiety and stress.</li> </ul>
	also reported poor sleep quality. Conclusion:
	There is a remarkable relation between psychological and physiological health. Psychological health affected the respondent's physiological health and was the dominant domain in health.

CP/OOP03	R.Harini
	Antioxidant activity of a popular formulation claimed by the traditional herbal medicine practioners of Puducherry to be effective in prophylaxis and therapeutic management of COVID-19
	Abstract:
	The aim of this research work is to evaluate the antioxidant activity of the hydroalcoholic extract of herbal formulation for COVID-19 by <i>in silico</i> and <i>in vitro</i> approach. The reported phytoconstituents of ingredients of herbal formulation were explored for molecular docking using Autodock Vina against the four targeted proteins such as lipoxygenase, NADPH oxidase, myeloperoxidase and xanthine oxidase. <i>In vitro</i> antioxidant activity was evaluated by DPPH radical scavenging and Hydroxyl Radical scavenging assay. The molecular docking study revealed that all phytoconstituents exhibited negative binding energy which indicates that they possess inhibitory activity. Among 157 phytoconstituents, Licorice-saponinA3 showed least binding energies such as-12.3Kcal/mol, -11.9Kcal/mol and -11.4Kcal/mol for the protein myeloperoxidase, NADPH oxidase, and xanthine oxidase respectively and 19-acetoxy-7, 9, 10 deacetyl-baccin VI showed least binding energy (-11.2Kcal/mol) for the protein lipoxygenase. The <i>invitro</i> antioxidant activity revealed that the hydroalcoholic extract showed dose dependent scavenging activity and maximum
	activity at Img/ml concentration. Based on the results obtained it is concluded that herbal formulation possess antioxidant activity.
	<b>Keywolds.</b> DFF11 scavenging assay, nyaroxyi scavenging assay, molecular docking and phyloconstituents.
CP/OOP04	Swetha Pasupuleti
	Assessment of knowledge about medications use and achievement of medication adherence through structured patient education in patients with diabetes mellitus
	Abstract :
	Diabetes is a chronic complicated disease. Self-care management and education are necessary to control blood glucose levels to decrease mortality and morbidity rate, the risk of complications and adverse medication related events. Lack of knowledge about a diabetic medication and non-adherence contribute to poor glycemic control among diabetes patients. Therefore, this study aims to assess relationship between medication knowledge and medication adherence among T2DM. A prospective observational study was conducted in Inpatient and outpatient department of General medicine in Government general hospital, Kadapa for six months by recruiting 112 patients. Eligible type 2 diabetic patients with written informed consent were enrolled and randomized into group A and group B. The MMAS-8 questionnaire was used at baseline and two subsequent follow-ups. Patients in the group B received structured education at every follow-up, whereas no group A patients received structured education. only SPSS software was used to evaluate the data. Among the 112 patients enrolled, 56 were randomized into group A and 56 into the group B. Majority of the study patients were males (69%) with an majority were recorded in the age range of61-65. At baseline, the mean FBS value of patients was 151.89 $\pm$ 52.751 in the group A and 166.60 $\pm$ 56.25 in the group B. During the last follow-up, a significant (p<0.05) was observed in EPS and PBPS values in group B nations to corrup B. During the last follow-up, a significant (p<0.05) was
	Pharmacist mediated structured education has shown a positive impact on medication knowledge and medication
	adherence which are important for managing diabetes.
	Keywords: Medication Knowledge, Medication Adherence, Type II Diabetes Mellitus

CP/PP/01	<ul> <li>Nimna Rose Anton</li> <li>Assessment of Knowledge, Attitude and Practice Towards Menopausal Related Symptoms of Women Residing in Rural Areas of Bagalkote District</li> <li>Abstract:</li> <li>Background: This study is aimed towards women's Knowledge, Attitudes and Practice towards menopause and its related symptoms as menopause brings multifaceted impact including psychomotor, vasomotor and cardiovascular changes on women's health. Many theories have been put up on the signs and symptoms that arise prior to, during, and following the start of menopause. These symptoms, which together make up the postmenopausal syndrome, significantly affect women, making their management a major area of current research.</li> <li>Methods: This was an interventional study. The study was conducted in the rural areas of Bagalkote district. The samples were collected from the women of age group 40 to 60 years those who have post-menopausal symptoms and those who were not having menstruation for more than 1 year and who were undergoing the period of perimenopause. The data was collected using predesigned questionnaire with informed consent and responses were analysed using simple percentages.</li> </ul>
	<b>Results:</b> In this study, we have taken the samples from the age group of 40 to 60 years in which the subjects at the end of the study while comparing the pre and post study there was a significant improvement in the KAP towards menopause and its related symptoms of women residing in rural areas of Bagalkote district. <b>Conclusions:</b> Most of the women in our study are unaware of menopause and its symptoms and they are not following healthy life style modifications. Increased awareness is required to prepare women for menopause. <b>Keywords:</b> Attitude, Knowledge, Menopause, Practice, Perimenopause, Rural, Women.
СР/РР02	<ul> <li>Shubhangini S L</li> <li>Knowledge, attitude and practice towards Diabetes mellitus in general public of Karnataka</li> <li>Diabetes mellitus is the 8<sup>th</sup>leading cause of mortality in 2012, according to the WHO. This research on diabetes mellitus in Karnataka helps us understand the behaviour, beliefs, and knowledge of the general people in Karnataka. A cross sectional survey was carried out for the period of two months in 2022.Overall 602 participants were involved in this study. Self-designed questionnaire was prepared after a compressive search and based on the most recently available information. This questionnaire was divided into 3 parts in a Google form. Knowledge, attitude and practice respectively. The data was then coded, and the participants' final knowledge, attitude, and practise scores were determined. 59% of the 602 participants in the survey had a strong understanding of diabetes. 65% of people had a favorable opinion about diabetes mellitus. They understood that a diabetic patient needed both a carefully planned diet and regular exercise. Almost all of them visited the hospital for regular exams. The survey's findings show that 77% of the population did not adhere to their medications and modifies their lifestyles extremely poorly. More than half of the research subjects didn't engage in any type of preventive practices, despite having a positive attitude and intermediate level of knowledge of diabetes. Our study demonstrates that their increased understanding of diabetes did not result in healthier behavior. As a result, improving participants' healthy behaviors has to receive considerably greater consideration. Diabetes mellitus is poorly managed among the general public in Karnataka.</li> <li>Keywords: Diabetes mellitus, blood sugar level, knowledge, attitude and practice.</li> </ul>
CP/PP03	<ul> <li>Shobhitha G K</li> <li>Knowledge attitude and perception of community pharmacist towards various medication adherence programs Introduction: Non adherence is a behaviour in which a patient unintentionally fails to follow prescription. 50% of patients are non-adherent to their prescribed medications. Community pharmacist plays an important role in preventing medication non-adherence. Community pharmacist provides some of the services like patient counselling, medication reconciliation, medication management therapy to prevent non-adherence. Non-adherence can be minimized by providing medication adherence programs. To understand the concept of medication adherence programs the pharmacist should undergo training by attending workshops, continues pharmacy education programs on medication adherence. However, there are no studies conducted in Indian scenario about pharmacist role on medication adherence program. <b>Objectives</b>: To assess the knowledge, attitude and perception of community pharmacist towards various medication adherence program. <b>Methodology</b>: The questionnaire based cross sectional study involving practicing pharmacists from community pharmacies in different areas across Mysore and Mandya district were enrolled in the study. The study was conducted over a period of six months. The data was collected using a validated questionnaire both in paper form and online as google form. The obtained data were analysed using descriptive statistics which was used to describe the demographics and to assess the items related to knowledge, attitude and perception towards medication adherence programs.</li> <li><b>Result</b>: A total of 95 practicing pharmacists were participated in the study. Among them majority were male (80%) and belong to age group 26-35 years (32.6%) with highest qualification D-pharm (50.5%). Majority of them have experience of 1-10 years (44.2%). All most all the community were aware of medication adherence programs. This may be because of less involvement of community pharmacist</li></ul>

CP/PP/04	Vikas TB
	A cross sectional study on prescribing pattern of antipsychotic agents for mental illness in a tertiary care hospital
	Abstract:
	<b>Background:</b> This study focus on the prescribing patterns of anti-psychotics, its use in co-morbidity and their pharmacoeconomic as they are prescribed for various mental illness. Antipsychotic as a class of medications became available for treatment of various psychiatric disorders in the early 1950's. Over the last 60 years many antipsychotics have become available. In line with the west, Indian researchers have evaluated the efficacy of antipsychotics in various conditions. Antipsychotic as a class of medications became available for treatment of various psychiatric disorders in the early 1950's.
	Methodology: A cross-sectional study was carried out in the psychiatric department of the Sapthagiri Institute of Medical Science and Research Centre, Bangalore over a period of 6 months including both in patients and out patients. The results of collected data were analyzed using statistical analysis and frequencies, percentages, mean values were calculated. The statistical analysis of collected data was performed using IBM SPSS version 26 statistical software.
	Result & discussion: The study shows that male patients was clearly predominant with 88 (57.5%) cases while the female patients was found to be 65 (42.5%) out of the 153 cases collected for the purpose of this study. this pattern is similarly reflected in the findings of most of the published guidelines. In that, 127 (90.1%) anti-psychotics were found to be prescribed in brand and in generic form was found only 14 (9.9%). Among this 141 anti-psychotics where prescribed. In that, 26 (18.4%) Olanzapines, 19 (13.5%) Resperidone and 24 (17%) Resperidone+Trihexyphenidyl, these results are similarly reflected in most of the published guidelines. But the findings in the study carried out by Shankar k et al in delhi would disagree as they found that out of their cases resperidone 44.71% were prescribed and next to it olanzapines 34.81%. 120 (85%) prescription contains atypical anti-psychotics and 21 (15%) prescriptions contains typical anti-psychotics. In this study 98 of the cases was with comorbidities at the time of data collection, rest 55 cases were not. Out of 76 (77.6%) cases have been treated and 22 (22.4%) cases were untreated. Average number of Anti-psychotics per prescription was found to be 0.92 which is opposite to the findings of Pinaki C et al where generic is more that is 93.7% which is due to the above study was conducted in a government hospital due to free supply of medicines. Average cost of branded Anti-psychotics per prescription was found to be 10.2 INR, while the average cost of Anti-psychotics if prescribed in generic was found to be 2.43 INR.
	<b>Conclusion</b> : This study shows that atypical antipsychotics with 85% are the most common antipsychotic class with olanzapine (18.4%) and resperidone (13.5%) as most prescribed drug. The drugs are mostly prescribed in brand form (90.1%).
	Keywords: schizophrenia, anti-psychotics, benzodiazepines, pharmacoeconomics, prescription pattern.
CP/PP05	Supriya. H. P
	The Pharmacy and Healthcare System: A Review Abstract: Globally, it is commonly accepted that pharmacist is the foremost source of healthcare system, which has changed the lives of many. The drug alleviates the symptoms of some disease, it prevents and heals it. The structure can be of natural or synthetic origin. If taken uncontrolled, it can cause addiction. Regardless of the composition, each drug should have been effective and safe. These are the facts with which each patient should be familiar. Since public health services do not serve to the society, pharmacies and private health contributors can play a crucial part in the healthcare system. Keywords: pharmacy and health care.
CP/PP06	Anju K S
	Coronavirus: the mystery of low covid-19 death rates in india
	Abstract: Objective: The world's second most populous country, with 1.3 billion people, it has the lowest number of deaths per 100
	confirmed cases out of the 20 most affected countries in the world. It is vitally important to understand the reason of recovery rate in a country.
	Method: COVID-19 data have been compiled from several sources, including the Ministry of health and family welfare, National disaster management authority, and Indian council of medical research and demographic and health data from census of India 2011.
	Result: According to sources 1 million deaths in 2020, a 6% rise over the previous year. Officials downplayed it, claiming that Covid was not to blame for any of the 474,806 extra deaths. In India, Covid caused the deaths of 149,000 persons in 2020, according to official figures. Our analysis emphasizes the beneficial impacts of the health system and better results on recovery rate.
	Conclusion: The death rate of covid-19 in India is low due to various factors such as vaccines, medications, the identification of covid-19 suspects, and Indian government actions like lockdowns and hotspot sealing, affect the spread of virus. In India, the choice to go into lockdown was wise.
	Keywords: Covid-19, recovery, remedies, pandemic.

# **Biomedical Research**

ABSTRACT NUMBER	ABSTRACT
BR/OP02	<ul> <li>Mudhol Seema</li> <li>Piperine-sodium caseinate loaded nano-emulsion for transdermal delivery through micro needle patch Abstract</li> <li>Obesity and overweight have negative metabolic consequences such as elevated blood pressure, cholesterol, triglycerides, and insulin resistance. To address this issue, we developed nano-emulsion-based polymeric microneedle patches for transdermal delivery of anti-obesity drug piperine in this study. Piperine from <i>Piper nigrun</i> was extracted using the traditional Soxhlet process. To produce nanoparticles, the extracted piperine was formed as a nano-emulsion using clove oil, ethanol, PEG 400, and sodium caseinate. Dynamic light scattering (DLS) verified the size of the nanoparticles (134.4 nm, zeta potential -44.4 mV). Scanning electron microscopy (SEM) and transmission electron microscopy (TEM) investigations confirmed the size and spherical structure even further. Nanoparticle X- ray diffraction examination demonstrated crystallinity and amorphous characteristics with a 96% encapsulation effectiveness. In nano-emulsion, differential scanning colorimetry (DSC) profiles revealed an endothermic peak at 129.30 °C, while fourier transform infrared (FTIR) spectroscopy showed strong bonding. MN patch release kinetics in vitro and ex vivo peaked at 30 and 32 h, respectively. The regulated release of plant bioactives using microneedle patches will help in the conversion of white adipose tissue (WAT) to brown adipose tissue (BAT), particularly in obese people those do not engage in intense physical activity or food restriction.</li> <li>Keywords: Nano-formulation, Microneedle patch, Piperine, Transdermal drug delivery. Bioavailability, Adipose tissue</li> </ul>
BR/OP03	<ul> <li>Dr. Karthikeyan</li> <li>Phytochemical screening and anti-tubercular activity of different extracts of ipomoea sepiaria roxb. leaf Abstract:</li> <li>Ipomoea sepiaria Roxb., also known as Purple heart glory is a slender vine belonging to family Convolvulaceae. The present study aims at the preliminary phytochemical screening of the successive solvent extracts of <i>Ipomoea sepiaria</i> and identification of compounds in the different extract by Qualitative identification tests. The preliminary phytochemical screening revealed the presence flavonoids, tannins, terpenoids, steroids, steroids, cardiac glycosides, and carbohydrates. Further, this study subjected the different extracts of invitro antitubercular activity by Luciferaseenzyme inhibition assay. The results of this assay paved the ethyl acetate extract of the leaf of <i>Ipomoea sepiaria</i> Roxb. has significant activity against standard laboratory strain M. tuberculosis H37Rv comparatively with the other extracts used in the study. Keywords: <i>Ipomoea sepiaria</i>, Phytochemicals, Anti-tubercular activity, Luciferase enzyme assay</li> </ul>
BR/OP/04	<ul> <li>Dhinesh B</li> <li>Quality evaluation of a phytopharmaceutical by high performance- Thin layer chromatography &amp; amp; herbovigilance studies</li> <li>Abstract:</li> <li>Objective: The present work includes the HPTLC quality evaluation of a phytopharmaceutical (expectorant) prepared from three herbs namely Ocimum sanctum (tulsi), Allium cepa (red onion) and Mentha piperita (mentha) asper the guidelines of Indian Pharmacopoeia Commission, Ministry of Health and family welfare, Govt. of India.</li> <li>Method: The latest direction of Indian Pharmacopoeia commission indicates for the inclusion of a minimum of four therapeutic or analytical markers in a phytopharmaceutical formulation. Therefore, the prepared herbal formulation aimed for developing necessary markers by HPTLC method. In the present work eugenol, menthol and quercetin were used as the markers for the herbal drugs Ocimum sanctum, Allium cepa and Mentha piperita respectively.</li> <li>Conclusion: The results can give an insight for herbal manufacturers for the quality development of phytopharmaceutical formulation indicated that, an amount of 0.16 ng of eugenol (Rf value: 0.80), 0.8 ng of quercetin (Rf value: 0.31), 11.83ng of menthol (Rf value: 0.38) are present per mcg of Ocimum sanctum, Allium cepa and Mentha piperita or sonctur, Allium cepa and Mentha piperita (respectively).</li> <li>The Herbovigillance part of the project may give good information about various herb-drug interactions for the patients taking these kinds of expectorant preparations along with conventional drugs in the post covid-19 pandemic period. Herbovigillance protocols were framed for the patients under anti-diabetic drugs, anti-coagulants, anti- allergic drugs, and felodipine like anti-hypertensives for monitoring carefully if taking the prepared phytopharmaceutical formulation along with. The proposed work also aimed to study the various activities like induction or inhibition of the liver Cytochrome P-450 enzymes by the herbs included in the Phytopharmaceutical prepa</li></ul>

BR/OP05	Pavithra V
	The molecular docking study of interaction of newly synthesised benzamide appended by pyrazolone derivatives as ligand molecule with the target protien 6lu7 of novel corona virus
	Abstract: Plants and bioactive compounds have played an important role in the development of several clinically useful therapeutic agents since time immemorial. The global health emergency of novel COVID-19 is due to severe acute respiratory syndrome corona virus-2 (SARS-CoV-2). As if now there are no approved drugs for the treatment of corona viral disease (COVID-19), although some of the drugs have been tried. The virtual interaction of the COVID-19 main protease in complex with the inhibitor N3 (Research Collaborators for Structural Bioinformatics Protein Data Bank [PDB] ID: 6LU7), Hence this is chosen as target protein molecule. The newly synthesised compounds of benzamide appended pyrazolones derivatives are made as ligand molecules. The synthesis of these organic ligand molecules is done through four steps using different reagents and different environmental conditions. In this article we have discussed the interaction of our synthesized ligands with the target protein molecule using autodock tools. Firstly, the ligands were prepared using commercial ACD/chemsketch tool in PDB format. Desired protein target 6LU7 is downloaded from Protein Data Bank. Further protein optimization done by removing co-ordinates and hetero atoms, energy minimization of protein is done by swiss PDB viewer 4.1.0. To change the file format open babel 2.4.1 is used. Docking of protein and ligand is done using autodock 4.2 and the results are visualized by pymol and tabulated using the Lamarckian genetic algorithm. After docking comparative study of the binding energies, inhibitory constant and hydrogen bonding of all interactions were discussed and tabulated for the good results. Keywords: Benzamide, pyrazolones, protein-ligand interaction, molecular docking, autodock 4.2, pymol
BR/OP06	Gokul
	Assessment of medication non-adherence and impact of patient counselling in rural hemodialysis patients
	<ul> <li>Abstract.</li> <li>Aim:The aim of the study is toAssess the medication non- adherence and provide patient counseling for better quality of life in rural hemodialysis patients.</li> <li>Method: A prospective observational study conducted for period of one year 2018-2019. The data was collected by morisky-8 item questionnaire, self-prepared formsand analyzed using descriptive statistics. Counseling on medication adherence and lifestyle changes were given to the study population and post counseling changes were collected at visit 3. The significant difference was calculated by using chi-square test and p-values.</li> <li>Results: A total of 100 patients were recruited in the study and they were assessed for their adherence rate and overall effect of patient counseling on medication non-adherence, life style modification in their daily life in three reviews. There was a significant difference in blood pressure and blood glucose levels (p&lt;0.05) in patient's and Hb% (p&lt;0.05) and drastically decrease in complications from initial visit to final visit in the study population.</li> <li>Conclusion:In every dialysis units especially in rural areas, there is a need of clinical pharmacist-provided educationabout life style changes and medication knowledge in order to make patient free of complications and extend their life span for better quality of life.</li> <li>Key words: Medication Adherence, Patient Counseling, Quality Of Life, Morisky-8 Item</li> </ul>
BR/OP07	Mirudularaja
	Raloxifene-in-liposomal transdermal systems for the management of postmenopasual osteoporosis
	Abstract: Postmenopausal osteoporosis is a less focused condition caused duc to reduced levels of estrogen. Raloxifene hydrochloride is a selective estrogen receptor modiilator which is used in treatiiient and prevention of postmenopausal osteoporosis. With 2% bioavailability, Raloxifene is a BCS class II drug. Pl'Omlsing routC Of drug delivery can help in efficient therapy for drugs with poor bioavailability. Liposomes are one of the popular drug delivery carriers that is very versatile to suit tlic transdermal delivery of drug molecules. The objective of the study was to formulate liposomes containing raloxifene hydrochloride using different variables and incorporation of prepared liposomes into transdermal patch and gel in order to achieve a prolonged drug release. The lij3Osoinal formulations were prepared by thin film hydration method and characterized. It was evident that particle size of the liposomes was reduced with increased sonication time and dnig entrapment efficiency was less for cholesterol free formulations. The kinetic analysis explained that liposomal formulations followed Higuelii's model. From prepared liposomal formulations, the optimized formulation was composed of Egg lecithiri: Cholesterol (60:40) mole ratio with sonication time 20 min which showed entrapment efficiency of 65.31 % and drug release of 59.51%. The optimized fonuulation was further formulated into gel and patch, evaluated and compared with non-liposomal formulations. The in-vi/ro drug release of liposomal gel and patch followed prolonged release with release rate of 58.71% and 57.13% respectively at 24 hours. Thus, prepared novel liposomal formulations could be used in effective treatment of postmenopausal osteoporosis. <b>Keywords:</b> Raloxifene hydrochloride: liposomes; transdermal; thin film hydration method

BR/OP09	Krishnalekha Bandyopadhyay
	Evaluation of anti-arrhythmic effect of elettaria cardamomum on experimental arrhythmias in rats
	Abstract: Arrhythmia is defined by irregular heart rate or rhythm. There are four basic phenomena which are the underlying disturbances of cardiac rhythm namely; Delayed after-depolarization, re-entry, ectopic pacemaker activity and heart block. Arrhythmias are cause of morbidity and mortality in patients with PAH and CTPH. Drugs used for arrhythmias are: Propafenone, verapamil, diltiazem, bretylium, propranolol, disopyramide, esmolol, lignocaine etc. Elettaria cardamomum belongs to the family Zingiberacea and is commonly referred as Cardamom. It contains phytoconstituents like $\alpha$ -pinene, $\beta$ -pinene, sabinene, $\alpha$ -Phellandrene, $\gamma$ -terpinene, $\alpha$ - terpineol, $\alpha$ - teripinyl acetate and linalool. It is used as cooking ingredient and is also employed to freshen breath, promotes digestion, and help to reduce tooth decay. Cardamom has a variety of beneficial properties, including aromatic, cardiac, carminative, deodorant, digestive, diuretic, expectorant, purgative, stimulant, thirst-quencher, and tonic. helpful for piles, asthma, burning sensations, colds, coughs, bladder and renal problems, flatulence, weak hearts, indigestion, and insufficient urine. This study is based on evaluation of Anti- Arrhythmic Effect of E. cardamomum in rats induced with arrhythmia. The study is further carried out to evaluate the anti-arrhythmic activity of Verapamil (40 mg/kg P.O.) and E. cardamomum with that of Verapamil is also performed in CaCl2 induced arrhythmic Rats. Verapamil has showed extremely significant improvement and reduction of PQRST wave and heart rate. The study concluded non-significant improvement or reduction on PQRST wave and heart rate after long term treatment at 400mg/kg. It was finally concluded that verapamil and E. cardamomum can reduce the damage of myofibrils and decrease the interstitial spaces produced by calcium chloride in heart muscle of arrythmia induced rat model.
	Keywords: E. cardamomum, Arrhythmia, Verapamil, anti-arrhythmic activity
BR/OP10	M.Vigneshwar
	Design, development and evaluation of optimized piperine decorated curcumin liposomes for invivo & invitro anti- ulcer activity
	Abstract
	The principle aim of this investigation is to formulate a novel curcumin-piperine liposomes and evaluate its potential in terms of in vitro study and in vivo anti-ulcer study in wistar albino rats. Liposomes, also known as lipid vesicles which are capable of delivering the drug at site specifically and also enhance drugs bioavailability. Curcumin is an excellent Anti- ulcer and anti-inflammatory agent. Bio enhancers are the agents which are capable of enhancing the drugs bioavailability upto 10-30% when administered concominantly with drugs. The objective of the study is to formulate and prepare curcumin-piperine liposomes. Preformulation studies was carried out initially to optimize drug and excipients. Curcumin Liposomes, Curcumin Piperine liposomes and blank where prepared by solvent evaporation techniques. Then the optimization is done to find optimal range of variables to enhance the encapsulation efficiency and stability. The result of in-vitro curcumin release data of the optimized curcumin-piperine liposomal formulation was fitted into various kinetic equations. The release pattern of curcumin from liposome formulation followed First–order kinetics (R2 = 0.9996) with fitting to Higuchi's kinetics (R2 = 0.9938) and Korsmeyer-Peppas kinetics (R2 = 0.9938), The In-vivo study also showed significant changes in ulcer. It is clear that curcumin Piperine Liposomes have better therapeutic efficacy than individual curcumin liposomes due to the bioenhancer-Piperine. Absorption of curcumin has been increased significantly and due to Liposomal formulation nature the better bioavailability is acheived which shows better anti-ulcer activity. Hence Bio enhanced Curcumin, Bioenhancer, Liposomes, Ulcer, Pharmacokinetic parameters
BR/OP11	Ramu Govindan
	Investigation of herbal extracts and concoction against lithiasis by weight reduction assay
	Abstract
	The investigation of herbal extracts and concoction against lithiasis by weight reduction assay has been carried out. Leaf extract was found with considerable activity whereas the concoction seems to be not much active as the stem pod extract in case of calcium oxalate inhibition whereas the result was vice versa in case of phosphate inhibition. Regular consumption of leaf, stem pod extract or the concoction of the plant would be helpful in calculi prophylaxis. The higher amount of phytochemicals, mineral elements and lower amount of antinutrients may correspond to their greater activity. <b>Keywords:</b> extract, concoction, lithiasis, phytochemicals

BR/OP12	Manasa R Development of weaning food using barnyard millet flakes and browntop millet flakes
	Abstract :
	Weaning is the process by which a haby slowly gets used to eating family or adult foods and relies less and less on
	breast milk. Cereals in the composite mixes can be replaced with millets in the formulation to get the benefit of enhanced micronutrients. Barnyard millet and Browntop Millet have good nutritional value comparable to staple cereals such as rice and wheat in terms of protein, fiber, minerals, and vitamin content. Flaking processes reduces anti-nutritional factors; compared to whole millet, flakes are easy to cook and easy to digest due to pre-processing. In this study, RF (Rice flakes) was used as control, BMF (Barnyard millet flakes), BTF (Browntop millet flakes) with varying concentrations (100%, 80%, 60%, 40%, 20%) were formulated. These formulations were analysed for sensory attributes (n=30) and their nutritional composition were analysed. The sensory score for BMF was highest in 80% formulation and in BTF score was highest in 60% formulation when compared to RF. In comparison with the RF, fiber and iron content in weaning food prepared from BMF and BMF were doubled; further carbohydrate content was reduced by in BMF and in BTF. There were no significant effects of the sensory and $\beta$ agretone agretone agret agree also give in formulation and in BTF.
	preparations. Among all these formulations when compared to RF, weaning food prepared from Barnyard millet flakes with 80% replacement had more acceptability in terms of nutritional and sensory aspect.
BR/OP13	Preetham Gowda HR
	Bioactive peptides and its application in the development of functional foods and nutraceuticals
	Biologically active peptides are derived from fragments of proteins, which can modulate physiological function. Peptides are hidden states in the protein molecule and can be unconfined during the hydrolysis processes. These bioactive peptides can show health-beneficial effects (in-vitro, in-vivo) such as antioxidant, antidiabetic, antihypertensive, mineral-binding, antimicrobial, ACE-inhibitory, etc. The production of bioactive peptides is generally through fermentation or enzymatic hydrolysis. In order to prevention of diseases, these peptides are considered prime compounds for the development of nutraceuticals and functional foods.
	Keywords: bioactive peptides, enzymatic hydrolysis, fermentation, functional foods.
BR/OP14	Deepika M
	Anti-Microbial Activity of Roselle (Hibiscus sabdariffa.L)
	Abstract:
	Hibiscus sabdariffa.L [HS] is a medicinal herb commonly known as Roselle. It belongs to the family Malvaceae.
	It exhibits antioxidant, anticarinogenic, antidiabetic, antihypertensive, antiatherogenic and Immunomodulatory effect. Antimicrobial activity is one amongst them which is a process of inhibiting the growth & activity of microorganisms such as bacteria. This review is to explain the roselle's bacteriostatic effect. The alcoholic extracts of calyces and leaf of HS exhibits profound antimicrobial activity. Gram +ve bacteria like S.aureus, B.subtitles and a wide range of food borne pathogenic bacteria like Salmonella typhi, ps.aeruginosa, B.cerus, and others were predominately inhibited by ethanolic extracts of calyx and leaf of HS given in variable concentrations. E.coli was inhibited by aqueous extracts of HS. Thus, Roselle in a potential antimicrobial agent that can be used for therapeutic applications.
	Key words: Roselle, Gram+ve bacteria, E.coli, Salmonella typhi, ethanolic extract.
BR/OP15	Gagana N K
	Anti-inflammatory activity of Calendula (Calendula officinalis)
	<b>Abstract:</b> Calendula officinalis (CO) is also known as marigold belongs to Asteraceae family. It is widely used in traditional medicines in wound healing and as an anti-cancer, anti-bacterial and anti-inflammatory agent. This plant contains several bioactive compounds, including terpenoids, terpenes, carotenoids, flavonoids and polyunsaturated fatty acids. Ethanolic extraction of CO exhibited an anti-inflammatory action through the inhibition of pro- inflammatory cytokines (IL-1 $\beta$ , IL-6, TNF- $\alpha$ and IFN- $\gamma$ ), and it was proposed to inhibit COX-2 through the inhibition of the enzymes gene and subsequent prostaglandin synthesis. This experimental study revealed that CO presented anti-inflammatory properties acting in a positive way on the inflammatory and proliferative phases of the healing process. <b>Keywords:</b> Pro-inflammatory cytokines, Prostaglandin, inflammatory.
BR/OP16	Rashmi S
	Anti-inflammatory activity of Matricaria chamomilla
	<b>Abstract:</b> Matricaria chamomilla (MC) is also known as Chamomile which belongs to the Asteraceae family. Chamomile helps to improve the cardiovascular conditions, provide protection against cancer and acts as anti-oxidant, anti-microbial, anti-depressant and it may benefit blood sugar control. Anti-inflammatory agents block certain substances in the body that cause inflammation. The flowers of chamomile contain 1–2% volatile oils including alpha-bisabolol, alpha-bisabolol oxides A & B, and matricin which gets converted to chamazulene and other flavonoids which possess anti-inflammatory property. In the experimental study, the aqueous, hydroalcoholic and other extracts of MC facilitates the anti-inflammatory activity by reducing myeloperoxidase enzyme which in turn reduces the paw oedema effect and it inhibits the production of granuloma tissue in animals. It also reduces the lipopolysaccharide activity in macrophage.
	Key words. Chamonine, Chamazuene, wyelopeoxidase, Elpopolysacchande, Oedenia.

BR/OP17	Anitha Tendulkar C M
	Cardio protective activity of lemon balm (melissa officinalis)
	Melissa officinalis (MO) commonly known as lemon balm belongs to the family Lamiaceae. It has been traditionally used for different medicinal purposes including Hypolipidemic and Cardio protective effects. Aqueous extract of MO facilitated decrease of cardiac rate in Langendoff technique isolated rat heart and blood pressure in Isoproterenol- induced Myocardial infarction animals. Ethanolic extract of MO showed significant decrease in infarct size, ventricular arrhythmias and oxidative stress in animals. Lyophilized aqueous extract of MO showed decrease in incidence of heart palpitation episodes and blood pressure in Benign heart palpitation humans. All extracts of MO showed Cardio protective activity. <b>Keywords:</b> Medicinal herb, cardiac rate, Phytochemistry, geranial, blood pressure.
BR/OP18	Kusum N
	Anti-inflammatory activity of saffron ( crocus sativus ) Abstract:
	Crocus sativus also called as saffron, has red stigma red which has great medicinal properties. Phytochemicals present in the saffron are crocin, picrocrocin, and safranal. It is utilized as anti-inflammatory, anti- carcinogenic, antioxidant, antidepressant, and also used to treat menstrual cramps. Saffron extract acts as a non- steroidal anti-inflammatory drug (NSAIDs). Anti-inflammatory effects of saffron, showed that some pro- inflammatory cytokines (IL-1β, IL-6, and TNF- alpha) and inflammatory mediators (PGE-2 and COX-2) were inhibited. In vivo studies were evaluated using albino wistar rats and swiss albino mice edema model tests. Pre- treatment with saffron extract (p.o) dose dependently inhibited the xylene induced ear edema in mice and carrageenan induced paw edema in rats. Thus saffron is a potential anti-inflammatory agent that can be used for therapeutic purposes.
	Key words: saffron, Crocin, picrocrocin, safranal, aqueous extract, ethanolic, ear edema, paw edema.
BR/OP19	Manasa C
	Anti-bacterial activity of manjistha (rubia cordifolia)
	Rubia cordifolia is also known as Manjistha. It has a pharmacological activities including anti-bacterial, anti- inflammatory, anti-oxidant, anti-acne, anti-allergic and hepatoprotective. The root extract of Manjistha shows anti- bacterial activity against many bacteria, such as gram positive bacteria and gram negative bacteria. The water extract of root of Manjistha was significantly active against B.subtilis and S.aureus, compared with streptomycin and penicillin G which were used as anti-biotic standards. It can be concluded that the root extract of manjistha inhibits the growth activity of bacteria such as gram positive bacteria and gram negative bacteria. <b>Keywords:</b> Maniistha, pharmacological activities, gram positive bacteria, root extract.
BR/OP20	Surabhi M
DR/0120	Antibacterial activity of mint (Mentha piperita)
	Mentha piperita [MP] is a medicinal herb commonly known as mint which belongs to family Lamiaceae. It has many pharmacological properties like antibacterial, antiviral, antifungal, antioxidant, anticancer and wound healing. The antimicrobial activities of Peppermint oil is mainly due to the combined effects of major compounds such as 1- menthol, menthone, menthyl acetate, and limonene which is effective against both gram negative and gram positive bacteria. The ethyl, menthonal and ethanol extract of mint has inhibited the growth of both Gram-positive and Gram- negative bacteria, thus peppermint oil can be used as a good preserving agent for inhibiting some pathogens.
BR/OP21	Paval R
DR/0121	Wound-healing activity of rosemary (rosmarinus officinalis)
	<b>Abstract:</b> Rosmarinus officinalis (RO) is an commonly known as Rosemary belongs to the Lamiaceae family. Rosemary is an aromatic plant with antibacterial, anti-inflammatory, antioxidant, anti-diabetic, anticancer and also wound-healing properties. Essential oils obtained from the aerial parts of rosemary exhibited significant wound- healing properties. In experimental studies on rats, rosemary oil helped in complete re-epithelialization of epidermal layer and increased the collagen fibre synthesis. It showed improvements in process of granulation of tissue and angiogenesis. In addition, it also decreased oxidative stress in the wounded area. In the human, when RO cream applied topically was effective in healing wounds in episiotomy and decreased the redness, wound discharge at inflammatory sites. Thus, rosemary oil and cream had wound-healing properties that acted positively in proliferative phases of healing process. <b>Key word:</b> Re-epithelialization, Granulation of tissue, Angiogenesis, Episiotomy.
BR/OP22	Swasthika P Y Anti-ulcer activity of mulethi (glycyrrhiza glabra linn)
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	Abstract:
	Glycyrrhiza glabra Linn (Gg) is a medicinal plant. In India it is also known as Mulethi. Dried root and rhizome extract of Gg shows Anti-ulcer activity in mammals by reducing the ulcer score, acid output and gastric volume. Gg also increases the antioxidant markers levels like GSH (reduced glutathione), SOD (superoxide dismutase) and TAC (total antioxidant capacity) and decreases the levels of TOS (total oxidant status), MDA (Malondialdehyde), which indicate reduction in gastric damage. Flavonoids of plant have gastroprotective properties that inhibit the growth of helicobacter pylori and thus prevent gastric ulcer formation. The plant also contains steroids such as beta sitosterol that is known to reduce the development of gastric ulcers. Thus extracts of Gg showed Anti-ulcer activity.
	Keywords: Dried rhizome, gastroprotective, gastric ulcer, steroids, helicobacter pylori, beta sitosterol.
BR/OP23	Meghana A Nayak
	Anti-oxidant activity of nilgiri (eucalyptus globulus)
	Abstract:
	Eucalyptus globulus (EG) which is also known as Tasmanian Blue gum and often called "Nilgiri", belongs to Myrtaceae family. The phytochemical studies revealed the presence of main chemical constituent 1, 8 – cineole (Eucalyptol) and other phytochemical components in different parts of the plant. The leaf extract exhibits a great range of anti-oxidant, anti-bacterial, anti-diabetic, anti-inflammatory and anti-helmintic activities. The essential oil of Nilgiri was screened for the presence of phytochemicals and their effect on 2, 2-Diphenyl-1-picryl-hydrazyl radical (DPPH) and nitric acid free radicle. Eucalyptus extracts were effective in ameliorating H2O2–induced oxidative stress by increasing cell viability, GSH (glutathione) levels and antioxidant enzymes activity and by decreasing ROS (Reactive oxygen species) production and lipid peroxidation levels. Thus, leaf extracts of Nilgiri showed anti-oxidant activity.
	Keywords: 1, 8 - cineol, leaf extracts, oxidative stress, DPPH
BR/OP24	Nisarga.R
	Anti- bacterial activity of cinnamon(cinnamomum verum)
	Cinnamomum verum (CV) is also known as cinnamon and belongs to the family Lauraceae . CV has significant benefits for human health, particularly as an anti-inflammatory, anti- diabetic, anti-hypertriglyceridemia, anti -cancer, anti-bacterial agent. Cinnamon oil has the most potential bactericidal properties . Cinnamon oil has been shown that in combination with triclosan, gentamicin, or chlorhexidine can effectively inhibit biofilm formation, detach existing biofilms, and kill bacteria in biofilms of clinical Staphylococcus epidermidis . Cinnamaldehyde has been shown to destroy the cytoplasmic membrane of both Gram-positive and Gram-negative bacteria and Induce depletion of the intracellular ATP concentration. Aqueous and alcohol extracts of cinnamon also have demonstrated antibacterial effects against H. pylori . Thus it can be concluded that cinnamon extract showed the antibacterial activity.
RD/OP25	Srikari K N
<b>BR/0125</b>	Protective effects of madhu tulasi [stevia rebaudiana] in diabetes induced renal damage
	Abstract:
	Stevia rebaudiana [SR] also known as Madhu Tulasi belongs to the Asteraceae family. SR exhibit anti-
	hyperglycemic, antibacterial, anti-inflammatory, anti-oxidant and improvement of renal function. The various studies conducted on diabetic induced rats showed decrease in creatinine, glucose and pH of urine, glutathione disulfide and oxidative stress and increase in the glutathione by consumption of SR extract. Treatment of stevia reduced chronic inflammation and glomerula hypertrophy. SR extract helps to maintain normal renal corpuscles, cortex and proximal tubule structure in diabetic rats. It can be concluded that stevia leaves could protect against diabetes, reduce the risk of oxidative stress and ameliorate liver and kidney damage.
	Keywords: Oxidative stress, creatinine, glutathione, inflammation, glomerula hypertrophy.
BR/OP26	Divya Shree S
	Anti-Cancer activity of azadirachta indica (neem)
	Abstract:
	Azadirachta indica(AI) is a medicinal nero belongs to Menaceae family commonly known as Neem. Different parts of neem tree including leaves, seeds, fruits, bark traditionally used for different medical purposes like, anti-inflammatory, anti-microbial, anti-diabetic, anti-malarial, anti-cancer effects. Phytochemicals of AI has anti- cancer effect via induction of apoptosis of cancer cell. Studies shows that extraction of Nimbolide, Azadirachtin, nimbin known Limonoids group of phytochemical present in leaf and seed ,bark of AI reduces the growth of cancer cell. This studies aim to explore that extracts of different parts of AI reduces the proliferation of cancer cells and shows anticancer activity.
	Keywords: Neem, Meliaceae ,Nimbolide,Azadirachtin, Nimbin.

BR/OP27	Saniya M
	Anti-inflammatory activity of Aloe vera (aloe barbadensis)
	Abstract:
	pharmacological activities like anti-inflammatory, anti-cancer, anti-hyperglycemic, anti-oxidant, anti-hyperlipidemic, wound healing and dermatological activities. Aloe vera gel extract contains anti-inflammatory chemical compound called anthraquinones which reduces swelling. It inhibits the cyclooxygenase pathway and decreases the prostaglandin E2
	production from arachidonic acid. Study showed that methanol extract in aloe vera gel reduced inflammation in Sprague Dawley rat. Inflammation is usually caused by oxidative damage due to free radicals. Aloe vera acts as an anti-oxidant that fights free radicals. This can be concluded that aloe vera has effective ability to reduce inflammation.
	<b>Key words:</b> hepatocyte apoptosis, hepatic inflammation, prostaglandin E2.
BR/OP28	Bhoomika B M
	Anti-hyperglycemic activity of Turmeric (Curcuma longa)
	Abstract:
	Curcuma longa (CL) also known as turmeric, which is a perennial herb belongs to zingiberaceae family. Turmeric has various pharmacological activities like anti-diabetic, immunomodulatory, anti-oxidant, gastroprotective, anti- microbial activity. Turmeric is being studied for its anti-hyperglycemic effect because of its various uses in treating diabetes mellitus. Curcumin is the most active component of turmeric. Ethanolic leaf extract of turmeric has shown to decrease blood sugar levels and glycated hemoglobin in diabetes induced albino rats. Hydroalcoholic and root extracts of turmeric showed to decrease serum glucose levels in diabetes induced rats. Similar results were observed in diabetes induced mice, by this it can be concluded that turmeric has ability to reduce hyperglycemia.
	Keywords: Pharmacological activities, Diabetes mellitus (DM), glycated hemoglobin, blood glucose level.
	Konshik C. C.
BR/OP29	NUISIIIK G C
	Abstract:
	Trigonella foenum-graecum also known as fenugreek is an annual plant belongs to the family Leguminosae. The green
	leaves and seeds of fenugreek are used in medicinal applications as well as in food. Fenugreek is well known for its
	pharmacological properties including hypocholesterolemic, anti-hyperglycemic, anti-oxidant, anti-cataract and anti- inflammatory activities. Ethyl acatete attract athenelic artest defatted fraction and seed neurophysical activities.
	total cholesterol, LDL and VLDL cholesterol and triglyceride levels in hypercholesterolemic animals. Similar results were
	observed in DM patients treated with fenugreek seed powder. Thus, fenugreek has been considered as effective agent for
	lipid lowering purposes.
	Keywords: Pharmacological properties, LDL, VLDL, Triglyceride, Cholesterol
BR/OP30	Thejashwini H M
	Anti-hyperglycemic activity of garlic (Allium sativum)
	Abstract:
	Allium sativum (AS) also known as garlic belongs to family Liliaceae. Garlic has many pharmacological activities like
	cardio-protective. Garlic is being studied for its anti-hyperglycemic effects because of its various uses in treating type 2
	diabetes and hyperglycemia. The sulfur containing amino acid alliin has ability to control diabetes. Aqueous extract of
	garlic has shown decreased serum glucose levels in diabetes induced rats. Similarly, ethanolic and hydroalcoholic extract
	glucose levels in humans. So, it can be concluded that garlic has ability to reduce hyperglycemia.
	<b>Keywords:</b> Pharmacological activities, alliin, hyperglycemia, blood glucose level
BR/OP31	Pooja N S
	Antiviral activity of green Chiretta (Andrographis paniculata)
	Andrographis paniculata (AP) also known as green chiretta belongs to the family Acanthaceae. The leaves and stem
	extracts are commonly used as a therapeutic drug. It is used traditionally for the treatment of cancer, ulcer, high blood
	hyperglycaemic, antipyretic and many more. Andrographolide is the major bioactive compound found in AP. The study
	was conducted on SARS-CoV-2 infected human airway epithelial cell line (Calu-3). The cells were treated with different
	dilutions of aqueous extract of AP and andrographolide for 48 hours. It showed that both the aqueous extract of AP and
	interfere with the entry of SARS-CoV-2 into the host cell. Andrographolide inhibited the DNA replication in Hepatitis B
	and Chikungunya virus. Thus aqueous extract of AP and andrographolide have a positive effect in treating viral infections.
	Keywords: Acanthaceae, Andrographolide, SARS-CoV-2, Calu-3 cells. Hepatitis B virus.

BR/OP32	Shrunga M
	Antioxidant activity of turmeric (Curcuma longa)
	Abstract:
	<i>Curcuma longa</i> also known as turmeric is an perrinial plant belonging to the family Zingiberaceae. Turmeric rhizome has a strong aroma and used as natural colorant. Turmeric is well known for its pharmacological properties including antioxidant, anti-diabetic, gastro protective, anti-cancer, and anti-inflammatory activities. Turmeric is a phenolic antioxidant and its property is mainly due to phenolic hydroxyl group. Turmeric extract was dissolved with fluoxetine hydrochloride was administered orally. Turmeric extract was effective in restoring antioxidant status and normalizing the markers of oxidative stress. This review highlights few animal studies as well as clinical trials to study the antioxidant activity of turmeric. Dietary turmeric has been experimentally documented to possess health-benefits against the free radical damage.
BR/OP33	Vibha Ramannia
DRIGISS	Anti-diabetic activity of Saffron (Crocus sativus)
	Abstract:
	<i>Crocus sativus</i> (saffron) belongs to the family iridaceae and is one of the most renowned spice used all over the world. This spice has enormous medicinal properties, such as anti-oxidant, anti-diabetic, anti-depressant, anti- tumour/ carcinogenic and many others. According to Ayurveda, saffron is used to treat menstrual cramps. The anti- diabetic compounds present in saffron include crocin, picrocrocin and safranal. By various studies it has been shown that these compounds helps in lowering the blood glucose level, thereby reducing hyperglycemia. This means, saffron can control the hormonal mechanisms involved behind this disorder. Various experiments have been conducted on animals like mice which were induced with diabetes, oxidative stress and hyperglycemia, a reduction in hyperglycemia was seen on administration with saffron extract. Human studies have also been conducted and it has been proven that, the biologically active anti-diabetic compounds like crocin, safranal and picrocrocin had a significant effect in treating diabetes by lowering blood glucose level upto 95%. By all these experiments it has been substantiated that saffron is an anti-diabetic agent.
	key words: Crocin, picrocrocin, safranal, hyperglycemia.
BR/OP34	Pavan kumar MR
	Antihypertensive activity of Hibiscus sabdariffa. L (Roselle)
	Abstract: <i>Hibiscus sabdariffa</i> . L, known as roselle, is the medicinal herb and also used as food. The plant is rich in nutrients as well as phytonutrients that are efficacious in the stream of pharmacological aspects like Antihypertensive, antidiabetic, antioxidant & anti-inflammatory activity. A sustained rise in blood pressure ≥140/90 mm Hg causes Hypertension, could be a leading cause of stroke and coronary artery disease, heart failure and renal failure. Antihypertensive activity is the process of lowering blood pressure by removing extra fluid and salt from the body or by relaxing and widening the blood vessels. The treatment given to various drug induced hypertensive rats and a healthy rats subjected with calyx and methanolic leaf extracts of Roselle that are rich in chlorogenic acid, anthocyanins & hibiscus acid exhibited significant reduction in systolic and diastolic blood pressure, which eventually decreases the mean arterial pressure and heart rate. Thus, this review elaborates on the powerful Anti- hypertensive activity of Hibiscus sabdariffa.L which has been authenticated by numerous scientific research based data. <b>Key words:</b> hypertension, systolic, diastolic, methanol extract, hibiscus acid
BR/OP35	Kavya M R
	Anti hyperglycemic activity of drumstick tree (Moringa oleifera)
	<b>Abstract</b> <i>Moringa oleifera</i> (mo) is also known as drumstick tree belongs to the family moringacea. it has pharmacological properties like antioxidant, antibacterial, anticancerous, antiulcer and wound healing activities. experiments conducted in rats indicated that aqueous extract and methanol extract of mo decrease the serum glucose level, low density lipoprotein level and total cholesterol level and increase the serum insulin level and high-density lipoprotein level. mo leaf powder is known to decrease blood sugar and increase the insulin level and body weight in rats. from studies, it is proved that phytochemicals present in mo have potent therapeutic effect on diabetes mellitus.

BR/OP36	Divyashree M
	Anti-Diabetic activity of catharanthus roseus (Vinca Rosea)
	Abstract: Catharanthus roseus (L.) is an important medicinal plant which belongs to the _Apocynaceae' family and is
	an evergreen and everblooming bushy herb in tropical parts of the world like India, America, Australia and Malaysia. The leaves consist of alkaloids like vincristine and vinblastine that provide medicinal benefits like anti-diabetic, anti- cancer and anti-microbial traits [1]. This study aimed to investigate the anti-diabetic activity of Vinca rosea on induced diabetes in mice. Diabetes is one of the common disorders with micro-and macrovascular complications that will result in significant morbidity and mortality. It is considered as one of the leading causes of death in the world [2,3]. In modern medicine, there is no satisfactory therapy is still available to cure diabetes mellitus. There is an increasing demand for the use of natural products with antidiabetic activity because of the side effects associated with the use of insulin and oral hypoglycaemic agents Key words: <i>Catharanthus roseus</i> , Antidiabetic, blood glucose, pancreatic $\beta$ cells.

BR/PP01	Deepika Bv
	<ul> <li>Synthesis, docking studies and evaluation of novel piperine derivatives as potential agents against breast cancer Abstract:</li> <li>A Total of 44 derivatives were subjected to molecular docking studies, in order to find derivatives with lowest binding score against the protein with PDB Id 5DXT, 1GII, 2W9Z and 2IOG. Docking studies revealed that the ligands V04, V05 and V06 gave relatively lower binding energy of -6.768, -7.195 and -6.768. Piperine was extracted and isolated from <i>Piper nigrum</i> and was considered as starting material for further synthesis. The synthesis involves conversion of piperine to piperic acid using alcoholic KOH. The converted piperic acid was treated with thionyl chloride to undergo chlorination to give Piperic acid chloride. The Piperi cacid chloride was reacted with various amines to produce piperic acid amides (V04, V05 and V06). The derivatives were characterized by physical constants and spectroscopic methods. Cytotoxicity against MCF-7 human breast adenocarcinoma cells were evaluated by MTT assay and the result was measured as cell viability percentage. The compound V06 exhibited better cytotoxicity of MIC of 100.25%, 97.36%, 91.26%, 87.98%, 73.25%, 61.68% at the concentration of</li> <li>10, 25, 50, 75, 100, 150 µg/mL. In continuation of discovering new cytotoxic agents for breast cancer, the compound V06 can be considered as potent cytotoxic agent.</li> <li>Key words: Piperine, Piperic acid, Molecular Docking, MCF-7 cell line, MTT assay.</li> </ul>
BR/PP02	Rudra Murthy B K Analytical method development and validations for simultaneous estimation of anti-hypertensive drugs Abstract: The present work involves development and validation of RP-UPLC methods for simultaneous estimation of Telmisartan and Azelnidipine. In UPLC method, C 18 column (250mm x 4.6mm, 5µm) column was used as stationary phase and Mobile phase A consist of (0.1% formic acid in water as an aqueous phase) and Mobile Phase B consist of (acetonitrile as an organic modifier). The flow rate was 0.8ml/min and both drugs were quantified at 260 nm. The retention time for Telmisartan and Azelnidipine was found to be 5.950 min and 7.293min respectively. The linearity range obtained for RP-UPLC method was 10-160 µg/ml and 5-80 µg/ml for Telmisartan and Azelnidipine respectively. The method was validated according to the guidelines of International Conference on Harmonization (ICH). Keywords: Telmisartan, Azelnidipine, Validation, UPLC
BR/PP03	<ul> <li>Phurbu Dolkar</li> <li>A study on the safety and neuroprotective profile of Sesame lignans in sleep restricted mice</li> <li>Abstract:</li> <li>Sleep is an essential component of healthy lifestyle. Good sleep is necessary to feel rejuvenated, to maintain a healthy balance in the body, and to ensure that the body system functions properly. Sleep deprivation has become prevalent as a result of lifestyle changes and globalization, with neurochemical alterations and neuronal cell death as distinctive symptoms leading to memory impairment. To treat sleep related disorders synthetic medications, which are habit-forming and have negative effects, are being used. Traditional and herbal remedies must be investigated in order to counteract the harmful effects of synthetic medications. The present study was designed to investigate the protective effect of sesame lignans on sleep deprivation induced cognitive impairment and oxidative stress. Black sesame seeds are also used as a supplement for a safe potential treatment to improve sleep quality and for those who have sleep problems.</li> <li>Researchers have reported that sesame lignans possess multiple physiological functions, such as antioxidant property, protective effects against hormone-related diseases and anti-inflammatory properties. There is a lack of evidence to prove their efficacy in sleep related disorders. Furthermore, to confirm its therapeutic potential, substantial preclinical data is necessary. Sesame lignans have demonstrated to have better anti-inflammatory properties as a food supplements, however scientific data on this subject is limited. In this study acute oral toxicity testing was performed to determine the safety of sesame lignans, and the results showed no toxicity signs at a dose of 2000mg/kg classifying it as group 5 or unclassified status according to the GSH Classification System. Sleep deprivation was induced by using modified multiple platform method. Results showed that following sleep restriction there is an impaired cognitive f</li></ul>

	Theisswirem M
BK/FF04	An overview of asthma and it's complications associated with obesity Abstract Asthma and Obesity are increasingly common condition in worldwide and has relationship between these two major health problems. These are the acute inflammatory disorders and that affects the population it has exploded in the last few years, being estimated that has been seen over 300 million people. 17% or 13 million children have obesity. 9% or 7 million children are having asthma. Few studies have elucidated the mechanisms of dyspnea (intense tightening in the chest) in patients with obesity. Asthma is a condition that causes our narrow airways to swell and produce mucus. A disorder called obesity involves having an excessive amount of body weight, which raises health risks. Increased oxygen may cost of breathing. Adults with obesity have two to fourfold increased risk of being hospitalized for asthma exacerbations compared with lean patients. Excess body weight has a significant impact on the functioning of the respiratory system. Bronchodilators are a type of medication that make breathing easier by relaxing the muscles in the lungs and widening the airways (bronchi). <b>Riskfactor</b> : Smoking, allergy, lifestyle, stress, obesity. <b>Symptoms</b> : Difficulty wheezing, shortness of breath, cough, nocturnal symptoms (waking up more than once a night to urinate, fatigue). <b>Treatment:</b> Bronchodilator, corticosteroids, NSAIDS. <b>Keywords</b> : Obesity, wheezing, stress, NSAIDS, asthma, bronchodilator.
BR/PP05	Bharath Kumar An overview: on pentic ulcer disease and its therapy
	An overview: on peptic ulcer disease and its therapy Abstract
	The Peptic Ulcer Disease (PUD) affects over four million peoples across the world and it has a prevelance rate of 5 to
	10 % in general population. Peptic ulcer is the formation of sore in the oesophagus, duodenum, stomach due to the imbalence between defensive and aggressive factor.
	Rapidly declining rate of prevelance of H.Pylori infection and wide use of Non steroidal anti inflammatory drugs
	(NSAIDS) for a long time increases the susceptibility of mucosal injury leading to peptic ulcer. NSAIDs block the prostaglandin synthesis which acts as a protective covering for the mucosal layer leading to the formation of ulcer.
	H2 Antagonists: H2 Antagonist is a class of drug upon administration competes with the H2 receptor on the parietal cell
	and blocks the action of histamine which decreases the CAMP formation and reduces acid secretion and subsequently leading to the curing of ulcer.
	Proton Pump Inhibitors(PPIs) is a widely used theapeutic agent, upon administration gets converted to sulfenamides and
	<b>Factors:</b> Lifestyle, H.Pylori infection, age, stress, NSAIDS.
	Symptoms: Upper abdominal pain, nausea, bloating, lack of appetite, weight loss,Irritation in Easophagus. Treatment:
	H2 receptor antagonist, proton pump inhibitors (PPIs), prostaglandin analogues, antacids, ulcer protectives. Here we study the pathology and medical therapy, safety profile and complication of peptic ulcer disease.
	Keywords: PUD, Prevalence, H.Pylori, NSAIDS, PPIs.
BR/PP06	B. Jayalakshmi
	Evaluation of Neuroprotective activity of <i>Amaranthus viridis L</i> . extract Abstract
	The nervous system is the part of an animal that coordinates its action by transmitting signals to and from different
	parts of its body. Neurodegenerative disease is an umbrella term for range of conditions which primarily affect the neurons in the human brain. Neurodegenerative diseases are incurable and debilitating conditions that results in progressive
	degeneration and/or death of nerve cells. This cause problems with movement (called ataxias) or mental functioning
	(called dementias). Ayurveda an ancient Indian system of medicine has traditionally been used in several neurological conditions. Neuroprotective activity of ethanol extract of Amaranthus viridis whole plant was conducted on Female Swiss
	albino mice by using Elevated plus maze and Morris water maze experimental apparatus by taking permission from the
	IAEC for animal experiment. Amaranthus viridis showed gradual decrease in activity as compared to Scopalamine, it showed progressive effect as compared to Normal control and it showed competitive effect with Piracetam. In elevated
	Plus Maze method A.viridis extract showed an average Transfer Latency of 19 Sec compared to Piraceatum which showed
	1/ sec. Even in Morris water maze method A.viridis extract showed an average Escape Latency of 63 Sec while Piracetum showed 58 Sec. The phytochemical studies of Amaranthus viridis showed presence of Flavonoids and Polyphenols. Thus
	this study showed that Amaranthus viridis has strong neuroprotective activity and validated its traditional use in the
	treatment of neuroprotective diseases. Key words: Neuroprotective activity, Extract

BR/PP08	C.S. Hamkeri Synthesis and molecular docking studies of novel pyrrolyl benzimidazole derivatives as anticonvulsant agents. Abstract:
	The pyrrole ring is a part of many biological compounds such as the enzyme catalase the hile numerication and
	the mould pigment prodigiosin; it is also a significant part of macrocyclic porphyrin ring system of chlorophyll and hemin.
	Apart from these properties pyrrole and its derivatives possess a number of biological activities such as antiallergic,
	antitumor, antibacterial, antifungal, antiinflammatory, analgesic, anticonvulsant, antitubercular, anticancer and anti HIV.
	Considering the above factor, we have synthesised substituted pyrrolyl benzimidazole benzamide derivatives which were
	found to be possess anticonvulsant activities. In present work, we have combined 4-(1H-pyrrol-1-yl)-benzoic acid with
	substituted benzimidazole aniline, for that precursor substituted benzimidazole derivatives (3a-o) were prepared by
	reaction between various substituted o-phenylenediamine (1a-o) with p-aminobenzoic acid (2) in ethanol. Further, 3a-o
	was reacted with 4-(1H-pyrrol-1-yl)-benzoic acid (4) yielded the titled compounds (5a-o). The structures of all the
	synthesized compounds were established on the basis of analytical and spectral data. All the synthesized compounds were
	docked in to the active site of enzyme nCA II isomer which was taken from the RCSB data bank (PDB file with code 2ERE) using the surflex deals measurement of subul X 2.0 software and they avhibited acad dealsing scores. And fault
	selected compounds were screeped for in vivo anti-convulsant activity against MES and PTZ induced seizures. The newly
	synthesized compounds exhibited significant anticonvulsant properties compared to standard drugs
<b>DD</b> ( <b>DD</b> 00	Chetan B. Savant
BR/PP09	Effect of co-administration of <i>Ocimum sanctum</i> and Atenolol : Possible pharmacokinetic mechanism in preclinical
	studies
	Abstract
	When patients take herbal medicines together with their allopathic medications, interactions between phytochemicals in
	herbal medicines and active components in prescription pharmaceuticals can occur through a variety of pathways that are
	either pharmacokinetic or pharmacodynamic in nature. These interactions are often unpredictable and sometimes life-
	threatening. Hence, it is essential to evaluate these serious pharmacokinetic interactions. The aim our research was to
	evaluate the potential pharmacokinetic interaction between Standardized extracts of Ocimum sanctum (SEOS) and
	Atenoiol (A1) in normal rats. Albino wistar rats weighing around 185 gms to 200 gms are divided into three groups.
	combination of drugs (AT + SEOS) Rats were anesthetized by ether and blood $(0.5 \text{ m})$ was taken from retro-orbit sinus
	through heparinized capillary tubes just before i.e. 0 and at 0.5, 2, 4, 6, 8, and 10 h after dosing. Plasma specimens were
	separated by centrifugation at 1000 rpm for 2 min and stored at -200C until analysis. Concomitant administration of SEOS
	(Ursolic acid) and AT decreased the plasma concentration of both drugs. Cmax of AT in combination with Ursolic acid
	was decreased when compared to AT given alone. Similarly, the AUC0-10 was decreased. Whereas, Vd, Cl and $t1/2$
	values of AT were decreased. A increase in the Ke of AT was observed in
	combination when compared to animals administered alone AT. Further, Cmax of Ursolic acid in combination with AT
	was decreased when compared to Ursolic acid given alone. A increase in the Ke of Ursolic acid was observed in
	combination when compared to animals administered alone Ursolic acid. Hence, we can conclude that SEOS (Ursolic acid) decreases the bioavailability of Atapalal probably by anyong induction
	Keywords - Atenolol Herb-Drug <i>Ocimum sanctum</i> and Pharmacokinetic
	Sovito M Illogoddi
BR/PP10	A novel microsponge cutaneous drug delivery in diabetic psoriatic animals
	Abstract
	The motive behind present work was to formulate and evaluate gel containing microsponge of acitretin to provide
	prolonged release for the better treatment of psoriasis. The acitretin loaded microsponge was prepared by Quasi- emulsion
	solvent diffusion method using ethyl cellulose as a polymer. A two factor, three level (32) factorial design using Design-
	Expert® was employed for the optimization of microsponges. The physiochemical interaction between drug and polymers
	were investigated by FT-IR and DSC spectra study. The prepared microsponges were evaluated for mean particle size,
	entrapment efficiency, and in-vitro drug release. From three level $(32)$ factorial design, formulation F1 was selected as the best formulation as it shows maximum entrapment efficiency of about 00 20+0.75, the particle size of 205.4+1.24 um and
	in-vitro drug release of about 88.9+0.56% at the end of 8 hours. Surface morphology of F1 formulation was studied by
	using scanning electron microscopy which reveals that microsponge were spherical in shape and porous in nature. The
	optimize formulation was incorporated in emulgel were characterized for physical appearance, grittiness, pH,
	Spreadability, drug content respectively. In-vitro diffusion study was performed for emulgel. The results of diffusion study
	revealed that optimize formulation F1-emulgel has shown better drug release of about (73.77 $\pm$ 4.0 % atend of 8 hrs.). The
	optimized formulation showed drug deposition of about 11759 $\pm$ 1.24 µg/cm2 and drug permeation of about 7076 $\pm$ 0.84
	$\mu$ g/cm <sup>2</sup> . Antipsoriatic activity of all gel formulation was performed on Balb/c mice skin model and it was found that
	activity is compared to the marketed gel. The stability studies revealed no significant difference in physical appearance pH % days contact before and after the stability studies revealed no significant difference in physical appearance pH %
	of gel preparation
	<b>Keywords:</b> Microsponge, Acitretin, factorial design.

Studies on preliminary phytochemical investigation and synthesis of silver nanoparticles of Albitia amara leaves by eco friendly approach Abstract Due to their therapeutic benefits, medicinal plants have been utilised for ages as treatments for both human and animal diseases. Various indigenous medical systems, including Siddha, Ayurveda, Unani, Western, and Chinese traditional medicine systems, have utilised therapeutic herbs in a variety of ways. The currently utilised medications are related to several side effects, higher treatment costs, and patient noncompliance, as well as substantial downsides such severe toxicity and cytotoxic consequences. To combat from these drawbacks now a days the bioactive from traditional plants are preferred. One such herbal extracts Albizia amara which has proved as antimicrobial, wound healing, antioxidant, anti- diabetic, anticonvulsant activity. Hence in the present study Albizia amara is selected as model plant belongs to the family Fabaceae and is traditionally known as Arapu. The photochemical apresent in Albizia amara is alkaloids (antimicrobial) such as saponins, tamins, terpenoids, glycosides, flavanoids, phenohs, cardiae glycosides and quininecomponents. The screening of preliminary phytochemical analysis of different extracts (actone, ethanol, methanol and water). Among the four tested extracts words - Albizia amara leaves, acetone, methanol, ethanol and water ettactBR/PP12Tenzin Deyang Evaluation of neuroprotective effect of withanolide-A standard extract in gonadectomized sleep restricted male rats to improve sleep quality and duration in experimental models of sleep. While long term administration of testosterone reported to inpart delerious effects in metabolism, specifically on kynurenic acid pathway leading to neurodegeneration Albteratic bereased latency time in the with - A trata groups of whith - A standard extract in gonadectomized as sees tha
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A study to evaluate the efficacy of Thanga parpam in a mouse model of Parkinson's disease
A study to evaluate the entrary of Fhanga par part and mouse mouth of Farkinson's disease
Abstract
Metal based drugs have proven high anti-oxidant potential, particularly gold based nanoparticles like Thanga parpam (TP)
have shown potent anti-inflammatory and anti-oxidant potential. Since there is no validated data available for the role of
IP in Parkinson's disease (PD), the present study aims to determine the efficacy and neuroprotective effects of TP in
rotenone intoxicated mice. Rotenone has been extensively used as a neurotoxin model to induce PD like symptoms in mice. In the current study, evaluated the efficacy of prophylaxis treatment of TP for 5 days and then challenged with
rotenone ( $30m\sigma/k\sigma$ ) for 11days induced neuro toxic effects in mice focusing on neuro behavioural and hig chemical
assessments. On day 13 to 16 behavioural assessments like Beam walk (Latency and number of foot slips) and NORT
were evaluated. TP treated groups have shown significant improvement in the motor functions as evidenced through
latency time and number of foot slips in the beam walk but failed to enhance the exploratory time for novel object
indicating that TP at these dose levels failed to elicit behavioural alterations. We also analysed for the levels of
corticosterone and Lipid peroxidation (TBARS) levels. Treatment with TP groups has shown reduction in the levels of
corticosterone and TBARS levels as compared to positive control indicates role of TP in mitigating the HPA axis
imbalance and oxidative stress. Based on these findings we propose that TP as the promising neuroprotective agent and
can be of a choice as adjuvant or prophylactic agent in Parkinson disease. Further molecular studies are anticipated to
confirm the same.

BR/PP14	G S Rakshanaa A study to evaluate the role of Ezetimibe on cognition and lipid profile in high fat diet fed sleep restricted mice. Abstract Sleep is an important phenomenon that plays a crucial role in metabolic clearance (brain) and consolidation of memory. Sleep deprivation (SD) leads to oxidative stress and inflammation along with alterations in synaptic plasticity in the brain impairing cognitive ability. SD also leads to over-consumption of high fat /calorie during the day. High fat diet (HFD) are rich in saturated fats leads to obesity and mediated inflammation altering the synaptic plasticity, lipid profile, and proteins triggering neurodegeneration and neuroinflammation. Sleep deprivation along with high fat intake leads to increased circulating and neuronal cholesterol levels along with stimulation of pro- inflammatory markers affecting cognition. The status of Ezetimibe in lipid-lowering is well evident but with respect to cognition in sleep-restricted (SR) status is not well elucidated. Therefore, this study was designed as a drug repurposing study to evaluate the effects of Ezetimibe with respect to SR and HFD status. In the present study, HFD animals gradually gained weight accounting to the hedonic hunger, palatability of the HFD, energy expenditure and composition of the HFD. However, weight loss in SR animals credited to the SR-mediated inflammation which delayed the recovery process in mice along with altered inflammatory marker expression in the adipose tissues decreasing the fat mass. Moreover, treatment with Ezetimibe has improved spatial memory in MWM assessment in treated groups by significantly decreasing the escape latency, increasing the time spent and the distance travelled in the target quadrant owing to the anti-inflammatory, anti-oxidant and cholesterol lowering effects of ezetimibe in the brain which improves short term and long-term neurological activity. Sedentary lifestyle of SD and high-calorie intake (mainly saturated animal fats) leads to elevated levels of LDL- c, major reas
	levels are regulated by circulating cholesterol levels creating a communication bridge between the central and peripheral cholesterol pools. Treatment with Eze attenuated the HFD and SR-induced memory deficits apart from its lipid-lowering effects. However, further histopathological and protein analysis are awaited to understand the molecular changes. <b>Keywords:</b> Sleep deprivation (SD), High-fat diet (HFD), Sleep restriction (SR).
BR/PP15	Akshay Javalgikar         Preliminary phytochemical screening of medicinal plants         Abstract         The Pharmacognostic study mainly helps in plant identification and it produces the standard parameter which         prevents adulteration. Pharmacognostic studies ensure the reproducible quality of plant products which leads to the         efficacy and safety of plant material. For this study, Crinum Solapurense and Curculigo sabui were selected.         The aim of the present study was to perform preliminary phytochemical screening and to determine the total phenolic and         flavonoid contents of the selected medicinal plants. The powdered leaves were successively extracted with ethanol and         water. The phytochemical analysis shows the presence of Glycoside, Alkaloids, Saponins, Quinones, and Flavonoids.         Total phenolic contents of the aqueous extracts of the plants were determined by the Folin-Cicoalteus reagent method. The         primary phytochemical evaluation identifies mainly secondary metabolites from the plant extract and it justifies their use         in the traditional medicines for the treatment of different diseases.         Keywords: Crinum solapurense, Curculigo sabui, extract, phytochemical, phenolic content.
BR/PP16	<ul> <li>Samar Patil</li> <li>Formulation and characterization of nanocomposites film of an antibiotic drug</li> <li>Abstract :</li> <li>The present work was carried out with an aim of formulating the nanocomposite films containing Vancomycine for wound healing. Chitosan nanocomposite containing different quantities of silver nanoparticles and polyvinyl alcohol were prepared by solvent casting method. The prepared nanocomposite films were analysed by Fourier transforms infrared spectroscopy (FTIR). Weight variation, thickness, moisture content &amp; uptake, drug content, folding endurance of films was studied using standard teqniques. Encapsulation efficiency was dependent on polymer composition. In-vitro release studies have been performed in 7.4 pH medium. FTIR studies confirmed the formulation of silver nanocomposites and compatibility with the drug vancomycin The drug release was extended up to 12hours. Formulation shows promising characteristic properties to be used as wound healing material.</li> <li>Keywords: Vancomycin Hydrochloride; Poly(vinyl alcohol); antibacterial; Chitosan</li> </ul>
BR/PP17	Prabhanjan B.H Synthesis, molecular docking study and biological evaluation of new 4-(2,5- dimethyl-1h-pyrrol-1-yl)-n'-(2- (substituted)acetyl) benzohydrazides as dual enoyl acp reductase and dhfr enzyme Abstract: In this study, new series of 4-(2,5-dimethyl-1H-pyrrol-1-yl)-N'-(2-(substituted)acetyl) benzohydrazides (5a-n) were prepared and the new heterocycles were completely characterized, evaluated for their antimicrobial activity, and some of them were subsequently screened for in vitro enoyl ACP reductase and DHFR enzyme inhibition. Most of the synthesized compounds displayed meaningful activity against enoyl ACP reductase and DHFR enzymes. Furthermore, some of the prepared compounds exhibited potent antibacterial and antifungal activities. A molecular docking study was undertaken to identify the possible mode of action of the synthesized compounds, which suggested binding interactions with the both enoyl ACP reductase and dihydrofolate reductase active sites. The highly pronounced biological activities of the compounds under investigation offer such species as promising future drug prospects which may find applications in the fields of biological and medicinal sciences

BR/OOP01	<ul> <li>Sangh Priya Mining of polyphenols and flavonoids in holy basil (Ocimum sp.): Comparison of four Abstract</li> <li>Leaves from four varieties of tulsi (Camphor, Krishna, Lavanga and Vishnu) were collected, dried and extracts were prepared using different solvents viz., acetone, aqueous, dichloromethane, ethanol, hexane and methanol. The percentage yield was highest in Lavanga and Camphor, while Krishna showed the least irrespective of the type of extract. The study revealed that various secondary metabolites such as polyphenols and flavonoids are present in tulsi leaf extracts. The HPLC profiling showed the presence of rosmarinic acid in all the extracts irrespective of the solvent extraction. The other polyphenols present in the tulsi leaf extracts were p-coumaric acid, isothymucin, proto-catechic acid and caffeic acid. The GC-MS analysis of the extracts revealed methyl eugenol in Krishna variety with all the solvents, Bornanone in Lavanga and Camphor variety in all the solvent extracts and caryophyllene in Vishnu variety. The LC-MS/MS profile of Krishna variety of tulsi showed mallic acid, citric acid, rosmarinic acid and asiatic acid as major compounds. The LC-MS/MS profile of Camphor variety of tulsi showed major peaks of compounds like mallic acid, citric acid, gallic acid, asiatic acid and asiatic acid. The LC-MS/MS profile of Lavanga variety of tulsi showed mallic acid, citric acid, gallic acid, siatic acid and sumaresinolic acid as major compounds. Similarly in case of Vishnu variety, mallic acid, citric acid, gallic acid, apigenin, and sumaresinolic acid were present in majority. These phytochemicals from natural plant sources are known to possess many health benefits and considered as safe. Hence, these bioactive compounds may be explored for possible application as nutraceuticals.</li> <li>Keywords : Ocimum, Flavonoids, Polyphenols, HPLC, GC-MS, LC-MS/MS</li> </ul>
BR/OOP03	<ul> <li>Vallamkondu Manasa</li> <li>Nanoencapsulation and characterization of apocynin and vanillic acid from Picrorhiza kurroa royle ex benth plant roots</li> <li>Abstract</li> <li><i>Picrorhiza kurroa Royle ex Benth</i> is an important medicinal plant in the Ayurvedic system for treating various liver and inflammatory conditions. The present study aimed to extract the bio-actives from various extracts (Acetone, Chloroform, Ethanol, Ethyl acetate, Hexane, and Methanol) of <i>P. Kurroa</i>. Further, the major bioactive compounds were nanoencapsulated and characterized to enhance activity towards the target. The polyphenolics (323.2, 316.3 μg GAEq./mg), flavonoids (280.3, 300.8 μg QEq./mg), ethanolic (38, 43 μg/mL) and methanolic extracts (40, 45 μg/mL) of <i>P. kurroa</i> exhibited a good FRAP and DPPH radical scavenging activity. The major nutraceuticals, such as apocynin and vanillic acid, were confirmed using HPLC. Further, the nanoencapsulation of apocynin and vanillic acid was successfully achieved. The average particle size was 350 nm and 204.4 nm, with an encapsulation efficiency of 93.6 and 93.3% for apocynin and vanillic acid, respectively. The SEM and AFM analyses revealed the surface morphology of the prepared nanoparticles, and X-ray diffraction patterns proved the lower degree of crystallinity. The nano-encapsulated compounds showed characteristic bands in FTIR at ~3297, ~1764, and ~1140 cm<sup>-1</sup>. Hence, the prepared nanoparticles could effectively be used as functional ingredients in the food and pharmaceutical fields.</li> <li>Keywords: Picrorhiza kurroa, Apocynin, Vanillic acid, Nano encapsulation, Antioxidant activity</li> </ul>

BR/OOP04	Sk Meheronnisha Scientific validation and mechanistic study of ayurveda formulation: Sahacharathi thailam for its anti- Parkinson's activity in 6-OHDA lesioned rat Parkinson's model Abstract Introduction: parkinson's disease (pd) is caused by the progressive loss of mesencephalic dopaminergic neurons in the substantia nigra. natural compounds such as poly-phenols, flavonoids, tannins like catechin, epicatechin are found in leaves, roots, stems of many indian medicinal plants are effective in preventing inflammation, production of ros and oxidative stress, and thus serves as potential sources of anti-parkinson's agents. sahachara thailam has been used by the ayurvedic practitioners for treatment of parkinson's disease. also, the drugs used in present formulation, have been reported for their antioxidant and anti-inflammatory activity owing to the presence of polyphenols and flavonoids. so, the current study is focus to prepare and evaluate the anti-parkinson's effect of ayurevedic formulation sahachara thailam. methods: ayurvedic formulation sahachara thailam was prepared. parkinson disease was induced in rodents by stereotaxic injection of 6-ohda. after that the effects of sahachara thailam on parkinson's disease induced wistar rats of both sex (180- 220g) were investigated by rota rod, actophotometer, and quantitative determined the calcium, tnf- $\alpha$ , sod, catalase and gsh levles. also, histopathology of substantial region were performed. results: ir motor activity and muscular coordination was significantly reduced in 6-ohda induced decrease in ir motor and muscular coordination activity. all formulation treated groups showed significant decrease in calcium level and tnf- $\alpha$ , and increase in catalase, sod and gsh level compared to the 6-ohda group. also, therapy with the different formulations showed increased in number of substantia nigra pars compacta (snpc) dopaminergic neurons as compared to 6-ohda treated. <b>Conclusions:</b> the present study shows that administration of ayurevedic formulation sahachara thai
BR/OOP05	Suma Naduvinamani
	<b>Abstract</b> the main goal of the study was to create a micro porous simvastatin-nano zno composite wound dressing for wound healing activity. in the current investigation, four formulations were created by changing the concentrations of chitosan and polyvinyl alcohol (pva). the chemical synthesis approach was used to create zinc nanoparticles, which were then added to wound dressing compositions. to make wound dressings, the freeze-thaw process was utilized. uv-visible spectroscopy, fourier transform infrared spectroscopy (ftir), x-ray diffractometry (xrd), transmission electron microscopy (tem), selected area electron diffraction (saed), zeta potential, and particle size determination were used to characterize prepared wound dressings. furthermore, thickness, weight fluctuation, folding endurance, swelling behavior, moisture content, moisture absorption, water vapor transfer rate, mechanical strength, dpph, mtt test, drug content, in-vitro release profile, kinetic data analysis, and film topography were determined. the optimized formulation was decided among all based on drug content, drug release, and swelling. f3 was found to be the optimized formulation based on the data gathered, and it was then subjected to film topography assessment using scanning electron microscopy (sem). f3 an optimized wound dressing was tested for stability analyses and demonstrated no significant variation in percent drug content or drug release before and after storage of the microporous wound dressing formulation. <b>Key words: -</b> simvastatin, microporous wound dressing, chitosan, polyvinyl alcohol, nano zinc oxide etc.
BR/OOP06	<ul> <li>Seema K S</li> <li>Anti-hyperlipidemic activity of divya methipachak against cafeteria diet induced hyperlipidemia in rats.</li> <li>Abstract</li> <li>The present study was designed to evaluate the anti-hyperlipidemic activity of divya methi pachak a polyherbal formulation against cafeteria diet induced hyperlipidemia in rats. hyperlipidemia was induced by cafeteria diet and treated with atorvastatin (10 mg/kg, p.o) and low and high dose of divya methipachak (150 mg/kg and 300mg/kg, p.o) for 28 days (except normal control). cafeteria diet consisted of 3 diets. diet 1 (condensed milk, 40g + bread, 40g), diet 2 (chocolate, 15g + biscuit, 30g + dried coconut, 30g) and diet 3 (cheese, 40g +boiled potatoes, 50g). the three diets were presented to all the groups except normal control on day 1, 2 and 3 respectively and then repeated in same succession upto 28 days. these diets were provided in addition to normal pellet chow. on 29th day after fasting for 12 hr the blood samples were collected by retero orbital sinus puncture, under mild anaesthesia. the effect of treatment was analysed by quantification of serum lipid profile, blood glucose level and histo-pathological analysis. the experimental results indicated all the lipid profile such as total cholesterol, triglyceride (tg), high density lipoprotein cholesterol (hdl-c), low density lipoprotein cholesterol (ldl-c), very low density lipoprotein cholesterol (vdl-c) and the glucose level were restored significantly by all the treated groups compared to cafeteria diet treated group. to conclude divya methipachak was found to be potential antihyperlipidemia agent in a dose dependent manner in alleviating abnormal conditions induced by cafeteria.</li> <li>Kev Words: cafeteria diet, divya methi pachak, atoryastatin.</li> </ul>

BR/OOP07	<ul> <li>Unnati G</li> <li>Qualitative and quantitative estimation of indegeneous Adiantum capillus-veneris Linn,.</li> <li>Abstract:</li> <li>Adiantum capillus veneris (acv) linn., belongs to the family of adiantaceae. the leaves are antibacterial, antioxidant, antipyretic, anthelmintic, diuretic, antiobesity, antifertility, antidiabetic etc. delivering plant extract at high loading with good antimicrobial activity is a challenging task. the hydroalcoholic extraction was done in three different ratios. the extract was screened for phytochemical investigation. the qualitative analysis of phenols, flavonoids and alkaloids was done using thin layer chromatography. the total phenolic and flavonoid content was quantified by using uv spectrphotometer. the extract was further purified by using solvent acetone. the purified extract was qualitatively estimated by fir and thin layer chromatography (ltc) and quantitative estimation was done by using high performance thin layer chromatography (ltc) the phytoconstituents present in the plant and further, useful for herbal formulations and will be beneficial in the pharmaceutical and alternative medicines.</li> <li>Keywords: Adiantum capillus-veneris (ACV), hydroalcoholic extract, UV spectrophotometer, TLC, HPTLC.</li> </ul>
BR/OOP08	<ul> <li>S Dhivya</li> <li>A review on Nanostructured Lipid Carrier: A boon for the lipophilic drug</li> <li>Abstract:</li> <li>For the past few decades, there is lot of advancement in the drug delivery systems andan interesting aspect among</li> <li>them is nano scale drug delivery systems. Nanosized drug delivery approaches have greater advantages over conventional</li> <li>drug delivery systems in various aspects like increasing drug solubility, bioavailability, biocompatibility, increased stability</li> <li>and so on. Lipid based drug delivery systems have greater opportunities for the lipophilic drugs for better solubility and</li> <li>efficacy. This review deals with the importance of Nanostructured lipid carrier, their types, preparation methods,</li> <li>applications and its future perspectives.</li> <li>Keywords: Drug delivery systems, nano size, lipid, nanostructured lipidcarrier, solubility.</li> </ul>

BR/OPP01	Madhavi.G Tumeric: ability to prevent breast cancer
	Turmeric (curcuma longa) is a herb native of tropical south Asia long used for its medicinal properties .It is a member of zingiberaceae family. Tuberous rhizomes /underground stems used for treating of skin disorders, dis coloration of skin anomalies urine, blood, diabetes, swelling, hepato splenomegaly ,all nature of wounds .Stimulate digestion ,when paired with vitamin – d circumin (chemical constituent) may protect against Alzheimer's diseasesmodern scientific evaluation shows the wide use turmeric in may ailing condition like breast cancer . Now the research is ongoing regarding treatment of preventing of Brest cancer.by the chemical constituents obtained from turmeric Keywords: circumin, Alzheimer's diseases, blood anomalies,
BR/OPP02	Ms.Suvarna
	<ul> <li>A new validated bioanalytical high performance liquid chromatographic method for the estimation of simvastatin in human plasma</li> <li>Abstract</li> <li>Objective: Simvastatin reduces cholesterol and low-density lipoprotein and increases high-density lipoprotein. Objective of current study is to develop a simple RP-HPLC liquid-liquid extraction method for the estimation of simvastatin from human plasma without interference of endogenous substances. Methods: The chromatographic separation was achieved with Cosmosil C18 (250mm x 4.6 ID, Particle size: 5µ) column protected with a guard column. The mobile phase consisting of a mixture of acetonitrile: 0.1M acetate buffer, pH-3.5 (80:20 v/v) was used with UV detection at 238nm. The internal standard Atorvastatin structurally related to Simvastatin was used. As per EMA guidelines, the stability of simvastatin in human plasma was evaluated by freeze and thaw stability, short-term, long-term, and post-preparative stability studies. Results: Chromatographic separation of Simvastatin and Atorvastatin from human plasma. The correlation coefficient was found 0.992. The % recovery of Simvastatin from human plasma was found in the range of 96.34 to 97.64%. % CV obtained for the developed method was within the acceptance limit of less than 15%.</li> <li>Conclusion: It was concluded that the developed bioanalytical RP-HPLC method was selective, linear, accurate, precise, and cost-effective for the estimation of Simvastatin in human plasma. The proposed method can be used for supporting therapeutic drug monitoring and pharmacokinetic studies.</li> <li>Keywords: Simvastatin, Internal Standard, High Performance Liquid Chromatography, Human Plasma, EMA wither the set of the standard, High Performance Liquid Chromatography, Human Plasma, EMA wither the set of the standard, High Performance Liquid Chromatography, Human Plasma, EMA wither the set of the standard, High Performance Liquid Chromatography, Human Plasma, EMA wither the set of the structure studies.</li> </ul>
BR/OPP03	Akshada Tandale
	Transdermal patch on hypertension Abstract: Transdermal drug delivery system are adhesive drug containing device of defines surface area that delivers a predetermined amount of drug to the surface of intact skin at prolonged rate to reach systemic circulation .The TDDS has potential advantages of avoiding hepatic first pass metabolism, maintaining constant blood levels for longer period of time resulting in a reduction of dosing frequency, improved bioavailability, decreased gastrointestinal irritation and improved patient compliance . Hypertension is one of the largest deaths causing disease for the mankind. Since it is a chronic disease it necessitates long term treatment. The transdermal delivery has gained importance in the recent years.
BR/OPP04	A.S.V.L.Sruthi 3D QSAR Study, syntheses and antitubercular activity of some novel 1,4-dihydropyridines
	<ul> <li>Abstract Introduction; Among the small organic molecules, heterocyclic moiety holds a special place as historical pharmacophore, apart from synthetic interests. The 1,4-dihydropyridine moiety is a key feature of antihypertensive drugs like nitrodipine and nifedipine, for blocking Ca<sup>2+</sup> channels. Recently, compounds containing 1,4-dihydropyridine moiety, were also found to possess potential antitubercular activity. In this present protocol we have made an attempt to synthesize, analyze, some novel substituted 1,4-dihydropyridines for their potential antitubercular. The CoMFA study was performed to define 3D structural features required for 1,4-dihydropyridines to exhibit antitubercular activity.</li> <li>Materials And Methods ;To perform COMFA analysis, thirty-three diverse 1,4-dihydropyridines compounds with invitro antitubercular activity values were taken from the literature. The molecular modeling software SYBYL 6.7 installed on a Silicon Graphics workstation with IRIX 6.5 operating system was used for three-dimensional structure generation and molecular modeling studies. The syntheses of 1,4-dihydropyridnes were carried out by multicomponent reaction and structure was analysed by IR, NMR and Mass spectra. Then compounds were screened for their antitubercular activities. Results and Discussion ;In this study, we synthesized some novel 1,4- dihydropyridines based on the CoMFA model. The best CoMFA model was generated for the aligned training set compounds and showed good predicted activities with low residual values. The developed model was further validated by predicting the activity with MIC at 50 and 75µg/ml, respectively. CoMFA model was derived to establish the structure activity relationships towards antitubercular activity. The compound 7 of test set, exhibited moderate activity may be due to the presence of dimethyl amino group at the para position of aldehyde ring.</li> <li>Conclusion: In conclusion, we synthesized novel 1,4-dihydropyridines by adopting Hantzsch method. The gener</li></ul>

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BR/OPP05	In vitro Anthelmintic activity of Acmella oppositifolia
	Abstract Acmella oppositifolia is a plant belonging to the family Asteraceae that has high medical usage and has been recognized as an important medicinal plant with increasing demand worldwide. To investigate the in vitro anthelmintic activity of ethanolic leaf extract of Acmella oppositifolia. Indian adult earthworms (Pheretima posthuma) were used for this experiment. In this work, dried ethanolic leaf extract was suspended in 1% w/v carboxymethyl cellulose prepared in normal saline in three different concentrations (25, 50, 100 mg/ml). Albendazole suspension of the same concentration was taken as standard, and normal saline with 1% CMC was taken as a control. Worms were placed in petridish containing 15 ml of vehicle, standard, and test solution, and the time taken for paralysis (Vermifuge) and death (Vermicidal) of the parasite was noted. Ethanolic leaf extract of Acmella oppositifolia has shown significant anthelmintic activity at all concentrations of the ethanolic leaf extract when compared to standard. 25 mg has taken 38.15 minutes to produce paralysis and 70 minutes for death of worms. 50 mg has taken 25.08 minutes for paralysis and 53 minutes for death of worms. 100 mg has taken 19 minutes for paralysis and 38 minutes for death of worms. The current investigation leads to the conclusion that the ethanolic leaf Acmella oppositifolia has potent anthelmintic activity when compared with the conventionally used drug and has comparable potency to the standard anthelmintic drug, albendazole. Hence, we can use this herb as an alternate source of an anthelmintic drug. <b>Keywords:</b> Acmella oppositifolia, Anthelmintic activity, Albendazole, Vermifuge and Vermicidal
BR/OPP06	Sneha Durgadi
	<b>Abstract</b> The purpose of this research was to develop gastror tetentive drug delivery systems containing famotidine and domperidone famotidine and domperidone maleate and famotidine as a model drugs with an intention to administer simultaneously. A prompt attempt has been made in the development of gastroretentive tablets using different grades of hydroxyl propyl methyl cellulose. The method adopted for the preparation of gastroretentive tablets was wet granulation technique. The prepared tablets were evaluated for precompression parameter like angle of repose, untapped bulk density, tapped bulk density, Carr's consolidation index, and Hasuner's ratio. Post-compression parameters like general appearance, hardness, thickness, friability, weight variation, uniformity of drug content, in-vitro buoyancy studies, swelling study, in-vitro dissolution studies were conducted. The results of in-vitro release of domperidone maleate and famotidine from tablet containing blend of HPMC K4M and HPMC K15M in the ratio 1:1 (F11) was found to release 93.26% and 97.62% for domperidone maleate and famotidine respectively at the end of 12 hrs and this formulation was considered as best formulation. All the formulations are subjected to different kinetic investigations such as zero order model, first order model, Higuchi model, Korsmeyer and Peppas model. The results indicated that almost all of the designed formulations are following first order release kinetics with Non-Fickian diffusion mechanism. Stability study was conducted for successful formulation according to ICH guidelines. The results have shown that there is no much variation in the physical appearance, drug content and drug release profile. These results confirm that the formulations are stable. <b>Keywords:</b> Famotidine, domperidone maleate, gastro retentive drug delivery system, HPMC, in-vitro swelling and in-vitro Dissolution.
BR/OPP07	Pranali P. Yadav Analytical method development and validation of metoprolol tartrate and telmisartan in bulk dosage
	form.
	Abstract RP-HPLC method has been developed and validated by using Metoprolol tartrate and Telmisartan by using ODS Hyper Sil C18 (4.6mm X 250mm X 5 $\mu$ ) as a stationary phase and Methanol: Buffer (pH -3) with ratio of (80:20) as a mobile phase by isocratic elution at a flow rate of 1.0ml/min. The detection was carried out at 230nm. The drugs are eluted at retention time 2.57 min for metoprolol tartrate and 4.87 min for telmisartan, respectively. The method is linear in the range 30- 70 $\mu$ g/ml and 110-150 $\mu$ g/ml with regression coefficients 0.997 and 0.998 for metoprolol tartrate and telmisartan respectively. The method is precise within the acceptable limit (%RSD -1.52). The proposed method showed linearity, accuracy, precision, specificity, LOD, LOQ, and system suitability results within the acceptance criteria of ICH. The method can be applied for the routine analysis of pharmaceuticals formulation.
BR/OPP08	Balda Aayushi Evoluction of memory impoirment and antionilantic activity of coherentin in the presence and observes of
	Mulminatm
	Abstract Introduction and Objective:
	Gabapentin (GBA) is a prescription medication known as a gamma-aminobutyric acid (GABA) analogue GABA is a role in seizures and the transmission of pain signals. MulmingTheoptains fruit pulp of Manaifers
	indica, mangiferin, the main constituent of Mangifera indica, has been reported to possess antioxidant, anti-inflammatory, immunomodulation and anti-apoptosis activities. This study investigated the Memory Impairment and Antiepileptic Activity of GBA in the presence and absence of Mulmina. <b>Methods</b> :
	Clonic convulsions were induced by administrating PTZ (45mg/kg) through the i.p. route in mice. Mulmina (80ml/kg; oral), and Gabapentin (200mg/kg; i.p.) were administered as a combinational drug at the interval of 2hr and 1hr respectively before PTZ. The anti-epileptic and MI activity were examined on every 7th day during the study. The MI activity was assessed by RAM and T maze task. <b>Results:</b>
	The antiepileptic and memory impairment activity was higher in GBP compared to the control. In combination, GBP+MulminaTM showed significant antiepileptic activity as well as decreased cognitive impairment when compared to both the control and individual GBP group. MulminaTM alone manifested slightly synergistic antiepileptic activity and better memory enhancement activity in the PTZ model. The levels of AChE and TBARS were enhanced in the GBP group,

	and the levels of endogenous antioxidants such as SOD, CATALASE and GSH were decreased in comparison with control and only GBP treated. <b>Conclusions:</b> The findings of the study reveal the MI potential of GBP and correction by co-administration of MulminaTM. However, further study is required to establish the molecular mechanism involved in MI caused by GBP.
BR/OPP09	<ul> <li>Poorna Chandra S M Development and evaluation of moxifloxicin hydrochloride loaded nanoparticle insitu gel for opthalmic drug delivery systems Abstract Background: Moxifloxacin hydrochloride is a quinolone antibiotic administered via conventional ophthalmic drops shows low ocular bioavailability. The hydrophilic nature of the drug restricts its entry into deep corneal tissues in bacterial infections of eye.</li> <li>Objective: The present work aims to determine moxifloxacin hydrochloride's therapeutic efficacy by combining nanoparticles (NPs) and in situ gelling systems.</li> <li>Method: A custom design assisted experimental trials via ionotropic gelation using chitosan resulted in nanoparticles. The formulations were evaluated for drug entrapment efficiency, particle size and drug release profiles. The optimum formulations obtained were characterized for particle size analysis, SEM, and DSC and were incorporated in situ gel. The gel was studied for gelling capacity, viscosity, in-vitro drug release, and ex-vivo drug permeation via goat cornea.</li> <li>Results: The 16 formulations prepared showed drug entrapment in the range of 70.9±0.08 to 89.7±0.09%. The drug release from the formulations repared between 67.3±0.03 to 90.6±0.08% for a 24 h study period. The optimum formulation showed a mean particle size of 497nm. The ex-vivo corneal permeation of NPs and optimized in situ gel formulation exhibited a higher flux and permeability coefficient than marketed drops (0.5% w/v). The comparative antimicrobial effect of the formulation against marketed drops exhibited a higher flux and permeability coefficient than marketed drops (0.5% w/v). The comparative antimicrobial effect of the formulation against marketed drops (0.5% w/v). The comparative antimicrobial effect of the formulation studies on rabbits</li> </ul>
	concluded no irritation. <b>Conclusion:</b> Ophthalmic delivery of Moxifloxacin hydrochloride nanoparticulate in situ gel would be a promising approach for improving ocular penetration with a prolonged therapeutic effect.

Keywords: Moxifloxacin hydrochloride, Nanoparticle, in situ gel, anti microbial effect

# Pharmacovigilance

# **ORAL PRESENTATIONS**

ABSTRACT NUMBER	COMPLETE ABSTRACT
PV/OP/01	<ul> <li>Rakshith D</li> <li>An insight view towards Pharmacovigilance of ASU &amp; H DrugsAbstract:</li> <li>Introduction: Pharmacovigilance is the science of detection, assessment and prevention of adverse drug reaction (ADR) in humans. ADR is a response to a drug which is noxious and unintended, which occurs at normal doses used in man for prophylaxis, diagnosis or therapy of disease or for modification of physiological function. WHO defines Pharmacovigilance as; it is the science and activities relating to detection, assessment, understanding and prevention of adverse effects or any other possible medicine related problem.</li> <li>History: The tragedy issue of Thalidomide led to the introduction of various stringent measures.</li> <li>Pharmacovigilance centres in India: India governs the following centres for Pharmacovigilance of ASU &amp; H Drugs.All India Institute of Ayurveda, New Delhi is the National Pharmacovigilance Co-ordination Centre. There are five Intermediary centers – NIA Jaipur, IPGT &amp; RA Jamnagar, NIS Chennai, NIUM Bangalore, NIH Kolkata and totally74 peripheral centres are there for ASU &amp; H Drugs.</li> <li>Functions: Documentation of AJDR, developing a system-wise database of ADRs for ASU &amp; H drugs, reporting of misleading advertisements of ASU &amp; H drugs for regulatory actions.</li> <li>Conclusion: Pharmacovigilance can also be considered as _Drug Safety<sup>4</sup>, relating to the collection, detection, assessment, monitoring and prevention of adverse effects with pharmaceutical products. In this present era, there is aneed to educate and encourage about analyzing and reporting of any adverse reactions that occur in a patient for the global acceptance of Ayurvedic drugs.</li> <li>Keywords: Pharmacovigilance, Peripheral centre, Adverse drug reaction, Drug safety</li> </ul>
PV/OP/02	<ul> <li>Richa gad</li> <li>Evaluation of Prescribing pattern of chemotherapy drugs, monitoring and reporting of adverse drug reaction in patients undergoing chemotherapy for various types of cancers at tertiary care hospital.</li> <li>Abstract:</li> <li>Introduction: Cancer is class of disease in which a group of cells display uncontrolled growth, invasion and sometime metastasis. The number of Indians suffering from cancer is projected to increase to 29.8 million in 2025 from 26.7 million in 2021. The effective modalities used for cancer treatment include surgery, radiation and chemotherapy. Drug use research is a methodological approach for quantifying and assessing the process of prescribing, dispensing and consuming medicines, as well as for evaluating adverse drug reactions to improve the effectiveness of the therapy.</li> <li>Objective: Objective of the study is to assess prescription pattern, to identify and report the adverse drug reaction among cancer patients receiving chemotherapy.</li> <li>Methodology: A prospective observational study was conducted at Hallamma Kerudi Cancer Hospital Bagalkote for the duration of 6 months. Age more than 15 years, either of sex were included, chronically ill patients were excluded.</li> <li>Results Out of 120 enrolled patients' majority was in 41-60 age group, carcinoma of head and neck was most commonly reported in males followed by breast in females. Carboplatin is mostly used as adjuvant drug &amp; supportive drugs. On influence of variables on DRPs there is association between DRPs and Age, p value 0.0342* OR:2.161. All patients (100%) receiving anticancer chemotherapy had ADRs, alopecia (62.3%) followed by vomiting (41.4%) and maximal reaction were in grade 1(65.9%). Upon WHO-UMC causality assessment, majority of ADRs were rated as possible (89.04%), Hartwig severity scales majority of ADRs were rated as mild (40.92%), Modified Schumock &amp; Thornton Preventability report were rated as definitely preventable (71.75%), Predictable scale majority of reports were rated a</li></ul>

PV/OP/03	Ms. Aishwarya laxmikant katawakar
	A prospective study on monitoring and reporting adverse drug Reactions in admitted patients at tertiary care teaching hospital
	Abstract:
	<b>Background</b> : ADRs are one of the major factors contributing to morbidity and mortality. Every time a patient is exposed to a medicinal product, it's a special circumstance, and there's no way to predict what might happen. The primary goal was to identify and report adverse medication responses. Methods: This prospective, observational, spontaneous reporting study was carried out in a tertiary care teaching hospital in Bagalkote, Karnataka, India, over the course of six months. Results: During the course of the trial, 114 patients reported a total of 154 ADRs. Male patients (54.54%) reported a greater percentage of adverse drug reactions (ADRs) than female patients (45.46%). In the study population, the most frequently encountered ADRs were hypotension, nephrotoxicity, constipation, and loose stools. Antihypertensive (20.7%), anti-TB (17.5%), and antibiotic (14.93%) medication classes had more adverse drug reactions (ADRs) than others. Conclusion: Regularly tracking and reporting ADRs can reveal information about their efficacy and pattern of occurrence. Similar reporting initiatives are required to inform and raise awareness about the reporting of ADRs among hospital medical staff. Studies of this nature that report ADRs will aid in promoting the safety of medication therapy. The studies under reporting of all ADRs was a flaw. In our investigation, the results of the ADR following rechallenge could not be examined due to a lack of patient follow-up, which probably wasn't done in some of the reports.
PV/OP/05	Makkapati manasa
	To study the protective effect of flax (Linum usitatissimum) seed oil on muscle atrophy induced by dexamethasone
	in rats.
	Abstract
	Age-related loss of skeletal muscle mass and function is associated with physical frailty and increased risk of morbidity(chronic diseases), in addition to all-cause mortality. The loss of muscle mass occurs incipiently from middle-age ( $\sim$ 1%/year), and in severe instances can lead to a loss of $\sim$ 50% by the 8–9th decade of life. The main objective of this study is to evaluate the antioxidant property of flax seed oil in muscle atrophy.
	Methods&Material: Dexamethasone injection was used to induce disease. Flax Seed Oil was administered orally to the animals after day 7 until end of day 28. Body weight, behavioral study was carried out assessing muscle mass and glucose. FSO is rich in antioxidants and Omega- 3 Fatty acids so its administration shows significant changes in the diseased rats.
	<b>Results</b> : After 28 days, flaxseed-treated rats showed significant increases in body weight and a decrease in blood glucose levels. After three weeks, blood glucose levels, muscle mass (body weight),momentary changes in rats and HDL levels were all significantly higher in the dexamethasone community. Flaxseed oil protects against the biochemical and histopathological changes caused by dexamethasone administration.
	<b>Conclusion:</b> The findings of this study indicate that flaxseed oil protects against dexamethasone-induced skeletal muscle atrophy and that this protective effect is due to flaxseed oil's antioxidant properties.
PV/OP06	Sahana n bhat
	Automation opportunities in Pharmacovigilance
	Abstract
	Medicine have impact on health of people. Pharmacompanies ensure that benefit of drug is more than risk. But there
	nave been adverse cases reported by patients. Thus arise a requirement of new technology, that is automation opportunities. Intelligent automation in pharmacovigilance has been working to evaluate various process to facilitate innovation with automation in all the areas. ICSR process was the first process for automation because of its resource intensive nature. It include methods like it starts with adverse event report which was then grouped into case intake, case processing, case report. Nineteen Trans'Celerate member companies have tried to complete a survey for the understanding of Automation opportunities across the ICSR process. Benefit of automation and risk of automation were combined to identify Intelligent automation opportunities. Result and conclusion-Fifteen Trans'Celerate companies responded to survey and stated that ICSR process step with efforts expected high automation benefits and low risk. Automation results in lower cost and also help to reduce errors. Automation also help patients by providing safety signals.

Keywords- pharmacovigilance, automation, ICSR, drug safety signals.

PV/OP07	Anurag r sattigeri
	Pharmacovigilance (Sustainability and management)
	The drug safety ecosystem is becoming increasingly complex and difficult to navigate with More information channels, greater reporting, and different therapies. To manage this Complexity, firms have tripled their annual pharmacovigilance (PV) spend as a percentage of Total sales – from 0.3% in 2003 to over 1% in 2017. In fact, if drug recalls are any indication Of drug safety, performance has deteriorated (see Exhibit 2). Worse still, financial loss is Only one problem; loss of life due to Adverse Drug Reactions (ADRs) is a bigger concern With thousands of lives (over 100,000 in the United States alone) lost every year due to Undisclosed/undiscovered side effects of drugs. Main goal and objective;
	The main objective is to study the sustainability ecosystem as well as the management regarding pharmacovigilance. To understand it better we have taken a case of COVID-19. Where the interaction between the drugs has been given As well as the cause of ADRs
	<b>Conclusion:</b> solving the case by taking artificial intelligence into consideration. Automated processes will generate and test hypotheses, Predict likely safety issues, and suggest potential Interventions to minimize those risks. These advancements Will support a much stronger emphasis on the science of Preventing ADRs, which is the most important role of PV. In the future, PV professionals will be able to devise more Precise definitions for the proper use of a drug—and more Sophisticated approaches for controlling that use.
	The principal goal of pharmacovigilance (PV) is to Influence patients and healthcare professionals to use Medicines more safely. Companies spend billions of Dollars on PV every year hoping to achieve exactly that. Yet adverse drug reactions (ADRs) remain a major cause Of death. In fact, ADRs account for nearly 7% of hospital Admissions in the U.S. alone, according to some estimates—And fully half of these may be avoidable, according to Other studies. That presents important challenges for Pharmaceutical companies
PV/OP08	Yashaswini kj
	Identifying ways to enhance antimicrobial stewardship activities of pharmacists serving rural primary health centres
	Abstract
	<b>Background</b> : Monoclonal antibodies (mAbs) are now established as targeted therapies for wide range of new indications and have been a treatment option for many chronic immune-mediated diseases. However, administration of mAbs carries the risk of numerous adverse effects. The detection of safety signals is the major step in ensuring post-marketing safety of mAbs. Objective: This study was aimed to generate signals (unlisted adverse drug reactions) of five mAbs using disproportionality analysis in FAERS database. Methodology: Attempt was made to detect all the serious adverse event syndromes from the FAERS database for the selected five mAbs which are not identified during premarketing stage. Disproportionality analysis was done using Reporting Odds Ratio (ROR), Proportional Reporting Ratio (PRR) and Chi- square test with 95% confidence interval. The threshold for statistical significance was predefined as a PRR of $\geq 2.0$ with a Chi-squared test statistic of $\geq 4.0$ , at least three reports ( $n \geq 3$ ) of that preferred term (PT) and ROR value was $\geq 2.0$ . Results: The syndrome adverse events reported more frequently then expected (signal) are 41, 29, 22, 13 and 12 for infliximab, adalimumab, tocilizumab, golimumab and certolizumab respectively. The commonly observed syndrome signal among all the mAbs is facet joint syndrome and irritable bowel syndrome. Discussion: Disproportionality approaches are widely used to detect statistical relationship between products and events in the databases of safety reports. Disproportionality measures always look for unexpected frequencies of reports in the dataset in assessment with general reporting frequencies. Conclusion: Disproportionality studies are considered to be very important in current scenario, where there is a growing demand for more safe drugs. The present study using the FAERS pharmacovigilance database suggested few safety signals for the mentioned mAbs. Hence, cohort and epidemiological studies are recommended to validate these results and establish the safety
PV/OP09	Dr. S anusha
	Case study on Propranolol induced bradycardia in Mucopolysaccharidosis type I-H/S
	Mucopolysaccharidosis is a rare inherited lysosomal storage disorder. Deficiency or malfunction of specific lysosomal enzymes leads to accumulation of abnormal complex carbohydrates like mucopolysaccharidosis or glycosaminoglycans in the arteries, veins, CNS, liver, spleen, bone marrow, joints, eyes, ears, skin and teeth. This eventually causes progressive damage to cells, tissues, various organs of the body. There are many types of MPS based on the deficiency of lysosomal enzyme. This case briefs about Mucopolysaccharidosis type I-H/S(MPS-IH/S). It is an extremely rare disorder that refers to individual who have severe form of scheie syndrome and less form of Hurler syndrome. There are very few cases of MPS-IH/S reported in India. The purpose of this article is to describe a rare case of Propranolol induced bradycardia in Mucopolysaccharidosis type I-H/S in 18-year Indian child with clinical, radiological and biochemical features.

Keywords: Mucopolysaccharidosis, Hurler- Scheie syndrome, Propranolol, bradycardia

PV/OP10	Mohd.ramish khan
	Pharmacovigilance (Overview of PVPI in INDIA)
	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. Thus, for safety medication ADRs monitoring required for each medicine throughout its life cycle, during development of drug such as pre-marketing including early stages of drug design, clinical trials, and post-marketing surveillance. PV is concerns with the detection, assessment, understanding and prevention of ADRs. <b>Challenges</b> :The biggest challenge facing the PVPI is the gross underreporting of adverse effects. There are many reasons for this, including lack of medical expertise in drug administration and adequate skilled resources in PV, and inadequate nationwide awareness of PV. The other challenges are infrastructure which are still conservative, wide time interval between guidelines and laws, orthodox attitude to new drug research, and PV and regulatory inspections that are almost non-existent. The system needs to be refined with the help of PV experts in collaboration with information technology (IT) because India boasts of a highly developed IT sector. Since PV deals with large numbers of ADRs, it would be wise for PV experts to collaborate with software professionals to develop and build a robust system. Software programs developed can be used for collection and analyses of data sets, determining trends of drug usage in various disease areas, compliance, medication errors and drug interactions leading to ADRs. Moreover, with more clinical research and PV outsourcing work now being conducted in India, it has been worthwhile for the DCGI to invest in a robust PV system to enable assessors and decision makers to analyze safety data and take regulatory decisions without the need to depend on other countries.
	The ultimate safety decisions on medicines may need considerations of comparative benefit/risk evaluations between products for similar indications.
PV/OOP01	Dasrao a patil Investigation of anticonger antidibatic antiinflammatory activity of athenalic Extract of Tampicalic externa and
	leaves extract
	Abstract:
	In vitro investigation of anticancer antidibetic and anti-inflammatory activity of ethanolic extract of terminalia catappa red leaves reveals that the given sample extract, which was utilized for the activity of antidiabetic by using alpha amylase enzyme. The given sample taken in the different. Concentration, 100 to 1000 $\mu$ g/ml. the results showed that the extract showed poor percent inhibition of the amylase enzyme for diabetic activity. The anticancer activity of the concentration range of 10,20,40,80 and 100 ug/ml plant extract showed good percent inhibition MCF-7 (breast cancer cell line) cell line as compared to standard drug. In anti-inflammatory activity The given Plant extract (1000 $\mu$ g/ml), which was utilized for the activity of anti- inflammatory by using egg albumin denaturation assay. The results showed that the plant extract showed good percent inhibition of the protein denaturation, which indicates anti-inflammatory activity
	Keywords: Anti-inflammatory activity, antidibetic activity, anticancer activity, ethanolic extract of <i>terminalia Cattappa</i> red leaves
PV/OOP02	Jaswant singh
	Complete ADR profiling of "Medicated, Regular and Ayuvedic Toothpaste" and their ingredient for drug
	Abstract: The new era of 2022, demands the safety of present populations with coming generation from the chemicals, drugs and their related products. In same manner the concept drug repositioning is basically linked to recycling the safest use of drug again on the basis of clinical trials reported and ADR profiling of it. Many of toothpaste uses are relates to issues and misuses of medicated, herbals and regular toothpaste may be the reason of ADR in many of patient cases. ADRs occur as a result of the extension of the desired pharmacologic effects of a drugs, often due to the substantial variability in the pharmacokinetics and pharmacodynamics seen among patients. Many of reported brands herbals, medicated and regular that were in regular use and prescribed by the dentists are: Colgate, Dabur Lal. Pepsodent, Sensodyne, Sensodent, Elsodent, Senquel, Enshine, Vicco, Herbodent and Himalyas brands are present in current market scenario. Many of un- reported Brands, like: Patanjali, Oral-B, Vicco, Himalya, Close Up, Amway (Glister), Aqua white, Biotique, Chicco, Pediflor, Mama Earth, Purexa, Pepsodent, and Glistodent (Biochem), Emoform and RA Thermoseal. Our findings on solicited and reported ADRs listed are: ulcers, cracking lips, rash on the mouth, chapped lips, itchy or burning sensations. Our survey and data studied on reported ADRs defines there were no genetically problems were reported till that date in sampled populations. Another our survey and data studies on reported ADRs defines there are no reported ADRs of toothpaste. Behind this project we are working on mapping of all marketed toothpaste those unsolicited ADR'S are not reported on marketed brands of all kind of toothpaste iil that time. Also the complet ADR is profiling of the ingredients used in toothpaste will help us in the recent concept of drug repurposing that is the project main aim.
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	Kamble swapnil shivaji
PV/OOP03	Post authorisation safety and effectiveness studies will complement the pre-marketing studies for vaccine for covid-19.
	<b>Abstract :</b> In order to, address serious concerns about efficacy and safety, the regulators requested post-authorization studies when covid-19 vaccines were initially approved. After a medication has been approved, a study known as a post-authorization safety study (PASS) is carried out to learn more about its safety or to assess how well risk- management strategies are working. The Emergency Use Authorization (EUA), a new mechanism, has been put in place for the Covid-19 vaccine. While businesses continue to gather further safety and efficacy data to support full licensure, the objective of EUA has always been to save lives by making life-saving vaccines and drugs accessible. In the past, EUAs have received vaccines against the ebola, enterovirus, H7N9, and Middle East respiratory syndrome outbreaks. The covid-19 vaccine is the most effective when compared to other vaccines. The European Medicines Agency (EMA) and national competent authorities (NCAs) in EU member states have implemented this pharmacovigilance plan, which was created specifically for the COVID-19 vaccines, due to the urgency of the public health situation and the extensive immunization campaigns that are being planned globally. This is done to make sure that any new information discovered following the marketing period is carefully examined and swiftly made available to the general audience.
	Swati parcha
PV/OOP04	Complete ADR profiling of marketed brands of pantoprazole for drug repurposing
	Abstract: Drug repurposing have many of possible targets like existing generic drugs, current branded compounds (protected under IPR) and shelved compounds (present in pharmaceutical industry libraries proved to be safe in humans) before going under drug repositioning ADR profiling of the molecule is first criteria. Many of old molecules were in regular use and customers are used to of these molecules medicine without knowing their good and bad effects on their body. Population health is degrading regularly due to unknown hazards of regular used medicines. Population is using these chemicals for their health prospectiveness but regular and chronic use of the medicines. Population is using these chemicals for their health demedicine PPi's (Proton Pump Inhibitors) have the main space on every patient prescription. Another issue is related to their regular user population which is so high in the world to control symptom of hyperacidity. Many of reported adverse drug reactions (solicited) occurs often due to prolongation of the desired pharmacodynamics seen among patients. Many of studied and of solicited ADR on reported brands like: Proponix-40, Panta-40, Topp-40, and Nupenta-40 are under studies and some reported found with solicited ADRs reported in regulatory bodies are listed as: headache, dizziness, stomach pain, vomiting, joint pain, and dry skin with genetically transmission reported till. During studies on ADRS on pantoprazole molecule found organ impairment but the studies during pregnancy it may show effects like; major malformations. The studies defines that no disability, bacterial infections (as life threatening effect) and no death were reported in solicited ADR. Working on our objective behind mapping of highly used pantoprazole is very clear because it's a widely used proton pump inhibitor of the world. Every doctor in their clinical trials have specific space of pantoprazole in their basic prescription has have proton pump inhibitor (especially Pantoprazole) to overcome all the disease related to
	Key words: Proton Pump Inhibitors, Pantoprazole, Unsolicited ADRs, Acid Reservoir, Antacid, Drug Repurposing
PV/OOP05	Mayank dwivedi
	Complete ADR profiling on marketed brands of cefixime for drug repurposing
	<b>Abstract</b> : Drug repurposing and repositioning is in recent trends for that purpose the post marketed ADR studies of different brands of a molecules that defines the safety of population is necessary. It's an early stage drug repositioning research that is fast, cheap and good for rare disease. The target behind this is the current and coming generation's safety from the chemicals, drugs and their related products which are in regular use to cure many of disease & also the misuses of drug by the prescriber in general population of India especially the broad spectrum antibiotics like: Cephalosporins and Chloramphinicols are very common and used to drugs. Adverse drug reactions occurs often due to elongation of the desired pharmacologic effects of a drugs that happens due to the substantial variability in the pharmacokinetics and pharmacodynamics seen among patients. We have many solicited studies of reported brands like: Taxim-O, Zifi, and Maha-cef that founds with diarrhea, skin rashes, ulceration, hepatotoxicity, and headache are reported ADRs of it. For further studies the unsolicited studies on un-reported brands: Cefix, Ceftas, Cefolac, Zipix, Safxim, Omnix, Tox-O and many other marketed brands are continue under our project. In reported solicited ADRs Cefixime (cephalosporin antibiotic) founded with some genetically problems (Gene Mutation), organ impairment, pregnancy (ADRs occurs in chronic use of this molecule and in double dosing), no disability reported, no life threatening effect and no death noted till that date. Our objective behind mapping of cephalosporin derivative is very clear because it's a widely used broad spectrum antibiotic of the world. Every basic prescription has have cephalosporin's (especially Cefixime) to overcome all the disease related to this molecules therapies. The reported solicited ADR of this molecule in later stage associated to many of other complications these are not reported till. So during this project we are working on those new ADR'S and unsolicited ADR'S which are n

Key words: Cephalosporin's, Cefixime, unsolicited ADRs, Broad Spectrum, ADR Associated Complications, Anti-Biotic, Brands

	E.R Nagasudha
PV/OPP01	The Rise of Antibiotic Resistance: A Growing Threat To Public Health
	Abstract:
	Antibiotic resistance is a growing problem that severely threatens global health. It occurs when bacteria develop the ability to survive exposure to antibiotics, which were once highly effective at killing them. This can lead to the spread of difficult or impossible diseases to treat with existing drugs, making them a significant public health concern. There are several causes of antibiotic resistance. One of the main drivers is the overuse and misuse of antibiotics. For example, people may take antibiotics when they are not needed, such as for viral infections like the common cold, or may not finish their entire course of treatment. This can lead to the selection and proliferation of antibiotic-resistant bacteria. Poor infection control practices, such as inadequate hand washing, can also contribute to the spread of antibiotic-resistant infections. In addition, the development of new antimicrobial drugs has not kept pace with the emergence of antibiotic resistance. One is to reduce the unnecessary use of antibiotics and promote appropriate prescribing practices. This can involve educating the public and healthcare providers about the appropriate use of antibiotics, as well as implementing prescribing guidelines and stewardship programs. Another strategy is to develop and maintain a pipeline of new antibiotics and alternative treatments, such as bacteriophages and antimicrobial peptides. Additionally, surveillance and monitoring systems can help track the emergence and spread of antibiotic-resistant bacteria, inform public health interventions, and guide research and development efforts.
PV/OPP02	Poonam rajendra hrambane
1 1/01102	Further the dissocube technology for inhibit anti hiv i target to $cd4 - t$ cell by nano suspension
	Abstract
	Abstract The human immune deficiency virus (HIV) is the causative agent of acquired immune deficiency syndrome (AIDS). According to Global HIV statistics, about 33.9 million- 43.8 million people were living with HIV in 2021. The development of effective antiretroviral drugs and the scientific accomplishments in HIV research over the past twenty-six years have been challenging. The pathogenesis of HIV disease is the basis of a decrease in the number of CD4-T cells. These _helper T cells are responsible for several roles for other immune residents, and their loss leads to profound immunosuppression. The close relationship between the HIV-1 life cycle and the activation state of cells supporting viral replication results in a dynamic interaction between co-infections and HIV-1 replication in infected people. Nanosuspension is a convenient tool for the drug delivery system. Most recently discovered drugs are insoluble or poorly absorbed due to their flexible characteristics and various advantages. Dissocube is a technology for homogenization and preparation for a new form of particle size it's having, high pressure for producing new insert texture cavitation of desired particle size to form a nanosuspension. Nanotechnology suggests a unique opportunity to unite and enhance different pharmacological profiles of antiretroviral medication with more convenient drug administration and potentially better patient compliance with HIV therapy. The development of nanotechnology has introduced a new opportunity to improve the therapeutic efficiency of the dosage form. Nanomaterial's can deliver the drug to the targeted area and have fewer side effects. A Nano range of less than 100 nm can easily penetrate the cell, and sensitivity to various external and internal stimuli and immune activation is a desirable component.
	Key words: Nanosuspension, AIDS, HIV, CD4- cells, Antiretroviral, NDDS
PV/OPP03	Kanika Pharmacovigilance: Future Challenges and Opportunities Abstract Pharmacovigilance is concerns with the detection, assessment, understanding and prevention of ADRs and also has traditionally involved in mining spontaneous reports submitted to national surveillance systems. PV link premarketing data with human safety information observed in the post-marketing phase and it also helps to the patients get well and to optimally managed or ideally, avoid illness is a collective responsibility of industry, drug regulators, clinicians and other healthcare professionals to enhance their contribution to public health. In the field of drug safety and regulation, a number of challenges have to be faced in the near future like COVID-19 pandemic highlighted how relevant pharmacovigilance and proper risk communication during public health emergency are as well as the development of advanced methodologies including machine learning techniques and the availability of large amount of electronic healthcare data offer opportunity for optimizing drug benefit-risk profile evaluation in real world setting. The increased access to large scale distributed database networks provides new ways and opportunities to monitor the post-marketing safety of vaccines and medicines and to generate real-world evidence to support decision-making. To date, Sentinel has developed one of the largest distributed database networks for the assessment of medical product safety. Huge amounts of electronic data present an opportunity to apply artificial intelligence (AI) techniques to improve drug safety assessment. Information extraction, using natural language processing (NLP) techniques and text mining to gather relevant insights from available, largely unstructured sources, has been gaining importance within the field of clinical research. Digital therapeutics (DTx) can be defined as —technologies that deliver medical interventions directly to patients using evidence-based, clinically evaluated software to treat, manage, and prev

	M D Awaise Iqbal Baig
PV/OPP04	Evaluation of Anti-Parkinson's Activity of Novel Glitazones on Experimentally Induced Mouse Model of Parkinson's Disease
	Abstract
	Parkinson's disease (PD) is a slow and on-going chronic disorder in which nerve cells degenerate. The disease's primary pathological basis is hypokinesia, or loss of movement. Such signs include stiffness of muscles, tremor, and hypokinesia, as well as secondary manifestations such as abnormal posture, gait, mask-like appearance, and sialorrhea. The disease could have a genetic component and be inherited at birth. Some treatments for PD include plants of the mucuna family of tropical vines, some of which grow seeds that are rich in levodopa. Levodopa is a direct molecular precursor of dopamine, a neurotransmitter.
	The discovery studio program was used to perform molecular docking on the thirty-three virtual Glitazones. The docking analysis revealed that two molecules, C7 and C25, demonstrated significant activity with receptor 3CS8. These two compounds were subjected to additional anti-Parkinsonian activity screening in a mouse model. The pharmacokinetic activity of the two compounds was determined, and C7 demonstrated a greater C-max, T-max, and T1/2 than C25, and was therefore chosen for further evaluation. Parkinson's disease was induced in animals at a dosage of 1.5 mg/kg s.c. using rotenone, and the compound C7 was tested for anti-parkinsonian activity at three different doses of 10mg/kg, 20mg/kg, and 30mg/kg. The compound's activity was determined using behavioural parameters on days 0, 7, 14, and 21 of the study, as well as by estimating anti-oxidant activity in brain tissues following scarification on day 21. By alleviating oxidative stress, the compound C7 has been shown to have anti- Parkinson's activity. Additional research is necessary to validate and advance this hypothesis.
	Key words: PPAR-7, Glitazones, Molecular Docking, Pharmacokinetics, Rotenone, Anti-oxidant, AChE.
	Y Mohammed Tausif
PV/OPP05	Prevalence and Risk Factors of Malnutrition among Children Aged Less Than Five Years Attending Primary
	Abstract
	There was a lack of evidence on the various parameters influencing malnutrition in less than five years child in rural areas. The main aim of the study is to analyse the frequency of underweight, stunting, wasting in relation with concomitant aspects in Primary Health Care Centre of Anantapur District. This was a cross sectional study conducted in a Sub Centres and Anganwadi Centres located in rural areas of Anantapur District, Andhra Pradesh in India. Total of 768 children were contributed in the study with age group of $\geq$ 5 years. An appropriate information was collected about the children's socio-demographics, utilization of government nutrition programs of government and WHO anthropometric parameters. Chi-square fisher exact test was used to associate predictors with malnutrition measures. Height-for-age z-score for stunting, weight-for-age z-score for under nutrition, and weight-for-height z- score for wasting were computed in WHO anthroplus software. The frequency of stunting, underweight, and wasting among PHC children was found to be 46.35%, 51.56%, and 75% respectively. There was no extensive difference in the nutritional measures among male and female children. Parameters such as literacy rate of parents and type of family were related with malnutrition characteristics. The study concludes that, the prevalence of stunting, underweight, and wasting among children was significant among family type; sub centric and illiterate parents.
PV/OPP06	ABU S Biswas
	A study to evaluate the development of seizures in Rat model oh Alzheimer's disease
	Abstract
	Alzheimer's Disease (AD) is a progressive neurodegenerative disorder that can significantly affect daily living
	activities. Epilepsy can occur in AD patients as a part of the classical features such as deteriorated cognition, behavior and functionality. Seizure development can occur in both familial and sporadic AD. However, seizures associated with sporadic AD lack sufficient evidence. There are a few treatment options to treat seizure development associated with AD such as the use of anti-epileptic drugs. However, these existing treatment strategies have certain disadvantages that can cause cognitive impairment when used in AD patients. Evaluating seizure development in sporadic AD can provide insights into the common biomarkers associated with both epilepsy and AD which can benefit in identifying novel targets for attenuating the seizure susceptibility in AD patients or slowing the advancement rate of AD pathologies.
	The current research work was undertaken to studying seizure development in AD animal model. AD was induced in Wistar Albino rats by intra cerebro ventricular (ICV) administration of A $\beta$ 1-42 peptide. Seizure development was monitored by EEG recording on the 0th, 30th and 60th day of the study. The study also involved the estimation of various common biomarkers involved in the pathogenesis of seizures associated with AD such as A $\beta$ and ptau. The development of AD in the animal model was confirmed in the behavioral study. EEG monitoring showed visibly significant spikes in the waveforms of the disease-induced animals which could indicate seizure development. Future studies can provide an insight into basic mechanisms involved in the pathogenesis of seizures associated with AD.
	Keywords: Alzheimer's disease, Amyloid-beta 1-42, Epilepsy, EEG, tulsi.

	Irshad Wani
PV/OPP07	Evaluation of therapeutic potential of hydroalcoholic extract of Proso millet in Aβ1-42 induced mice model of Alzheimer's disease
	Abstract:
	Introduction and Objective
	Alzheimer's disease (AD) is a serious CNS disorder of multifactorial origin, it impairs memory and cognition. Chronic inflammation is recognized as a key player in both the onset and progression of AD. However, several antioxidant therapies and nonsteroidal anti-inflammatory drugs have failed in clinical trials. Therefore, it is of vital importance to expand the scope towards novel targets. Recent studies have reported pharmacological inhibition of soluble epoxide hydrolase (sEH) as a new therapy for AD. Proso millet, a cereal crop belongs to family Gramineae, and has been widely studied for its antioxidant and anti-inflammatory effect. The health benefits of Proso millet are mainly due to various antioxidant compounds, such as $\alpha$ -tocopherol, carotenoids, polyphenols, and active polysaccharides, which could protect human tissues and organs from oxidation. In the current study we focused on evaluating the therapeutic potential of Proso millet against A $\beta$ 1-42 induced mice model of Alzheimer's disease by targeting sEH as a potential target. Methods
	Hydroalcoholic extract of Proso millet (HEPM) was subjected to preliminary in-vitro sEH inhibition activity followed by investigation against A $\beta$ 1-42 induced mice model for AD. Animals were divided into 6 groups: Sham control, Amyloid- $\beta$ 1-42 (A $\beta$ 1-42), Standard 1 (TPPU-1 mg/kg), Standard 2 (PTUPB-5mg/kg), Proso millet dose 1(100mg/kg), Proso millet dose 2(200mg/kg). Following parameters were evaluated: Novel Object Recognition Test, Buried Pellet Test, Discrimination Index and ROS level estimation.
	<b>Results</b> :The Ic50 value of Proso millet in mouse and human sEH proteins was found to be 6.40 and 100 $\mu$ g/mL by invitro assay. HEPM at 200mg/kg significantly decreased the time taken to unbury the pellet when compared to disease control (24.83±1.57 vs 36.16 ±1.10). Both the doses of HEPM (100 and 200mg/kg) showed significant increase in time spent near novel object when compared to disease control (3.1±0.7, 3.0±0.41 vs 1.5±0.5). Furthermore, HEPM significantly decreased the ROS levels when compared to disease control in mice brain tissues.
	<b>Conclusion :</b> Current study reveals the potential beneficial effect of HEPM in A $\beta$ 1-42 mice model of AD. In-vitro studies demonstrated the sEH inhibitory activity of HEPM and in-vivo studies further proves the beneficial effect of HEPM in AD and this might be due to its sEH inhibitory activity resulting in elevation of EETs in brain leading to its neuroprotective effect via antioxidant and anti-inflammatory pathway. Further studies are in progress to explore the molecular mechanism of action of Proso millet.
	Keywords: Alzheimer's disease, Soluble epoxide hydrolase (sEH), HEPM, Proso millet, Neuroinflammation
PV/PP/01	Pankaj Khuspe
	Pharmacovigilance of herbal medicines: Need of an Hour
	Abstract
	Pharmacovigilance is crucial for accurate information to be developed regarding the safety of herbal medicines; the herbal formulations for treatment of various diseases are widely accepted. The most pervasive misconception about herbal medications is that they are perfectly safe and can therefore be taken without a doctor's prescription by patients on their own. Now a day's reported adverse events occurred after taking herbal products and medications can be attributed to either incorrect use or poor product quality. Such events may have been influenced by inadequate regulatory controls, feeble quality assurance procedures, and completely unregulated distribution methods. Events brought on by such circumstances will need to be decreased or avoided in order to increase our understanding of real adverse reactions to herbal medicines and to prevent spending precious resources on their identification and analysis. In order to increase national regulation, registration, quality assurance, and control of herbal medicines, Member States of the World Health Organization are encouraged. The state health authorities should also place more emphasis on consumer education and certified practice when it comes to the supply of herbal medications. It will thoroughly examine the difficulties that herbal medication pharmacovigilance poses, take into account pertinent new problems, and discuss what actions may and need to be implemented to enhance safety monitoring for herbal medicines in the future.

Key words: Regulatory Guidelines, WHO, herbal Product & medicines, PV.

PV/PP/02	Irshad Wani
	Evaluation of the rapeutic potential of hydroalcoholic extract of proso millet in a $\beta$ 1-42 induced mice model of alzheimer's disease
	<b>Introduction and Objective:</b> Alzheimer's disease (AD) is a serious CNS disorder of multifactorial origin, it impairs memory and cognition. Chronic inflammation is recognized as a key player in both the onset and progression of AD. However, several antioxidant therapies and nonsteroidal anti-inflammatory drugs have failed in clinical trials. Therefore, it is of vital importance to expand the scope towards novel targets. Recent studies have reported pharmacological inhibition of soluble epoxide hydrolase (sEH) as a new therapy for AD. Proso millet, a cereal crop belongs to family Gramineae, and has been widely studied for its antioxidant and anti-inflammatory effect. The health benefits of Proso millet are mainly due to various antioxidant compounds, such as $\alpha$ -tocopherol, carotenoids, polyphenols, and active polysaccharides, which could protect human tissues and organs fromoxidation. In the current study we focused on evaluating the therapeutic potential of Proso millet against A $\beta$ 1-42 induced mice model of Alzheimer's disease by targeting sEH as a potential target.
	<b>Methods:</b> Hydroalcoholic extract of Proso millet (HEPM) was subjected to preliminary in-vitro sEH inhibition activity followed by investigation against A $\beta$ 1-42 induced mice model for AD. Animals were divided into 6 groups: Sham control, Amyloid- $\beta$ 1-42 (A $\beta$ 1-42), Standard 1 (TPPU-1 mg/kg), Standard 2 (PTUPB-5mg/kg), Proso millet dose 1(100mg/kg), Proso millet dose 2(200mg/kg). Following parameters were evaluated: Novel Object Recognition Test, Buried Pellet Test, Discrimination Index and ROS level estimation.
	<b>Results</b> : The Ic50 value of Proso millet in mouse and human sEH proteins was found to be 6.40 and 100 $\mu$ g/mL by invitro assay. HEPM at 200mg/kg significantly decreased the time taken to unbury the pellet when compared to disease control (24.83 $\pm$ 1.57 vs 36.16 $\pm$ 1.10). Both the doses of HEPM (100 and 200mg/kg) showed significant increase in time spent near novel object when compared to disease control (3.1 $\pm$ 0.7, 3.0 $\pm$ 0.41 vs 1.5 $\pm$ 0.5). Furthermore, HEPM significantly decreased the ROS levels when compared to disease control in mice brain tissues.
	<b>Conclusion</b> : Current study reveals the potential beneficial effect of HEPM in A $\beta$ 1-42 mice model of AD. In-vitro studies demonstrated the sEH inhibitory activity of HEPM and in-vivo studies further proves the beneficial effect of HEPM in AD and this might be due to its sEH inhibitory activity resulting in elevation of EETs in brain leadingto its neuroprotective effect via antioxidant and anti-inflammatory pathway. Further studies are in progress to explore the molecular mechanism of action of Proso millet.
	Keywords: Alzheimer's disease, Soluble epoxide hydrolase (sEH), HEPM, Proso millet, Neuroinflammation
PV/PP/03	Balda Aayushi
	Evaluation of memory impairment and antiepileptic activity of gabapentin in the presence and absence of mulmina
	<b>Introduction and Objective:</b> Gabapentin (GBA) is a prescription medication known as a gamma-aminobutyric acid (GABA) analogue. GABA plays a role in seizures and the transmission of pain signals. Mulmina <sup>TM</sup> contains fruit pulp of Mangifera indica, mangiferin, the main constituent of Mangifera indica, has been reported to possess antioxidant, anti- inflammatory, immunomodulation and anti-apoptosis activities. This study investigated the Memory Impairment and Antiepileptic Activity of GBA in the presence and absence of Mulmina.
	<b>Methods</b> : Clonic convulsions were induced by administrating PTZ (45mg/kg) through the i.p. route in mice. Mulmina (80ml/kg; oral), and Gabapentin (200mg/kg; i.p.) were administered as a combinational drug at the interval of 2hr and 1hr respectively before PTZ. The anti-epileptic and MI activity were examined on every 7th day during the study. The MI activity was assessed by RAM and T maze task.
	<b>Results:</b> The antiepileptic and memory impairment activity was higher in GBP compared to the control. In combination, GBP+MulminaTM showed significant antiepileptic activity as well as decreased cognitive impairment when compared to both the control and individual GBP group. MulminaTM alone manifested slightly synergistic antiepileptic activity and better memory enhancement activity in the PTZ model. The levels of AChE and TBARS were enhanced in the GBP group, and the levels of endogenous antioxidants such as SOD, CATALASE and GSH were decreased in comparison with control and only GBP treated.
	<b>Conclusions:</b> The findings of the study reveal the MI potential of GBP and correction by co-administration of MulminaTM. However, further study is required to establish the molecular mechanism involved in MI caused by GBP.
PV/PP/04	Pooja Rani
	Reversal of high fat diet-induced hyperlipidemia by terpinolene
	Abstract
	Terpinolene (1-isopropenyl-4-methylcyclohex3-ene) is a monoterpene and present in essential oils of plants such as
	Microtoena patchoulii, Cannabis etc. Terpinolene has been reported to possess sedative, antinociceptive and anti- inflammatory, antifungal, larvacidal, anticancer and antioxidant and in addition to producing Euphoria. The present study was undertaken to explore the effect of terpinolene on high fat diet-induced hyperlipidemia in Wistar albino rats. High fat diet (HFD) was given for 28 successive days. Terpinolene (10, 20 and 40 mg/kg, p.o.) and atorvastatin (10 mg/kg) were administered 2 h prior to feeding rats with HFD from 15th day to 28th day. HFD significantly increased the levels of total cholesterol, triglycerides, VLDL-c, LDL-c and atherogenic index; and significantly decreased the level of HDL in serum. All the doses of terpinolene and atorvastatin significantly reversed HFD-induced changes in lipid parameters like total cholestrol, triglycerides etc. Terpinolene and atorvastatin significantly reversed HFD-induced changes in lipid parameters like total cholestrol, triglycerides etc. Terpinolene and atorvastatin significantly reversed HFD-induced changes in lipid parameters like total cholestrol, triglycerides etc. Terpinolene and atorvastatin significantly reversed HFD-induced changes in lipid parameters like total cholestrol, triglycerides etc. Terpinolene and atorvastatin significantly reversed HFD-induced increase in the levels of MDA and decrease in the levels of GSH in liver. Thus, terpinolene administered for 14 successive days produced
	activity and alleviation of oxidative stress. Therefore this substance is expected to prevent Ischemic Heart Disease upon

chronic intake.

PV/PP05	Nikitha
	A rare case of generalized tonic -clonic seizure induced by carboplatin and paclitaxel infusion
	Abstract
	Background: We assess and report a rare case of chemotherapy-induced Generalized Tonic- Clonic Seizure in a
	carcinoma of Hypopharynx stage IVA male patient treated with Carboplatin-Paclitaxel.
	Case Study :We report a rare case of a 52 old male patient with complaints swelling in neck , cough, decreased hearing and tinnitus since 1-2 months Upon CT it was found that the patient. Had left side Sopra glottic growth with enlarged node S/O pyriform fossa tumor. An HPR test was done which features positive for malignant cells and Metastatic squamous cell carcinoma of Hypopharynx stage IVA. The patient is a K/C/O DM for 2 years and is on Tab.Metformin 500mg but taking irregularly. The patient was planned to be put on Carboplatin (AUC-5), Paclitaxel (175 mg/m.sq) chemotherapy for a total of 4 cycles along with Inj .GCSF once every 3 weekly. After completion of 1st cycle of chemotherapy, the patient developed abnormal jerky movements in upper limbs and twitching of eyes along with uprolling of eyeballs altered sensorium and was diagnosed with chemo-induced Generalized tonic- clonic (GCTS). The MRI did not reveal brain metastasis /meningeal carcinomatosis. Upon further investigations, it was found that the patient had hyponatremia (129meq/l). He had no signs and symptoms of infection and no history of seizures, excluding several causes. Seizure was thought to be most likely related to the chemotherapy and carboplatin was the more likely agent in view of observed temporal relationship with the adverse event. This was further confirmed the patient developed similar symptoms when chemotherapy was rechallenged. The Patient was treated with Inj.Lorazepam,and Tab. Levitriacetam by which the patient was stabilized.
	<b>Conclusion:</b> Carboplatin-paclitaxel chemotherapy is relatively safe with minimal adverse effects anyhow rare instances such as this cannot be overseen. Active vigilance and effective management will aid in active detection. Seizures might be a result of electrolyte imbalance but the exact underlaying pathophysiology is not clearly understood, Addition of Levetiracetam significantly improved patients' symptoms and therapeutic adherence.
	Keywords: Carboplatin, Paclitaxel, Generalized tonic-clonic seizure, rechallenged. Lorazepam, Levetiracetam
PV/PP06	Raghuveer
	Dietary anthocyanins and anthocyanin-rich extracts: role in diabetes and its induced complications
	Abstract
	Diabetes mellitus (DM) is a chronic metabolic disorder characterized by high sugar concentrations in the blood. It may be due to impaired insulin secretion, resistance to peripheral actions of insulin, or both. Chronic hyperglycemia in synergy with the other metabolic aberrations in patients with diabetes mellitus can cause damage to various organ systems, leading to the development of disabling and life-threatening health complications, most prominent of which are microvascular (retinopathy, nephropathy, and neuropathy) and macrovascular complications leading to increased risk of cardiovascular diseases. Many efforts have been made in the past two decades into the search for novel natural and less-toxic anti-diabetic agents. A number of natural products that act through multiple mechanisms have also been identified to overcome diabetes and its induced complications. One group of such compounds that gained interest in recent years are the dietary anthocyanins. Some clinical trials have assigned this ability to anthocyanins, although different factors like the food source, the amount ingested, the matrix effect and the time of consumption (before or after a meal) seem to result in contradictory conclusions. Anthocyanins are the largest group of water- soluble pigments in the plant kingdom, known collectively as flavonoids. More than 8000 flavonoids, and 500 anthocyanin structures had been reported by the year 2000 and more are continually being isolated. Anthocyanins are believed to display an array of beneficial actions on human health and well-being. The aim of the present article is to summarize the properties of anthocyanins to counter the diabetic and its induced complications and help in our understanding of their functional mechanism.
	Key words: Diabetes mellitus, retinopathy, nephropathy, neuropathy and anthocyanins.
PV/PP07	Arun M Mahale
	Formulation and evaluation of matrix
	Abstract
	The sustained release drug delivery includes the application of physical and polymer chemistry. These polymers
	slowly release the drug in bio-system and maintain drug blood level within therapeutic range for longer duration. The in present work aimed to study effect of release retardant polymers on release pattern of Mosapride Citrate as a model drug. The matrix tablets were prepared using different concentrations of eudragit derivatives such as Eudragit Rs, Eudragit RL, Eudragit E in ten batchech by direct compression method. Prepared tablets were evaluated for thickness, hardness, friability, weight variation, assay, percent drug release. All formulations from batch F1 to F10 shown satisfactory results. Percent drug release lied between 83.64% to 98.01% range over 08 hrs. From the results it can concluded that sustained release matrix tablet for mosapride citrate could be prepared and sustained action of drg could be archived using eudragit RS 100 as rate retarding polymer successfully.

Key Words:- Sustained Release, Mosapride Citrate, Tablets, Eudragit RS100

PV/PP08	Mercy Kerenhap R
	iormulation, characterisation and invivo evaluation of antimicrobial camp; anti-diabetic effect of novel n- acetylcysteine liposomes
	Abstract:
	N-Acetylcysteine being a drug of choice in a wide range of ailments, its poor bioavailability makes it a tougher candidate in conventional dosage form hence a novel system of. N-Acetylcysteine liposomes were prepared by reverse phase evaporation using soy-lecithin in different concentrations. The prepared N-Acetylcysteine liposomes were evaluated for its particle size, zeta potential, entrapment efficiency, and SEM analysis and in-vitro drug release. The result confirms the prepared N-Acetylcysteine liposomes were unilamellar, spherical in shape and micron in size using SEM. Based on the evaluation results of prepared N-Acetylcysteine liposomes (NAC1- NAC5), formulation NAC3 is considered as the best formulation due to its better encapsulation efficiency and better particle size. Entrapment efficiency of NAC-3 formulation was found to be 86.20 %. Also results are concluded that the newly formulated N-Acetyl Cysteine may be ideal and effective in therapy due to their smaller particle size. In Anti- diabetic activity, the novel NAC formulation was found to be effective in the management of Diabetes. Similarly in Antimicrobial activity the liposomes are found to be effective. Hence the novel liposomal formulation can be considered as a choice in both anti diabetic activity as well as anti-inflammatory activity. As a result, the newly formulated controlled release liposomal drug delivery systems of N- Acetyl Cysteine may be excellent and useful in the treatment of Diabetes which should be further developed in nanoformulations.
	Key words: N-Acetylcysteine, Reverse phase evaporation method, Unilamellar Liposomal
	Pavithra N
PV/PP09	Development of miglitol TDDS for the treatment of diabetes mellitus
	Abstract:
	Miglitol reduces levels of glycosylated hemoglobin in patients with Type II (non-insulin-dependent) diabetes mellitus. Transdermal patches are polymeric formulations which when applied to skin deliver the drug at a predetermined rate across dermis to achieve active systemic effects in TDDS. The main aim of this study is to formulate Miglitol into novel Transdermal Formulation which can enhance the bioavailability and better patient compliance compared to oral route. Six formulations of transdermal patches were formulated with three different polymers, HPMC, PVP K30 and Eudragit L100 with three different ratios (MTDDS1- MTDD S6) of drug and polymers. The patches were prepared by solvent casting method. The weight of the patches varied between $45.5 \pm 0.82$ mg to $48.78 \pm 0.76$ mg. The patch had shown 100% flatness nearly which indicates negligible amount of constriction of the prepared transdermal patches. The formulation MTDDS1 which contains 300mg of HPMC has shown higher maximum absorption (14.67 $\pm$ 0.55) than the other formulation. The drug content in all formulations was found to contain 97.31 % to 98.58 % of Miglitol. In conclusion formulation MTDDS1 (300mg of HPMC) has achieved the targets of present study such as extended release, reduced frequency of administration, and thus may improve the patient compliance. Based on the result it is proposed that Miglitol can be used in the formulation of transdermal drug delivery systems for providing effective treatment for diabetes with enhanced patient compliance.
	Key Words : Miglitol, Transdermal Patches , Diabetes Mellitus , Solvent Casting and Polymers.
	Mahananda G . Uppin
PV/PP10	Evaluation of anti - arthritic activity of bark extract of mammea suriga kosterm in CFA induced experimental
	rats Background: Arthritis is inflammation of one or more joints, causing pain and stiffness that can worsen with age. Rheumatoid arthritis (RA) is one type of this condition which is an autoimmune disorder affecting around 1% of the population. RA is an inflammation of synovial joints due to immune mediated response. The inflamed synovium leads to erosions of the cartilage and bone and sometimes leads to joint deformity. Sometimes RA causes problems in other parts of the body as well, such as the eyes, heart, lungs and circulatory system. For unknown reasons, more women than men get RA, and it usually develops in middle age.Objective: The aim of this study was to evaluate the effect of ethanolic bark extract of Mammea Suriga Kosterm (EBEMSK) on Complete Freudens Aduvant (CFA) induced arthritis in Rats.
	<b>Methods:</b> The male albino wistar rats weighing 150-200gm were selected and randomized in to six groups. A normal control group I received mineral oil was given subcutaneously (S.C) to the subpantar tissue of right hind paw. Other five groups received CFA 0.1ml subcutaneous injection. Sixth group received Diclofenac sodium (10mg/kg) as standard by oral route. All the group of animals were administered orally with EBEMSK at dose of 200mg/kg, 400mg/kg and 600mg/kg 24 hours before administration of CFA injection. The treatment is continued daily for 20 more days. Paw volume and body weight and ankle joint diameter of each rat was measured at 4th, 8th, 12th, 16th and 20th day. On 21st day blood samples were collected for the analysis of biochemical parameters and animals were sacrificed, ankle joints were dissected and placed in 10% buffered formalin for histological assessment Results: The collected blood samples were send for the estimation of biochemical parameters. The collected ankle joints were subjected for histological assessment. Paw volume, body weight and ankle joint diameter was measured and assessed. The protective role of EBEMSK is confirmed by histopathological examination.
	<b>Conclusion:</b> The present study suggested that the in-vivo CFA induced activity indicates that the EBEMSK is useful in the treatment of <b>B</b> A
	<b>Keywords:</b> RA, Paw volume, Ankle joint, Mammea suriga kosterm

PV/PP11	Prajwal Y S
	Public engagement in Pharmacovigilance
	Abstract
	Pharmacovigilance defined by the World Health Organization as Ithe science and activities relating to the detection, understanding, assessment and prevention of adverse effects or any other drug related problems". It plays a key role in ensuring that patients receive safe drugs. Our knowledge of a drug's adverse reactions can be increased by various means, including spontaneous reporting
	Key words: PV ADR

# Hospital Pharmacy

# International Confernce on Pharmacovigilance, Pharmaceutical Care & Biomedical Research

ABSTRACT NUMBER	ABSTRACT
HP/OP/01	<ul> <li>Bhoomika S K</li> <li>Assessment of drug related problems and clinical pharmacist interventions in cardiac patients in secondary care hospitals</li> <li>Abstract:</li> <li>Background: Cardiovascular diseases (CVD) are often accompanied with comorbidities and complications leading to taking multiple drugs and thus are more liable to be exposed to drug-related problems (DRPs). DRPs can occur at any stages of medication process from prescription to follow-up treatment. However, a few studies have assessed the specific risk factors for occurrence of DRPs in CVD patients.</li> <li>Objective: To identify and evaluate the nature and incidence of drug-related problems (DRPs) and the role of clinical pharmacist in cardiovascular disease patients in secondary care hospital.</li> <li>Materials And Methods: A Prospective observational study is conducted in a secondary teaching hospital of Cardiology department for a period of 6 months to identify and evaluate the nature and incidence of DRP's and to manifest the role of clinical pharmacist in ensuring safe and efficient use of medications with CVD patients by using PCNE Classification version 9.1.</li> <li>Results: A total number of 94 Cardiac patients were evaluated and out of which 78 (82.9%) patient profiles were identified with 208 DRPs. Among 208, 140 (67.3%) DRUG drug interactions, 15 (7.2%) untreated indications, 12 (5.8%)adverse drug reactions, 10 (4.8%) drug use without indication, 8 (3.8%) drug underused, 8(3.8%) duration of treatment-too short, 5(2.4%)dose unclear , 4 (1.9%) inappropriate drug form, 3(1.4%) treatment-too long 2(1.0%) too many drugs prescribed for an indication, 1(0.5%)drug overused. For 208 DRPs identified and provided with 74 interventions which includes 30(41.6%)drug discontinuation, 24(33.3%) addition of a new drug, 4 (5.55%) change of dosage form, and 14 (19.14%) decrease the dose.</li> <li>Conclusion: The present study revealed that cardiovascular disease patients suffer from numerous DRPs that can be identified, resolved, or preve</li></ul>
HP/OP/02	<ul> <li>Sughosh V Handigol</li> <li>Management of patient care in health systemAbstract: - Introduction: The quality of life is adjusted and it will reflect on the present health life. Recent years have seen an increased level of interest in the definition and valuation of health care outcomes beyond those traditionally encapsulated by quality adjusted life, commonly used in the economic evaluation of health interventions by the National Institute for Health and care Excellence (NICE). To establish systematically review the existing the literature on the value associated with conveniences in health care delivery system ,Independent of health outcomes and try to estimate the likely magnitude of any value found so we are mainly concentrating on patient health care, satisfaction and intent to revisit the hospital by providing good Patient care. </li> <li>Methods: - This present perspective of Patient care in health system is to review systematic search was conducted for previously published articles that reported preferences for convenience-related aspects of health care by in a manner that was consistent with either cost-utility analysis or cost-benefit analysis. Data were analyzed in terms of the methodologies used, the aspects of convenience considered, and the values reported. </li> <li>Results: Based on the Literature survey, the aim of clinical guidelines is to improve quality of care by translating new research finding into practice. there is evidence that the following characteristics contribute to their use; inclusion of specific recommendation, sufficient supporting evidence, a clear structure and an attractive lay out. In the process of formulating recommendation, implicit norms of the target users should be taken into account, guidelines should be developed within a structural and coordinated programme by a credible central organization. To promote their implantation, guidelines could be used as a template for local protocols, clinical pathways and interprofessional agreement.Overall</li></ul>
HP/OP/03	<ul> <li>Kavya Rachamsetty</li> <li>Prevalence and Risk Factors of Psychotropic Polypharmacy In Treatment of Psychiatric Disorders</li> <li>Abstract:</li> <li>Polypharmacy is originally coined to refer to problematic prescriptions that entitled multiple drug consumption and excessive drug use during the treatment of a disease or disorder which is connoted potentially inappropriate and unnecessary medication. Psychotropic Polypharmacy is concurrent use of two or more psychotropic agents from different classes for more than 60 days. It can be categorized of same class, multi-class, adjunctive, total pharmacy. Despite of clinical guidelines and advancement in psychopharmacology, APP (antipsychotic polypharmacy) became a common practice for treating several psychiatric disorders, but its use compared to antipsychotic monotherapy is controversial. The prevalence of psychiatry polypharmacy varies between 13-90%. Current treatment standard in psychiatry are towards polypharmacy that is patient receive combination of anti-depressants ,mood stabilizer's , anti-cholinergic , anti-histamines, anxiolytics, Hypnotics , instead of its beneficial pharmacological effects patients are experiencing severe adverse drug reactions , drug –drug interactions , non-adherence,higher health-care costs, morbidity and mortality. There are various clinical and pharmacoeconomic factors associated with APP. Education and proper guidelines and algorithms should be followed for appropriate management of various mental disorders and to avoid irrational use and serious adverse effects of psychotropic agents.</li> <li>Keywords: Anti-psychotic polypharmacy, psychiatric disorders, psychotropic agents</li> </ul>

HP/OP/04	Lakshmi Totar
	Identification of drug-drug interaction Intprescriptions received at IPD of a tertiary hospital
	Abstract:
	<b>Introduction</b> : DRP - drug related problems cause preventable negative health outcomes, the growing use of pharmacological agents has led to increased drug use in population precipitating drug interaction and related untoward effects which are of increasing interest for public health. Drug-drug interactions have been shown to increase hospitalization, increase duration of hospital stay, morbidity, mortality, and increase financial costs on treatment. Medication errors and ADRs which are unfortunately a reality in most health care institutions, resulting in serious morbidity and mortality with adverse economic impact on the patient always go unnoticed. In the present scenario, there is pressing need to initiate strict vigilance activity in order to promote safe usage of drug at all levels of medication management
	<b>Objectives</b> : The purpose of the study was to assess potential DDIs in prescriptions, their severity and prevalence, major therapeutic classes of drugs involved and incidence of DDIs with polypharmacy in the prescription and possible clinical outcomes of DDIs
	<b>Materials and Methods: Study Design:</b> The study design was observational prospective study where prescriptions at IPD were monitored to collect the data. Prescription monitoring from this form was prepared to document the data from the prescription. The parameters involved in the form were patient demographics of age,gender, body weight ect. Drugs prescribed , dose, dosage form route of administration. Study site: The study was carried out at IPD of a tertiary care hospital. Study duration: The study was carried out for a period of two months. Methodology Prescription with at least two drugs prescribed were selected for the study.
	<b>Results and Discussion:</b> A total 47 Prescriptions were analyzed, 48.93% prescriptions were found to have potential DDIs, which amounts up to a total of 23 DDIs. concomitantly with azithromycin, Diclofenac and Dexamethasone which occurred 6 times, 4 times and 1 times in the prescription respectively. Rabeprazole, the drug which is used frequently in majority of the diseases and simple ailments as an OTC drug was involved in severe DDIs when used concomitantly with Clopidogrel(3 DDI), Theophylline (1DDI), Aspirin (1 DDI) and ferrous sulfate (2DDI). The major therapeutic class was Antibiotics, involved in 10 DDIs and fluoroquinolones were the most frequently implicated drugs. In fluoroquinolones, Ciprofloxacin and Ofloxacine were the most frequently prescribed which were involved in severe potential DDIs. Rabeprazole, the drug which is used frequently in majority of the diseases and simple ailments as an OTC drug was involved in severe DDIs when used concomitantly with Clopidogrel(3 DDI), Theophylline (1DDI), Aspirin (1 DDI) and ferrous sulfate (2DDI). The major therapeutic class was involved in severe DDIs when used concomitantly with Clopidogrel(3 DDI), Theophylline (1DDI), Aspirin (1 DDI) and ferrous sulfate (2DDI). The major therapeutic class was Antibiotics, involved in 10 DDIs and fluoroquinolones were the most frequently inplicated drugs. In fluoroquinolones were the most frequently inplicated drugs. In fluoroquinolones, Ciprofloxacin and Ofloxacine were the most frequently implicated drugs. In fluoroquinolones, Ciprofloxacin and Ofloxacine were the most frequently prescribed which were involved in severe potential DDIs.
HP/OP/05	Monika chaparala
	Prevalence of Drug Resistant Tuberculosis (Rifampicin Resistance)
	<b>Background</b> : Tuberculosis is an infectious illness that is one of the leading causes of death worldwide and a major factor is poor health. Mycobacterium tuberculosis, the bacillus that causes tuberculosis, spreads when TB patients cough or sneeze and release bacteria into the air. Global TB control has been significantly hampered by the emergence of Rifampicin-resistant tuberculosis (RR-TB) and Multidrug resistant tuberculosis (MDR-TB).
	<b>Objectives:</b> To study the prevalence of drug resistant tuberculosis (Rifampicin resistance) in patients diagnosed with tuberculosis (Pulmonary and Extra Pulmonary).
	<b>Methodology:</b> A 6-month cross-sectional study was carried out in the Department of Respiratory Medicine, Kempegowda Institute of Medical Sciences Hospital and Research Centre, Bangalore, from March 2022 to August 2022. The study comprised patients between the ages of 15 and 70. The data was collected in a self prepared Individualized Case Record Form (ICRF). The collected data was assessed for prevalence of Rifampicin Resistance. IBM SPSS Statistics was used to analyze the data collected, and the findings were presented as numbers and percentages
	<b>Results</b> : In the study of 162 TB patients, it was found that 63 (38.9%) had pulmonary tuberculosis and 99 (61.1%) had extra pulmonary tuberculosis. 139 individuals (85.8%) had no co-morbidities, whereas 23 individuals (14.2%), among whom 19 individuals (11.7%) had a single co-morbidity and 4 individuals (2.5%), multiple co-morbidities. Only one (0.6%) of the 161 (99.4%) were Rifampicin resistant. Pearson Chi-square test was done to evaluate the relationship between diagnosis and CBNAAT in which the results indicated that there was no statistical significant relationship between two variables (chi-square with 1 degrees of freedom = $1.581$ , P=0.209).
	Conducion: The majority of the study population was found to be consistive to Diferminin according to the study

**Conclusion:** The majority of the study population was found to be sensitive to Rifampicin, according to the study. Keywords: Tuberculosis; Rifampicin Resistance; MDR TB; Pulmonary Tuberculosis; Extra-Pulmonary Tuberculosis

HP/OP06	Nandini H B
	Prescribing pattern for the management of nausea and vomiting in pregnant women
	Abstract
	Pregnancy is a delightful physiological phase in which zygote develops into a 3.175kg newborn infant within 40 weeks of conception within the mother's womb (9 months). Most pregnant women (50 to 90%) experience nausea and vomiting of pregnancy (NVP) during the first trimester. The objectives of our study were to assess the severity of nausea and vomiting in pregnancy and to analyse the prescribing pattern for the treatment of nausea and vomiting in pregnant women. This is a Prospective cross-sectional study which was carried out in the OBG department of Adichunchanagiri Hospital and Research Centre, B.G. Nagara, Nagamangala, Mandya. The severity of Nausea and Vomiting in pregnancy was assessed by using modified PUQE scoring system. Out of 230 participants, 5 (2.2%) were graded as none NVP, 41 (17.8%) as mild NVP, 166 (72.2%) as moderate NVP and 18 (7.8%) as severe NVP. The study showed that there was a significant relation between the age group (p=0.01), Educational status(p=0.01), Pregnancy trimester (p=0.01) and family history(p=0.01) of the pregnant women with NVP severity. However, there was no significant association between the BMI (p=0.07), Occupational status (p=0.72), socio-economic status (p=0.437), gravida (p=0.058) and parity (p=0.056) of pregnant women with NVP severity. The findings highlight the importance of an optimal management of NVP. Health Professionals should offer assistance to pregnant women regarding adverse outcomes of NVP if left untreated, whenever possible.
HP/OP07	Arfa A Sayed
	A systematic KAP survey of diabetes in general public knowledge, attitude and practice about diabetes with regard to their disease in south indian population: a cross-sectional study
	<b>Abstract</b> <b>Background:</b> India is a home to approximately 1.4 billion people. Diabetes has become a global rife. Diabetes has proliferated in developing economies like India that has estimated 77million people (1 in 11 Indians) diagnosed with diabetes according to International Diabetes Federation (IDF) in 2020 accounting as 2nd most affected individuals in the
	<b>Objective:</b> This study examines the levels of knowledge, attitude and practices (KAP) towards diabetes mellitus by general public.
	<b>Methodology</b> : It is a prospective observational study conducted in Hubballi. Self-administered questionnaire was assessed by the team of doctors and faculty. The pilot survey was conducted on 68 people and responses were collected. Data analysis was done using dichotomous/2.0 scale and an excel sheet. The public's knowledge, attitude and practice response were studied and examined.
	<b>Results:</b> Out of 68 participants 33 were males and 35 were females. The age category between 20-37 years had a good knowledge and positive attitude of 64% regarding diabetes. The ages falling between 38-55 years had a good practice of about 75%. Around 27% of population had good knowledge about diabetes, 37% participants had little attitude and 36% had good practice of diabetes mellitus.
	<b>Conclusion:</b> Participants had moderate knowledge about diabetes which was significantly associated with little positive attitude towards diabetes but good practice was seen in the study. Lack of awareness concerning the need for proper knowledge and attitude towards diabetes is needed. Further KAP research will be carried out on a large scale population.
	Keywords: Diabetes; DM; Diabetic; KAP; Knowledge; Practice
HP/OP08	Akshata P Gore
	'Assessment of Knowledge, Attitude and practice regarding hypertension in general public in south indian population: an observational study
	Abstract
	<b>Background:</b> Hypertension is a very important risk factor for cardiovascular diseases. Hypertension is a serious clinical situation observable in India and can grow the threat to heart, mind, kidney & other major organs. It's a prime reason for the loss of life internationally, with 1 in 4 men & 1 in 5 women over a billion humans having the condition. Affecting more than 1.4 billion population and accounting for approximately more than 28,000 deaths every day.
	<b>Objective</b> : The main aim of this study was to assess the Knowledge, Attitude and Practice regarding hypertension in General Public.
	<b>Methodology:</b> A prospective observational study was conducted for the period of 2 months in Hubballi. The study participants were the general public. The Knowledge, Attitude and Practice questionnaire were prepared and validated by the team of doctors and faculty. Over all 55 study participants were included in the study. All the responses were recorded and assessed. Data was analysed using 2.0 or dichotomous scale and excel spreadsheet. The knowledge, attitude and practice of the public's were examined.
	<b>Results:</b> Out of 55 participants 25 where males and 30 were females. The age category between 31-40 years had a little less knowledge about 28% and good attitude of 33% regarding hypertension. The ages falling between 41-50 had a good practice of 31%. Around 25% of population has moderate knowledge about hypertension, 37% had good attitude and 37% had good practice of hypertension
	<b>Conclusion:</b> Participants had moderate knowledge about hypertension whereas slightly high attitude towards hypertension and a little positive practice was observed in the study. There is a scope for improving knowledge, attitude towards hypertension for the awareness and better practice. Further KAP research will be carried out on a large-scale population.
	Keywords: hypertension, knowledge, attitude, practice, Participants,

# HP/OP09 Risha Snehal Monis

## Impact of diabetic foot ulcer on the patient's quality of life in a tertiary care teaching

## Abstract

Diabetic Foot ulcers are defined as lesions involving a skin break with loss of epithelium: they can extend into the dermis and deeper layers sometimes involving bone and muscle. Health-related quality of life (HRQOL)is a subjective assessment of the patient's physical and mental well-being and the effects that a disease (e.g., DFI) has on their life. The degree by which diabetic foot ulcers impair the quality of life is population specific. The objective of this study is to determine the impact of diabetic foot ulcers on patients' health-related quality of life and to compare the QOL between DM with complications and DM without complications. This is a prospective, observational study conducted at Adichunchanagiri Hospital and Research Centre (AH&RC), B.G Nagara. Health-related quality of life in DFU was assessed by using questionnaires namely, Diabetic Foot Scale (DFS) and Euro Quality of Life Questionnaire (EQ-5D-5L). Out of 423, only 103 were having diabetic foot ulcer, in which the age group of patients above 50 years (66.0%) was found to be the largest group of patients in the study. It was observed that the male patients were more affected than female patients, 73 (70.9%) versus 30 (29.1%). The mean score for the leisure domain was found to be 12.4951 ±2.73278, physical health 14.6408±2.58144, daily activities 14.2718±2.53677,emotions 43.1845±8.38386, non- $\mbox{ compliance } 6.1553 \pm 1.39155, \mbox{ family } 13.2816 \pm 2.43108, \mbox{ friends } 13.1456 \pm 3.39668, \mbox{treatment } 11.2816 \ \pm \ 2.38219, \mbox{ compliance } 11.2816 \ \pm \ 2.38219, \mbox{ friends } 12.1456 \pm 3.39668, \mbox{treatment } 11.2816 \ \pm \ 2.38219, \mbox{ friends } 12.1456 \pm 3.39668, \mbox{treatment } 11.2816 \ \pm \ 2.38219, \mbox{ friends } 12.1456 \pm 3.39668, \mbox{treatment } 11.2816 \ \pm \ 2.38219, \mbox{ friends } 13.1456 \pm 3.39668, \mbox{treatment } 11.2816 \ \pm \ 2.38219, \mbox{ friends } 13.1456 \pm 3.39668, \mbox{treatment } 11.2816 \ \pm \ 3.38219, \mbox{ friends } 13.1456 \pm 3.39668, \mbox{treatment } 11.2816 \ \pm \ 3.38219, \mbox{ friends } 13.1456 \pm 3.39668, \mbox{treatment } 11.2816 \ \pm \ 3.38219, \mbox{ friends } 13.1456 \ \pm \ 3.39668, \mbox{treatment } 11.2816 \ \pm \ 3.38219, \mbox{ friends } 13.1456 \ \pm \ 3.39668, \mbox{treatment } 11.2816 \ \pm \ 3.38219, \mbox{ friends } 13.1456 \ \pm \ 3.39668, \mbox{treatment } 11.2816 \ \pm \ 3.38219, \mbox{ friends } 13.1456 \ \pm \ 3.39668, \mbox{treatment } 11.2816 \ \pm \ 3.38219, \mbox{ friends } 13.1456 \ \pm \ 3.39668, \mbox{treatment } 11.2816 \ \pm \ 3.38219, \mbox{ friends } 13.1456 \ \pm \ 3.39668, \mbox{treatment } 13.1456 \ \pm \ 3.39668, \mbox$ satisfaction  $3.8835 \pm .85521$ , positive attitude  $13.4466 \pm 1.56386$ , financial  $6.0000 \pm 1.42113$ . The average mean score of EQ-5D-5L for the DM group was found to be 12.35±2.48 and for the DFU group was found to be 11.14±2.09 with a mean difference of 1.21. The results showed that there was a significant difference between the DM group and the DFU group (p=0.00\*). The findings showed that the patients with diabetic foot ulcers had low quality of life and negatively affect patients' Quality of Life due to deteriorated emotional stability and physical health.

# HP/OP10 Bipin Shaji

Development validation and evaluation of communicative effectiveness of patient information leaflet on hypothyroidism with metabolic syndrome

#### Introduction

A Patient Information Leaflet (PIL) is a document that contains information regarding disease, medications, and lifestyle modifications to educate patients. The communication effectiveness of the PIL is determined by the reader's emotional, cognitive, and behavioral responses. Hypothyroidism is a condition with an underactive thyroid gland. A cluster of risk factors including high blood pressure, blood sugar, and cholesterol levels characterize the metabolic syndrome. The medication adherence among hypothyroidism patients is low, forgetfulness was the main reason associated with low medication adherence, leads to decreased therapeutic outcomes. Thus, patient education materials like PIL improve patients' knowledge, thereby enhancing medication adherence and therapeutic outcomes.

# **OBJECTIVES**

i) To prepare, validate, and perform user-testing of the Patient Information Leaflet for Hypothyroidism patients with Metabolic syndrome.

ii) To assess the communicative effectiveness of the Patient Information Leaflet developed for Hypothyroidism patients with Metabolic syndrome.

### METHODOLOGY

A PIL was prepared by referring to primary, secondary, and tertiary resources, validated by an expert committee, and translated. A user-testing questionnaire was prepared, validated, and translated to evaluate the PIL. The reliability of the user-testing questionnaire was done with 30 patients (10 patients for each language). The user testing and communicative assessment of the PIL was done with 72 patients (24 patients for each language). The study was initiated after obtainning the ethical permission (Ref. No: NU/CEC/2022/317). The data were electronically documented using MS Excel and statistically analysed with Paired T-test using SPSS software (version 26).

## RESULTS

The FRE and FKGL scores of the PIL were 62.0 and 7.1. The BALD scores for English, Kannada, and Malayalam versions of PILs were 28, 27, and 27. The Mean Content Validity Ratio (analysed using Lawshe method) of the PIL and the user-testing questionnaire were 0.875 and 0.966. The Intraclass Correlation Coefficient and Cronbach's alpha values of English, Kannada, and Malayalam User testing questionnaires were 0.917 and 0.910, 0.956 and 0.956, and 0.917 and 0.945. User Testing was done with 72 patients (24 patients for each language). The mean pre and post-test scores of the English, Kannada, and Malayalam versions of PILs were 57.50  $\pm$  12.24 and 77.92  $\pm$  9.31 (P value: 0.001), 51.67  $\pm$  7.61 and 71.25  $\pm$  6.79 (P value: 0.023), 54.17  $\pm$  12.12 and 75  $\pm$  9.32 (P value: 0.278). The communicative assessment of the PIL was done using a user opinion questionnaire (as a feedback questionnaire). The overall user opinion score of the English, Kannada, and Malayalam versions of PIL was 17.91  $\pm$  1.24, 18.54  $\pm$  0.88,18.25  $\pm$  1.11 respectively, indicates that the PIL has good communication ability.

#### CONCLUSION

A Patient Information Leaflet was developed and validated for Hypothyroidism patients with metabolic syndrome. The prepared Patient Information Leaflet has a good design and layout, easy to read, and has a good communication ability. Also, the patients' knowledge increased after the administration of the Patient Information Leaflet. Thus, materials such as PILs may aid in improvement of the attitude and practice of patients, eventually contributing to better therapy outcomes.

Keywords – Hypothyroidism, Metabolic syndrome, Patient Information Leaflet

HP/OP11	Rosy Raju
	Identifying ways to enhance antimicrobial stewardship activities of pharmacists serving rural primary health centres
	Introduction
	Pharmacovigilance (PV) is a developing domain in the primary healthcare level. Pharmacists have a central role in medicine safety by contributing to the prevention, documentation, and reporting of adverse drug reactions (ADRs). Pharmacists have a responsibility in ensuring the safety of medications especially antimicrobials to reduce the development of antimicrobial resistance (AMR). Antimicrobial stewardship (AMS) requires multisectoral action as AMR is a global health and development threat. This study focuses on identifying AMS activities at rural primary healthcare centres. One of the objectives is to initiate educational interventions based on the participatory collaboration from pharmacists in identifying the relevant topics focused on pharmacovigilance and the safe use of antimicrobials. Method A qualitative participatory study with 3 pharmacists serving rural primary health care centers (PHCs) of Karnataka was undertaken. A semi-structured interview was conducted with all 3 pharmacists.
	Result
	Pharmacists acknowledge the relevance of pharmacovigilance and the need for ADR reporting in their rural PHC facilities. In addition, they highlighted that they have not received specific training in pharmacovigilance and ADR monitoring. Regarding the safe use of antimicrobials, pharmacists acknowledged that currently they provide advice to patients on dosage, frequency, and advantages of finishing the prescribed antibiotic course. One of the pharmacists identified that ADR records are maintained in their PHC. Currently, they do not have access to any source of medicines information for the rational use of antibiotics. They identified the need for a medicines information booklet for AMS activities.
	Conclusion
	The pharmacists serving the rural PHCs identified the specific needs during the educational intervention in this project, that will support their activities in AMS.
HP/OP12	G Sri Sai Anwitha
	Drug prescription pattern and cost analysis of antipsychotic drugs in psychiatric outpatient department in a tertiary care teaching hospital
	Abstract
	Due to their high prevalence, early onset, and persistence, psychiatric disorders significantly increase the burden of disease in all regions. The extent of the burden of mental disorders on family members is difficult to assess and quantify and is consequently often ignored. Economic evaluation, which involves analyzing the costs and outcomes of various alternative therapies, can also be useful; however, it can be difficult to achieve. prescribing pattern of the psychotropic drug will assess the rationality of existing treatment practices and provide an overview of drug preference and rationale for drug use. To assess the pharmacoeconomic evaluation of antipsychotic drugs in a psychiatric outpatient department and the rationale of the prescription. A Prospective, Observational study was conducted in the Department of Psychiatry, Adichunchanagiri Hospital and Research Centre, The Pharmacoeconomics and the prescription pattern of antipsychotic drugs as part of drug utilization research in mental health. Prescription of drugs in their generic names leads to patient compliance and less financial burden contrary to the use of brand names. The present study also revealed the use of different polypharmacy strategies in treating psychiatric patients: therefore, there is a need to watch out for drug interaction indices.
HP/OP13	Pallavi K B
	Title: Pharmacovigilance in Ayurveda
	<b>Introduction:</b> The foremost aim and objective of Ayurveda is prevention along with cure of the disease. Any drug in its natural form is a compendium of chemical constituents, which has positive and negative effects. Pharmacovigilance is developed to reduce the risk of drug related harms. Tragedy of thalidomides compelled health agencies and regulators worldwide to deliberate on drug safety issues. Few reasons like faulty manufacturing technique, online sales of ayurvedic medicines, OTC products, choosing wrong species of plants etc. compelled the implementation of pharmacovigilance in Ayurveda. National Pharmacovigilance Program for ASU drugs was launched in 2008.
	Aim: To review the concept of Pharmacovigilance in Ayurveda
	Materials and methods:
	A thorough literature review was done in both print and digital media about Pharmacovigilance in Ayurveda concepts Discussion: Ayurvedic drugs are safe due to their natural origin is a popular misconception. Ayurvedic literature gives details of vyapath, pathya-apathya drug-drug and drug-diet incompatibilities like ghee and honey in equal quantity or combination of milk and banana etc. To overcome problems like poor quality control, poor dispensing pharmacy practice etc. there are 74 pharmacovigilance centres are working across the country and which will reach 100 soon to improve patient care and safety in relation to drug use.
	<b>Conclusion:</b> To overcome problems of ADR Pharmacovigilance is developed it provides information to consumers, practitioners and regulators on the effective use of drugs thus improve the patient care and safety in relation to drug. Pharmacovigilance program promises to close the gap between ayurvedic drugs potential and reality.

HP/PP/01	Megahana Krishnamurthy
	Evaluation of nutrition knowledge, attitude and practice among pregnant women visiting tertiary care hospital.
	abstract:
	<b>Background:</b> Pregnancy is one of the most important events in the life of every woman. Pregnancy is a period that the body goes through numerous physical and hormonal changes. Having sufficient nutrients for both mother and child is essential for good health. Eating the right foods in appropriate quantities will give you the right balance of nutrients that you need to ensure you and your baby remain healthy throughout your pregnancy.
	<b>Objective</b> : The objective of the study is to determine knowledge, attitude and practice of pregnant women regarding nutrition during pregnancy.
	<b>Materials and methods:</b> A cross-sectional study was performed to determine the nutritional status of pregnant women. The nutritional knowledge of 250 pregnant women attending AH&RC in a tertiary health care facility was assessed. The subjects were randomly chosen using a basic random procedure. Informed consent and ethical approval were obtained. Data was collected using data collection forms. The data was analyzed using SPSS software and statistically tabulated using frequency and percentages.
	<b>Results:</b> The study findings suggest that the majority of pregnant women understand the significance of nutrition throughout pregnancy and act on this understanding. 250 pregnant women were included in the study, few important questions were asked, among them majority 230(92.0%) of them had knowledge about extra food during pregnancy, 223 (89.2%) agree ,2 (0.8) disagree and 25 (10.0) of them had a neutral opinion on whether it was beneficial to eat extra amount of food during pregnancy. 160(64.0%) had the practice of adding at least 1 additional meal from non- pregnant diet.
	<b>Conclusion</b> : Based on the findings the study concludes that pregnant women had satisfactory knowledge attitude towards nutrition and diet during pregnancy but practices towards nutrition is still lacking among the study population. Hence, attention should be given by health care providers to improve dietary practice during pregnancy.
HP/PP/02	Akshay Mohan
	A prospective study on impact of clinical pharmacist intervention In patients with cardiovascular diseases in a tertiary care teaching hospital
	Abstract:
	<b>Background :</b> Cardiovascular disease (CVD) is the leading cause of morbidity and mortality in adults worldwide. Patients with CVD are at significant risk for adverse drug reactions and medication errors due to polypharmacy. Clinical pharmacists are pharmacists who, through advanced training, experiences, and/or certification requirements for licensure as a general pharmacist, have the skills and knowledge to provide clinical pharmacy services (CPS) to the health care team and patients. CPS includes, but is not limited to, complex medication management, transitional care related to medications, and patient or clinician medication education. Drug-related problems (DRPs) are events or circumstances involving drug therapy that potentially or actually interfere with desired health outcomes.
	<b>Objective :</b> To review and evaluate the drug therapy of patients admitted in intensive care unit and emergency department.
	<b>Methodology :</b> A prospective and observational hospital-based study conducted in Medicine ICU and General medicine department, over a period of months in Adichunchanagiri hospital and Research centre. The patients were informed about the study and those who shown interest was enrolled after obtaining their consent. The data was collected in a suitable designed data collection form by interviewing the patients.
	<b>Results</b> : A total of 536 patients were enrolled in the study. 360 (67.16%) were male and 176 (32.84%) were male. Majority of patients were belonging to the age group of 60-100 years (61.94%). Among 536 patients 180 patients were belonging to the stage 2 hypertension. Hypertension was found to be the highest and common CVD found in patients (94.02%). Antiplatelets are the common drug used in majority of the patient. Majority of prescription had 5- 10 drugs in it. Out of 536 patients 236 patients drug chart had DRP's and among all DRP Drug interaction was found to be the highest(n=204).In drug interaction, Pharmacodynamic were found highest(68.86%) followed by Pharmacokinetic(26.74%).The commonly involved drug was found to be aspirin and involved in 120 Drug infractions common pair of drug interaction were found to be metronidazole and ondansetron(n=41). In 214 patient, clinical pharmacist intervention is carried out. Drug monitoring were the highly suggested Clinical Pharmacist Intervention (29.39%).
	<b>Conclusion:</b> The present study concludes the males were more affected than females and the study shows that in this hospital, as in other countries, clinical pharmacists can detect and resolve DRPs and medication error in hospitalized patients through medication review. The assessment of the potential impact of pharmacist interventions characterized the activities of clinical pharmacists and suggested the need for the inclusion of clinical pharmacists to improve the quality of patient care. The results of this study provide useful knowledge for understanding DRPs and pharmacist interventions in hospitals. The findings of this study may help to ensure safe and effective pharmacotherapy.

Keywords : CVD, Drug Related Problems, Clinical Pharmacist Intervention, Drug Interaction

HP/PP/03	Thanveer Ahammed Chonari
	Assessment of medication knowledge and medication adherence among Patients undergoing haemodialysis in a tertiary care teaching hospital
	Abstract:
	<b>Introduction</b> : The medication knowledge of the patient is approximated based on the extent of patient's ability to recall the basic essential information. Hence, continuous education is required for a better understanding of the medications among patients. Medication adherence as, "the degree to which the person's behaviour corresponds with the agreed recommendations from a health care providerl. Adherence is the key link between therapy and outcome in medical care. Hence the aim of this study was to explore knowledge among CKD patients and assess the basic education on Medication knowledge and adherence by using MKAQ and GRSMAQ-HD questionnaire. This questionnaire seems to be an easy and appropriate tool to conduct studies exploring adherence to HD regimen. Therefore, it would be useful for widespread use in future studies.
	<b>Objective:</b> The objectives of the study to evaluate the medication knowledge of Haemodialysis patient and provide education to bring medication awareness in them. And to assess the patient medication adherence in patients on Haemodialysis and to understand the factors that affects this adherence, negatively or positively.
	<b>Methods:</b> The research was a Prospective Observational Study the Patients who satisfied the inclusion criteria were enrolled into the study. Patient data was collected and documented using the patient data collection form after obtaining their consent. Their medication knowledge and medication adherence were assessed using questionnaires and was quantified. Patients were counselled using Patient Information Leaflets.
	<b>Results</b> : Out of total 98 patients, 75 were male and 23 were female. In medication knowledge the mean rank increase from baseline $(1.31)$ to first follow up $(1.94)$ and second follow up $(2.75)$ (P=0.001). Study emphasizes the need for the continued education to the haemodialysis patient for better understanding of the medication use. Medication adherence statistically significant of post-test is greater when compared to pre-test. (P<0.001). This study finding provides information to health care providers to improve their patient's care by playing their important role in promoting the importance of knowledge on medication adherence for a better quality of life among haemodialysis patients. This result showed the effectiveness of medication counselling by a clinical pharmacist. Assessment of medication knowledge in patients may influence their medication adherence, though it may not necessarily result in better clinical outcome.
	<b>Conclusion</b> : By Providing continuous education on Medication Knowledge and Medication Adherence to improve knowledge awareness among haemodialysis patients could enhance adherence to therapies and thus could improve clinical outcomes and quality of life.
	Keywords: Medication Knowledge, Medication adherence, Haemodialysis, Chronic kidney disease.
HP/PP/04	Keywords: Medication Knowledge, Medication adherence, Haemodialysis, Chronic kidney disease. Muhammed Dahim
HP/PP/04	Keywords: Medication Knowledge, Medication adherence, Haemodialysis, Chronic kidney disease.         Muhammed Dahim         Assessment of knowledge, perception and willingness towards telemedicine usage among healthcare professionals and public
HP/PP/04	Keywords: Medication Knowledge, Medication adherence, Haemodialysis, Chronic kidney disease.         Muhammed Dahim         Assessment of knowledge, perception and willingness towards telemedicine usage among healthcare professionals and public         Abstract:
HP/PP/04	<ul> <li>Keywords: Medication Knowledge, Medication adherence, Haemodialysis, Chronic kidney disease.</li> <li>Muhammed Dahim</li> <li>Assessment of knowledge, perception and willingness towards telemedicine usage among healthcare professionals and public</li> <li>Abstract:</li> <li>Introduction: Development of a country is measured by the level of use of information Technology and Telecommunication to provide services to the public. The World Health Organization (WHO) defines Telemedicine as —The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information of diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities<sup>6</sup>. By increasing the accessibility of medical care telemedicine can enable patients to seek treatment earlier and adhere better to their prescribed treatments, and improve the quality of life.</li> </ul>
HP/PP/04	<ul> <li>Keywords: Medication Knowledge, Medication adherence, Haemodialysis, Chronic kidney disease.</li> <li>Muhammed Dahim</li> <li>Assessment of knowledge, perception and willingness towards telemedicine usage among healthcare professionals and public</li> <li>Abstract:</li> <li>Introduction: Development of a country is measured by the level of use of information Technology and Telecommunication to provide services to the public. The World Health Organization (WHO) defines Telemedicine as —The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information for diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities<sup>6</sup>. By increasing the accessibility of medical care telemedicine can enable patients to seek treatment earlier and adhere better to their prescribed treatments, and improve the quality of life.</li> <li>Objective: The aim of the study was to assess the knowledge and perception of telemedicine usage among health care professionals and public and to evaluate their willingness towards adaptation of telemedicine.</li> </ul>
HP/PP/04	<ul> <li>Keywords: Medication Knowledge, Medication adherence, Haemodialysis, Chronic kidney disease.</li> <li>Muhammed Dahim</li> <li>Assessment of knowledge, perception and willingness towards telemedicine usage among healthcare professionals and public</li> <li>Abstract:</li> <li>Introduction: Development of a country is measured by the level of use of information Technology and Telecommunication to provide services to the public. The World Health Organization (WHO) defines Telemedicine as — The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information of health care providers, all in the interests of advancing the health of individuals and their communities'. By increasing the accessibility of medical care telemedicine can enable patients to seek treatment earlier and adhere better to their prescribed treatments, and improve the quality of life.</li> <li>Objective: The aim of the study was to assess the knowledge and perception of telemedicine usage among health care professionals and public and to evaluate their willingness towards adaptation of telemedicine.</li> <li>Methodology: A cross sectional study was carried out among various healthcare professionals and public. A questionnaire was used to explore the knowledge, perception and willingness of specialized physicians and public by obtaining their opinions based on specific criteria and the responses were analysed as per the study objectives.</li> </ul>
HP/PP/04	<ul> <li>Keywords: Medication Knowledge, Medication adherence, Haemodialysis, Chronic kidney disease.</li> <li>Muhammed Dahim</li> <li>Assessment of knowledge, perception and willingness towards telemedicine usage among healthcare professionals and public</li> <li>Abstract:</li> <li>Introduction: Development of a country is measured by the level of use of information Technology and Telecommunication to provide services to the public. The World Health Organization (WHO) defines Telemedicine as —The delivery of health care services, where distance is a critical factor, by all health care professionals using information and communication technologies for the exchange of valid information of diagnosis, treatment and prevention of disease and injuries, research and evaluation, and for the continuing education of health care providers, all in the interests of advancing the health of individuals and their communities'. By increasing the accessibility of medical care telemedicine can enable patients to seek treatment earlier and adhere better to their prescribed treatments, and improve the quality of life.</li> <li>Objective: The aim of the study was to assess the knowledge and perception of telemedicine.</li> <li>Methodology: A cross sectional study was carried out among various healthcare professionals and public. A questionnaire was used to explore the knowledge, perception and willingness of specialized physicians and public by obtaining their opinions based on specific criteria and the responses were analysed as per the study objectives.</li> <li>Results: A total 724 participants in the study, out of which 370 were health care professionals &amp; 354 were public. Majority of the respondents were using computer and internet at work place for searching information, to maintain knowledge on telemedicine. Comparing to health care professionals towards telemedicine asplication, 6.9% are not willing to refer telemedicine technology to their friends and peers. Irrespective of their age, gender</li></ul>

Key Words: Telemedicine, Health care Professionals, Public, Knowledge, Perception
HP/PP05	Prajwal R			
	Type-2 diabetes mellitus and cardiovascular disease			
	Abstract			
	Patient with type 2 diabetes mellitus have an increased risk [2x] getting heart failure, according to new research about 90% of people develop heart failure who have type 2 diabetes, this paper focus on mechanisms of risk factor and treatment of type 2 diabetes who have the risk of cardiovascular disease.			
	MECHANISMS: Includes myocardial infraction and chronic pressure overload and pathogenic mechanisms mainly linked to hyper glycemia and chronic sustained hyperinsulinemia, exes include changes in metabolic profiles.			
	<b>RISK FACTOR:</b> Hypertension, abnormal cholesterol, obesity, lack of physical activity, poorly controlled blood sugar level, smoking.			
	<b>TREATMENT</b> : Use of atorvastatin show significant improvement in cardiovascular risk factor in patients with diabetes, Administration of a combination of drugs like thiazolidinediones [TZD]+ sulfonylureas in patient of diabetes mellitus and thiazolidinediones [TZD]+ metformin reduced the risk of myocardial infraction. Finally, dipeptidyl peptidase- inhibitors and glycolipoprotien-1 analogues shows potential for helping to prevent the deterioration of glucose metabolism in early diabetes mellitus type2.			
	Keywords:Hyper glycemia, obesity, hypertension, hyperinsulinemia, myocardial infraction,			
HP/PP06	Kiran M			
	Epidemiology and treatment of COPD			
	Abstract			
	Chronic obstructive pulmonary infection (COPD) is liable for early mortality, high passing rates and tremendous expense for wellbeing frameworks. The projection for 2020 demonstrates that COPD will be the third driving reason for death around the world (from 6th in 1990) and fifth driving reason for years lost through early mortality or debilitation (handicap changed life years) (twelfth in 1990). The predominance of COPD shifts by nation, age and sex Risk factors: Tobacco smoking, aging, air pollution.			
	Symptoms: Shortness of breath, wheezing or a chronic cough.			
	Treatment: corticosteroid, short acting bronchodilator, Methylxanthines, long acting bronchodilator, combination drugs.			
	Significant test for the following couple of years depends on the avoidance of smoking and the early discovery of the sickness in overall public early.			
	Keyword:COPD, predominance, bronchodilator, corticosteroids, significant test			
HP/PP07	Chandrakala D			
	Effect of nausea and vomiting on the quality of life of pregnant women			
	Abstract			
	Background: Pregnancy is a delightful physiological phase in which a zygote develops into 3.175kg newborn infant			
	within 40 weeks of conception within the mother's womb (9 months). The complex changes of pregnancy have an immense effect on the quality of life in these women as these changes will not only affect their physical variables but also their mental and social variables. There is an important relationship between Nausea and Vomiting with Quality of life during pregnancy.			
	Objective: To assess the effect of nausea and vomiting on Quality of Life (QOL) during pregnancy.			
	<b>Methodology:</b> A prospective study was carried out in 315 pregnant women out of which 230 were enrolled considering the inclusion and exclusion criteria. The approval of the Institutional Ethics Committee of Adichunchanagiri Hospital and Research Centre, B.G. Nagara was obtained prior to the commencement of study.			
	<b>Discussion:</b> Among 230 people, majority of them belongs to age group 23-27 years (44.3%), followed by 18 - 22(37%), 28-32(17.8%) and 33 & above(0.9%). And majority of participants 113 (49.1%) had Lower than average QOL and only 2 (0.9%) had a much higher than average QOL. When comparing the quality of life of pregnant women with NVP severity, a significant relation was found between the quality of life of pregnant women and NVP severity (0.01*).			
	<b>Conclusion:</b> The study demonstrated that presence of NVP have a significant impact on health-related QOL with being negatively affecting the QOL of pregnant women.			

HP/PP08	Bijisha Baburaj Nair
	PATIENT RESPONSIBILITY IN SAFE USE OF MEDICATION
	Abstract:
	Pharmacovigilance is the branch of pharmacology that deals with gathering, detecting, evaluating, monitoring, and preventing adverse medication effects. In affluent countries, adverse drug reactions (ADRs) are the fifth most common cause of mortality, with hospitalized patients more frequently experiencing severe ADRs. Some groups appear to be more impacted than others, particularly women and children. The 5 Moments for Medication Safety are the key moments where action by the patient or caregiver can greatly reduce the risk of harm associated with the use of their medication/s. There are 5 important questions for each situation. Some of the questions are self-reflective for the patient, while others need assistance from a health professional to be properly answered and pondered upon. As part of the third WHO Global Patient Safety Challenge: Medication Without Harm, this patient engagement tool has been created. It aims to empower patients to freely speak with their healthcare providers, stimulate patients' interest in the medications they are taking, and include patients in their own treatment more actively. With the assistance of medical professionals, patients, their families, and caretakers can use this tool at various stages of care and in a variety of contexts. Pharmacovigilance is unquestionably significant and has significantly demonstrated its effectiveness in practice. The Five Moments for Medication Safety tool from the World Health Organization improves patient medication management and is advised for use in a variety of healthcare settings
	Keywords: Pharmacovigilance, WHO, ADR, Medication safety, 5 Moments, Healthcare
HP/OOP01	G Haripriya
	Menstrual disorders associated with thyroid disfunction
	Abstract:
	Menstrual disorders pose a huge burden on gynecology outpatient department, accounting for approximately 20% of attendance. Thyroidysfunction can lead to menstrual irregularities and infertility. In India, thyroid disorders are among the most common endocrine disorder. Onset of thyroid disorders increases with age, and it is estimated that 26% of premenopausal and menopausal women are diagnosed with thyroid disease. Thyroid disorders are more common in women than in men and in older adults compared with younger age groups. The introduction of serum thyroxin level, T3 and serum thyroid stimulating hormone TSH radioimmunoassay has increased the sensitivity and specificity of thyroid function testing. SPSS version-20 was used for statistical analysis and calculated frequency, percentages, mean, SD and median. In this study, 56.8% were in the age group 21-30 years, 36.1% were between 31-40 years.
	Key words: Dysfunctional uterine bleeding, Hyperthyroidism, Hypothyroidism, Subclinical hypothyroidism.
HP/OOP02	Rajeswari P
	Pharmacoeconomics: Basic Principles, Methods and Economic Evaluation of Drug Therapies:
	Abstract
	Pharmacoeconomics identifies, measures, and compares the costs and consequences of drug therapy to healthcare systems and society. Due to the high pricing of drug, it is very essential in pharmaceutical industry, government, and in the private sector for comparing various cost consequences. This branch of health care economics offers important guidance for the management of limited health care resources and medical practice. Health outcomes research, and patient-reported outcomes (PRO) in particular, aim at understanding patient value in terms of impact of disease and its treatment on physical functioning and psychosocial wellbeing, known also as —health-related quality of lifel (HRQL). As a consequence of limited financial resources, health economics, and particularly pharmacoeconomic analyses, are becoming a frequently used criterion for decision making in modern health care policy. The purpose of this article is to provide an introduction of pharmacoeconomics, its various methods of evaluations such as cost minimization analysis, cost benefit analysis, cost utility analysis, cost effectiveness analysis and guidelines to deliver quality care cost effectively and also discuss challenges, limitations and applications of pharmacoeconomics.
	<b>Key words</b> : Cost minimization analysis, Cost benefit analysis, Cost utility analysis, Cost effectiveness analysis, Health care economics, Pharmacoeconomics.

HP/OPP01	<ul> <li>M Maneesha</li> <li>INNOVATIONS IN PHARMACY PRACTICE: IMPROVING PATIENT OUTCOMES</li> <li>Abstract:</li> <li>Pharmacy practice is constantly evolving as new research and technologies emerge, and the incorporation of these innovations has the potential to significantly improve patient outcomes. One area of innovation that has garnered significant attention in recent years is pharmacogenomics, or the study of how an individual's genetic makeup affects their response to medications. By using pharmacogenomic testing, pharmacists can tailor medication regimens to an individual's unique genetic profile, potentially leading to more effective treatment and fewer adverse drug reactions. Another area of innovation in pharmacy practice is the use of digital technologies to improve patient care. For example, pharmacists can use electronic medical records to track a patient's medication history and alert them to potential drug interactions or other safety concerns. Telepharmacy, or the use of videoconferencing to provide pharmacy services remotely, can also increase access to care for patients in underserved areas. By using these technologies, pharmacists can improve patient outcomes by ensuring that patients receive timely, accurate, and appropriate medication information and advice.</li> <li>Overall, the incorporation of pharmacogenomics and digital technologies into pharmacy practice has the potential to significantly improve patient outcomes and enhance the role of the pharmacist in healthcare. By staying up-to-date on the latest innovations in pharmacy practice, pharmacists can better serve their patients and contribute to the overall improvement of healthcare.</li> </ul>
HP/OPP02	M Kalpana "NSAIDS INDUCED HALLOW VISCOUS PERFORATION" Abstract Today, Non-steroidal Anti-inflammatory Drugs (NSAIDS) are the most often used medications and their use is unavoidable. In addition to their analgesic, anti-inflammatory and antipyretic effects NSAIDS have also been shown to give protection against serious diseases like cancer and heart attacks. Additionally, it raises their demand for repurposing in order to cure new ailments. The most significant issue with the usage of NSAIDS is the vast spectrum of GI adverse effects. These include colitis, enteropathy, perforation, stricture and ulceration. However, advanced age, drinking alcohol, smoking, having co morbid conditions using glucocorticoids or anticoagulants concurrently, using NSAIDS at high doses or for an extended period of time are all established risk factors. Rare but potentially fatal NSAIDS adverse effects after extended use include gastrointestinal perforation. Hallow Viscous Perforation, which has a mortality rate of 30 to 50 percent and is brought on by trauma, bowel ischemia, infections, medications like NSAIDS, Corticosteroids, Immunosuppressant's etc., is characterized by loss of gastrointestinal wall integrity with subsequent leakage of enteric contents. It presents as sudden onset of abdominal pain, nausea, vomiting, obstipation and symptoms of peritonitis. The risk of perforated diseases should be clinically assessed in any sick patient with an acute abdomen pain especially if the patient is using an NSAIDS, Indicating that NSAIDS should always be administered with the utmost prudence.

Key Words: Non-Steroidal Anti inflammatory Disease, Hallow Viscous Perforation, Pathological studies.

Committee	Name Of The Students			
Scientific	Varsha	Salman	Snehashree	
	Shivaprasad	Preethu	Kushi	
	Madhushalini	Chethan	Sharath rv	
	Preethu	Amith M N	Rakhi krishna	
	Sneha	Prajwal B	malavika	
	Kiran	Viola Vinita Dsa	Akshay N	
	Chandan K S	Spandana	Prathiksha	
	Ravi kumar	Shanaz Khanum	Harsha	
	Kruthika	Shivani	Sindhu S	
Registration	Vibhav	Mihir	Prithviraj	
	Harsalan	Tejas	Bharath	
	Akshay	Shivamuthu	Hithesh	
	Dinesh	Kushal	Rudramurthy	
	Harshith	Rajath	Srujan	
	Harini	Karthik	Himashruthi	
	Sufiya	Yashaswini	Divya	

#### STUDENTS VOLUNTEER COMMITEE

	Sumaiya	Chandrakala M	Syeda zohra
	Lakshmisagar	Prajwal B	Basavasagar B
Accommodation & Hospitality	Dawjan	Santhosh	Sai Naveen
	Abdul	Kushal	Suhas
	Likith S Gowda	Preetham	Jayprakash
	Vishnu	Dhanush gowda	Najeed
	Arpitha	Priya	Anvar
	Kruthika	Sahana	Priyanks
	Anju	Sahana	Bhargavi
Stage	Adhvaith	Girish	Arpitha
	Sneha R	Shreyas	Preetham
	Prajwal R	Chandhan	Pruthviraj
	Tejaswiram	Sheetal	Bhanupriya
	Shivani	Sharath	Supritha





**ICPPBR-23** 



#2882/2, Kalidasa Road, V.V.Mohalic, Mysuru.570002

**ICPPBR-23** 

Aushad





Sarada Vilas College of Pharmacy, Mysuru

**ICPPBR-23** 





India Shopping Mall, Margadarshi Colony, Kothapet, Hyderabad - 102.



**ICPPBR-23** 

# Dr.D. Srinath

## **Murthy Pharma**

## **BKS Hospital Premises**

1<sup>st</sup> Cross Gandhi Nagar

### **Ballary – 583103**

Karnataka, India



Sarada Vilas College of Pharmacy, Mysuru

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