



**JSS  
ACADEMY  
OF HIGHER  
EDUCATION  
AND RESEARCH  
MAURITIUS**

A Degree Awarding Institution registered with  
the Higher Education Commission, Mauritius



# **JSS Health & Education Newsletter Issue IX**

**September – December 2023**



A Degree Awarding Institution registered with the Higher Education Commission, Mauritius

### **About JSS Academy of Higher Education and Research, Mauritius (JSSAHERM)**

The JSS Academy of Higher Education and Research, Mauritius (JSSAHERM) was established in 2018 with degree-awarding powers and is an approved and registered institution with the Higher Education Commission, Mauritius.

JSSAHERM is located on a sprawling eight- acre freehold campus at Bonne Terre, Vacoas, the only one of its kind in the country, including some 15, 000 sq. mts of built- up area with necessary academic, learning, and recreational infrastructure. The campus also comprises of hostels for boys' and girls' students, sports facilities such as Volleyball, Basketball, Football and in- door games. There are also residential units for staff and guests.

Building on its philosophy of quality education at affordable costs, JSSAHERM aims to present itself as the destination of choice for higher education and training in Mauritius and the Indian Ocean region.

JSSAHERM launched the Bachelor of Pharmacy (BPharm) programme in 2020. The Bachelor of Pharmacy and Doctor of Pharmacy programmes of JSSAHERM have received Pre-accreditation from the Accreditation Council for Pharmacy Education (ACPE), USA, making JSSAHERM the first institution in the African region to get ACPE pre-accreditation. JSSAHERM has also received the accreditation of Doctor of Philosophy in Health Sciences, Life Sciences and Management Studies.

JSS Mahavidyapeetha (JSSMVP), Mysuru, India is the sponsoring society of JSSAHER, Mauritius. JSSMVP has established more than 350 educational institutions in India, Dubai, Mauritius, and USA, with a total student population over 50,000 and a staff strength of over 12,000.

The parent institution for the establishment of JSSAHERM, is the JSS Academy of Higher Education & Research, Mysuru (JSS AHER, Mysuru, India), formerly known as the JSS University. JSSAHER, Mysuru, India has been ranked in 351 to 400 rank band by THE 2023 ranking. THE Subject Ranking 2023, JSSAHER, Mysuru is ranked in the band of 125 - 150 in the world and becomes the first institution in India in the subject 'Clinical and Health'.

The School of Pharmacy, JSSAHERM started its Newsletter "Health & Education" in the year 2021 (Triannual issues) with the aim to cover general information related to health care & pharma sector, the latest happenings in the world of science, scientific articles of students and staff members on health and life sciences, invited papers and views, drug-related information and event corner of the JSSAHERM etc.

# JSS Health & Education Newsletter

Issue IX September – December 2023

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## Forward

### Message for JSS Academy newsletter



It is a privilege for me to contribute to the ninth edition of the "JSSAHER Newsletter - Health & Education". Since its establishment in 2018, your institution has been in line with the HEC (Higher Education Commission) guidelines and has been driven by its mission of providing students with outstanding, innovative education and training, based on research and personality development.

I do also adhere to the philosophy of "quality education at affordable costs" promoted by the JSS Academy. At the level of the government, we are also guaranteeing free education, from pre-primary to tertiary level. Since education is the backbone of any society willing to reach the highest standards of living, we have to encourage such venture like yours.

For this edition, the focus is on health and education. Your institution is paving the way for innovation in that field by collaborating with public/private hospitals, international universities and allowing students, through internships, to get hands-on training. I wish all your students success in their studies.

I commend JSSAHERM for its dedication to establish a quality Higher Education institution in Mauritius and for having this publication.

A handwritten signature in blue ink, consisting of a large, stylized initial 'S' followed by a horizontal line and a small flourish.

**Hon. Soodesh Satkam CALLICHURN,**

*Minister of Labour, Human Resource Development & Training.*

## Health Promotion

Health Organization (WHO) defines health as the state of complete physical, social and mental well-being and not just the absence of disease or infirmity.

The enjoyment of the highest attainable standard of health is considered one of the fundamental human rights.

The importance of health is realized only after it is lost.

All of us want to be happy healthy and harmonious, but are we?

We may be having the know-how to be so, but lack the implementation.

The most important missing issues are burning desire, internal motivation, perseverance and mindset. These need to be addressed at a personal level since it is the primary responsibility of an individual. Most of the time focus remains on physical health but the mental component of health is much more essential for total health.

WHO defines Health promotion as the process of enabling people to increase control over, and to improve their health

Health Promotion is very relevant today. There is a global acceptance that health and social well-being are determined by many factors outside the health system which include

- 1) socioeconomic conditions,
- 2) patterns of consumption associated with food and communication,
- 3) demographic patterns,
- 4) learning environments,
- 5) family patterns,
- 6) the cultural and social fabric of societies;
- 7) socio-political and economic changes, including commercialization and trade and global environmental change.

In such a situation, health issues can be effectively addressed by adopting a holistic approach by empowering individuals and communities to take action for their health, fostering leadership for public health, and promoting intersectoral action to build healthy public policy.

### **Why is health promotion important?**

Health promotion improves the health of individuals, families, communities, states, and the nation. Health promotion enhances the quality of life for all people. Health promotion reduces premature deaths.



## **Important key concepts of health promotion**

Incorporates five key action areas

- 1) build healthy public policy,
- 2) create supportive environments for health,
- 3) strengthen community action for health,
- 4) develop personal skills,
- 5) re-orient health services and

The three basic health promotion strategies are to

- 1) enable,
- 2) mediate, and
- 3) advocate.

The responsibility of health keepers and policymakers is vital.

### **Role of institutes, staff and students**

Awareness and implementation of healthy lifestyle measures within the educational institution for staff and students will not only help themselves but serve as role models for society and also can extend their social services by awareness programs, health camps for the prevention of diseases and promotion of health, thus contributing to global health.

**Dr Khayati Moudgil**  
**Chief Editor**  
**JSSAHERM**

## Women in Pharmacy

For many years, pharmacy has been touted as a female-friendly profession. Two “feminized niches” have presented pharmacy opportunities that appealed to women; the first being hospital pharmacy which afforded pharmacists the opportunity to provide patient care, where “feminine” attributes such as communication and empathy were useful skills and secondly, the emergence of the staff pharmacist, a position more commonly held by women than by men.

Of community pharmacists, females accounted for 69.1% of staff pharmacist positions in 2009, in a study performed by the Canadian Institute for Health Information (CIHI) and 72% in 2019. The increasing number of chain pharmacies also creates an opportunity for female pharmacists to work in a retail setting with flexible scheduling options.




Additionally, women have historically been attracted to pharmacy because it is widely perceived as a profession that offers them an opportunity to combine a professional career with a family.

The notable presence of women in pharmacy has reinforced the facade of pharmacy as a profession that has successfully integrated women into a previously male-dominated workforce. Yet this obvious demographic change masks a more subtle but persistent gender disparity in the profession such as gender segregation and underrepresentation of women in senior positions. Female pharmacists tend to occupy lower-paid, lower-status positions than male pharmacists; deterrents to higher-status positions, such as inflexible or antisocial working hours, family responsibilities and limited geographic mobility, have a greater impact on women compared with men.

Rather than being fully integrated into the profession, female pharmacists have been segregated into these “feminized niches.” Women are currently underrepresented in pharmacy management and ownership positions; only 39.1% of these higher-paid and higher-status positions were held by females, according to the CIHI. Although female participation in pharmacy academia is rising, predominantly due to increases in assistant and associate professor positions, women are also underrepresented in academic leadership roles. The American Association of Colleges of Pharmacy reported that only 30% of deans of colleges or schools of pharmacy and 20% of chairs of pharmacy practice were female.

Although it has been proposed that the underrepresentation of women in senior positions is simply a result of personal choices, there is evidence that men and women do not have equal opportunities to further their careers. Women are less often included in mentoring and networking relationships and report lower levels of co-worker support compared with men. These play an important role in career advancement. Moreover, women who choose to temporarily leave the profession or reduce their hours often must do so at the expense of career development, much of which happens in the childbearing years. In addition, a recent American study designed to determine whether a gender earning gap exists found that male pharmacists



continued to earn higher incomes than female pharmacists when controlling for various explanatory variables. Despite representing the majority of pharmacists, only 2% of women are pharmacy business owners compared with 13% of men.

Despite a prevailing belief that the increasing proportion of women does not affect the status of pharmacy or the salaries of pharmacists, it is important to maintain some male presence in pharmacy. This reflects the importance of increasing diversity in pharmacy and other health care professions, as benefits to diversity include greater patient access to care, improved patient satisfaction, greater provider-patient communication and better education experiences for students in health professions.

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2. The Status of Women in Pharmacy Education: Persisting Gaps and Issues. *American Journal of Pharmaceutical Education*. 2004. Vol.68 Issue 1-5.
3. Women in Pharmacy Today. *Royal Pharmaceutical Society*. Available at: <https://www.rpharms.com/about-us/museum/online-exhibitions/celebrating-women-in-pharmacy/women-in-pharmacy-today>

**Written By:**

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## AI in the Pharmacy World: Little Miss Perfect or not?

The health care industry has made significant strides in integrating artificial intelligence into its operations to date. Within the pharmaceutical field, AI is solving problems that approach the limits of human capabilities, such as the rapid analysis of enormous datasets, paving the way for more efficient drug development and the rapid rollout of life-saving medications.

The potential for AI to supersede existing guidelines for patient care—that is, offer more appropriate solutions than a physician could, based on available patient history—underscores the promise of the technology for population health. In some instances, this ability for AI to “intervene” in a physician or pharmacist’s recommended course of therapy is already here. AI has the potential to change our lives for the better.

### **More efficient drug development, trials and rollout**

The design of new drugs will be aided by AI without getting technical, AI-powered predictive modeling can identify at a clip which part of the body a drug is going to target and how it’s going to help with a given disease. In this way, AI can fast-track the drug discovery and development process.

Moving on to the trial process, when new drugs are tested on people, AI can play a radical role in identifying health hazards. With AI, we can fast-track phases 1 and 2 by predicting what smaller test groups of patients might experience, and apply it to subsequent phases, in which the technology can streamline patient scoring, virtual screening, and randomization, offering predictive insights into how the drug will be absorbed and metabolized, along with any indicators of toxicity.

### **Improved patient outcomes in clinical and retail pharmacy settings**

In many ways the COVID-19 pandemic has fast-tracked utilization of AI in the health care space. At the retail pharmacy level, for example, we’ve seen a surge in robotics-assisted fulfillment as well as a rise in the popularity of standalone pharmacy kiosks for contactless dispensation.

AI models can predict pharmacy foot traffic and peak service times, and even analyze patient histories to single out who picks up their prescriptions on time.

The result is time saved (and less stress) for all: The patient is in and out of pharmacy faster, and the pharmacist can sync inventory more closely with pickups, minimizing inventory waste and the mundane task of restocking unclaimed meds.

AI can also prove helpful at another, crucial touchpoint of the retail pharmacy experience: Identifying which patients will benefit most from an in-person consultation with a pharmacist at the time of pickup.

However, Artificial intelligence does not always seem easy to handle. After all, we humans are the master of AI, as the latter has some shortcomings in carrying out tasks as us.

### **No replicating humans**

Robots with AI technology is associated with the power of thinking like humans and being emotionless. These add some advantages to performing the given task more accurately without any judgment. If unfamiliar problems arise, robots cannot decide and provide a false report.

### **No improvement with experience**

Human resources can be improved with experiences. In contrast, machines with AI technology cannot be enhanced with experience. They cannot identify which individual is hard-working and which one is nonworking.

### **No original creativity**

Machines with AI technology have neither sensitivity nor emotional intelligence. Humans can hear, see, feel and think. They can use their creativity as well as thoughts. These features are not achievable by the use of machines.

On this note, it is our responsibility to make good use of artificial intelligence. Abusing AI would mean letting technology consume us all to an extreme level. Hence, there should be an equal balance between artificial intelligence and humans.

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1. AI in Drug Discovery- Advantages and Disadvantages. Available at: <https://roboticsbiz.com/ai-in-drug-discovery-advantages-and-disadvantages> 2022
2. AI and Pharma: Creating Improved Outcomes for Patients and Practitioners. Available at: <https://www.pharmacytimes.com/view/ai-and-pharma-creating-improved-outcomes-for-patients-and-practitioners>

### **Written By:**

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# Understanding Premenstrual Syndrome – A guide for Women's Health



Premenstrual syndrome more commonly known as PMS is a group of physical and emotional symptoms that start one to two weeks before a woman starts menstruating.

In an article published by Mingzhou Gao she explained how about 90% of women in their reproductive phase suffered from mild or severe PMS. In that, about 20-40% were PMS but 2-8% experienced PMDD (premenstrual dysphoric disorder).

The menstrual cycle consists of 4 stages; Menstruation, follicular phase, ovulation & luteal Phase. It is during the luteal phase that women suffer from the symptoms of PMS.

## **SIGNS & SYMPTOMS OF PMS:**

### **Physical symptoms:**

- Swollen or tender breasts
- Constipation or diarrhea
- Bloating or a gassy feeling
- Cramping
- Headache or backache
- Clumsiness
- Lower tolerance for noise or light

### **Emotional symptoms:**

- Irritability or hostile behaviour
- Feeling tired

- Sleep problems (sleeping too much or too little)
- Appetite changes or food cravings
- Trouble with concentration or memory
- Tension or anxiety
- Depression, feelings of sadness, or crying spells
- Mood swings
- Decrease in libido

### **CAUSES OF PMS:**

There is no exact research defining the exact reasons causing PMS. According to some studies, PMS happens due to the drastic decrease in estrogen and progesterone level which is why it happens right after ovulation before menstruating. These changes in hormone level in a women's body may affect some more than others.

PMS may happen more in woman;

1. High level of stress
2. Family history of depression
3. Personal history of depression or postpartum depression

### **COPING WITH PMS:**

There is no definite way of diagnosing a person with PMS. The practitioner will enquire about your past menstrual cycle history and the symptoms that you have tracked.

You probably have PMS if you have symptoms that:

- Happen in the five days before your period for at least three menstrual cycles in a row
- End within four days after your period starts
- Keep you from enjoying or doing some of your normal activities

There are simple ways that you can relieve the symptoms of PMS-

1. Be active physically throughout the month
2. Try to eat mostly healthy foods
3. Get enough sleep
4. Find ways that help you to cope with stress
5. Avoid smoking

Over-the-counter medications can help alleviate some physical symptoms like cramps, headaches, backaches and breast tenderness.

Eg. Ibuprofen, Naproxen, Aspirin

If the over-the-counter drugs do not work, some people may use prescription medicines.

- Hormonal birth control – it may help with the physical symptoms but may worsen the emotional symptoms

- Antidepressants- relieve emotional symptoms of PMS when other medicines do not work. Selective serotonin inhibitors are the most common type of antidepressant used to treat PMS.
- Diuretics- these are used to relieve the symptoms of bloating and breast tenderness
- Anti-anxiety drugs- reduce the feeling of anxiousness in some women

### **PMS IS ONLY A MYTH**

Many people stand the point that PMS isn't real, that women are making it up as an excuse for bad moods. But the truth is that PMS affects many women where even their work life and social life may be affected.



### **References:**

1. Struggling With PMS? THIS Calm Cycle Tea Will Help You ([lukecoutinho.com](http://lukecoutinho.com))
2. Premenstrual syndrome (PMS) | Office on Women's Health ([womenshealth.gov](http://womenshealth.gov))
3. Premenstrual syndrome (PMS) - Symptoms & causes - Mayo Clinic
4. Premenstrual Syndrome | PMS | PMS Symptoms | MedlinePlus
5. Global and regional prevalence and burden for premenstrual syndrome and premenstrual dysphoric disorder - PMC ([nih.gov](http://nih.gov))
6. Common Myths & Misconceptions Around PMS You Should Know About ([healthians.com](http://healthians.com))

### **Written By:**

**Ms Angeli Sophia Tan Wee, 3<sup>rd</sup> Year B Pharm Student, JSSAHERM**

## Alice in Wonderland... Syndrome



“When I look at my feet, they seem to be so long and I do feel very tall too, I can nearly touch the ceiling! Oh, look, my right hand is so large and my left hand is so tiny! Your huge head and big black eyes are so funny mum...”

No this isn't any random replica of the well-known movie “Alice in Wonderland” but instead a few of the concerning symptoms of the not so well known, Alice in Wonderland Syndrome (AIWS), demonstrated by a 5-year-old girl. In the case of this little girl, all these hallucinations episodes occurred on average 4-5 days right after manifestations of *streptococcal pharyngitis*. However, despite the recurring amoxicillin treatment given to her, the symptoms persisted while those of the streptococcal pharyngitis would spontaneously disappear right after. Later on, she was finally diagnosed with AIWS.

AIWS is a feeling of corporal dysmorphia and this clinical entity is mainly characterised by


- A combination of visual hallucinations
- Abnormalities in corporal image (Macropsia, Metamorphopsia)
- Distortion of time and space

Where all of these generally followed severe migraines.

Despite being rarely reported in adults, AIWS is often seen in epileptic patients, and demonstrates the same descriptive features of the symptoms as those present in a child.

Other causes that may influence or trigger AIWS are

- Psychotropic Drugs
- EBV infection
- Intake of LSD
- Cerebral Tumour
- Schizophrenia



Several studies were carried out on children's cohorts with acute AIWS and some of them seem to indicate a defect in the cerebral perfusion in the posterior region near the visual cortex, some depicted hypoperfusion of the right frontal lobe and right frontoparietal region.

Up to now, the specific regions of the cerebral cortex as well as the neuronal mechanism related to the occurrence of the AIWS are still uncertain.

It is also important to note that, AIWS is a distinct and separate syndrome on its own and is in no way the same as schizophrenia. In fact, the symptoms of AIWS have both diagnostic and therapeutic consequences that differ completely from those caused by schizophrenia spectrum disorder or other hallucinatory disorders.

Did you know?

The author of "Alice in Wonderland", Lewis Carroll was in fact himself suffering from the conditions of AIWS which he illustrated in his well-known tale through Alice.

**Reference:**

1. [www.lemonde.fr](http://www.lemonde.fr)

**Written By:**

**Ms Mary Eileen Ramasawmy, 2<sup>nd</sup> Year B Pharm Student, JSSAHERM**

# Lassa Fever



Lassa fever is an acute viral haemorrhagic illness caused by Lassa virus, a member of the arenavirus family of viruses.

Infection of Lassa virus is usually due to exposure to food or household items which have been contaminated by urine and faeces of mastomy rats. This virus can also be transmitted from person to person or by laboratory contamination usually in health care settings in the absence of adequate infection prevention and control measures.

Lassa virus is originated in rodent population in Western African countries such as Benin, Ghana, Guinea, Liberia, Mali, Sierra Leone, Togo and Nigeria.

Lassa fever has been named after a town in Nigeria where the first cases of the disease appeared in 1969.

## Signs and symptoms

- On first days, there is fever, weakness and malaise
- Few days later, headache, sore throat, muscle pain, chest pain, nausea, vomiting, diarrhoea, cough, and abdominal pain may follow.
- In severe cases facial swelling, fluid in the lung cavity, bleeding from the mouth, nose, vagina or gastrointestinal tract and low blood pressure may develop.
- In later stages, protein is found in urine, shock, seizures, tremor, disorientation and coma may be also seen.

Lassa fever is difficult to distinguish from other viral haemorrhagic fevers such as Ebola virus disease, malaria, shigellosis, typhoid fever and yellow fever as symptoms are varied and non-specific.

Death usually occurs within 14 days in fatal cases. The disease is severe late in pregnancy, with maternal death and or foetal loss in more than 80% of cases during the third trimester.

Every year there is about 5000 death and 100000 to 300000 infections of this virus. In some areas of Sierra Leone and Liberia, about 10-16% of people admitted to hospitals each year have Lassa fever.



## **Diagnosis of Lassa virus**

- reverse transcriptase polymerase chain reaction (RT-PCR) assay
- antibody enzyme-linked immunosorbent assay (ELISA)
- antigen detection tests
- virus isolation by cell culture

## **Treatment**

- No currently approved vaccines against Lassa virus
- Use of ribavirin, an antiviral drug

## **Prevention**

- avoid contact with Mastomy rodents
- Trapping in and around homes can help reduce rodent populations
- Take preventive precautions against contact with patient secretions
- Educate people in high-risk areas about ways to decrease rodent populations in their homes
- Increase availability of the only known drug treatment, ribavirin

## **References:**

1. [www.cdc.gov](http://www.cdc.gov)
2. [www.who.int](http://www.who.int)

## **Written By:**

**Mr Yuvraj Dany, 2<sup>rd</sup> Year B Pharm Student, JSSAHERM**

## FDA Approved Drugs

S.N	Drug	Indication	Date of approval
1	Beyfortus (nirsevimab-alip)  Intramuscular injection	To prevent respiratory syncytial virus (RSV) lower respiratory tract disease.	17/7/2023
2	Vanflyta (quizartinib)  Oral administration	To use as part of a treatment regimen for newly diagnosed acute myeloid leukemia that meets certain criteria.	20/7/2023
3	Xdemvy (lotilaner)  Ophthalmic solution	To treat Demodex blepharitis.	25/7/2023
4	Zurzuvae (zuranolone)  Oral administration	To treat postpartum depression.	4/8/2023
5	Izervay (avacincaptad pegol)  Intravitreal solution	To treat geographic atrophy secondary to age-related macular degeneration.	4/8/2023
6	Talvey (talquetamab-tgvs)  Subcutaneous injection	To treat adults with relapsed or refractory multiple myeloma who have received at least four prior therapies.	9/8/2023
7	Elrexfio (elranatamab-bcmm)  Subcutaneous injection	To treat adults with relapsed or refractory multiple myeloma who have received at least four prior lines of therapy.	14/8/2023
8	Sohonos (palovarotene)  Oral administration	To reduce the volume of new heterotopic ossification in adults and pediatric patients (aged 8 years and older for females and 10 years and older for males) with fibrodysplasia ossificans progressiva.	16/8/2023
9	Veopoz (pozelimab-bbfg)  Intravenous or Subcutaneous injection	To treat patients 1 year old and older with CD55-deficient protein-losing enteropathy (PLE), also known as CHAPLE disease.	18/8/2023

10	Aphexda (motixafortide)  Subcutaneous injection	To use with filgrastim (G-CSF) to mobilize hematopoietic stem cells to the peripheral blood for collection and subsequent autologous transplantation in patients with multiple myeloma.	8/9/2023
11	Ojjaara (mometinib)  Oral administration	To treat intermediate or high-risk myelofibrosis in adults with anemia.	15/9/2023
12	Exxua (gepirone)  Oral Administration	To treat major depressive disorder.	22/9/2023
13	Pombiliti (cipaglucosidase alfa-atga)  Intravenous injection	To treat late-onset Pompe disease.	28/9/2023
14	Rivfloza (nedosiran)  Subcutaneous injection	To lower urinary oxalate levels in patients 9 years and older with primary hyperoxaluria type 1 and relatively preserved kidney function.	29/9/2023
15	Velsipity (etrasimod)  Oral administration	To treat moderately to severely active ulcerative colitis in adults.	12/10/2023
16	Zilbrysq (zilucoplan)  Subcutaneous injection	To treat generalized myasthenia gravis in adults who are anti-acetylcholine receptor (AChR) antibody positive.	17/10/2023
17	Bimzelx (bimekizumab-bkzx)  Subcutaneous injection	To treat moderate to severe plaque psoriasis in adults who are candidates for systemic therapy or phototherapy.	17/10/2023
18	Agamree (vamorolone)  Oral administration	To treat Duchenne muscular dystrophy.	26/10/2023
19	OmvoH (mirikizumab-mrkz)  Intravenous or Subcutaneous injection	To treat ulcerative colitis.	26/10/2023
20	Loqtorzi (toripalimab-tpzi)  Intravenous injection	To treat recurrent or metastatic nasopharyngeal carcinoma when used together with or following other therapies.	27/10/2023

21	Fruzaqla (Fruquintinib)  Oral administration	To treat refractory, metastatic colorectal cancer.	8/11/2023
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## Drug Profile: Zurzuvae



**Brand name:** Zurzuvae

**Generic name:** Zuranolone

**Class:** Neuroactive steroid gamma-aminobutyric acid (GABA)

**Indication:**

Zurzuvae is indicated for the treatment of postpartum depression (PPD) in adults.

**Dosage form:** Capsules

**Clinical purpose:**


Postpartum depression (PPD) is a major depressive episode that typically occurs after childbirth but can also begin during the later stages of pregnancy.

Zurzuvae is thought to work in the treatment of postpartum depression via positive allosteric modulation of GABA-A receptors. The GABA system is the major inhibitory signaling pathway of the brain and central nervous system and contributes to regulating brain function. Altered neurotransmission of GABA has been implicated in the pathogenesis of depression.

Zurzuvae contains the drug zuranolone, which was developed as an improvement to brexanolone (Zulresso) for the treatment of postpartum depression. Zuranolone has better bioavailability and can be administered orally compared to brexanolone which is administered via intravenous injection.

**Side effects of Zurzuvae include:**

1. drowsiness,
2. dizziness,

- 
3. diarrhea,
  4. fatigue,
  5. runny or stuffy nose, and
  6. urinary tract infection (UTI).

### **Drug interaction:**

Zurzuvae may interact with other medicines such as:

1. CNS depressants,
2. alcohol,
3. strong CYP3A4 inhibitors,
4. CYP3A4 inducers

### **Overdose:**

Overdosage with ZURZUVAE may result in excessive CNS depressant effects such as somnolence and disturbance in consciousness. There is no specific antidote for ZURZUVAE overdose.

### **Pharmacology:**

#### Mechanism of action:

The mechanism of action of zuranolone in the treatment of PPD is not fully understood but is thought to be related to its positive allosteric modulation of GABAA receptors.

### **Pharmacodynamics:**

#### Cardiac Electrophysiology

At two times the maximum recommended dose, ZURZUVAE does not cause clinically significant QTc interval prolongation.

#### Psychomotor Performance with Alcohol or Alprazolam

Co-administration of repeated 50 mg daily doses of ZURZUVAE with alcohol or alprazolam led to impairment in psychomotor performance.

### **Pharmacokinetics:**

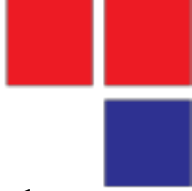
Zuranolone exposure (C<sub>max</sub> and AUC) increased approximately dose proportionally with doses ranging from 30 mg to 60 mg (1.2 times of the recommended dosage of ZURZUVAE) with a moderate-fat meal (700 calories; 30% fat). The once-daily administration of ZURZUVAE resulted in accumulation of approximately 1.5-fold in systemic exposures and steady state was achieved in 3 to 5 days.

#### Absorption

Following oral administration, peak zuranolone concentrations occur at 5 to 6 hours (T<sub>max</sub>).

The absolute bioavailability of ZURZUVAE was not evaluated.

#### Effect Of Food



Following administration of 30 mg of ZURZUVAE to healthy subjects, the C<sub>max</sub> increased by approximately 3.5-fold and the AUC<sub>last</sub> increased by approximately 1.8-fold with a low-fat meal (400 to 500 calories, 25% fat) compared to fasted conditions. The C<sub>max</sub> increased by approximately 4.3-fold and the AUC<sub>last</sub> increased by approximately 2-fold with a high-fat meal (800 to 1,000 calories, 50% fat) compared to fasted conditions. The T<sub>max</sub> was not impacted by food.

### Distribution

The volume of distribution of zuranolone following oral administration is greater than 500 L. The mean blood-to-plasma concentration ratio ranged from 0.54 to 0.58. Plasma protein binding is greater than 99.5%.

### Elimination

The terminal half-life of zuranolone is approximately 19.7 to 24.6 hours in an adult population. The mean apparent clearance (CL/F) of zuranolone is 33 L/h.

### Metabolism

Zuranolone undergoes extensive metabolism, with CYP3A4 identified as a primary enzyme involved. There were no circulating human metabolites greater than 10% of total drug-related materials and none are considered to contribute to the therapeutic effects of zuranolone.

### Excretion

Following oral administration of radiolabeled zuranolone, 45% of the dose was recovered in urine as metabolites with negligible unchanged zuranolone and 41% in feces as metabolites with less than 2% as unchanged zuranolone.

## Events' Corner

### **Event 1: World Pharmacist Day 2023**

#### **Day 1: Saturday 23<sup>rd</sup> September 2023 (Free Health Camp)**

A free health camp with the motto “Serving Humanity is like Serving God” was organized by the JSSAHER Mauritius at Tribeca Mall, Trianon, as part of the World Pharmacist Day celebrations.

The combined efforts of several organisations, namely JSSAHER Mauritius, Sihha Medical Centre, Port Louis, Lions Club of Albion and Pharmaceutical Association of Mauritius (PAM) along with collaborative partners and sponsors including MedActiv, Spectra Eye, Soza Health and Diagnos Clinique led to the fruitful results of the camp, demarcated by the mass of 274 people who made a visit on that day and by the health check-ups amounting to a total figure of 1400+ tests, worth Rs 700,000+. Another upshot not to be disregarded is the distribution of gifts and health related give aways (Glucometer, Oral Care products and Vitamin Supplements among others) to the public of an estimated net worth of Rs 300,000+.

The event kicked off at 10.00 AM, signifying the start of the comprehensive health examination of the visitors, with media coverage ensured by various news channels such as Wazaa FM, GIS Mauritius and RadioMoris. The many representatives of different partners performed the health tests along with the students and staff of JSSAHER Mauritius.

The free health assessments included:

- Breast Cancer Screening
- Blood Pressure
- Blood Glucose Level
- Body Mass Index (BMI)
- Body Fat
- Eye Check-up
- Ear Check-up
- Dental Check-up and Oral Care Tips
- Complete Blood Count (CBC)
- Patient Counselling

Winners of the quiz contest held in the preceding days by the local Radio Stations Kool FM and RadioMoris also made an appearance as the event unfolded. To honor their achievement, they were rewarded with gift vouchers in the presence of Prof (Dr) Praveen Mohadeb, CEO of JSSAHER Mauritius, and Prof (Dr) V Jaishree, Professor & Head Faculty of Life Sciences at JSSAHER Mauritius. Naturally, this important moment was captured through the lenses of several cameras.

The event, which went on like clockwork, drew to a close at 02.30 PM and with this, the celebrations for the commemoration of the World Pharmacist Day 2022 were wrapped up.

To end the day, students Ms. Ramparsad, Ms. Wahidna, Ms. Milan, Ms. Jankee and staff Dr Khayati Moudgil participated in a live interview on RadioMoris, where they talked about JSS AHERM and the free health camp.

**A glimpse of the event:**





## Day 2:

On the 25<sup>th</sup> of September JSS AHER held its International World Pharmacist Day 2023, which was graciously attended by several prestigious guest namely:

**Honourable Subhashnee Lutchmun Roy**, Parliamentary Private Secretary, Government of Mauritius, graces this occasion as an Chief Guest,

-Who elaborated on how pharmacists play fundamental role in the health sector.

-Emphasizing on their utmost need during the covid-19 crisis.

-Also disagreeing with the view that pharmacists are silent individuals, highlighting the diligence, hard work and dedication of such professionals.

-Our Chief Guest also inaugurated the 8<sup>th</sup> edition of our triannual newsletter which received appreciated recognition from the President of the Republic of Mauritius.



**Mr Siddique Khodaboccus**, Chairman of Pharmacy Council of Mauritius,

-Who elaborated on the regulatory phase of pharmacy and how we as future pharmacists should be very well acquainted with its different phases.

-The regulatory phases of pharmacy occurring currently in Mauritius.

-Widened our mindset on the awaiting aspects of our upcoming career.

- The second part of the event was followed with the representatives from **Medactiv**
- Who shared with us their visions, pillars and foundations.
- The history of MedActiv.
- Elaborated on the Medactiv cluster.
- The MedActive Academy and its importance especially for school leavers.
- Insights on the current aspects of the actual scenario of Pharmacy in Mauritius.



Moving ahead with the program, there was a lecture on Pharmacovigilance by **Mrs Waheeda Gopee**, Principal Pharmacist attached to the Ministry of Health and Wellness since 2016 (currently registered with both the South African Pharmacy Council and Pharmacy Council of Mauritius)

- The assertiveness required by a pharmacist.
- The drug Thalidomide and how it is linked to pregnancy.
- Use and potential risk of drugs.
- Drug monitoring in Mauritius, risk management and vital role of Pharmacists in detecting medication errors.
- Polypharmacy and the ongoing accessibility to drugs.
- Importance of drug scrutiny.



The event ended with a lecture by **Miss Natasha Peerally**, adjoint director of Diagnos Clinique.

- Increased our awareness the importance of right diagnosis before treatment.
- Medical Imaging and it's heightened need in today's health sector.
- Mammography in diagnosing abnormalities.
- Use of specific drugs prior to and post medical imaging.

### **Day 3: Webinar on the 29<sup>th</sup> September 2023**

Following the celebrations regarding the WORLD PHARMACIST DAY on the 25<sup>th</sup> September 2023 which consisted of; a Free Health Camp at the Tribeca Mall of Mauritius and a conference on the 25<sup>th</sup> of September 2023 which included 4 different types of lectures that enhanced our knowledge, the celebrations was conclude with Pharmacy Council of Mauritius approved CPD on 29<sup>th</sup> Sep 2023. The CPD was attended by 300+ participants through out the globe virtually.

“PHARMACY STRENGTHENING HEALTH SYSTEMS”, which was the theme of this years’ Pharmacist Day, was beautifully elucidated by:

Dr Smit Patel who explained about ‘Digital Health Revolution: Empowering Pharmacists for Better Patient Care’, and  
Mr. Sivakumar Bellan who talked on ‘Therapeutic Communication and Beyond for Retail Pharmacists’.

The webinar was kicked off by the welcoming remarks of Prof (Dr) Ashish Wadhvani and opening remarks of Prof (Dr) Praveen Mohadeb. Dr Goutham Yerrakula who is an Assistant Professor at JSSAHER Mauritius, was the one to introduce the speakers in their respective times and Saniya Issimdar as a Student Representative took up the Q&A session and also concluded the Webinar.

#### **Digital Health Revolution**

The first speaker Dr Smit Patel, whose lecture was based on digitalization, about how it empowers pharmacists for better patient care was really illuminating. He spoke about the virtual approach that pharmacists in this evaluating generation should implement and how, on applying certain changes, there will be better outcomes for patients. He presented how according to Moore’s Law; every 2 years the globe experiences a new technological evolution. The flow was between 1900 to 2020. The simple example of an X-Ray was taken about how, a few decades ago, there was the need of large cabinet like tools to be able to perform these scans and how nowadays, most of the scans can be done through small devices like a phone. He stated a beautiful thought that has to really stick in our minds ‘In the future, we will not be determined by our illnesses but by our health’.

Dr Smit Patel, who is currently established in the United States enlightened us about how big companies are investing into Digital Health Platforms. These platforms turn around; biometric sensors, virtual assistance, personal health record electronically, AI chat box with health care specialists, disease management applications and consumer mobile applications.

The concept of Remote Monitoring was also detailed on how it provides a mobile holistic view. It is based on the concept of people who are assessed on their heart rate, blood glucose and many more, on a daily basis till the next doctors’ appointment, to get the accurate results on a person’s body in his daily curriculum. This has been implemented because of the mentality of only taking care of ourselves just before the doctors’ appointment so the lab results come out clean. This concept, as stated by Dr Smit Patel has improved the patient care, especially in the diagnosis and cure. He also made us discover many different applications that can be installed anywhere in the world, via the play stores which are FDA approved. Amongst them are;

- Kaia: an application designed for skeletal muscle pain, specifically for chronic pain management which shows you exercises which help you to ease the pain and the application even corrects your form.

• Insulia: it is a digital therapeutic application that manages data and is also connected to the doctors' platform which measures your blood glucose levels.

And many more such as an application for children with ADHD, another application that measures your cardiac rhythms and others.

He even gave the example of Amazon Alexa who through the sound of the cough, can diagnose disease.

He also presented how all these tools since they have been digitalized, may have many drawbacks such as economic, social and psychological harm. Though the system has been put in place to be able to reduce all these to maximum.

### **Therapeutic Communication.**

Our second speaker, Mr. Sivakumar Bellan elucidated beautifully upon the topic of 'Therapeutic Communication and beyond for Retail Pharmacists'. He imposed on the fact that compassion is one of the greatest tools that us humans have. The way that his lecture had a direct relationship to our field was, when the first point of contact between someone in the medical field and the patient is good, the whole relationship is established. He defines this first contact for us pharmacists as welcoming the patient with a broad smile. He also explained to us the difference between the feeling of sympathy and the feeling of empathy. Us pharmacists, instead of having the feeling of sympathy for people, like most human beings have, we need to be empathetic towards them. This feeling of empathy is the one that will make us understand the patient's pain, it will make us focus on the emotional wellbeing of the patient and it will make us respond in a way that will make the patient feel more comfortable by creating a safe space for them.

He presented how there are four types of patients in India:

- Ignorant patients
- Informed patients
- Empowered patients
- Enlightened patients

And at the end of the webinar, we told him that in Mauritius as well and we actually believe that it is something that is worldwide.

He also reminded us that since we are provided with the knowledge in this vast field of medications, it is a privilege for us to speak to people and to share what we have actually acquired, in the goal of helping them in their health and lives on general.

The statement of 'Pharmacists are becoming one the most respected professions' is something that should remain engraved till the rest of our lives. We are climbing to the top and it is our job to make sure that we reach there. The way we put ourselves out there is the way we define the field we are representing.

Another point he highlighted is that how, each individual has to know about his own style of communication. How someone should classify himself as:

- Active
- Logical
- Connector
- Thinker

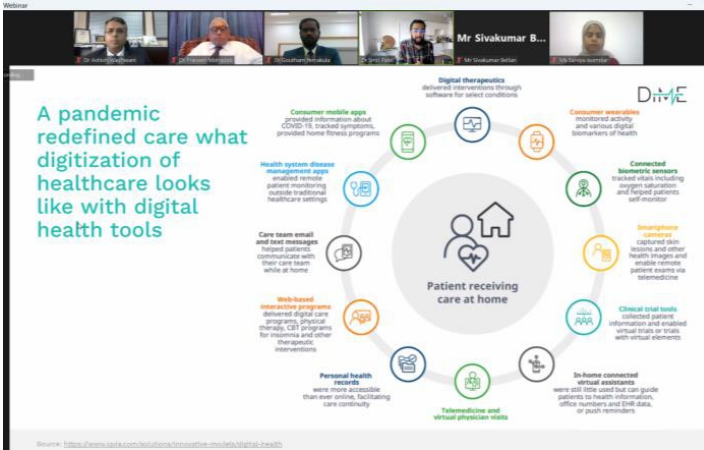
Also, we all need to be careful about the approach:

- Do you listen to your patients?
- Vision-eye to eye contact

- Feel- do you feel what they are feeling?

## Closure

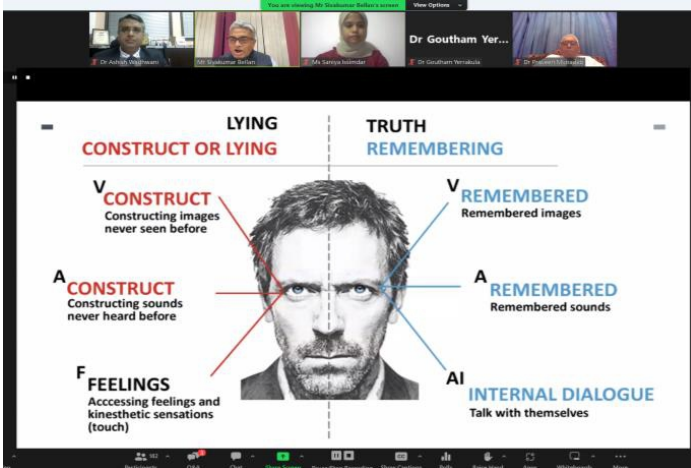
The student representative closed the webinar with a Q & A session with questions which came from the participants, as well as a summary of the whole webinar.



**GET YOUR DAILY D.O.S.E. OF HAPPINESS**  
The happy brain chemicals that make you feel good

**1 What are the Happy Chemicals?**

- DOPAMINE**
  - Enables motivation, learning, and pleasure
  - Gives you determination to accomplish goals, desires, and needs
- OXYTOCIN**
  - Feeling of trust, motivates you to build and sustain relationships
  - Known as "Cuddle or Love Hormone", plays a role in bonding
- SEROTONIN**
  - Feeling significant or important among peers
  - Calm form of accepting yourself with the people around you
- ENDORPHINS**
  - Releases a brief euphoria to mask physical pain
  - Response to pain and stress that alleviates anxiety and depression



## Event 2: Sports Day 2023

JSSAHERM concluded an exhilarating three-day sports event, drawing participants from all four cohorts as well as enthusiastic lecturers fostering a spirit of camaraderie and healthy competition. The sporting event, encompassing a diverse range of sports and activities took place at the ground of JSSAHERM and the stadium of Bambous, GERMAIN COMARMOND STADIUM, allowing participants to experience the thrill of competition across different settings.

### **Events conducted on Campus:**

The activities kickstarted on the 11<sup>th</sup> of October in the afternoon and continued to captivate participants and spectators alike on the 12<sup>th</sup> of October. The CEO, Prof (Dr) Praveen Mohadeb, and Dr. Ashish Wadhvani, Professor & Head Faculty of Health Sciences delivered impactful speeches setting the tone for the day's activities and shortly afterwards, the engaging events commenced and lasted until 4.30 p.m. The event featured a dynamic lineup of activities including:

<b>Activities: 11<sup>th</sup> October</b>	<b>Winners</b>	<b>Activities: 12<sup>th</sup> October</b>	<b>Winners</b>
1. Arm wrestling	Henrage Pravir, Shamima Kissoon and Lutfiya Molabaccus	1. Tug of war	Vignesh Tatayah, Dr Goutham, Eileen Ramasawmy, Lutfiyah molabaccus
2. Carrom	Mr. Naveen and Dr Ashish	2. Dodgeball	Vasish Madoo, Qays Baxou, Dr. Goutham ,Anasheed Domun, Umar Mahamed, Salvi Wahidna
3. Table Tennis	Umar Mahamed	3. Pétanque	Saniya Issimdar, Anasheed Domun
4. Chess	Chummun Chetramsingh	4. Volleyball	Anasheed Domun, Yaseen Abdool, Yuvraj Dany, Vanshita Bhoojhowon, Rohan Matadeen
5. Domino	Mrs. Gammah and Mrs. Roopa	5. Lemon and spoon	Vasish Madoo
6. Badminton singles(male)	Umar Mahamed	6. Musical chair	Bheenick Githika

7. Badminton singles(female)	Salvi Wahidna	7. Badminton doubles	Farhaan Maudarbocus, Salvi Wahidna

### Events conducted at Germain Comarmond Stadium, Bambous:

On the 13<sup>th</sup> of October, students were transported to the stadium where the day's festivities started promptly at 9.30 a.m. An array of events such as Race, long jump, shotput were conducted before noon showcasing the diverse athletic talents of the students. Following the morning activities, a delectable lunch was provided, replenishing the energy of the participants.

During the day, students were also served refreshing beverages following the exhilarating games. The excitement continued in the afternoon with a series of events leading up to the highly anticipated football match, which served as a grand finale of the invigorating sports day and left the crowd on the edge of their seats.

Concluding the event, medals were awarded to the deserving students from the hands of the CEO, Dr. Praveen Mohadeb, Dr. Ashish Wadhwani, Professor & Head Faculty of Health Sciences, Dr Jaishree Vaijanathappa, Dr. Khayati, Dr. Goutham and Mr Naveen, commemorating their outstanding performance and participation in the grand sports day.

Activities	Winners
1. 100m race	Eileen Ramasawmy (female category) Anasheed Domun (male category)
2. 200m race	Shamima Kisson (female category) Raees Pokun (male category)
3. 400m race	Shamima Kisson (female category) Umar Mahamed (male category)
4. Long Jump	Eileen Ramasawmy (female category) Abdool Yaseen (male category)
5. Shotput	Melvina Pomosawmy
6. Discus Throw	Melvina Pomosawmy (female category) Vignesh Tatayah (male category)
7. Football	Farhaan Mawlaboccus, Yuvraj Dany, Oummar Peerally, Qays Baxou, Raees Pokun, Rohan Matadeen, Anasheed Domun, Umar Mahamed

The overall most awarded participants were Mr. Umar Mohamed and Mr. Anasheed Domun with each five medals and the cohort with the highest number of medals was cohort 2 with a total of 15 medals awarded to the students.

The students of the sports committee played a pivotal role in making the sports day a resounding success and the team consisted of:

- Ms. Bhatoo Zeenaat
- Ms. Issimdar Saniya
- Ms. Bheenick Githika
- Ms. Khushi Beeharry

- Ms. Aliyah Edo
- Mr. Sultan Abdallah
- Mr. Mahamed Umar
- Mr. Tatayah Vignesh

The guidance of the academy's lecturers and staff members was instrumental in supporting the students.

The committee extends its gratitude to all the students as well as lecturers and staffs for their dedicated participation and for making the sports fest a success.





### Event 3: Diwali Celebrations

‘Let us move from untruth to truth and from darkness to light.’

Diwali is a festival of lights & symbolizes the spiritual “victory of light over darkness, good over evil, and knowledge over ignorance.

JSS Academy of Higher Education and Research, Mauritius celebrated the Diwali festival on 11 November 2023. The program started at 10 am by welcoming all the staffs and their family members. The cultural program was kickstarted with the lighting of lamp. The campus was decorated with clay lamps and eco-friendly products. Various fun and frolic games were organised for the team-building among the staffs and children. Lastly, the program ended with the distribution of sweets and gifts.



## Event 4: Visits

### 4.1 Student Visit to Sihaa Medical Centre

Sihaa Medical Centre is a private healthcare organization providing services in the fields of medical, dental, pharmacy, and diagnostic services. 2<sup>nd</sup> semester B. Pharm students and staff Dr Goutham Yerrakula visited the Diagnostic laboratory of the Sihaa Medical Centre on 17<sup>th</sup> November 2023 to carry out a few experiments under the guidance of Dr Etwarooh Abdallah and his team. The examinations that were conducted were:

- **Determination of blood creatinine**
- **Determination of serum total cholesterol**
- **Determination of salivary amylase activity**
- **Estimation of glucose in urine by Benedict's quantitative reagent method**



The visit provided the students with an opportunity to have practical knowledge of all the equipment available in the laboratory. Being first-year students in B Pharm, the opportunity to see a laboratory in action has greatly expanded their understanding and curiosity about how lab tests are conducted, thus the tour was undoubtedly beneficial.



## 4.2 Students visit to CIDP

The purpose of visiting CIDP (Centre International de Développement Pharmaceutique) International Contract Research Organisation (CRO) located in Phoenix, was to strengthen the knowledge of the 3<sup>rd</sup> year B Pharm students for the Quality Assurance, Regulatory approvals, GLP, GMP, ISO 9000:2015 as a part of their curriculum.

CIDP group is a cutting-edge international contract research organization with 20 years of experience, specialized to carry out high-performance R&D activities for pharmaceutical, medical devices, nutraceutical, and cosmetic industries.

The students visited different boxes such as:

- Evaluation box adaptation,
- Clinical evaluation of subject box,
- Photo box, etc....

The students were accompanied by Dr Khayati Moudgil on 17<sup>th</sup> November 2023, where they learnt about different high-tech equipment used for several studies such as the cutometer to check the skin density and the sebumeter to analyse the amount of sebum on the skin.

Furthermore, our guides introduced us to various studies CIDP conducts like analysing the effectiveness of sunscreen and other various types of creams (skin-firming, etc..).

Since practice makes perfect, Dr. Geetanjali Petkar enlightened us about how and why an experiment room should be designed. This was a great experience for the students as they specializing in the Quality assurance module. Also, they experienced Good Laboratory Practices where each box was neat, clean and organized.

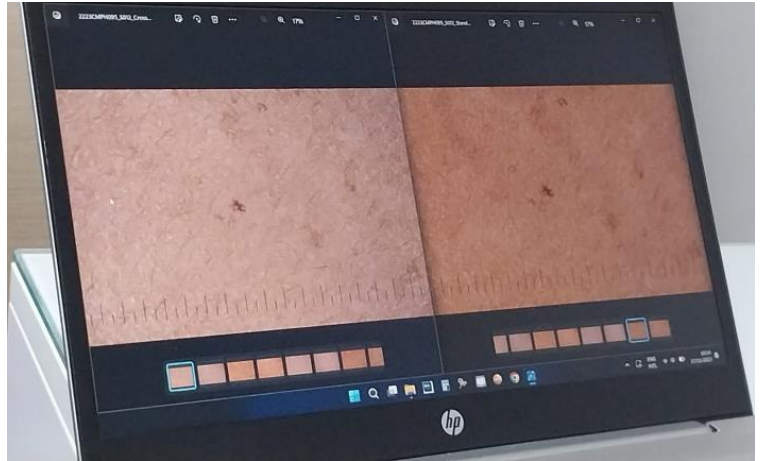
An interesting point of the GLP practiced in CIPD is that the walls are neutral coloured so as not to influence evaluation, temperature control, and humidifier.

A brief, but insightful, lecture was presented by Mrs. Rajini Naidoo Cartier about the history of CIDP, the awards won, the ISO 9001 certification and the pre-clinical and clinical studies conducted.

On behalf of JSSAHERM, the students extend their sincere appreciation to:

- Mrs. Rajini Naidoo Cartier, Head of Quality, Health, Safety, and Environment,
- Mrs. Anissah Appadu, Head of project and regulatory affairs manager, and
- Dr. Geetanjali Petkar, medical director- dermo cosmetics at CIDP, Dermatologist, Medical expert, Clinical research, Hospital and Health care management,

for graciously hosting the visit. The insights gained during their time at CIDP have significantly enriched the understanding presented in this report.

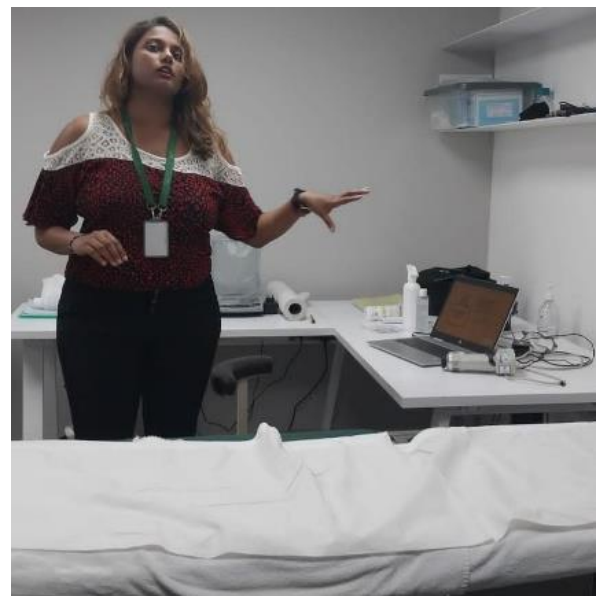


Some of the equipment used to analyse certain products dermatologically.

The sebumeter on the left and the photometer on the right.



Mrs Rajini Naidoo Cartier giving a brief and insightful presentation



Mrs Anissah Appadu presenting us boxes and equipment.



Group photo comprising of Mrs. Rajini Naidoo Cartier, Mrs. Anissah Appadu, Dr. Geetanjali Petkar, Dr. Khayati Moudgil and 3<sup>rd</sup> year B Pharm students

### **Event 5: International Conference IEEHDS 2023**

#### **International Conference on “Improving Efficiency and Effectiveness in Health Delivery Systems in Developing Countries: Research, Implementation and Policy Issues (IEEHDS-2023)”**

From the 21<sup>st</sup> of November to the 23<sup>rd</sup> of November 2023, JSS Academy of Higher Education and Research, Mauritius, seized the opportunity to hold their first ever International Conference on “Improving Efficiency and Effectiveness in Health Delivery Systems in Developing Countries: Research, Implementation and Policy Issues (IEEHDS-2023)” in association with the Centre for Science & Technology for the Non-Aligned and Other Developing Countries (NAM S&T Centre), New Delhi, India at the Pearle Beach Resort, Flic en Flac, Mauritius.

Set against the backdrop of the magnificent beaches of Mauritius, the international and local participants had the chance to discuss and present on a wide range of thematic areas which comprised of:

- Global Health Coverage
- Quality Care
- Improvement of Quality of Life (QoL)
- Public-Private Partnership in the Health Delivery System
- Global Awareness, Advocacy and Leadership
- Antimicrobial Resistance (AMR) – Research, Strategies, and Implementation
- Use of Digital Technology in Achieving One Health
- Diseases and Management – Emerging Infectious Diseases, Metabolic Disorders, Cancer, Cardiovascular Diseases and other Communicable and Non-Communicable Diseases
- Regulations of Diseases and Policy Matter
- Environmental Health
- Natural Products and Health
- Strategies and Best Practices in Health Care

## Day 1: Tuesday, 21<sup>st</sup> November 2023

The first day of the conference was kickstarted with the opening ceremony in which Prof (Dr) Ashish Wadhvani, Head of Faculty of Health Sciences & Dean, School of Pharmacy JSSAHERM, gave the welcome address and provided a brief overview of the conference. His speech was succeeded by the CEO and Vice-Chancellor of JSSAHERM, Prof (Dr) Praveen Mohadeb, and Dr Amitava Bandopadhyay, Director General NAM S&T Centre, New Delhi, both of whom expressed the importance of the conference for the two organizations and welcomed all the participants.

The **Guest of Honour –Mr Youdhisteer Munbodh**, President, NAM S&T Centre Governing Council and Permanent Secretary, Ministry of Education, Tertiary Education, Science and Technology, Mauritius then delivered his address. He mentioned that the Conference on such an important theme was being organized at the right time when Mauritius is already on the way to make the health and medical sector as a pillar for its economy including medical tourism. He acknowledged the unwavering contributions of the NAM S&T Centre in advancing Science and Technology - as a fundamental enabler for the socio-economic growth and prosperity amongst its Member Countries.

**Chief Guest – Dr Bhooshun Ori**, Director General of Health Services, Ministry of Health and Wellness, Mauritius in his address, mentioned that the JSSAHER, Mauritius and the NAM S&T Centre have excellent track record in promoting S&T and education and by convening this Conference, they have recognized the interdependence of research, implementation and policy.

Finally, the opening ceremony was concluded with a vote of thanks by **Mr Naveen K P**, Registrar at JSSAHERM.



The rest of the day comprised of various talks by speakers and students alike on the two technical sessions “Disease Prevention, Management and Control” and “Natural Products (NPs) for Health Promotion” as well as a talk by Mr. Siddique Khodabocus, Chairman of the Pharmacy Council of Mauritius. The keynote lectures for the day were on “Recent Advances in Therapeutics: Polypill: The Future in the Management of Cardiovascular Diseases, New Drugs in the Management of Obesity and Diabetes, Drug Repurposing and Psychedelic Drugs -The New Frontier for Mental Health” by Mr. Sadeck Vawda, “Heart Failure and

Cardiovascular Disease in South Africa” by Prof Ntobeko A.B. Ntusi and lastly, “Regulatory Aspects for a Natural Based Innovation” by Prof Namrita Lall.

**Day 2: Wednesday, 22<sup>nd</sup> November 2023**

Day 2 proceeded with the third technical session of the conference “Healthcare Delivery - Science, Technology and Innovation” which began with a keynote lecture on “Health Delivery Systems in an Emerging Economy and Role of Innovation for Cost Effective Delivery: A Case Study from India” by Dr H Basavana Gowdappa.

Next on the agenda was the Official Release of the Fact File on “Rare Diseases: An Emerging Global Health Priority” published by the NAM S&T Centre, New Delhi jointly with JSS Academy of Higher Education and Research, Mysuru and a Panel Discussion on “Strengthening Health Care Delivery Systems in Developing Countries: A Global Imperative for Achieving Universal Health Coverage” which was moderated by Prof (Dr) Ashish Wadhvani. The discussion proved to be highly enriching and informative with the various inputs by the experienced and well-versed panel experts from myriad countries across the globe.



The second keynote lecture of the day was delivered by Dr Thenkrishnan Kumaraguru on “Role of Generic Drugs in Effective Health Delivery Systems and Health Sector” in the fourth technical session “Medicines, Vaccines and Health System - Research & Development”. The second day was then wrapped up with several paper presentations by the students of JSSAHER,

Mauritius in the fifth technical session which was “Communicable and Infectious Diseases, Mental Health and Well-Being, and Health Financing and Workforce”. An exciting networking session was then held for the delegates at the Racing Club of Mauritius through a Gala Dinner.

### **Day 3: Thursday, 23<sup>rd</sup> November 2023**

On the final day of the conference, the participants gave ear-to-talk for the sixth technical session “Anti-Microbial Resistance (AMR)” and the seventh technical session “Improving Health Delivery Systems through Quality Care”. Ultimately, the conference came to an end with the Adoption of Resolutions and Closing Remarks were made by Prof (Dr) Praveen Mohadeb, JSSAHER, Mauritius and Dr Amitava Bandopadhyay, NAM S&T Centre, New Delhi. Concluding Remarks were given by Prof (Dr) Ashish Wadhvani, JSSAHER, Mauritius.

The three best presentations awards were also given to the students. The conference was sponsored by JSS AHER, Mysuru, India; Unicorn Ltd, Mauritius and Biswal Traders, Mauritius.

## **Students’ Learning Experience- Internship**

### **Internship of Mr Nubheebucus Haiman at Transphorm Pharmacy**

After completing my 4<sup>th</sup> semester, I was eligible to start my internship. So, my first experience was at the Transphorm pharmacy at Floreal owned by Mrs Kaajal Nathoo.

My six-week internship was a truly amazing experience since I got a glimpse of how the pharmacy world is outside of learning. At the pharmacy, I learnt many new aspects with my pharmacist in charge Mrs Vidooshi Hullooowan that I had no idea about or wouldn’t give it a second thought.

The aspects that I learnt and did with my pharmacist were:

- prescription reviewing – meaning of the abbreviations used by general practitioners
- dose calculation - especially for paediatrics according to their weight
- purchase orders – making purchase from supplier to refill stocks or bring new stock of pharmaceutical product
- stock management – for available stock and reserved stock of drugs
- dangerous drugs – the procedures to follow according to the law while dispensing
- customer interaction – measurement of blood pressure
- case discussions – on antibiotics, cosmetics, oral contraceptive pills and anthelmintics

Additionally, despite the busy schedule of Mrs Kaajal, we had case discussions and trainings along with the dispensers which were beneficial and precise to the point. I also learnt a lot from the dispensers whereby each person is allocated a specific task in the pharmacy.

Finally, some important aspects that I noticed for the smooth running of a pharmacy are:



- To have good relationship with other colleagues and work as a team.
- Have patience with the patients and serve them rightfully.
- Trust
- Leadership

After all, I really enjoyed this first experience working in a community pharmacy. My next internship next time will be working in a hospital or clinic to discover more of the pharmacy world and health sector.

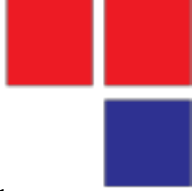
### **Internship of Ms Harsha Santchurn at Clinique Darne**

The internship at Darne provided a comprehensive and hands-on experience for me, from 26<sup>th</sup> June to 4<sup>th</sup> August 2023. I worked from Monday to Friday, from 9 am to 3 pm, under the supervision of my preceptor, Mrs. Hooma Auchoybur. I also had the privilege to work with two other pharmacists in the in-patient pharmacy and outpatient pharmacy; Miss Dipna Ramsoorooop and Miss Kushmita Doysuree who brought tremendous help during my journey at Darne. The primary goal of the internship was to integrate theoretical knowledge with practical skills in a clinical setting, fostering professional growth and preparing me for a career in pharmacy.

During my first week, I visited the different wards, the laboratory of C-care, and the inpatient and outpatient pharmacies where the drugs were stored according to their dosage forms and in alphabetical order and dispensed by using FEFO. Files of discharged patients in different wards were reviewed and I got the immense pleasure of getting acquainted with doctors and nurses who along with Mrs. Hooma shed light on:

- Different pathologies
- Diagnostics
- Different tests conducted for diagnostic and monitoring patient during treatment- pre-anesthetic chart, anesthetic chart, pressure ulcer test, CT scan report, Humpty Dumpty fall scale, etc
- Drug treatment given to patients
- Surgeries
- Pharmacist intervention
- Medical abbreviations
- Consideration of drug allergies and other pathologies of the patient when medication is given

By the end of the first week, I could understand the prescription chart and identify the drugs given and their use in the treatment of the diseases.



From the second week, I started to review files of patients admitted to the clinic followed by being introduced to the outpatient pharmacy where at first, I observed the operation and was later able to perform the different tasks. Miss Kushmita and the friendly dispensers enlightened me about these different aspects of the outpatient pharmacy:

- Different drugs and their active constituents that are available in different brands, in different dosage forms and doses.
- Supplements available and their use
- Calculation of pediatric doses of certain medications.
- Consumables available and their use
- Integrating the knowledge of dangerous drug schedules studies in our 3<sup>rd</sup> semester and the procedure of dispensing those drugs
- Counselling patients
- Build a trusting relationship with patients
- Patient referral
- Compounding medication
- Antibiotic audit
- Verification of drugs received from suppliers
- Management of drugs in store and ordering of medications from supplier
- Training given by supervisor and pharmacist to boost sales and increase patient satisfaction and compliance

During the two last weeks, my daily schedule was distributed between ward rounds, the inpatient pharmacy, and the outpatient pharmacy. In the inpatient pharmacy, I learned about its operation which is dissimilar from the outpatient pharmacy. Other distinct points on which I acquired knowledge with the guidance of Mrs. Hooma and Miss Dipna along with the dispensers were:

- Hospital Information System usage in both inpatient and outpatient pharmacy
- Dangerous drug audit
- Entering data in records books such as the dangerous book and antibiotics book
- Storage of medications- medications that are kept in cold, away from light, etc.

The internship experience at Darne has been an invaluable journey that has not only expanded my theoretical knowledge but has also provided me with practical skills crucial for a successful career in pharmacy.

This internship has been a catalyst for personal and professional growth, challenging me to adapt to real-world scenarios, problem-solve on the fly, and communicate effectively with both patients and healthcare professionals. The challenges encountered have been stepping stones to building resilience and sharpening critical thinking skills.

As I transition from this internship experience, I am grateful for the mentorship and support received from the dedicated staff at Darne and the opportunity given to me.

## Internship of Ms Neelakshi Joyram

On Monday, June 26, I embarked on my internship journey as a pharmacist intern with C-Care Wellkin, Mauritius. My internship lasted for 6 weeks, with working hours, 9 am to 4 pm, Monday to Friday. My preceptor at the site was Mr Nurveen Sunassee, Principle Pharmacist C-Care Wellkin.

During these 6 weeks, I was posted to 3 different departments; In-Patient Department (IPD), Out-Patient Department (OPD) and Clinical pharmacist Department on a rotational basis (2 weeks each).

During the first week, I had a full visit to the clinic, got to know my co-workers and the pharmacist technicians who were very welcoming.

During the first two weeks, I was posted to the Out-Patient Department which they also called the Retail Pharmacy. Over the course of these two weeks, I learnt more on:

- The inventory control of the Retail Pharmacy which were in alphabetical order and according to the type of product (OTC drugs, Antibiotics, Inhalers, Powders, Cosmetics) and the fast-going drugs was in front.
- The Hospital Information System and how to use it. (Making indents, retrieving patient information, invoice)
- Meeting with representatives.
- Pharmacist intervention during the dispensing to Dangerous Drugs.
- Dispensing and patient counseling.
- Restocking and auditing.

The next two weeks, week 3 to week 4, I shifted to the Clinical Pharmacist Department. During this time period I got the opportunity to do ward rounds to different wards such as:


- Male and Female Wards,
- Pediatric Ward,
- Maternity Ward,
- Chemo Ward
- ICU
- NICU

I also learnt on the:

- Patient Drug Administration chart,
- Crash Cart checks,
- Dilution methods used for injections,
- Calculations of Dosages,
- Risk Assessments,
- Different types of medication errors.

My last 2 weeks were in the IP department where I learnt about:

- Everything used in the in-patient department, such as injectables, extension sets and cannula used for drug administration in wards.

- 
- Dispensing to individual patients to different wards
  - Cold chain products
  - Dispensing of high alert drugs
  - Restocking of pharmaceutical products
  - Issue of medication and how to do return and clearance on system.

This internship has proven to be a very enriching and unique experience to me that has contributed to both my personal and professional growth. I was able to put into practice the theories learnt from one of my BPharm Module, Community Pharmacy. My perspective on the work opportunities of a pharmacist is not only restricted to retail pharmacist now as this internship has shown me that pharmacist has many more responsibilities.

# Memorandum of Understanding/Agreements



**The JSSAHER Mauritius signed MoU with the Ministry of Health and Wellness, Mauritius**

**This MoU focuses on Community Pharmacy Practice and management such as;**

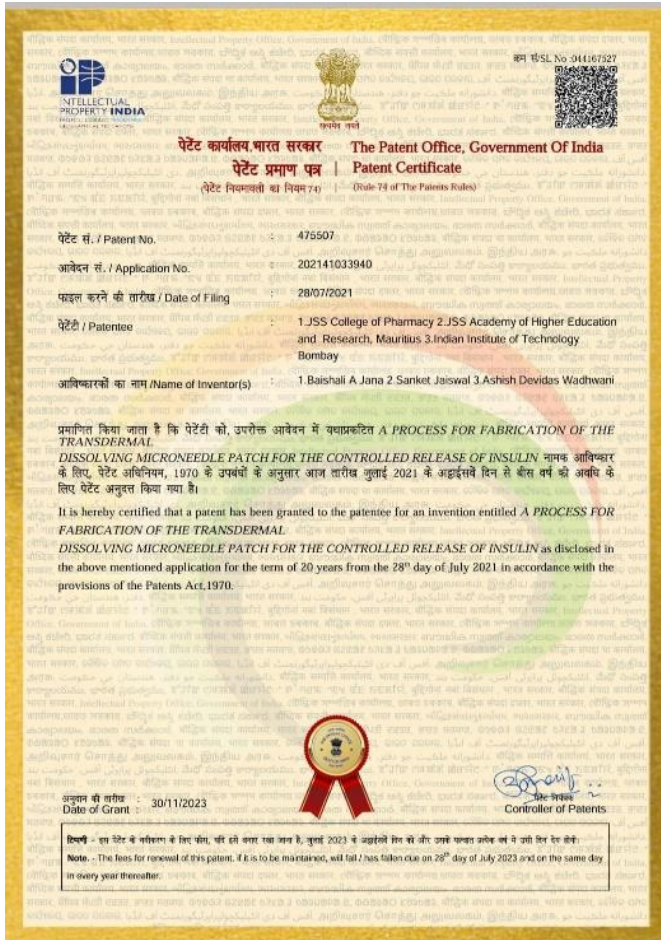
- procurement and inventory management,
- dispensing of medicines,
- computer applications
- pharmaceutical and patient care practices and
- any other specific best practices followed by the hospital/company

**This MoU further enlightens the need to engage in Hospital Pharmacy such as:**

- Participating in ward rounds, reviewing patient treatment charts, allowing patient reviews and monitoring ADRs
- Assessing possible drug interactions and performing dose divisions
- Inventory management and performing medication audits
- Use of Hospital Information System (HIS) to indent, issue, and print labels, prior to dispensing of medications

# JSSAHERM Publications and Conferences Attended (September-December 2023)

## 1. Patent: JSS Academy wins Patent for Microneedle Patch for Diabetes



Research
Mauritius Times
Friday, December 8, 2023
12

### JSS Academy wins Patent for Microneedle Patch for Diabetes

*A closed-loop transdermal patch – a game changer in diabetes research*

A patient has been granted to researchers from JSS Academy of Higher Education and Research, Mauritius, JSS College of Pharmacy, Ooty, India and Indian Institute of Technology, Bombay for the innovation "A Process for Fabrication of the Transdermal Dissolving Microneedle Patch for the Controlled Release of Insulin" on 30th November 2023 (Patent no. 475507, Patent Office, Government of India).

According to the WHO, around 180 million people globally are affected by diabetes and that number is estimated to reach over 300 million by the year 2030. The last NCD survey conducted in 2021 shows around 23% of the overall population in Mauritius suffer from diabetes. The prevalence of uncontrolled diabetes is a real concern as it increases the risk of severe health complications such as heart disease, renal impairment, eyes problems and damaged arteries.

**Diabetes: A metabolic disorder**

Diabetes, which causes abnormal increases in blood glucose levels, is globally one of the most prevalent, chronic diseases. It is a metabolic disorder that either causes permanent lack of insulin production from the pancreas (Type 1 diabetes) or a condition where the cells fail to respond to insulin due to dysfunction (Type 2 diabetes) which later elevates blood glucose levels. Insulin is a hormone which is synthesised and secreted from the pancreas to mediate the metabolic reaction involving glucose.

In the absence of insulin, the cellular system cannot accurately convert carbohydrates such as sugars, starches, or other foods into energy which is used by the body. These factors in due course result in many complications, such as cardiovascular disease, chronic renal failure, retinal damage, nerve damage, and musculoskeletal damage.

In the human body, insulin and glucagon are counter-regulatory hormones that play a vital role in regulating blood glucose levels. Either excess or shortage of glucose in the blood is known as a metabolic disorder.

**The problem associated with current therapy**

In the case of diabetic patients, medications like oral drugs and insulin injections are taken which give rise to multiple complications where delivery by parenteral route administers the drug into the bloodstream. Some common problems associated with injectable insulin therapy are:

- Subcutaneous insulin injection is painful and leads to lipoatrophy in patients.
- Injectable insulin taken with other anti-diabetic drugs increases risk of side effects.
- The traditional care for diabetic people often requires monitoring of blood glucose and insulin injections to maintain normal glycaemia. Injectable insulin leads to poor patient compliance as it causes pain and irritation.

**JSS's innovation – microneedle patch**

Prof Dr Ashish Wadhvani, Principal Investigator of the project and Head Faculty of Health Sciences, Dean School of Pharmacy, JSS Academy of Higher Education and Research, Mauritius, assisted by Dr Baishali Jana, Senior Research Fellow, conducted research to mitigate the limitations of injectable insulin therapy, and they have developed a microneedle-mediated drug delivery system that may enable patients to painlessly self-administer therapeutic micro and macromolecule drugs.

The microneedles (MNs) have been described as a novel method of delivering effectively pharmacologically potent molecules to the deeper layers of the skin in a minimally invasive manner. It is also pain-free, bio-safe, patient-friendly, and self-applicable system. An alternate approach is insulin delivery via transdermal delivery system, which could provide insulin continuously using a system likely to be well accepted by patients.

The goal of the research was to design, fabricate and test arrays of dissolving microneedles for minimally invasive and continuous delivery of insulin in vivo. Insulin is a hydrophilic protein drug that was found to be compatible with gelatin and sodium carboxymethyl cellulose thus making the two materials suitable for this study. The dissolving microneedle made up of the above material is widely being explored in many medical applications such as tissue engineering and drug delivery. Dissolving microneedle patches were fabricated mainly composed of a combination of carboxymethyl cellulose and gelatin.

Gelatin produces a tough and strong needle material suitable for penetration and, on the other hand, carboxymethyl cellulose is considered to be an excellent material as a dissolving factor and encapsulating drug and this composite has proved to be safe in drug formulation and release with no side effects.

This study demonstrated that the proposed microneedle system featured this unique design allowing more convenient and efficient self-administration of drug result into the skin.

**Way forward**

Prof Wadhvani says this breakthrough invention is a significant step forward in the development of non-invasive insulin delivery methods. The transdermal microneedle patch offers a pain-free and convenient alternative to traditional insulin injections. The dissolving microneedle patches were fabricated with a very simple process to maintain the protein drug stability, localize the drug in the needle and minimise the drug loss. The degradation of the polymeric compound takes place only after insertion of these dissolving microneedle patches into the skin thereby releasing drug in rapid and sustain manner.

He adds that compared with subcutaneous injections, dissolving microneedle patches are fully biocompatible and generate no biohazardous sharp waste making them an ideal candidate and this will certainly be a game changer in the field of diabetes research. The dissolving microneedle patch mainly offers a potentially fast and inexpensive pharmaceutical development model by using drug already proven safe and effective. It can also influence product stability and delivery to the intended site of action. "Ultimately there is remarkable increase in efficiency, with no side effects, long duration action, this slow reduction in blood glucose level and maintained at a significantly reduced level. The discussion is ongoing with pharmaceutical and biomedical companies and hopefully, the product will be in the market soon," he adds.

**Breakfast with Bwana**  
Uncertainty in Interesting Times: We Live in an Interesting Age

• Cont. from page 6

**US presidential election**

On the domestic US front there is great uncertainty about the presidential election coming in 2024. Although Donald Trump is far ahead in the polls for the Republican Party nomination, the uncertainty as to whether he is banned from serving as President by the 14th Amendment to the US Constitution, remains a cloud over him. That issue is now squarely before the Colorado Supreme Court. It is certain that the issue will reach the US Supreme Court asking. What is uncertain is how that court will rule.

Meanwhile, Trump continues to get more unhinged by the day. If his 2016 and 2020 campaigns were characterized by grinning up hate against enemies, real or just perceived (China, immigrants in general, Mexicans specifically, Muslims, NATO, etc.) those were all foreign. Now, he is doling out vengeance to the Republicans who ostensibly support him in the polls, angry enough to turn on their fellow Americans and vote for a man with that kind of message? Will we have a civil war at the polls? That is uncertain.

President Biden has injected more uncertainty of his own. He said: "If Trump weren't running, I'm not sure I'd be running, but we cannot let him win." This certainly sounds like Biden is setting the stage to bow out of the presidential race. But that too is uncertain. As a reader of the tea leaves of presidential politics, I have long predicted that California Governor Gavin Newsom is the most likely Democratic Party nominee if Biden does not run, and I reiterate my prognostication that he will not run again. If Newsom does run, then Kamala Harris cannot be his running mate because a Vice Presidential candidate cannot be from the same state as the Presidential candidate. Certainly she could change the state of her domicile, but that too is uncertain.

The only certainty is that we live in an interesting age.

Cherry ...  
Bwana

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## 2. Book Chapter: An Educational Review on Psoriasis, Pharmacological and Phytochemical Treatment Approaches

Edited Book

# Recent Advances In Pharmaceutical & Medical Sciences

Edition-2

**Dr. A. Lakshmana Rao**

Professor and Principal,  
V. V. Institute of Pharmaceutical Sciences,  
Gudlavalleru Post, Krishna District, PIN-  
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Recent Advances in Pharmaceutical &  
Medical Sciences (Edition 2)

Chapter-2

## AN EDUCATIONAL REVIEW ON PSORIASIS, PHARMACOLOGICAL AND PHYTOCHEMICAL TREATMENT APPROACHES

Dhuny Misbah Bibi , Dr Khayati Moudgil\*

School of Pharmacy, JSS Academy of Higher Education & Research,  
Mauritius. Assistant Professor, Faculty of Health Sciences, School of  
Pharmacy, JSS Academy of Higher Education & Research, Mauritius

### Abstract

Psoriasis, discovered by Robert Willan in the early 19th century and termed by Ferdinand Hebra in 1841, is a papulosquamous condition characterized by papules, scales, plaques, and erythema. It is a chronic, recurrent inflammatory illness mediated by the immune system that affects the skin, nails, and scalp of a large number of people of all ages. Being one of the most prevalent skin ailments, psoriasis has garnered the attention of several scientists and researchers, resulting in the discovery of the disease's pathophysiology and potential treatments. This has significantly improved the lives of a large number of psoriasis-stigmatized individuals. Currently utilized treatments include topical therapy, phototherapy, oral or injectable medicines, and biologics. The latter are formed of products from living organisms and target particular immune system components. This article examines the epidemiology, pathophysiology, and therapies of psoriasis, with an emphasis on the use of biologics.

**Keywords:** Psoriasis, papulosquamous, inflammatory, immune system, pathogenesis, treatment, biologics.

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Book Title: Recent Advances in Pharmaceutical & Medical Sciences

Prime Publication

ISBN: 978-71-868796-2-0

Publication year: August 2023

Book Chapter written by:

Dr Khayati Moudgil and Dhuny Misbah Bibi

### 3. Conferences Attended

#### 3.1 The Academy of Pharmaceutical Sciences of South Africa (APSSA)

##### Annual Conference of Pharmaceutical Sciences 2023 attended by Dr Khayati Moudgil and Ms Salvi Wahidna of JSSAHERM

From the 31<sup>st</sup> of August to 3<sup>rd</sup> September 2023, the Capital Zimbali Resort in Durban, South Africa, welcomed the various stakeholders involved in the APSSA Annual Conference of Pharmaceutical Sciences 2023 in collaboration with the College of Health Sciences at the University of Kwazulu-Natal (UKZN) for what proved to be an exceptional and highly enriching experience, all whilst simultaneously relishing Durban's captivating shoreline.

Dr Khayati Moudgil, Assistant Professor of the Faculty of Health Sciences, JSS Academy of Higher Education and Research, Mauritius, was approached to be the chair for one of the sessions during the 3-day conference and she was accompanied by Ms. Salvi Wahidna, BPharm student at JSSAHER Mauritius, who presented a research work on "The Inhibitory Effects of Anti-HSV Drug Acyclovir on Cultured Human Culture Cells – A Drug Repurposing Approach".

This conference presented to researchers and scientists alike the thrilling opportunity of making known their endeavors which corresponded to the novel theme of the event, "Riding the Waves of Change". But that's not all. The conference also opened the doors to expanding the participants' circle of acquaintances. Knowledge was shared, enlightening conversations were interchanged, and new faces were made familiar.

Among the many individuals who were gathered at the venue, Dr. Khayati Moudgil had several interactions with the convenor of the event, Dr. Varsha Bangalee, the UKZN College Dean of Research, Prof Anil Chuturgoon, one of the key speakers from India, Dr. Sanyog Jain, members of the South African Pharmacy Council, including Mr. Vincent Tlala, the Registrar and CEO of the Council, and Mrs. Mojo Mokoena, the Chief Operating Officer. She also did not miss to engage with the numerous sponsors and speakers of the event, the latter





comprising of distinguished Professors, MPharm, and PhD students from the myriad universities throughout South Africa.

### **Day 1: Thursday, 31<sup>st</sup> August 2023**

Following registration of all participants, the event was kickstarted by the motivating welcome address of the UKZN College Dean of Research, Prof Anil Chaturgoon. The floor was succeeded by Dr. Nirupa Misra for a plenary talk on the treatment of drug resistant tuberculosis.



The rest of the session was encompassed by 5 more speakers, including Ms. Salvi Wahidna, on topics ranging from nanoencapsulation of pyrazolone-based compounds and pea protein isolate and inulin as microencapsulating agents to dual-decorated liposomes for therapy against sepsis.

The second session of the day was chaired by Dr. Khayati Moudgil for various talks on pharmacogenomics, sulfonylureas as co-formers for metformin co-crystals, formulation of rifampicin loaded solid lipid nanoparticles, biomimetic nanoparticles for the treatment of tuberculosis, and ferrocene in drug discovery. The session also included a talk by the distinguished teacher of 2022, Dr. Ane Orchard.

After these intellectual sessions, members of the conference found themselves in an entertaining Welcome Cocktail, sponsored by Aspen Pharmacare Holdings Limited. Many connections were established in this networking session, but of course, without losing out on the chance of savoring the delightful meal and drinks.

### **Day 2: Friday, 1<sup>st</sup> September 2023**

Once Dr. Sanyog Jain had opened the session with his plenary talk on targeted anticancer drug delivery, the second day of the event was fully dedicated to the candidates for the Young Scientist Competition, which proved to be a rigorous and challenging task for them. Areas covered included transdermal delivery of ivermectin with ways to increase its permeability and solubility, co-crystal systems for solubility enhancement, bio-mimetic gels for intra-articular drug delivery in osteoarthritis, development of nanoparticles and nano emulsions of pyrazinoic acid and bedaquiline respectively to treat drug-resistant tuberculosis, formulations for nose-to-brain delivery of curcumin, oral cleansing foams for gingivitis... The list goes on. Not to be overlooked are the poster presentations which were also held between the separate oral sessions.

### **Day 3: Saturday, 2<sup>nd</sup> September 2023**

The liveliest day of the event, Day 3. An everlasting stream of oral presentations were held in parallel, in which a wide range of topics were discussed, including but not limited to, quinolone derivatives, pharmacovigilance, computational pharmaceuticals, shampoo formulations,

antimicrobial role of essential oil compounds in combination with fixed oil compounds, phytochemistry, natural sugars as co-formers for pharmaceutical solid dispersions, and 3D-bioplatforms.

The scholarly part of the conference was brought to an end by Prof Sandile Khamanga, who opened the floor to discussions regarding chronic staff shortages. The audience suggested several collaborative approaches as a strategy to eliminate as much as possible these issues currently being faced by pharmacy schools.

The gala dinner held at the start of the evening proved to be the highlight of the day. Winners of the Young Scientists competition were awarded a certificate and a medal to commend them for their brilliant work. Prizes for the distinguished teacher 2023 and the best poster and oral presentation were also awarded followed by a vote of thanks from the Chairperson of the APSSA, Ms Lorraine Thom, and the convenor of the event, Prof Varsha Bangalee. The rest of the night was lost in celebrations and endless conversations, thus bringing the conference to a close.



### **3.2 Workshop on Research Capacity Building**

The CEO of JSSAHERM, Dr. Praveen Mohadeb and staff Dr. Khayati and Dr. Goutham attended a four-day Research Capacity Building Workshop, organised by the Higher Education Commission (HEC) and focussing on the role played by research in societal progress, was launched on 16<sup>th</sup> October 2023, at the Caudan Arts Centre in Port Louis.

The Chairman of the HEC Board, Dr Abdess Salem Saumtally; the Chairman of the Sub-Committee on Research and Planning and HEC Board Member, Dr Hemraz Boodhoo; the Commissioner of the HEC, Prof Romeela Mohee; and other personalities were present at the opening ceremony.

In his address, Dr Saumtally highlighted that the workshop was a gathering of distinguished researchers, academics and resource persons from the Ministry of Education, Tertiary Education, Science and Technology, and the HEC. “This,” he stated, “reflects a shared dedication to working together to effect positive societal change.”





### **3.3 Women in Technology Africa Mauritius Workshop**

#### **Women in Tech Africa Mauritius Chapter**

Dr. Khayati and students of JSSAHERM had the pleasure to attend a conference programme organized by Women in Tech Africa held on the 25<sup>th</sup> of October 2023 at Le Workspace, The Docks in Port Louis. The theme for this year's workshop was "Unlock the Technology for Tomorrow".

We were warmly welcome by the leader of Women in Tech Africa, Sameera Chattun Khoyratty and the message of the founder, Ethel Cofie, was also addressed. The Guest of Honour for this event was, The Honourable Mrs Kalpana Devi Koonjoo-Shah, Minister of Gender Equality and Family Welfare who gladly addressed the audience.



Panel discussion on "Marketing & Analytics", "AI & Mobile: The Power of Two", "Digital Transformation and Leadership" and "AI, Automation and Data Science" were conducted by various position holders of various companies. It really transformed the way we perceive technology as pharmacy students. After all, artificial intelligence is the future of facilitating every field.

Deeya Mungur of Ceridian (Mauritius) Ltd was the storyteller of the event where she shared the most vulnerable part of her life of how she decided to fight the world, despite being at her lowest. Everyone was mesmerized and inspired by her story and this further motivated us to keep going in any circumstances of life.

The conference also organized a small prize ceremony where 3 JSSAHERM students received prizes.



Ms. Angeli Tan Wee,  
3<sup>rd</sup> year B Pharm



Ms. Zina Elaheebucus, 4<sup>th</sup>  
year B Pharm



Ms. Salvi Wahidna,  
3<sup>rd</sup> year B Pharm





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For Clarifications/Feedback, Write

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