pharmahorizon

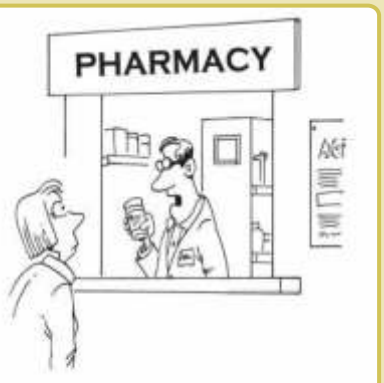
A panorama in the world of health sciences

NEWSLETTER FROM DEPARTMENT OF PHARMACY, SUMANDEEP VIDYAPEETH DEEMED UNIVERSITY

NAAC 'A' Grade
UGC Category I Deemed University

JUL-DEC 2019 I Vol V Issue 2

CARTOON



"This probably won't work, but we do have medications that will take care of the side effects."

EDITOR-IN-CHIEF'S VIEW:

Dr. Chintan Aundhia

It is my great pleasure to write the editorial for the second issue of the fifth volume. In this issue, we have incorporated articles which include herbal drugs, clinical pharmacists etc. The articles in the present newsletter are contributed from persons from industry, academician, students, alumni etc.

We have also incorporated, the activities performed by the Department of Pharmacy especially towards the community and have given a glimpse of the national level seminar 'Pharmarendezvous 2019'.

I hope the readers will appreciate the current issue issue of Pharmahorizon. Your feedbacks will go a long way in improving the quality of our newsletter.

HERBAL DRUGS – GLOBAL SCENARIO

Globally 14.2 million people between the ages of 30-69 years die prematurely each year from life-style oriented diseases than infectious or hereditary ones. WHO has warned that more than 270 million are susceptible to fall victims to unhealthy lifestyles. Incidentally, a majority of this number are thought to be comprised of individuals from China, India, Pakistan and Indonesia. In a recent report (Down to Earth's biennial publication, Body Burden: Lifestyle Diseases, Nov' 17) lifestyle diseases have been considered to be the biggest killer in India, accounting for 61% percent of deaths. The NFHS (National Family Health Survey) figures suggest that currently India ranks second with 155 million obese citizens and are increasing at 33-51% every year. The International Diabetes Federation suggests that India has the largest number of people who suffer with type 2 diabetes at around 40.9 million people. Around 30% to 40% of cardiovascular deaths happen in India among the age group of 34-64 years of age. India ranks No.1 in cardiac patients, around 50 million people in India suffer from heart problems. In India, more than 100 million people have high blood pressure. Indian studies have shown that about 10% to 15% of strokes occur in people below the age of 40 years. 4.3 million adults were diagnosed with Chronic Obstructive Pulmonary Disease in the past year. In India, approximately 36,149 people die each year due to cirrhosis. Around 39,480 deaths are estimated due to nephritis each year in India….and many more.

With the revolution of economy, the standard of living has inevitably risen and with this has increased the need to work and work even more. Working in prolonged night shifts affects the biological clock and results in insomnia and consequently, deterioration in over-all health. Deadlines and commitments at work places cause immense strain and failure to meet these results in severe stress and depression. Due to the new-age globalization and time constraints, people no longer want to have home-made food and love to indulge in junk food and ready-made food from road-side eateries. Lack of physical exercise and outdoor games in children is resulting in obesity which has taken a massive form abroad and is affecting children in India as well. Heart diseases, hypertension and cases of heart attacks have become so common. Thus it is rightly stated that "we lose health to gain money and we lose money to gain health".....

SOLUTION OFFERED:

The onset of these lifestyle diseases is insidious, they take years to develop, and once encountered do not lend themselves easily to cure or quick fix by Allopathic Medicine. The human population, the world over, is thus grappling with the new age health problems and is unable to get viable solutions for their health needs. Therefore there is a search and growing acceptance of complementary systems of health care. Treatment of illness and maintenance of health using herbal medicines is the oldest and most popular form of Healthcare practice known to humanity. Herbs are staging a comeback and herbal 'renaissance' is happening all over the globe. The herbal products today symbolize safety in contrast to the synthetics that are regarded as unsafe to human and environment. As lifestyle diseases require long term medical treatment herbal drugs offer a far better and safe alternative.

During the past decades, public interest in natural therapies has increased dramatically, not only in the developing world but also in industrialized countries. This has increased the international trade in botanicals enormously and has attracted many large pharmaceutical and consumer products companies worldwide. India is sitting on a gold mine of well recorded and traditionally well practised knowledge of herbal medicines. In spite of this the share of India in the global market is not up to the mark. Over three-quarters of the world population relies mainly on plants and plant extracts for health care. It is estimated that world market for plant derived drugs may account for about Rs.3,00,000 crores. Presently, Indian contribution is less than Rs.9000 crores. This offers a wide scope for trade based on herbal drugs. Until a few years ago, only small companies had interest in the marketing of herbal medicines. Currently, most large multinational companies are including herbal drugs in their product portfolios.. By virtue of the in-depth knowledge of Pathophysiology, Pharmacology and Phytochemistry several herbal products for the treatment of various lifestyle diseases like diabetes (D-Prio), obesity (Svelte and Shape), stress (Glyck), varicose veins (Varicono), hormonal problems in women (Sharvari), arthritis and joint pain (Indolore), etc are in the market

Dr. Pallavi Bafna
Director, Priority Herbals Pvt. Ltd., Pune
Contact: 7875055656/020-2740 2020 Email: info@priorityherbals.com ,priorityherbals@gmail.com

pharmahorizon
A panorama in the world of health sciences
JUL-DEC 2019 I Vol V Issue 2

Clinical Pharmacist's stance:

Clinical pharmacists: The major support to Indian healthcare system in near future:

India has launched Doctor of Pharmacy (Pharm.D.) study program in the year 2008, and it has sprouted huge discussions about both, the program and the role of clinical pharmacists (CPs) in the country. Furthermore, there had been "almost no" professional clinical pharmacy services (CPs) provided in the country. As a consequence, the concepts of CP and Pharm.D. are quite new in India. Here, we have predicted the benefits of CPs and CPs in Indian healthcare system on the grounds of current healthcare scenario.

The philosophy of pharmaceutical care (PC) is the sum of responsibilities of the pharmacist to meet all of the patient's drug-related needs through direct patient care and cooperation with other facets of the health care system. Clinical pharmacists possess in-depth therapeutic knowledge and scientific skills that allow them to act as drug therapy experts in healthcare setting.

Pharmacy practice is still in the initial stages of development in India, but launching of Doctor of Pharmacy (Pharm D) study program has brought serious discussions about clinical pharmacy in the country. As the profession is in budding stage in the country, the patients, physicians, nurses, other healthcare providers, recruiters in pharmaceutical industries, prospective students, and their parents have numerous questions about this profession and study course. The objective of this article is to create awareness about clinical pharmacy services (CPS) and to introduce the role of clinical pharmacists (Cps).

Nowadays, various electronic databases and drug information softwares are used for the provision of unbiased and latest medicine/poison information in the western world. Such softwares/databases give easy, quick and updated information about drugs/poisons. Some good examples include - MICROMEDEX™, Clinical Pharmacology™ (by Elsevier), Medscape™, etc. Further to add, their mobile and apps are also available for quick information related to medicine.

Until now, the central and several state governments have not considered them to work in hospitals as CPs. The clinical pharmacy profession is restricted only to hospitals linked to pharmacy practice and Pharm.D. schools. The regulatory framework has not recognized the need of CPs at national level and there are almost no opportunities for CPs in hospital settings in India. The recruiters in private pharmaceutical companies are not completely aware of the role of CPs.

Physicians' attitudes toward CPSs and collaborating with clinical pharmacists may facilitate or hinder the implementation and expansion of the services and the role of clinical pharmacist on hospital wards. For CPSs to be successfully implemented, to be sustainable and to grow, the roles, abilities and responsibilities of the clinical pharmacist need to be clearly described and there need to be opportunities to support collaborative relationships not only with physicians but with other health care practitioners. It is also important that decision-makers support the implementation of CPSs.

Bibliography:

- Deshpande PR, Vantipalli R, Lakshmi CC, Rao EJ, Regmi B, Ahad A, Nirojini PS. Clinical pharmacists: The major support to Indian healthcare system in near future. Journal of pharmacy & bioallied sciences. 2015 Jul;7(3):161.
- Tegegn HG, Abdela OA, Mekuria AB, Bhagavathula AS, Ayele AA. Challenges and opportunities of clinical pharmacy services in Ethiopia: a qualitative study from healthcare practitioners' perspective. Pharmacy Practice (Granada). 2018 Mar;16(1).
- Vinterflod, C., Gustafsson, M., Mattsson, S. et al. Physicians' perspectives on clinical pharmacy services in Northern Sweden: a qualitative study. BMC Health Serv Res 18, 35 (2018). https://doi.org/10.1186/s12913-018-2841-3

Dr. Mahek Mistry, Pharm.D., Assistant Professor,
Departement of Pharmacy, SVDU

Student's Outlook:

Internship experience by Pharm. D intern

Internship is a period where a person's whole education is put into a practice to give an insight of real purpose of hard work of all these years and that's exactly what happened to me. All my bookish knowledge was put into force.

All though these months during my internship,I have put all my energy and efforts to educate and to prepare myself to gain experience and to provide the best clinical pharmacy services to the healthcare system and to prove the importance of clinical pharmacist and clinical pharmacologist in the hospital setting.

It was overall an overwhelming experience. Auditing cases and actively participating in the ward rounds were the best part, I enjoyed doing the most with endless number and the variety of cases available at Dhiraj hospital.

Clerkship did give a glimpse of internship along with our research project which was made successful with immensely knowledgeable mentorship by our guides.

During these years we did audit approximately around 400 cases and prescriptions and trials to give all possible inputs by providing drug information, reporting ADRs, counseling patients to discussing therapy strategies with other healthcare professionals to improve the healthcare system.

As a Pharm.D few significant works during my internship were:-

- A 75 year old male patient with the K/c/o interstitial lung diseases was prescribed with a new drug pirferidone and therefore doctor s were unaware of its dosing and I was asked to provide its dosing and also to find out the reason for tremors. I provided all the information they required.
- I provided the drug information of therapy regimen for hypertension with comorbidity of stroke.

Tiji Mathew, Pharm.D Intern.

CLINICAL PROJECT EXPERIENCE IN PHARM.D

Pursuing Doctor of pharmacy (Pharm.D) at Sumandeep Vidyapeeth has been an amusing and a knowledgeable experience. Along this journey, throughout the years I was guided by highly knowledgeable and skilled professors, polishing my view point in every theoretical and practical aspects. Also with compatible colleagues, refreshing studying environement in campus assisted in becoming a competent Pharm.D graduate.

Throughout the four years gaining sufficient and systematic theoretical and practical knowledge ahead of clinical project in 5th year, helped in proving proper direction and gave the opportunity to identify a specific interest for the research work.

Teaming up with 2 other colleagues, we decided a common topic of interest at department of psychiatry, Dhiraj hospital.This research topic was titled as "a drug use evaluation study of antidepressants in psychiatric patients". It determines the distribution, prescription patterns and the usage of drugs in a community. The pattern of prescribing Antidepressants to patients have been varying worldwide over the last few years. Hence, through this study we wanted to observe the prescribing pattern of antidepressants as well as assess its various outcomes in patients along with the rationality of the prescriptions and the prevalence of antidepressant usage in the community.

During this research project as a clinical pharmacist we identified several factors which played an important role in patient's therapy such as:

- Monitored the patient's Adherence towards therapy which is essential especially for psychiatric patients and provided several techniques and methods to improve adherence during interview and counseling sessions in person.
- Interviewed the patients for assessing their cure rate on using antidepressants, using a scale called HAMD. This assisted the prescribing doctor to take necessary decision in patient's therapy on the basis of that score.
- They were screened for possible ADRs and side-effects by using WHO-UMC scale. All the suspected patients with ADRs were counseled with proper guidance under supervision and the records were documented for helping doctors to make necessary changes with the suspected drug.
- As a clinical pharmacist, intervention was made wherever it was necessary in a professional manner through discussing with healthcare professional. Mainly intervention was related to patient discomfort on using the drug leading to weight gain, elevated BP or decline in sexual activity rate.

Through this project I was not only able to identify the method of prescribing in a rationale way but also was able to develop several communication and self presenting skills with patients and other healthcare professionals which I believe played an important role throughout my internship phase in interacting with healthcare colleagues, senior doctors and counseling patient in both hospital setting and community setting mainly during medical camps organized by Dhiraj hospital.
Finally summing up the project work with internship I would like to add that all these years of knowledge have played an important role in shaping up for my future professional life.

Bhumin Sangani, Pharm.D Intern

pharmahorizon
A panorama in the world of health sciences
JUL-DEC 2019 I Vol V Issue 2

-:THE SCIENTIST WHO DISCOVERED EBOLA:-

- ✓ The Ebola Outbreak is a continuing problem in West Africa. Thousands have perished from Ebola while the region as a whole has experienced economic difficulties as a result of the outbreak. With all the media coverage and focus on the Ebola Virus, some may wonder who actually discovered it. In 1976 Dr. Peter Piot of Belgium and his colleagues were the first people to identify Ebola.
- ✓ Dr. Piot had just graduated from medical school and was training to be a clinical microbiologist in 1976. While working in a lab at the Institute of Tropical Medicine in Antwerp, Belgium, Piot received a cheap plastic thermos containing two vials of blood and some melted ice. Also inside was a handwritten note from a Belgian doctor based in Zaire. The note explained that the blood had been taken from a Belgian nun working in Zaire. She and two hundred others in a remote region of Zaire had become seriously sick with a mysterious illness. The thermos had been flown on a commercial flight from Zaire's capital city in one of the passenger's carry-on bags! Upon opening the thermos, Piot and his colleagues were greeted with a slushy mix of melted ice and blood. Of the two vials only one had remained intact while the other had shattered en route.

Dr. Piot

- ✓ When the scientists examined the blood under a microscope they were surprised by what they saw. "We saw a gigantic worm like structure- gigantic by viral standards," explains Piot. The World Health Organization ordered the Belgian scientists to send their blood samples to the CDC lab, the world's reference center for hemorrhagic viruses at the time. After analysing the virus, the CDC confirmed that the sample contained a brand new hemorrhagic virus. Dr. Piot says that he experienced a feeling of "incredible excitement" with the discovery of Ebola.
- ✓ The group of scientists decided that they needed a name for the virus that they were tracking down. Some wanted the name Yambuku after the village where the virus first appeared. However, there was worry that naming a deadly virus after a town would attach a stigma to that town. Instead the scientists looked to a map of the affected region. They chose to name the virus after the river closest to the village of Yambuku, the Ebola River. The name has stuck ever since.
- ✓ In retrospect, Dr. Piot says that he was "lucky not to get infected, not only in the laboratory but later on when I was drawing blood from patients and touching them." Following his work with Ebola, Dr. Piot conducted research on the AIDS epidemic in Africa and later became the founding executive director of UNIAIDS, the Joint United Nations Programme on HIV/AIDS. Dr. Piot is currently the Director of the London School of Hygiene and Tropical Medicine.

❖ References:-

Scitable by nature's Education. The Scientist Who Discovered Ebola. Available from [Internet] https://www.nature.com/scitable/blog/viruses101/the_scientist_who_discovered_ebola/. Accessed on 14th April, 2020.

-: MOLECULE OF THE MILLENNIUM :-

- ➢ **A -Lasmiditan**, 5-HT1F receptor agonist is being developed by Eli Lilly and Company for the acute treatment of migraine, Received its first approval on 11th October, 2019.
- ➢ Lasmiditan is an orally available serotonin (5-HT)1F receptor agonist. In October 2019, the US FDA approved lasmiditan 50 mg and 100 mg tablets for the acute treatment of migraine with or without aura in adults. Approval was based on positive results from two pivotal phase III trials, in which lasmiditan signifcantly improved the proportions of patients achieving freedom from headache pain and freedom from the most bothersome symptom (photophobia, phonophobia or nausea), relative to placebo, when used to treat a migraine with moderate to severe pain. Lasmiditan is not for use in the preventive treatment of migraine.
- ➢ The recommended dose is 50 mg, 100 mg or 200 mg administered orally as needed. A maximum of one dose should be taken in 24 h; a second dose has not been demonstrated to be effective in treating the same migraine attack. Lasmiditan should only be taken if the patient can wait≥8 h between dose administration and driving or operating machinery. The safety of lasmiditan in treating>4 migraine attacks on average in a 30-day period has not been established.
- ➢ The recommended controlled substance classification for lasmiditan is currently under review by the US Drug Enforcement Administration (DEA) and is expected within 90 days of the aforementioned FDA approval date.

- ➢ **Learning Points for Lasmiditan:-**
- ➢ Lasmiditan also shouldn't be taken with alcohol or other drugs that depress the central nervous system.
- ➢ The most common TEAEs [occurring in ≥ 2% of patients receiving any lasmiditan dose and with a significantly ($p < 0.05$) higher incidence than with placebo] were dizziness (8.6%, 15.3% and 17.2% of lasmiditan 50 mg, 100 mg and 200 mg recipients, respectively, vs 2.9% of placebo recipients), paresthesia (2.4%, 5.8% and 7.2% vs 1.5%), somnolence (5.4%, 5.1% and 6.0% vs 2.1%), nausea (2.8%, 4.1% and 4.0% vs 1.6%), fatigue (2.8%, 4.1% and 4.0% vs 0.6%), muscular weakness (1.1%, 1.3% and 1.5% vs 0) and hypoesthesia (0.3%, 1.3% and 1.6% vs 0.2%). These TEAEs had a rapid onset (typically < 1 h after administration) and, depending on the event, a median duration of 1.0–4.8 h. Dizziness was typically mild or moderate in severity, and was the only serious adverse event to occur in > 1% of patients in any treatment group (doing so in the lasmiditan 200 mg arm). There were no ischemic events or deaths during the studies.

❖ References:-

1. Lamb YN. Lasmiditan: First Approval. Drugs. 2019 Dec 1;79(18):1989-96.
2. MayoClinic. Migraine. https://www.mayoclinic.org/diseases-conditions/migraine-headache/diagnosis-treatment/drc-20360207. Available from [Internet]. Accessed on 14th April, 2020.

NEW DRUG APPROVAL

Rifapentine 150mg film coated tablet

"For the treatment of latent tuberculosis infection caused by Mycobacterium tuberculosis in adults and children 2 years and older who are at high risk of progression to tuberculosis disease (including those in close contact with active tuberculosis patients, recent conversion to a positive tuberculin skin test, HIV-infected patients, or those with pulmonary fibrosis on radiograph). Active tuberculosis disease should be ruled out before initiating treatment for latent tuberculosis infection. Rifapentine Tablets 150mg must always be used in combination with isoniazid as a 12- week once-weekly regimen for the treatment of latent tuberculosis infection.

Drug dosing: Latent Tuberculosis: Once weekly rifapentine PO (weight based dosing below) plus isoniazid once-weekly for 12 weeks as directly observed therapy (DOT). ≥12 years and >50 kg: 900 mg , ≥12 years and 32.1-50 kg: 750 mg.

Isoniazid dose: 15 mg/kg (rounded to nearest 50 mg or 100 mg); not to exceed 900 mg once-weekly for 12 weeks.

Side effects: Hyperuricemia (most likely d/t pyrazinamide from initial phase combo Tx).

Contraindications: Hypersensitivity to rifamycins, Pregnancy: No Human data (Animal studies in rats and rabbits revealed embryofetal toxicity in both species)

Source:

1. List of new drugs approved in the year 2019 https://cdsco.gov.in/opencms/opencms/system/modules/CDSCO.WEB/elements/download_file_division.jsp?num_id=NTQxMA==

2. https://reference.medscape.com/drug/priftin-rifapentine-342681

3. Sterling TR, Villarino ME, Borisov AS, Shang N, Gordin F, Bliven-Sizemore E, Hackman J, Hamilton CD, Menzies D, Kerrigan A, Weis SE. Three months of rifapentine and isoniazid for latent tuberculosis infection. New England Journal of Medicine. 2011 Dec 8;365(23):2155-66.

WHO RECOMMENDATIONS ON FIRST- AND SECOND-LINE ANTIRETROVIRAL REGIMENS

First-line ART regimens

1. Dolutegravir (DTG) in combination with a nucleoside reverse-transcriptase inhibitor (NRTI) backbone is recommended as the preferred first-line regimen for people living with HIV initiating ART.
   - Adults and adolescents (strong recommendation, moderate-certainty evidence)
   - Infants and children with approved DTG dosing (conditional recommendation, low-certainty evidence).
2. Efavirenz at low dose (EFV 400 mg) in combination with an NRTI backbone is recommended as the alternative first-line regimen for adults and adolescents living with HIV initiating ART (strong recommendation, moderate certainty evidence).
3. A raltegravir (RAL)-based regimen may be recommended as the alternative first-line regimen for infants and children for whom approved DTG dosing is not available (conditional recommendation, low-certainty evidence).

A RAL-based regimen may be recommended as the preferred first-line regimen for neonates (conditional recommendation, very-low-certainty evidence)

Second-line ART regimens

1. DTG in combination with an optimized NRTI backbone may be recommended as a preferred second-line regimen for people living with HIV for whom non-DTG-based regimens are failing.
   - Adults and adolescents (conditional recommendation, moderate-certainty evidence)
   - Children with approved DTG dosing (conditional recommendation, low-certainty evidence)
2. Boosted protease inhibitors in combination with an optimized NRTI backbone is recommended as a preferred second-line regimen for people living with HIV for whom DTG-based regimens are failing (strong recommendation, moderate-certainty evidence)

Source: https://apps.who.int/iris/bitstream/handle/10665/325892/WHO-CDS-HIV-19.15-eng.pdf?ua=1

Guidelines on Clinical Management of COVID – 19

1. **Immediate implementation of appropriate IPC measures :** Infection prevention control (IPC) is a critical and integral part of clinical management of patients and should be initiated at the point of entry of the patient to hospital.
2. **Sample collection: Preferred sample:** Throat and nasal swab in viral transport media (VTM) and transported on ice Alternate: Nasopharyngeal swab, BAL or endotracheal aspirate which has to be mixed with the viral transport medium and transported on ice.
3. **Early supportive therapy and monitoring:** Give supplemental oxygen therapy immediately to patients with SARI and respiratory distress, hypoxaemia, or shock: Initiate oxygen therapy. Use conservative fluid management in patients with SARI when there is no evidence of shock as it may worsen oxygenation. Give empiric antimicrobials to treat all likely pathogens causing SARI. Do not routinely give systemic corticosteroids for treatment of viral pneumonia or ARDS outside of clinical trials unless they are indicated for another reason.
4. **Management of hypoxemic respiratory failure and ARDS :** Recognize severe hypoxemic respiratory failure, Hypoxemic respiratory failure in ARDS commonly results from intrapulmonary ventilation-perfusion mismatch or shunt and usually requires mechanical ventilation. When respiratory distress and/or hypoxemia of the patient cannot be alleviated after receiving standard oxygen therapy, high – flow nasal cannula oxygen therapy or non – invasive ventilation can be considered. Endotracheal intubation should be performed by a trained and experienced provider using airborne precautions.
5. **Management of septic shock:** Recognize septic shock in adults when infection is suspected or confirmed AND vasopressors are needed to maintain mean arterial pressure (MAP) ≥65 mmHg AND lactate is < 2 mmol/L, in absence of hypovolemia. Recognize septic shock in children with any hypotension (systolic blood pressure [SBP] <5th centile or >2 SD below normal for age).
6. **Other therapeutic measures:** For patients with progressive deterioration of oxygenation indicators, rapid worsening on imaging and excessive activation of the body's inflammatory response, glucocorticoids can be used for a short period of time (3 to 5 days). It is recommended that dose should not exceed the equivalent of methylprednisolone 1 – 2mg/kg/day.
7. **NO SPECIFIC ANTIVIRALS** have been proven to be effective as per currently available data. off – label indication in patients with severe disease and requiring ICU management: Hydroxychloroquine (Dose 400mg BD – for 1 day followed by 200mg BD for 4 days) In combination with Azithromycin (500 mg OD for 5 days).

Source: https://www.mohfw.gov.in/pdf/RevisedNationalClinicalManagementGuidelineforCOVID1931032020.pdf

pharmahorizon
A panorama in the world of health sciences
JULY-DES 2019 I Vol V Issue 2

DRUGS IN CLINICAL TRIALS:

Poxel reports positive results from TIMES 3 trial of Imeglimin for treatment of type 2 diabetes – November, 2019, Poxel SA, a biopharmaceutical company focused on the development of innovative treatments for metabolic disorders, including type 2 diabetes, announced positive topline phase 3 results from the 36-week, open-label extension period of the TIMES 3 trial, which evaluated Imeglimin in combination with insulin for the treatment of type 2 diabetes. Referred to as TIMES (Trials of IMeglimin for Efficacy and Safety), the Imeglimin phase 3 programme in Japan includes three pivotal trials to evaluate Imeglimin's efficacy and safety in over 1,100 patients. The 16-week, double-blind placebo-controlled randomised portion of the TIMES 3 trial was observed to demonstrate efficacy and achieved statistical significance ($p<0.0001$) for its primary endpoint, defined as a change of glycated hemoglobin A1c (HbA1c) from baseline versus placebo at week 16, with a mean HbA1c placebo-corrected change from baseline of -0.60%.

Source: http://www.pharmabiz.com/NewsDetails.aspx?aid=119631&sid=2

Linnaeus Therapeutics begins phase 1/2 trial of LNS8801 in patients with advanced cancer – October, 2019, Linnaeus Therapeutics, a biopharmaceutical company, focused on the development and commercialisation of novel small molecule oncology therapeutics, announced that it has dosed the first patient in its phase 1/2 clinical trial of LNS8801 in patients with advanced solid and hematologic cancers. This marks the first time any company has dosed a patient in a clinical trial specifically targeting the G protein-coupled estrogen receptor (GPER). The initiation of the study follows US Food and Drug Administration (FDA) clearance of the company's investigational new drug application (IND) for LNS8801 in September. LNS8801 is an orally bioavailable small molecule that is a highly specific and potent agonist of the GPER. GPER activation suppresses well-known tumor-associated genes, such as c-Myc and PD-L1. In preclinical cancer models, it displayed potent antitumor activities across a wide range of tumor types.

Source: http://www.pharmabiz.com/NewsDetails.aspx?aid=119092&sid=2

NIH awards $945 million funding in research to tackle opioid crisis through NIH HEAL Initiative – September, 2019, National Institutes of Health (NIH) has awarded $945 million in total fiscal year 2019 funding for grants, contracts and cooperative agreements across 41 states through the Helping to End Addiction Long-term Initiative or NIH HEAL Initiative. The trans-NIH research effort aims to improve treatments for chronic pain, curb the rates of opioid use disorder (OUD) and overdose and achieve long-term recovery from opioid addiction. The NIH HEAL Initiative is leveraging expertise from almost every NIH institute and center to approach the crisis from all angles and disciplines, and across the full spectrum of research from basic to implementation science in the areas of: Translation of research to practice for the treatment of opioid addiction. New strategies to prevent and treat opioid addiction. Enhanced outcomes for infants and children exposed to opioids. Novel medication options for opioid use disorder and overdose. Clinical research in pain management. Preclinical and translational research in pain management.

Source: http://www.pharmabiz.com/NewsDetails.aspx?aid=118458&sid=2

DIETARY RESEARCH:

Not Eating Good Food Worse Than Eating Bad Food

11 million deaths in 2017 attributed to dietary factors, more were associated with inadequate intakes of healthy foods than with superfluous consumption of unhealthy ones, according to the Global Burden of Disease 2017 (GBD 2017) study. Righting that dietary imbalance might potentially prevent more than 1 in 5 deaths worldwide. Globally, the largest deficiencies in healthy food consumption were related to nuts, seeds, milk, and whole grains, whereas sugary drinks, processed meats, and sodium were overconsumed. GBD 2017 report that while the effect of specific dietary factors differed across countries, non-optimal consumption of whole grains, fruits, and sodium accounted for more than 50% of deaths and 66% of disability-adjusted life years (DALYs) attributable to diet.

Source: https://www.medscape.com/viewarticle/911932

NEW MOLECULE ENTITY & NEW THERAPEUTIC BIOLOGICAL PRODUCT

Upadacitinib

August, 2019 – The U.S. Food and Drug Administration approved Upadacitinib (Rinvoq, AbbVie) for adults with moderately-to-severely active rheumatoid arthritis (RA) who have had an inadequate response or intolerance to methotrexate. Based on data from the SELECT program, upadacitinib, an oral Janus kinase (JAK) inhibitor, met all primary and ranked secondary endpoints across a variety of patients with moderate-to-severe RA. The efficacy, safety, and tolerability of upadacitinib for RA was studied in five phase 3 studies from the SELECT program. The studies enrolled a variety of RA patients, including those who experienced treatment failure with or were intolerant of biologic disease-modifying antirheumatic drugs (csDMARDs-IR) and who were naive to or who responded inadequately to methotrexate (MTX-IR). The most common side effects associated with upadacitinib include upper respiratory tract infections, nausea, cough, and pyrexia.

Source: https://www.medscape.com/viewarticle/916987

Cenobamate

November, 2019 – The US Food and Drug Administration (FDA) has approved XCOPRI (cenobamate tablets) to treat partial-onset seizures in adults. The safety and efficacy of XCOPRI to treat partial-onset seizures was established in two randomized, double-blind, placebo-controlled studies that enrolled 655 adults. The recommended maintenance dose of XCOPRI, following a titration (medication adjustment) period, is 200 mg daily; however, some patients may need an additional titration to 400 mg daily, the maximum recommended dose, based on their clinical response and tolerability. The most common side effects that patients in the clinical trials reported were somnolence (sleepiness), dizziness, fatigue, diplopia (double vision), and headaches.

Source: https://www.fda.gov/news-events/press-announcements/fda-approves-new-treatment-adults-partial-onset-seizures

DEPARTMENT OF PHARMACY ACTIVITIES

National seminar and workshop on "Cosmetic Sciences: Exploring Newer Avenues & Entrepreneurship"

Department of Pharmacy, SV organized a National seminar and workshop on "Cosmetic Sciences: Exploring Newer Avenues & Entrepreneurship" from 29/082019 to 30/08/2019. Speakers were Dr. Rachna Rastogi from BREGMA SCIENCE LLP, Bangalore, Karnataka and Ms. Anjali Gholap from Personal Care R &D, Himalaya Drug Company Ltd. Bangalore. Seminar and hands on training was carried out for manufacturing and evaluation of different cosmetic preparations such as skin lotions, herbal shampoo etc.



National Level Training cum Certification Program on the Nano Drug delivery techniques

Department of Pharmacy, SV organized an National Level Training cum Certification Program on the Nano Drug delivery techniques from 14/11/2019 to 16/11/2019. Now a days, Nano Drug Delivery technique is a promising field for the development of novel dosage form. The speaker, Dr. Thievasanthi T. from Kalasalingam University, Madurai, Karnataka, came to deliver a talk and a hands-on training for the formulation of various nanoparticles. 50 students participated. They all formulated Silver NPs, Carbon NPs, Metal oxide NPs, Cellulose oxide NPs etc.



3rd Pharmarendezvous - 2019

National seminar on "Healthcare Management of Respiratory Diseases by Physicians and Pharmacists"

This National seminar was organized by Department of Pharmacy, SV from 06/12/2019 to 07/12/2019. During these two days, series of 9 scientific sessions was scheduled by different Physicians, Scientists and Pharmacists came across the country. Respiratory diseases are the 4th leading cause of the death worldwide and predicated to be third by 2030 in India. Among the respiratory diseases, tuberculosis, COPD, asthma and sleep apnea are the major disorders responsible for high mortality rate. The speakers have addressed the problems of drug resistance tuberculosis, COPD, asthma sleep apnea. scientists and academician from the field of pharmacy have addressed newer form of targeted drug delivery system which can target only the affected part of the body, since the present system many antitubercular drugs, anticancer drugs and drugs for asthma can cause severe adverse reactions due to their interaction with other systems of the body.


pharmahorizon
A panorama in the world of health sciences
JUL-DEC 2019 I Vol V Issue 2

WORLD PHARMACIST DAY

World Pharmacist Day celebrated on 25 September 2019 by awareness rally and basic health awareness seminar at village 'Dabhoi'. The students had prepared posters, leaflets and pamphlets for general health awareness.


WORLD HEART DAY

World Heart Day celebrated by organizing seminar and rally related to cardiovascular disease at village 'Dabhoi' on 29th September 2019. Mr. Mayur Parmar was invited as chief guest and speaker. He explained about life style modification, disease, complications, diet chart etc. World Heart Day celebrated by organizing seminar and rally related to cardiovascular disease at village 'Dabhoi' on 29th September 2019.


WORLD CHILDREN'S DAY & WORLD DIABETES DAY

Celebrated on 14th November 2019 at village 'Banaj'. Students had prepared handmade posters for general health awareness regarding Minor Ailments (i.e. Cold, Cough, Heat Stroke), Administration of different formulations, Immunization etc. and collect knowledge of village population related to diabetes in term of prevention and management.

WORLD AIDS DAY

On 3rd December 2019 in collaboration with ISPOR Student Chapter SVDU organized basic health awareness camp on HIV/ AIDS. Patients and care takers were informed about the epidemics, signs & symptoms, prevention and treatment options of HIV/ AIDS. The students had prepared leaflets (in Gujarati and Hindi languages) on general information about HIV/ AIDS and were distributed among community people.

Book-Post

To, ...

.....

.....

.....

DEPARTMENT OF PHARMACY
SUMANDEEP VIDYAPEETH
(An Institution Deemed to be University)
At & PO: Piparia, Waghodia Road, Ta: Waghodia, Vadodara 391760.
Accredited NAAC 'A' Grade, UGC Category I Deemed University
Please email your suggestions, comments and contribution for next issue to editorpharmahorizon@gmail.com
Note: If you have any query regarding medication and disease please write us at: svdruginfo@gmail.com