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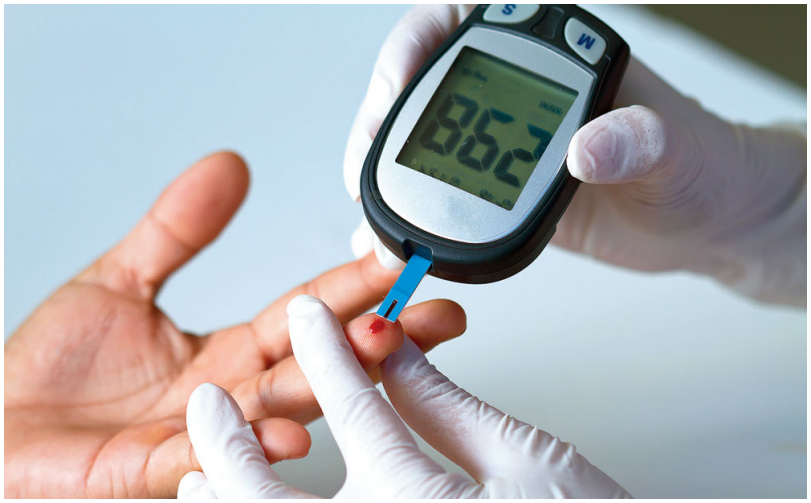
Does Covid-19 affect patients with Diabetes too?

Ronit Handa S.Y. B Pharm



People with diabetes are more likely to have serious complications. The recent study conducted by the researches of University of Aberdeen shows that Covid-19 affects people with diabetes more than people with controlled diabetes. The study by researchers of University Aberdeen was conducted, more than 158 studies over

270,212 participants around the globe. The patients with diabetes have

1.87 times more chances of dying

1.44 times likely to require ventilation

1.59 times to be admitted to ICU

2.88 times to be classed as severe or critical

It has also been showed that patients with good management can also reduce the threat of dying. Stavroula Kastor who worked on study alongside Professor Mirula Delibegovic and Professor Phydugint Said "**We found the following Covid-19 infection the rise of death for patients with diabetes was significantly increased in comparison to patients without diabetes**." Total patients' sample was comprising a total of **270,212** patients of which **57,801** were diagnosed with diabetes. A total of **488** patients were diagnosed with Type-1, remaining with type-2. Median age of total patient was 59 [**53-65 IQR 25th-75th percentile**] of which over [**56.50%**] of Covid-19 patients were male. Across of studies ventilation rate at 12.25% [median] [**4.16-25IQR 25th-75th percentile**] ICU admission and discharge at 67.78%

[**41.63-88.53 IQR 25th-75th percentile**] A total of 22 studies were conducted in [Denmark, France, Italy, Spain, U.K] 90 in far

Pfizer to take over Biohaven Pharmaceuticals.

Ronit Handa S.Y. B Pharm

Pfizer to commercialize NURTEC® ODT [Rimegepant] an innovative compound for prevention and acute treatment of migraine, a condition with high unmet need Biohaven common shareholders will receive $148.50 per Biohaven share in cash, plus 0.5 shares of a new publicly traded company that retains Biohaven's non-CGRP pipeline compounds ("New Biohaven") Pfizer Inc [NYSE: PFE] and Biohaven Pharmaceutical Holding Company Ltd [NYSE: BHVN] announced that the companies have entered into a definitive agreement under which Pfizer will take over on Biohaven. Who is Biohaven Pharmaceuticals? Biohaven is a clinical-stage biopharmaceutical company with proven leadership in industry and academic settings. Biohaven deals with neurological and neuropsychiatric diseases including rare disorders. They also deal with migraine problems in adults. They are a maker of NURTEC® ODT an innovative dual-acting migraine therapy approved for both acute treatment and episodic prevention of migraine in adults.

Nirsevimab will bring great changes to the world.

Harshita Agarwal S.Y.B Pharm

Nirsevimab is the first investigational vaccine designed to protect all infants with a single dose against RSV (Respiratory Syncytial Virus). Nirsevimab is being developed as a single dose for the protection of all infants during their first RSV season due to its extended half-life technology.

“Pediatrics-infectious mono cause of LRTI in infants and results in seasonal epidemics globally each year,” explained Eric Simões, clinical professor, pediatrics-infectious diseases at UC Denver School of Medicine. “This new analysis strengthens nirsevimab’s potential to protect all infants across the RSV season with a single dose, which may lead to a paradigm shift in RSV prevention.”

Jean-François Toussaint, global head of R&D vaccines, Sanofi, said: “This new analysis is very consistent with and confirms the strong results observed in all phase 2 and phase 3 studies that evaluated nirsevimab in diverse pediatric populations. We take pride in the progress made to develop a potential solution to address this long unmet need for all infants.”

“Each year, RSV causes seasonal epidemics of LRTIs in infants,” concluded Mene Pangalos, executive vice president, BioPharmaceuticals R&D at AstraZeneca. “This analysis adds to nirsevimab’s compelling body of evidence as to the first potential single-dose preventative immunization for all infants against RSV, addressing a clear unmet need in the RSV preventative landscape.”

Sources: Pharma Times, Sanofi's official website, and Bio Space.

Does monkeypox need a Global health emergency tag?

Manas Joshi S.Y. B Pharm

Like COVID 19, the World health organization arranged a meeting on 23rd June to decide whether, to declare Monkeypox as a global health emergency. For a month, more than 1650 confirmed & 1550 suspected cases have been reported to WHO. In more than 39 applicant countries monkeypox is endemic. Only 72 death has been still reported. WHO stated that the "appearance of monkeypox simultaneously in place without direct or recent travel links areas where the disease is endemic" it indicates that there may have been undetected transmission for several weeks or longer. "Global outbreak of monkeypox is unusual for concerning". WHO chief Tedros Adhanom Gebreyesus This disease primarily spreads through contact with the infected person. This virus is a species of double-stranded DNA virus that causes monkeypox in humans as well as animals. This virus belongs to the genus of orthopoxvirus. In the family poxviridae, this could be spread through broken skin, wounds, bites, and scratches. Monkeypox was firstly discovered in 1958 when pox-like diseases were outbreaks and causing mass damage. At that time monkeys were used to research (animal testing) it originated in Central Africa. The current outbreak is caused by the less severe West African Claude. In over 20 countries monkeypox is not endemic. No outbreak has been reported to WHO. More than 300 confirmed or suspected infections seen in Europe.

New Acne Drug was launched in India by Glenmark.

Laukik Kakade S.Y.B Pharm

India's first topical Minocycline 4% Gel was launched by Glenmark for the treatment of acne under the brand name MINYM. The inflammatory skin disease is known as acne, it affects millions of people worldwide. Minocycline is a potent antibacterial gel that has strong anti-inflammatory actions. MIC90 (minimum inhibitory concentration at which it prevents visible growth of 90% bacteria and its isolates) is also offered in the gel. “Glenmark is a leader in the dermatology segment in India and has been at the forefront in providing access to the latest treatment options to the patients. We are proud to introduce the primary topical Minocycline-based - MINYM Gel, in India; proven for its potent antibacterial effect, anti-inflammatory action, and lowest resistance, as a treatment choice to patients aged 9 years and above laid low with acne," says Alok Malik, group vice chairman & head of India Formulations at Glenmark.

LONDON MEDICAL LABORATORY'S TEST SHOW THAT 80% OF CHILDREN MAY DEVELOP ALLERGIES IF THEIR PARENTS HAVE THEM.

Ayush Kadam S.Y.B Pharm

The UK studies the most comprehensive allergy test, analyzing 295 allergens including 295 food allergens which include well-known potential food allergens such as nuts, shellfish, and eggs. It further includes common foods which trigger allergens such as strawberries, avocado, and mustard. The data from London Medical Laboratory states that around 40% of UK children have allergies and up to 80% of children may develop them if both their parents are allergic. Children with allergies and parents with allergies play a very crucial link. One in ten UK children may suffer from potentially severe allergies. The study says that parents must learn to spot early symptoms and keep the schools informed regarding these allergies. There are numerous symptoms that parents should be aware of as it may indicate that their child has developed an allergy. The symptoms may generally include a runny or blocked nose, sneezing, watery eyes, itching sensation or tingling in the mouth, hives, or even a red rash. While looking at the results of the allergy test it was found that: One in ten children may develop some kind of food allergies. Children with such kinds of allergies should be treated by a doctor if parents believe that there may be a risk of a specific reaction. Pre-loaded adrenaline injection device such as EpiPen is prescribed to avoid more allergic reactions.

Did Dostarlimab completely cure cancer?

Harshita Agarwal S.Y. B Pharm

A recent clinical trial in the United States demonstrated the complete eradication of cancer for the first time in history. It evidenced eradication in patients at Manhattan's Memorial Sloan Kettering Cancer Centre. Despite the fact that the trial was conducted at a very small stage, the world is hopeful that we will soon have a cure for a deadly disease such as cancer. The trial included 18 cancer patients who took the drug 'Dostarlimab' for 6 months and were all tumor-free at the end. It was expected that these patients would require additional treatment after taking this drug, but this was not the case. Dostarlimab is a drug that contains laboratory-created molecules that act as substitute antibodies in the human body. Cancer is undetectable by physical examination, according to experts, indicating that the drug could be a potential cure for the disease. According to Dr. Luis A. Diaz J. of the Memorial Sloan Kettering Cancer Centre in New York, this is "the first time this has happened in the history of cancer. "This could be the most important and fascinating thing the world has been given; the drug Dostarlimab could be a discovery that brings many happy tears and can finally save the family's loved ones.

Source: New York Times, Hindustan Times

T&C Apply

Manas Joshi S.Y.B pharm

GOVT is on the way to announcing rules and regulations for e pharmacy which will help to regulate the supply and the intake of medicines being sold on e-platforms. These rules and regulations may be applicable from starting of October. DPIIT and the pharma industry will be working together on these rules and regulations. The intention behind these rules and regulations is to monitor & regulate the framework as well as the proper registration of the selling platform. It will assign the responsib ility for selling the genuine drug. Every possible misuse will be concerned. & to control the distribution of improper & illegal drugs to the customers. These regulations will help to control the supply of unethical drugs, illegal drugs, addicts, counterfeit drugs, and substituted & expired drugs. the diligence toward the orphan or a life-saving drug will also be decreased. These platforms can be misused. any kind of misleading by the platform can risk the life of a patient. Additional taxes, rates & fake GST invoices will not be an issue after the implementation of rules and regulations.

Scientists create a long-acting injectable drug delivery system for tuberculosis.

Ayush Kadam S.Y.B Pharm

All over the world 1.5million, people have died of tuberculosis. It was for the first time in more than a decade that annual TB deaths had increased and demonstrated the global need for better access to treatments. To address this health hazard, scientists at the UNC School of Medicine, the UNC Institute for Global Health and Infectious Diseases, and the International Center for the Advancement of Translational Science developed a long-acting injectable formulation of the anti-TB drug rifabutin. Martina Kovarova, Ph.D., associate professor of medicine at UNC said that "We think our approach could dramatically change TB treatment. To ease the burden of this disease on low-income communities around the world where better access to treatment is most needed affordable long-acting formulations with generic anti-TB drugs may help. Tuberculosis is caused by Mycobacterium tuberculosis (Mtb), which affects an estimated 10 million people a year, according to the World Health Organization. It estimates that about one-quarter of the world population has a latent TB infection with the potential for reactivation, which may lead to symptoms like weakness, coughing, weight loss, fever, chest pain, and coughing up blood. Not adhering to strict drug regimens can cause drug resistance and treatment failure. To overcome this problem, UNC researchers sought to create a therapeutic delivery system that will provide an effective way to improve adherence to medications. This long-acting formulation prevented infections in mice that were later found to have TB. Single injection cures the infection from lungs and other tissues in mice that had been previously infected with Tuberculosis. The researchers observed no adverse effects in the mice, but if the side effects arise in mice, the implant is removable. Such type of long-acting technology has already been FDA-approved for other conditions, such as cancers, schizophrenia, and opioid dependency. Kovarova said that "We think this technology could be leveraged in our battle against tuberculosis worldwide, More research is required before phase 1 trials in humans, but according to our study provides an important step toward a much-needed long-acting treatment and prevention strategies against the Tuberculosis. Kim M, Johnson CE, Schmalstig AA, Annis A, Wessel SE, Van Horn B, Schauer A, Exner AA, Stout JE, Wahl A, Braunstein M, Victor Garcia J, Kovarova M. A long-acting formulation of rifabutin is effective for the prevention and treatment of Mycobacterium tuberculosis. Nat Commun.

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Novartis donated Rs 16 Crore Drug for free to save a life.

Laukik Kakade S.Y.B Pharm

Yes, Novartis - A Swiss-America-based multinational pharmaceutical firm has availed a Rs 16 crore drug for free to save a baby's life, a 23-month-old baby "Ellen" who was suffering from a rare genetical disorder called "Spinal Muscular Atrophy 1" The only treatment for this disease is Zolgensma Gene Therapy, which is in the form of an injection that cost around Rs 16 Crore.

Ellen is a daughter of Rayapudi Praveen and Stella, residing at a regular village in Bhadradri Kothagudem district, and was admitted to Rainbow Children's Hospital in Hyderabad. Ellen's parents reached out to the news media and also started to raise funds for the treatment of their daughter.

Asper the Consultant Paediatric Neurologist Dr. Ramesh Konanki, children affected by SMA-1 are unable to attain growth milestones. Ellen lost her control over Voluntary movements like motions in the leg, neck, hand, and head and was not swallowing. Eventually, she started facing breathing difficulties and severe muscle weakness because of which she lost control of sitting and hold of her neck. Furthermore, they added: "SMA can be life-threatening, if not treated before the child attains two years of age. Until 2019, there was no treatment. However, Novartis developed a treatment that works by replacing the defective gene"

Al TO ANALYZE LARGE AMOUNTS OF BIOLOGICAL DATA:

Pranjali Samarth S.Y B Pharm

Many researchers from the University of Missouri are applying a form of Artificial Intelligence (AI) which was previously used to analyze how National Basketball Association (NBA) players helped moved their bodies and is now used in order to help scientists develop new drug therapies for medical treatments emphasizing on cancer and other ailments. The kind of AI which is used in this form of study is termed a Graph Neural Network which helps scientists speed up the time it takes to sift a large amount of data that is generated while studying protein dynamics. Innovative ideas can be provided to identify target sites on proteins which helps the drug to work in a more efficient and effective manner. A novel outcome of this method is that we can identify the pathway between different areas of protein structure which may potentially allow drug designing scientists to see additional possible target sites for the targeted therapies. This may enhance the chances of therapy being successful! It can also stimulate the protein change in relation to conditions such as the development of cancer . Machine learning can really study the important interactions with different areas of protein structures. Such methods provide a systematic review of data involved while studying proteins and the protein's energy state which may help to identify any possible mutation effect. This is important because protein mutations can magnify the possibility of cancer and other developing diseases in the body.

Initiations of trials into vaccination against HIV after achieving major success against COVID - 19 With mRNA Tech.

Riya Chotai S.Y.B Pham

During the BIO International Conference, one of the main subjects was COVID - 19 vaccines and the lesson learned during the pandemic. The potential of mRNA technology was discussed during the conference. BIO mentioned an area of research that could have a significant impact on global health, as it highlighted ongoing clinical trials of an mRNA vaccine against HIV. The study, conducted by Moderna and IAVI, a non-profit research organization, began a Phase I trial earlier this year and is already underway. Just a few weeks ago, partners initiated another Phase I trial in Rwanda and South Africa investigating the safety and immunogenicity of mRNA-1644. This study is the first time an mRNA-mediated HIV immunogen has been tested in Africa, and African scientists and researchers are leading the effort. IAVI's Vice President of Clinical Development, Dagna Laufer, said clinical research should transfer to clinical trials involved transferring state-of-the-art laboratory technology to Africa to enable African scientists to conduct research and analyze relevant data. Given the speed at which vaccines for COVID-19 are being developed using mRNA technology, Laufer notes that HIV is a "much more complex virus," and results are likely to come in this case at a similar rate, noting that the HIV is a `much more complex virus` than the one causing COVID-19. Moreover, the lack of a natural protective immune response to HIV means researchers cannot target model responses. In addition to developing expertise in this area, the main aim of this research is to advance the development of vaccines against HIV.

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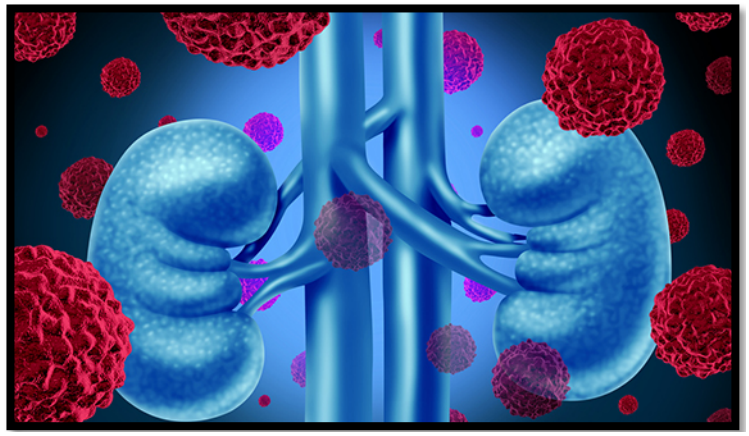
ENHANCEMENT IN THE TREATMENT OF DEADLY KIDNEY CANCER.

Pranjali Samarth S.Y.B pharm

The researchers from Karolinska Institute in Sweden have linked resistance to ailment for a deadly form of kidney cancer to low mitochondrial content in the cell. The cancer cells responded to this ailment when the researchers increased the mitochondrial content with the help of an inhibitor. Their findings are published in Nature Metabolism and offer hope for most targeted cancer drugs. The energy for the cell and oxygen required is produced by mitochondria. It is also the most demanding oxygen component of the cell but the fact of how mitochondria adapt themselves in a low-oxygen environment and is associated with cancer therapy resistance has remained unknown. Susanne Schlisio, group leader at the Department of Microbiology, Tumor and Cell Biology, (Sweden) Karolinska Institute states that "We have shown for the first time the formation of New Mitochondria is regulated in the cells that lack oxygen and how this process is altered in cancer cells with VHL modification". The gene called Von Hippel- Lindau (VHL)helps prevent healthy cells from becoming cancerous. The 2019 Noble Prize in Physiology or Medicine was Awarded to the discovery that VHL was a part of cells' oxygen detection system. Another protein called HIF leads to the breakdown of VHL. HIF accumulates and causes a disease called VHL syndrome in which cells react as if the lack of oxygen despite oxygen being present while VHL is mutated. The risk of tumors, both benign and malignant is greatly enhanced by VHL syndrome. It has a poor prognosis with a five-year survival rate of barely 12%. In the present study, the researcher examined the protein content of cancer cells from patients with different variants of VHL syndrome and how they differed from patients from another group of individuals with a special VHL mutation called Chuvash, a mutation involved in hypoxia-sensing disorders without any tumor evolution. The patients with the Chuvash VHL mutation had normal mitochondria in their cells, while those with VHL syndrome mutation had few mitochondria in their cells. The researchers treated these tumors with an inhibitor of a mitochondrial protease which is called "LONP1" to increase the amount of mitochondrial content in VHL-related kidney cancer cells. The cells, therefore, became endangered to the cancer drug sorafenib, which they had previously resisted. While studying the mouse, the combination treatment led to lower growth of tumor



The study's first author Shuijie Li, a postdoctoral researcher in Schlisio's group said that "We hope that this knowledge will ease the way for more distinct LONP1 protease inhibitors to treat VHL-related clear cell kidney cancer." Their finding can be linked to all VHL syndromic cancers, such as the neuroendocrine tumors pheochromocytoma and paraganglioma.

Grants from the Swedish Childhood Cancer Foundation, the Swedish Cancer Society, the Swedish Research Council, Alice Wallenberg Foundation, and the European Research Council supported this study.

Managing director of Pfizer resigns.

Manas Joshi S.Y.B pharm

The managing director of Pfizer S. Sridhar announced his resignation from his post on Wednesday, August 10, 2022.

S. Sridhar has announced his resignation and had an intention for early retirement. Said the company. S Sridhar has significant contribution to the growth of Pfizer. from the last 14 years Mr.S. Sridhar working at Pfizer. He proved himself an excellent leader.S. Sridhar worked as the chief financial officer for over 8 years. And as managing director for last 6 years. In his 14 years of service, he showed excellent leadership and spectacular carrier for upcoming people.

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Intas Pharmaceuticals and Dr. Reddy are in a race to acquire Athenex.

Ronit Handa S.Y.B Pharm

Intas Pharmaceuticals and Dr. Reddy's laboratories are in talks to acquire Athenex Inc for $200-250 that's a 1580-1980 crore deal in Indian Rs. Athenex US-based clinical-stage biotechnology focused on the development of autologous and allogeneic CAR-NKT cell therapies to treat cancers. Athenex has its firm goal to become a global leader in bringing innovative cancer treatments to the market, and improving the health outcomes of cancer patients. Athenex was founded in the year 2002 and since then it has raised more than $250 million in private capital. Its drug delivery system helps existing chemotherapy drugs that are given intravenously to be administered orally. Athenex also develops supportive-care products for cancer patients, Athenex has its North American headquarters in Buffalo, New York, and its Asian headquarters in Hong Kong. Intas, one of the largest outbound deals, acquired Actavis UK and Actavis Ireland from Teva Pharmaceutical Industries for 600 million pounds in 2016. It's backed by the Abu Dhabi Investment Authority [ADIA] owned by the Emirates of Abu Dhabi. While on the other hand, Dr. Reddy's also keeps expanding their business globally. In June they acquired a Sears portfolio of generic injectable products from US-based Eton Pharmaceuticals worth $ 5 million in cash. Some of the major buyouts of Dr. Reddy's are Betapharm [$570 million deal in 2006] Octoplus[$36 million in 2012] Cidmus [$61 million in April 2022]. " a formal process has started and the first round of offers have come in," said one of the officials.

Indian Pharma Market saw a boost of 14.1% in the month of July according to the AIOCD report.

Ronit Handa S.Y.B pharm

Indian Pharmaceutical Market [IPM] saw a boost of 14.1% in value and 7.3% in volumes. The market shows growth in all therapeutic categories such as respiratory which grew at 22.3% gynecology 24% chemotherapy 28.4% urology 22.5%. IPM saw sales of Rs 15,921 crore during the month of July. The IPM is 3rd largest in terms of volume in the world and 14th largest in terms of value and with sales of 15,921 crores, the market saw a growth of 14.1%.

Indonella Sakaienesis.

Manas Joshi S.Y.B pharm

Bacterium or a bacterium has been found in Japan that can break down and can consume plastic. Indonella Sakaienesis is bacteria that can degrade plastic, & can use it as a source of energy as well as the source of carbon for growth. Donella Sakaienesis is from the genus ideonella and belongs to COMAMONA DACEAE. This bacterium was firstly identified in 2016 at a plastic bottle recycling facility in Sakai, Japan. It's a gram-negative bacterium.

It has a rod-like structure and a single flagellum. It is a smooth, colorless & slightly circular bacteria that is found in various sizes. INDONELLA SAKAIENESIS could be very helpful for the degradation of polyethylene. Which will help to maintain and decrease unwanted plastic waste.

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Olumiant Approved by FDA

Riya Chotai S.Y.B Pharm

On June 13, the U.S. Food and Drug Administration (FDA) approved the drug baricitinib (Olumiant) for severe alopecia areata (AA), an autoimmune disease that causes sudden hair loss. sudden and sometimes extremely severe.

The once-daily pill is the first FDA-approved systemic treatment for alopecia areata, which means it treats the entire body instead of a specific area.

Alopecia areata affects more than 300,000 people in the United States each year, often resulting in bald patches on the scalp. People with a lot of hair loss may also experience loss of eyebrows and eyelashes.

"Access to safe and effective treatment options is critical for a significant number of Americans affected by severe hair loss," says Kendall Marcus, MD, Division of Dermatology and Dermatology and Medicine. Dentistry at the Center for Drug Evaluation and Research said in an FDA press release. release. "Today's approval will help address a significant unmet need for patients with severe alopecia areata."

Frustrated with the limited number of treatment options, many people with AA turn to wigs, false eyelashes, or wigs, said Lotus Mallbris, vice president of immunology development at Eli Lilly, the company that makes baricitinib. tattooed eyebrows. Dr. Mallbris said: “People with alopecia areata face significant challenges as the disease can be very stigmatizing. “With this approval, we now have a once-daily medication that can help patients achieve significant hair, eyebrow, and eyelash growth,” she said.

Before baricitinib's approval, there was no FDA-approved therapy to treat alopecia areata, says Kristen Lo Sicco, MD, associate professor of dermatology and director of the Skin and Oncology Unit at the Medical Center NYU Langone Hospital in New York said.

Big Bull rises its stake in Pharma. Do you own it?

Chandresh Mali S.Y. B Pharm

*The Big Bull Rakesh Jhunjhunwala had invested in these pharma stocks. The fourth quarter of 2022 has been a hectic period for Jhunjhunwala, who has posted significant gains in his portfolio.

*As per shareholding, Rakesh Jhunjhunwala holds 57.5 lakh equity shares in Jubilant Farmova.

* As per shareholding, he has worked on my position in Lupine, he holds a 1.60% stake in Lupine.

Nifty Pharma may break this quarter's all-time high and create a new height

Chandresh Mali S.Y. B Pharm

All pharma stocks have given good results in the last quarter.
Sun Pharmaceutical Industries, India's largest pharmaceutical company, reported a net profit of ₹2,061 crores for the quarter ended June 30, 2022. They may report higher profits than their previous quarter's profit.

Cipla reported 5.5% higher revenue in Q3 FY22 as of June 30, 2022, at around Rs 5,442.86 crore as compared to the previous quarter

Lupine Pharmaceuticals has also reported good results in this quarter. Its profit was INR 23,929 Cr as compared to INR 22,323 Million in Q3 FY2022
The legendary investor Rakesh Jhunjhunwala has also invested in this stock.

The अर्थ-icle

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Do you still think you have nothing?

1380 MILLION. Yes, that's current the population of India. Among those half of the population lives in metropolitan cities. Or at least in the areas where their basic need like, food, shelter, clean water, and proper medication can be fulfilled. But still, there are some people, for them, these services are like heaven. After 75 years of independence, over 105 million tribal people are living in India. Education, medication, these words they haven't heard of. Electricity is like a miracle for them. These groups are known as SCHEDULED TRIBES.

More than 105 million tribal people are living all over India. These people stay in groups. 90% of these tribes live in rural areas. And spread across 705 tribes which are 8.6% of the Indian population. But still, they are unknown about the basic services provided by the INDIAN GOVT. As we know primary medication services are being provided by the govt. Govt. hospitals are there to provide these kinds of services. AANGANWADI and a few NGOs are working to provide the tribal people with good & nutritional food. Lots of schemes are getting in the stream for the upliftment of tribal people. But the question is, are these schemes, these medical services, and nutritious food working in the real sense? Are these tribal people getting these things?

The answer is no, not at all!

These tribal people still didn't get primary first aid, they are not even aware of what is medicine what tablets or pills are used or what is cough syrup. The girls in these tribes didn't get any sanitary products, there are no signs of contraceptives. Paracetamol, and antacids, are very cheap, easily available medicines, but still, they don't have them. Why? Let us take a look.

What kind of diseases do they face?

- malaria
- tuberculosis
- malnutrition
- cancer
- hypertension
- cardiovascular diseases
- fungal infections
- skin diseases
- leprosy
- anemia

Teenage girls (age 15 - 19) suffers from anemia. They carry a baby in their womb at a very small age. They are underweight as well as not given the proper required nutrition for giving birth to a new life. Lack of sanitization, hygiene, and negligence towards self-care lead them to severe health conditions. Newborns are born with kind of deficiencies, weaknesses, or sometimes serious disabilities.

STDs is a rising problem in tribal areas. Lack of knowledge and availability of contraceptives is the main reason behind this problem.

ALCOHOLISM: this is a shameful thing that, where there is no good food, no water, no electricity, and no medical facilities still they have alcohol to consume and alcoholism is the biggest problem among these tribal people. How do these people get the alcohol? (they have international brand liquors in their huts)

In 2014 a survey was conducted. As per the reports, the rate of alcohol consumption is more than 41% in men which costs around 79 crore INR and tobacco consumption is around 44% which costs around 298 crore INR. Some of the tribal people get involved in smuggling and drug rackets. These drugs may be consumed by them as well. MINISTRY OF TRIBAL AFFAIR should take this seriously.

LEPROSY: nowadays it is a rare disease. but there was a time when this disease was at its peak. It destroyed a generation. Same with the people in cities and the same with the people in tribes. There were no doctors, no one was ready to treat the leprosy patient, neither in cities nor in tribal areas. Thanks to Baba Amte, he treated and cared for all these people.

There are 28 states and 8 union territories in India and every state (except Punjab and Haryana) as tribal group. for example

Madhya Pradesh: - 15 million tribal people

Maharashtra: - 10 million tribal people.

Odessa & Rajasthan: - 9 million tribal people

total 43million tribal people are there only in 3 states.

BUT THEY DON'T HAVE BASIC MEDICATION.

"THIS IS A SERIOUS ISSUE FOR ME!!"

Manas Joshi

S.Y.B Pharm

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Quality Control of Herbal Drugs

Human beings are using various plants as medicines since very ancient times. Traditional therapies such as Ayurveda, Unani, and Siddha are testimony to this. Even today in this 21st century, herbal medicines are being used widely all over the world along with modern medicines. We must not forget that like modern medicines, herbal drugs should also be tested thoroughly on various quality parameters. Quality is defined as the status of a drug that is determined by identity, purity, content, and other chemicals, physical, or biological properties, or by the manufacturing processes involved in making the drug. Quality control is a term that also refers to the processes involved in maintaining the quality and validity of manufactured products. Mentioned below are 3 important parameters of quality control -

• Identity - Is the herb the one it should be?

• Purity - Are there contaminants?

• Content/Assay - Is the content of active constituents within the defined limits? Quality control goes back to the extent of checking the agricultural practice of raising the raw material including seed selection, use of fertilizers, harvesting techniques, drying, and storage of the plants. A set of good agricultural processes (GAP) is of utmost importance in the efficacy of the drug. Factors such as the use of fresh plants, age and part of the plant collected, period, time and method of collection, the temperature of processing, exposure to light, availability of water, nutrients, drying, packing, transportation of raw material, and storage, can greatly affect the quality of the drug.

Standardization parameters for quality control of herbal drugs-

•Microscopic evaluation – microscopic analysis is needed to determine the correct species and/or that the correct part of the species is present like leaf

constant, powder characteristic, type of stomata, type of trichomes, etc.

•Determination of Foreign Matter - Herbs should be entirely free from moulds or insects, including excreta and visible contaminants such as sand and stones, poisonous and harmful foreign matter, and chemical residues.

•Determination of Ash - Total ash is the measure of the total amount of material left after burning and includes ash derived from the part of the plant itself and acid-insoluble ash. The latter is the residue obtained after boiling the total ash with dilute hydrochloric acid and burning the remaining insoluble matter.

•Determination of Extractive value: To investigate the type of Phytoconstituents present in the plant plays a very important role in considering its biological role. Different types of extractive values are generally carried out to identify the chemical nature of phytoconstituents like water-soluble extractive value, ether soluble extractive value, and alcohol extractive value.

•Determination of Heavy Metals - Contamination by heavy metals such as mercury, lead, copper, cadmium, and arsenic should be investigated.

•Determination of foaming index and swelling index.

•Determination of Microbial Contaminants and Aflatoxins - Medicinal plants may be associated with a broad variety of microbial contaminants, represented by bacteria, fungi, and viruses which need to be thoroughly investigated.

•Determination of Pesticide Residues – Needs to ensure that herbal drugs are free from pesticides and fumigants.

•Determination of Radioactive Contamination - There are many sources of ionization radiation, including radionuclides, occurring in the environment. Hence a certain degree of exposure is inevitable. Dangerous contamination, however, may be the consequence of a nuclear accident.

• Analytical Methods - Additional information, especially on chromatographic like TLC, column chromatography, HPTLC, HPLC, etc, and/or spectroscopic methods like UV-Visible, Infra-red, Nuclear Magnetic Resonance, Mass spectroscopy, etc can be found in the general scientific literature which should be used to get valuable information on the identity of the plant.

Mrs. Shital Awasare Kalekar

Faculty Member

The अर्थ-icle

D Y PATIL UNIVERSITY PUNE, AMBI | School of Pharmacy

Skills for exemplary performance in pharmaceutical career

After the catastrophic pandemic, we all have started to recover and make efforts to come to normalcy. The same is true for the Pharmaceutical industry. There is an upbeat mood and the resurgence not only to normalcy but further growth is seen.

As a student of pharmaceutical science, you all must be watching these developments and contemplating what career opportunities you will be getting considering this growth mode.

No doubt, many windows of opportunities are opening because of a positive milieu; I felt that we should positively consider opportunities available in pharmaceutical sales and marketing.

This is one field where automation does not work! It gives career opportunities to each individual irrespective of gender, based on your knowledge and skill sets.

The importance of thorough knowledge of pharmacotherapeutics in making a successful career in sales and marketing cannot be undermined. As we are aware, a sales and marketing job involves an interface with the doctor, who is knowledgeable in therapeutics, but not necessarily pharmacotherapeutics. This is where our knowledge of pharmacology gives us an edge over others. We can communicate with confidence to a very well-informed customer, the doctor.

In addition to knowledge of pharmacology, a sales and marketing job requires certain skill-sets, which make us effective in the job.

One such basic skill is “Interpersonal skill” This skill has a wide canvas and it basically includes establishing a “win-win” relationship with others and in the work groups. It helps in establishing a personal relationship, and a rapport with others. Such a rapport goes a long way in creating “goodwill”.

In addition, it helps in establishing a sound, positive professional relationship with your customers and business associate including employers. In addition, it helps in understanding others, and their perspective on a given situation. This is the first step in finding solutions.

These skills are also important in business and management where modern organizations increasingly use teamwork which requires being able to communicate and collaborate with others.

These are skills that can be learned thereby improving an emotional literacy.

Communication is obviously an integral part of interpersonal skills.

Today there is a paradigm shift in communication- Communication is not only expressing but equally important is listening. The cornerstone of effective communication is the ability to listen and to accomplish this actively. Often communication fails because people have not actually heard the message or have only listened to part of it. As a result, they may have assumed or misinterpreted what was actually said. In the professional arena, good listening skills are necessary in order to communicate that you want to help.

Expressing refers to the ability to effectively say what we want to say.

Verbal refers to what we say with words.

Non-verbal refers to all the other ways we communicate, via body language, tone, etc. We’ll come back to this as it’s a very important part of the communication process.

A commonly accepted scenario is that communication between people is usually comprised of the words used (7%), the way words are used or stressed, e.g., tone, emotions (13%), and body language (80%). Therefore, it is very important to pay attention to non-verbal signals, both from a listening perspective as it will offer further clues about the other person’s internal situation beyond the words they use; but also, the non-verbal signals we are giving out when expressing ourselves.

Listening is one part of the good communication loop;

The other part consists of the ability to send verbal messages constructively. Difficulties in expressing ourselves often arise when emotions become

involved (which is frequent!). These difficulties may occur in a work situation, a professional relationship, personal interactions, educational exchanges, meetings, or group settings – basically anytime people get together to communicate.

It is important that what we feel and/or think is congruent with what we say.

You will appreciate that these skills are not only helpful in our job, but also in establishing a positive relationship with others.

These skills are a foundation of inter-relationship with other human beings!

There are many other job-related skills, which we will discuss as we meet again and again on VYOM platform.

Satish Kelkar

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The अर्थ-icle

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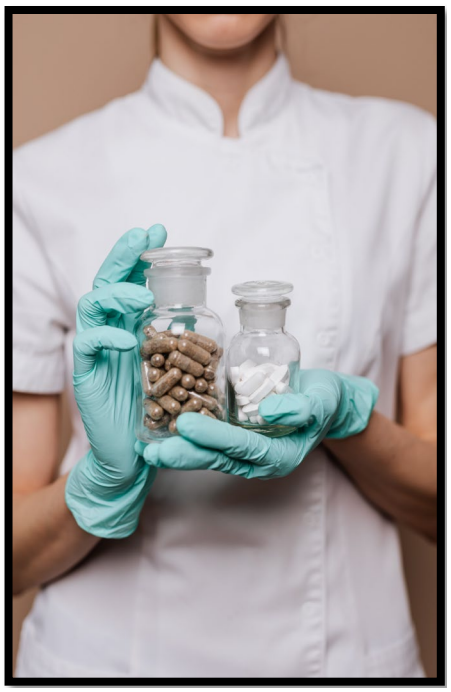
ENGINE OF INNOVATION

Hospital pharmacy has often been seen as the *ENGINE OF INNOVATION* for pharmacy services and, since the introduction of the word pharmacy occurred in the late 1960s, however, supply remains a major part of the pharmacy service and together with specialist compounding and information support is a mainstay of any hospital pharmacy. It is a definitive guide to the multidisciplinary specialty of pharmaceutical medicine, encompassing scientific, medical, and related activities in the discovery, development, evaluation, registration, and monitoring of medicines, the execution of clinical trials, and the regulatory and ethical requirements pertaining to drug development. Hospital pharmacy has become increasingly patient-orientated. B.D. Miglani who is known as the Father of Hospital Pharmacy started the Indian Hospital Pharmacist Association.



Association. The primary mission of a hospital pharmacy is to manage the use of medications in hospitals and another medical center. Goals include the selection, prescription, procuration, delivery, administration, and review of medications to optimize patient outcomes. It is important to ensure that the right patient, dose, route of administration, time, drug, information, and documentation are respected when any medication is used. For example...In the COVID-19 pandemic the doctor, pharmacists, and scientists continuously work to save everyone's life and the results are in front of us. Due to proper management and planning, there was no financial loss or loss of life. According to the previous situation, the condition of medical sources in India is very poor than in other countries. But in the future, if there is another disease attacking us then the question arises whether we and our medical sources are ready to fight. In the future, we have to think quite a long way into the land of the “unthinkable”, so maybe we find the far-fetched vision to update and develop a new version of hospital pharmacy. For hospital pharmacies, the COVID-19 pandemic sparked an abrupt and intensive re-evaluation of nearly every aspect of their operations. As said above, we have to work on updating the hospital pharmacy method. Let’s get on some ideas that can help us deal with issues and make a way for future planning.

1. Use technology to improve revenue recovery.

2. Make patient assistance more effective.

3. Expand into specialty drugs to improve your revenue recovery management capabilities.

4. Add retail and ambulatory pharmacy services.

5. Adopt and use automated management tools.

6. Create cost-saving workflow and inventory management efficiencies.

7. Changes in shopping patterns in supermarkets have led many of the bigger chains to open extended-hours pharmacies.

8. improved quality of care and lack of staff and constrained budgets will inevitably result in some change.

9. Government’s drive to modernize the NHS (national health service) and the introduction of an information and technology strategy.

10. The introduction of the electronic transfer of information within the NHS will open up several opportunities.

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The अर्थ-icle

D Y PATIL UNIVERSITY PUNE, AMBI | School of Pharmacy

Counterfeit medicines

The issue related to counterfeit medicines turned up in 1980 and has been described as a major problem in the world that is affecting major health and economies. As per the Black law dictionary "Counterfeit drug" is a drug made by someone other than the genuine manufacturer, by copying or imitating an original product without authority or right, intending to deceive or defraud. As per World Health Organization "A counterfeit medicine is deliberately and fraudulently mislabelled concerning identity and source. It may be applied to both branded and generic products and counterfeit products may include products with correct ingredients or with wrong ingredients, without active ingredients, with insufficient active ingredients, or with fake packaging."

Factors responsible for an increase in counterfeit drugs are:

- Availability of sophisticated technology
- High cost of quality drug products
- Unorganized drug distribution networks involving so many intermediaries
- Harsh business environment
- Illegal drug importation
- Inefficient cooperation between drug regulatory authorities and stakeholders
- Weak regulations, in terms of implementation of existing drug laws and panel sanctions
- Non-professionals in the drug business

Ignorance and increase in self-medication culture

Categories of drugs that are encouraging counterfeiting cases are chemotherapeutic agents, vaccines, sexual dysfunction agents, weight loss agents, hormones, antibiotics, antiviral, analgesics, steroids, antihistamines, and antianxiety agents.

Steps taken for combating counterfeit drugs are:

Many systems are used by the manufacturer to fight the problem of drug counterfeiting blister packaging, taggants, barcodes, two-dimensional encryption, and holograms.

Use of track and trace systems to plug the gaps in distribution systems such as radio-frequency identification (RFID), and e-pedigree.

Indian government has made it mandatory to put QR codes on packages of active pharmaceutical ingredients used in medicines to curtail the menace of counterfeit and substandard drugs in the country. The new rule will be effective from 1st January 2023.

Counterfeit drugs arising in India and other countries have posed problems globally. Countries must unite together to resolve the issue of counterfeit drugs and unite on a single definition. Proper study is required to combat counterfeit drugs which would help in the improvement of the health care system.

Charu Mehta

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The अर्थ-icle

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The curious case of Molnupiravir and why ICMR is in opposition to its use.

So, what is Molnupiravir?
It is an antiviral drug that inhibits the replication of certain RNA viruses. It is used to treat Covid - 19 in those who are mostly infected by SARS - CoV - 2. Whereas ICMR stands for Indian Council of Medical Sciences.
Although more than a dozen national pharmaceutical companies produce the antiviral drug Molnupiravir at an affordable price, the Indian government opposes its inclusion in the treatment regimen for safety reasons.
The drug failed to convince the Indian Council of Medical Research (ICMR) to give it a green signal to include it in India's national COVID-19 treatment regimen, even though it received a License by Emergency Use Authorization (EUA) from the Indian drug regulator.
The US Food and Drug Administration (FDA), a federal agency of the Department of Health and Human Services, has issued a EUA for this drug. Since then, the drug has also been approved in several countries including India.
The issuance of a EUA is different than an FDA approval, however. In determining whether to issue a EUA, the FDA evaluates the totality of the scientific evidence available and carefully balances any known or potential risks with any known or potential benefits of the product. Molnupiravir is limited to situations where other FDA-authorised treatments for COVID-19 are inaccessible or are not clinically appropriate and will be a useful treatment option for some patients with COVID-19 at high risk of hospitalization or death. India's issuance of EUA, therefore, in no way means the drug has become a part of the country's accepted treatment protocol.
However, issuing a EUA is different from FDA approval. In determining whether to issue a EUA, FDA will evaluate all available scientific evidence and carefully balance known or potential risks with the known or potential benefits of the product. . Molnupiravir is limited to cases where other FDA-approved COVID-19 treatments are inaccessible or clinically inappropriate and would be a useful treatment option for some patients. Patients with COVID-19 are at high risk for hospitalization or death. Therefore, the issuance of the EUA by India does not mean that the drug is part of an accepted treatment protocol in the country.

So why is ICMR against the usage of this drug?
First of all, the US approved it based on only 1,433 patients, with a 3% reduction when administered in severe, moderate, and mild cases. It should be remembered that there are major safety concerns," said Dr. Balram Bhargava, Director-General at ICMR, Secretary, Department of Health Research a division under the Ministry of Health and Family Welfare.
Molnupiravir is not approved by the FDA for any use, including the treatment of COVID-19. made it clear that the risks and benefits need to be carefully weighed.
The FDA claims mornupiravir is an investigational drug and is not approved

by U.S. regulatory agencies for the treatment of COVID-19 patients.
Bhargava believes that molnupiravir has the following side effects: Mutagenicity, Teratogenicity, etc.
"Because of possible teratogenicity problems in newborns and children, effective contraception should be used for 3 months when this drug is administered to both men and women. It is not included in the national task force treatment.WHO has not included it, the UK has not included it until now," he added. Bhargava said the government had discussed it twice. pointed out that the drug included or did not include government treatment protocols.
"We are concerned about the drug's risks associated with pregnancy, lactation, soft tissue injury in children, and the reproductive age group. even if there was a reduction in unvaccinated individuals and a reduction of only 3% in mild to moderate disease, which is currently the national Cipla, Sun Pharma and Torrent manufacture the drug in India starting at Rs 35 per capsule. But Mornupiravir's true destiny hangs in the balance.

Due to doubts about the efficacy and potential risks of molnupiravir, health officials are keen to find alternatives. In early November, New York City-based Pfizer released the first results showing that the COVID-19 antiviral drug Paxlovid reduced hospitalizations and deaths by 89%, although full data have yet to be made public. It has not been peer-reviewed. The mechanism of action of paxlobid is different from that of mornupiravir. Despite downgrading molnupiravir's results, Seley-Radtke hopes that research on it and Paxlovid will lead to an effective drug cocktail that combines antivirals to kill SARS-CoV-2. "In addition to stopping the growth of the virus with this multipronged attack, it also slows the development of resistance," she says. Viruses have a harder time developing resistance to combinations of drugs than to single drugs. Ultimately, cocktails are "the better answer," she says.

Riya Chotai

S.Y. B Pharm

The अर्थ-icle

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DISREPUTED & MISSUNDERSTUD CREATURE

INDIA is a country full of flora & fauna, a country blessed with nature & natural resources. Plants, animals, minerals, and many more. In the category of animals, a snake is one of the most beautiful, and interesting creatures on the planet. in India there are 300+ species found to date. In India, we found only four species of snakes that are deadly and venomous -

• Cobra

• Krait

• Saw scaled vipers

• Russell's viper

These snakes are the most venomous in India. snakes' venom is a mixture of lots of proteins compound that is slightly toxic/harmful to the human body. Their venoms are primarily classified into two types.

1. Neurotoxic: - this venom directly affects the CENTRAL NERVOUS SYSTEM [CNS] Cytotoxic venom has a localized action at the site of the bite. Neurotoxic venom tends to act more quickly. The attack on CNS causes paralysis, starting at the head, and moving down the body until, if untreated, the diaphragm is paralyzed and the patient can't breathe which certainly causes death.

2. Hemotoxic: - Hemotoxic venom makes us suffer by attacking the circulatory system. By entering the bloodstream, it creates a lot of tiny blood clots in the blood vessels which exerts pressure on the walls and forces them to leak there is nothing left to stem the flow and the patient bleeds to death, or those clots resist the flow of blood to the heart which also causes the death of the patient.

Symptoms of Various bites:

Cobra bite symptoms:

A muscle sensation and muscle aches at the sight of the bite. General weakness, drowsiness, and control of the tongue, facial muscles, and eyelids are lost. Subsequently, the patient feels difficulty in speech, swallowing, and breathing. Paralysis of limbs, a sharp drop in blood pressure is observed and sometimes a coma. The discoloration is observed at the site of the bite.

Krait bite symptoms:

Advance symptoms are similar to cobra bite the difference is –there is no burning sensation or swelling at the site. there may be severe pain in the stomach and joints.

Russell's vipers bite symptoms:

Severe pain and swelling, blisters on the bitten limb edema all around the limb, cardiac arrhythmia and eye pupils becoming insensitive to the light, haemorrhage, anaemia, hypertension, and heart failure.

Saw scaled vipers bite symptoms:

• Severe Burning sensation and pain at the site of the bite and later in the bitten limb, swelling and discoloration on the bitten skin bleeding from the wound and gums, and blood is found in the urine. Anaemia and weakness due to loss of blood, nausea, and vomiting.

• All snake bites should be treated as an emergency.

• Anti-snake venom is the only remedy for the treatment

Anti-venoms, these life-saving antidotes to snake bites are made by extracting venom from snakes and then injecting it diluted into sheep or horses, which build up antibodies against it. But these antivenoms are produced in very less amounts, as it requires lots of research time and money. Every common individual can't afford these antivenoms due to their prices. These antivenoms are quite expensive and the government shows very less interest in encouraging the pharmaceutical companies to make this possible. in the case of snake bites, here are some of the first aids to do. Firstly, tie a cloth or a wire above the bite site. immobilized the affected limb. Apply basic first aid and wash the wound with soap and water and take the patient to the hospital as soon as possible. Tantriks and snake charmers are not the solutions to snake bites. sucking the wound is also not an option. These are the don'ts for the snake bites. Snakes are the most amazing and disreputed reptiles on the planet. Lots of snakes are being killed just because of the misunderstanding and fear of venom. some rare species are on the border of extinction.

Ashish Chimbalkar

HOD

The अर्थ-icle

D Y PATIL UNIVERSITY PUNE, AMBI | School of Pharmacy

MEDICINAL CHEMISTRY

Medicinal chemistry is a scientific discipline that has progressed rapidly over the last few decades. Medicinal chemistry is the latest outstanding development in chemistry and rational drug design. Medicinal Chemistry covers all areas of remedial chemistry, including biological evaluation, of biologically active compounds, diagnostic agents, or labeled ligands employed as pharmacological tools, structural biological studies using X-ray, NMR, etc.

"What is medicinal chemistry?"

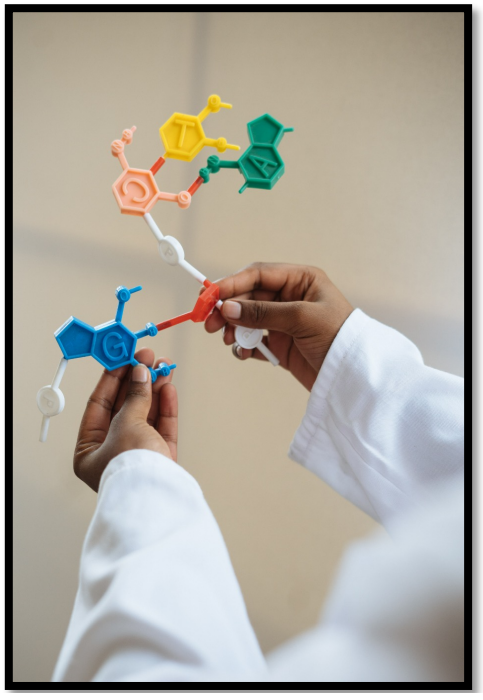
Medicinal chemistry is an interdisciplinary field of study combining aspects of organic chemistry, physical chemistry, pharmacology, microbiology, biochemistry, as well as computational chemistry. Medicinal chemistry is concerned with the discovery, design, synthesis, and interactions of a pharmaceutical agent (drug) with the body. A person in this field would be interested in designing drugs and contributing in this way to therapeutics or healthcare. They have a bent for chemistry and want to work in or supervise a lab in a pharmaceutical, big pharma, or biotech company. "Medicinal chemists today are not only making new bioactive molecules but also improving existing pharmaceuticals. Even though most people today still consider medicinal chemistry as the design and synthesis of biologically active molecules, no one would deny that medicinal chemistry has evolved to be the center of a vast variety of related scientific fields. Medicinal chemists connect the communities of analytical chemists, computational chemists, biochemists, chemical biologists, molecular biologists, cell biologists, structural biologists, microbiologists, pharmacologists, toxicologists, and translational medicine experts.

CAREER IN MEDICINAL CHEMISTRY

Medical chemists have an important part to play in health. A career in Medicinal chemistry is concerned with the discovery, design, and synthesis of new drugs for clinical use. This course includes modules in biochemistry, biology, physiology, pharmacology, and synthetic drugs. The duties are Laboratory Careers and Non-Laboratory Careers

Other duties may include;

- Maintaining records of work
- Collaborating with project leads and other scientists
- Conducting research activity
- Presenting your findings to stakeholders within the company



Rutuja Dhone

F.Y. B Pharm

The अर्थ-icle

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FDA LIMITS THE USE OF JANSSEN COVID-19 VACCINE TO CERTAIN INDIVIDUALS.

The use of Janssen COVID-19 vaccines has been limitedly authorized and used by the U.S. Food and Drug Administration for individuals of 18 years and above.

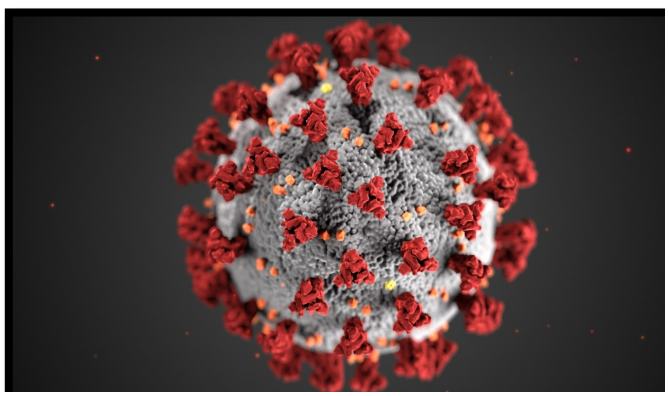
After an updated analysis and investigation of the cases reported, the FDA has determined that the risk of thrombosis with thrombocytopenia syndrome (TTS), this syndrome is a rare and potentially life-threatening blood clot in combination with the low levels of blood platelets with the onset of having symptoms nearly up to one to two weeks following administration of the Janssen COVID-19 Vaccine.

The FDA has also determined the known, as well as the potential benefits of the vaccine for the prevention of COVID-19, determined the known and potential risks for individuals 18 years and older for whom the other authorized COVID-19 vaccines are not accessible or clinically appropriate, and for the individuals of age 18 and above who elected to receive the Janssen COVID-19 Vaccine because they would diversely not COVID-19 vaccine.

Now The Fact Sheet for Healthcare Providers Administering Vaccine has reflected the revision of the authorized use of the Janssen COVID-19 Vaccine which also includes an admonishing statement at the opening of the fact sheet for the rise which summarizes information on the risk for TTS. The additional information related to the revision to the authorized use of the vaccine and updated information on this risk of blood clots with low levels of blood platelets are also been added to the Fact Sheet for Recipients

In the current pandemic response, Jassen Covid-19 still has a role in the United States and also across the global community. Today's action exhibit and prove our safety surveillance systems and our commitment to ensuring that science and data guide our decisions. It has been closely monitored that the Janssen COVID-19 Vaccine and the occurrence of TTS following its administration and the updated information used for our safety surveillance systems to revise the EUA.

CURRENT STATUS:



In an updated analysis of TTS cases following administration of the Janssen COVID-19 Vaccine which were reported to VAERS through March 18, 2022, the FDA and CDC identified 60 confirmed cases including nine lethal cases. The reporting rate of TTS is also determined by the FDA which is 3.23 per million doses of vaccine administered and the reporting rate of TTS causing deaths is 0.48 per million doses of vaccine administered.

The agency considered that the reporting cases of both TTS And TTS death following the vaccine are said to be more than the previous cases reported. The factors that put an individual at risk for TTS following the administration of the Janssen COVID-19 Vaccine remain unknown. The FDA also considered that individuals with TTS may rapidly be declined, despite having prompt diagnosis and treatment, and that TTS may lead to long-term and debilitating health consequences which also as a high death rate chances. The agency also considered the availability of alternative authorized and approved COVID-19 vaccines which provide protection from COVID-19 and have not been shown to present a risk for TTS.

Ayush Kadam
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The अर्थ-icle

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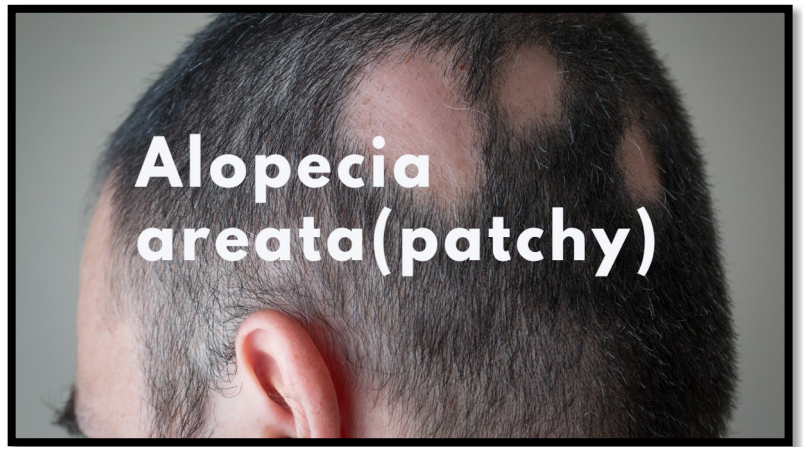
FIRST SYSTEMIC TREATMENT FOR ALOPECIA AREATA!

The U.S. Food and Drug Administration approved Olumiant as oral tablets to treat patients with severe alopecia areata. This disorder generally appears as patchy baldness and usually affects more than 3,00,000 people in the U.S. every year. FDA approves the first systemic treatment for alopecia areata. The treatment for Alopecia Areata treats the entire body rather than a specific part of the body. Kendall Marcus: M.D Director of the Division of Dermatology and Dentistry in the FDA center of E&R said, "Access to safe and effective treatment options is crucial for a significant number of Americans affected by severe alopecia areata.

Alopecia Areata is generally referred to as alopecia. It is a kind of autoimmune disorder in which the body attacks its hair follicles, causing hair to fall out often in clumps. Olumiant is the kind of (JAK) inhibitor that blocks the activity of one or more specific families of enzymes, interfering with the pathway that leads to inflammation. The safety and efficacy of Olumiant were studied in two randomized, double-blind, placebo-controlled trials on patients who had 50% scalp hair loss. This was measured by the Severity of Alopecia Tool for more than 6 months. Patients in such kinds of trials received either a placebo or 2-4 milligram of Olumiant every day.

22% of 184 patients received 2 milligrams of Olumiant and 35% of 281 patients received 4 milligrams of Olumiant in the AA-1 trial and hence achieved adequate scalp coverage as compared to 5% of 189 patients who received a placebo. 17% of 156 patients received 2 milligrams of Olumiant and 32% of the 234 patients received 4 milligrams of Olumiant in the AA-2 trial and hence achieved adequate scalp coverage compared to 3% of 156 patients who received a placebo.

Olumiant associated include side effects such as upper respiratory tract infections, headache, acne, high cholesterol (hyperlipidemia), increase of an enzyme called creatinine phosphokinase, urinary tract infection, liver enzyme elevations, nausea, genital yeast infections, abdominal pain, and weight increase. Olumiant is not recommended for usage with a combination of other JAK inhibitors, biological immunomodulators, cyclosporine, or other potent immunosuppressants. It also comes with warnings and precautions. It comes along with a boxed warning for serious infections, mortality, malignancy, major adverse cardiovascular events, and thrombosis. Olumiant was approved originally in 2018 for the treatment of active rheumatoid arthritis and is now approved for the treatment of COVID-19 in certain hospitalized adults. Olumiant to Eli lily and company was granted by FDA.



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WHO signs MOU to set up global traditional medicine center in Gujrat- Jamnagar

The WHO Global center for traditional medicine is a knowledge center for long-established medicines. As per WHO'S overall traditional medicine strategy, it has a strategic focus on evidence & learning data and analytic sustainability, and equity & innovation, and technology to optimize the contribution of traditional medicines to global health and sustainable development. Now being established with the support of the government of India, the center reflects the WHO director-general's vision that harnessing the potential of traditional medicines would be a game-changer for health when founded on the evidence of innovations & sustainability. The Prime Minister and the Government of India are supporting the establishment of the WHO global center for traditional medicine in Jamnagar, Gujrat as a global good & in the spirit of **Vasudhaiva kutumbakam**: - *"the world is one family."*

WHAT ARE TRADITIONAL MEDICINES?

Traditional medicines comprise medical aspects of traditional knowledge that developed over generations within the folk beliefs of various societies before the era of modern medicine. the WHO defines traditional medicines as "the sum total of the knowledge, skills, and practices based on the theories, beliefs & experiences indigenous to different cultures whether explicable or not, used in the maintenance of health as well as in the prevention, diagnosis, improvement, or treatment, of physical & mental illness. traditional medicines when used to develop new drugs, natural products, and traditional medicines have their incomparable advantages such as abundant clinical experiences and their unique diversity of chemical structure & biological activities. Traditional medicine refers to health practices approaches, and beliefs incorporating plant, animal, and mineral-based medicines, spiritual therapies, manual techniques, and exercise, applied singularly or in combination to treat diagnosis and prevent illness or maintain well-being. Development in the field of traditional medicines, future of traditional medicines. It is a well-known fact that traditional systems of medicines always played important role in meeting global healthcare needs. They are continuing to do so at present and shall play a major role in the future also. India has the unique distinction of having six recognized systems of medicines in this category, they are Ayurveda, Siddha, Unani & Yoga, Naturopathy & Homeopathy.

Though homeopathy came to India in the 18th century. At present, there are more than 200 colleges that offer a four and half year course leading bachelor's degree in ayurvedic medicines and surgery, followed by a one-year internship. The research activity is being carried out by the central council for Unani, Homeopathy, Naturopathy and yoga. A recent review points out that more than 13000 plants have been investigated during the past 5 years.

Poonam Nalawade
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The अर्थ-icle

D Y PATIL UNIVERSITY PUNE, AMBI | School of Pharmacy

Outbreak of Monkeypox

Monkeypox is a zoonotic disease, which means the pathogens are transmitted from animals to humans. It originated from central and Western Africa in the year 1958 from the monkeys that were kept for research. It's from the orthopoxvirus genus, smallpox an eradicated virus also belongs to the orthopoxvirus genus, as well as the vaccine for smallpox, which is created from the vaccinia virus, which belongs to orthopoxvirus.

Signs and Symptoms

Within 2-3 weeks of exposure to the virus, a person will start witnessing the symptoms of Monkeypox.

Symptoms like :

Fever

Headache

Exhaustion

Chills

Respiratory symptoms (e.g. cough, sore throat, nasal congestion, etc)

Swollen lymph nodes

These are some common symptoms of Monkeypox that may occur with the main sign of Monkeypox is *rashes*.

A person suffering from Monkeypox will get rashes located near their genital areas, face, hands, chest, feet, or mouth.

These rashers sometimes look like pimples or blisters but are painful in many cases.

Asper the case study published in the British Journal of Dermatology: 185 cases of monkeypox have been reviewed which states that the major symptom of an outbreak of monkeypox differs from the previous outbreak of pox. Pustules were the main symptoms of the previous pox, whereas rare *pseudo-pustules* are found in monkeypox.

In appearance, pseudo-pustules are similar to pustules but they are solid and don't have the pus stored in them. In pustules, the top layer can be scraped off to get the pus in that. As per the study of the characteristics of pseudo-pustules, the lesions of pseudo-pustules may lead to ulcers

The Spread of Monkeypox in India

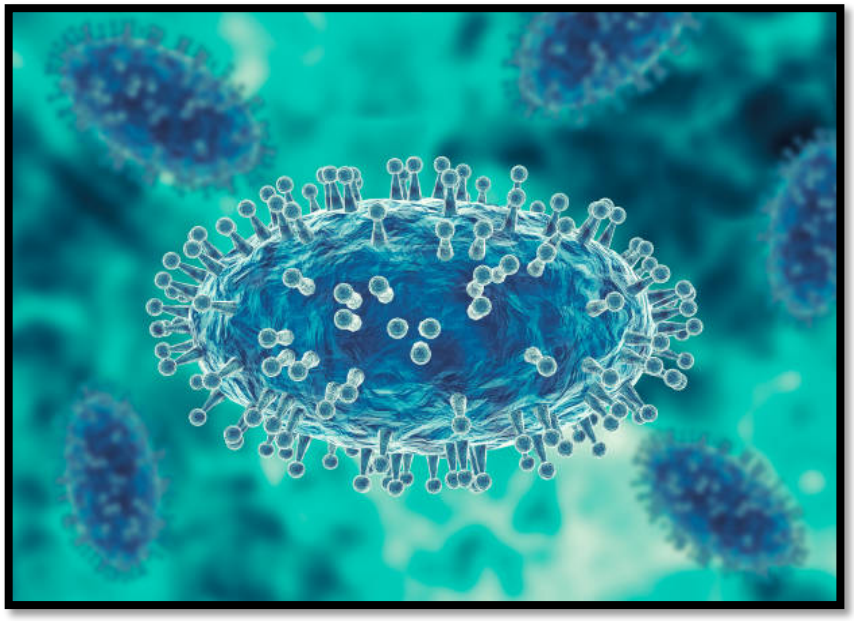
In India first case of monkeypox was discovered on the 15th of July 2022, a 35-year-old man returned to Kerala from the Middle East.

Till now 9 cases of monkeypox are discovered and monitored where 4 cases are from Delhi and 5 cases are from Kerala itself. In Delhi out of 4, 3 peoples are Nigerian and most of them have traveled recently to India.

How does it spread?

Monkeypox spreads through physical contact. This virus is transmitted from animals to humans. This disease affects humans but some mammals are also susceptible.

Its main way of transmission is human-to-human close physical contact like face to face, mouth to mouth, skin to skin, mouth to the skin, during sex, etc. In some cases, the virus also spreads through saliva or respiratory droplets.



It's not yet proven that this virus can spread through the air (while inhalation).

Is Monkeypox curable?

As such no vaccine, antidote or drug are available on market for treating monkeypox but there is some antiviral drug that may help in curing monkeypox. The world is relying on Bavarian Nordic for the monkeypox vaccine while the FDA authorities have the permits to do the necessary changes in the vaccine.

Precaution is better than cure.

Precautions such as wearing a mask and gloves when around people and sanitizing your hands when using frequently touched things.

Avoid public gatherings.

Practicing protected sex.

Animal meat should be cooked thoroughly before eating.

Contact with infected people should be avoided.

Stay away from infected animals (avoid touching them).

Approach a doctor if any symptoms of illness are diagnosed.

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What would you choose, Health or Pleasure? – Harshita Agarwal

If you're wondering what I'm talking about when I say "pleasure," it's smoking addiction.

Even though smoking causes cancer, lung disease, heart disease, chronic obstructive pulmonary disease (COPD), emphysema, and chronic bronchitis, people continue to smoke. It's obvious that there are numerous reasons why your health is suffering, but you keep doing it. Not only does it affect you, but it also affects those who are standing or walking around you. I chose this topic because I want people to be educated about it and understand how it affects you and those around you. I am someone who 'HATES' it; I know it's a strong word, but that's how I feel, and I want people to understand how much it affects those who don't like it. I get it that you enjoy smoking, that it relieves your stress, and that it gives you pleasure, but dude, just do it in your house with the windows closed. Why do you want to kill people who have chosen to be healthy? According to the research, secondhand smoke (smoke inhaled involuntarily from tobacco being smoked by others) causes serious health problems in people who do not smoke. It even causes lung cancer in people who have never smoked in their entire life.

If you're trying to quit smoking but can't seem to stop, consider a personal reason for quitting. Consider the effects of secondhand smoke on your loved ones. I understand that it is not easy and certainly not healthy to simply throw out the cigarettes, but you can definitely seek professional assistance and perhaps begin reducing the total number of cigarettes you consume in a day. It's a long process, but you won't succeed if you don't even tr

Begin by actually trying, and one day you will not need it. You won't crave it. It's just in your head that you can't live without it, but you can. Just start small and believe me that there are so many things you can do to relieve your stress. Find a healthy hobby that makes you happy, encourages you, and makes you cheerful. Just try it!

Shine brightly like the stars,
Have a moon-like halo,
Be as silent as the night,
Be as clear as the day, with a few stray clouds here and there.
Have a melody-like cadence,
Be various characters in your story, as if it were a book or a movie.
Have the aroma of coffee and the glow of a sunflower.

-Harshita Agarwal

Sakshi Ghadigaokar S.Y. B pharm

Survival of The Fittest.

Chapter 1

Manas Joshi

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“MASSACRE” This word astounded everyone. No one agreed with Prof Xang's opinion that "massacre is the only way possible."

Nobody was ready to execute this. This was complete lunacy, and everyone was aware of it.

"Professor, this is insane. We simply cannot risk billions of lives. This is not a reasonable solution, let's just get things over with. Will consider another option." Dr. Ankit Agarwal stated. The youngest, most talented scientist Dr. Ankit was present in the room. "I agree with Dr. Ankit and Dr. Xang this is an issue of millions and billions of lives. We can't merely assume that our assumption is right. Sorry, but I'm out of this one." Dr. Hoover took a step back. "Me, too," agreed Drs. Elena and Christine and Dr. Xang crashed with frustration. His joy was no longer visible on his face. Only disappointment was present.

"ARDI" Association for Immunology Research and Development, a treaty trial effort including four nations INDIA, CHINA, THE UNITED KINGDOMS, AND THE UNITED STATES OF AMERICA to create and cultivate synthetic viruses in order to research their effects on human life such as swine flu and covid-19. ARDI's original founder and the president was DR. AJIT JOSHI. It ran successfully and the research accomplished in every means. This lab and all of its setup were completed in the covert research facility in Wuhan for the first two and a half years. After 2.5 years, it was transferred to the United Kingdom. Dr. Xang had his proposal during the organization's final third month. Dr. Xang was one of China's most well-known scientists.

"Doctor, leave it. This isn't going to end well. We cannot rely solely on data and a conspiracy idea. The end result is unpredictable." Dr. Hoover was attempting to persuade Dr. Xang to abandon this plan. "Doctor, I beg you to halt this. Millions of lives will be lost, and it will be another inferno." Dr. Xang's expression was emotionless. "Doctor, we demand you. Please stop this." said Dr. Christine. Everyone requested Xang but he won't respond to anyone. Christine, Hoover, and Elena, after so many unanswered requests and appeals walked out of the room, disappointed. Ankit was still present. He gently rested his palm on Xang's shoulder and attempted to chat with him

"Xang, I understand how you feel. You worked so hard on this. However, this will not lead to a better life. Perhaps the life that succeeds will be the worst. Please...” The stillness was maintained. Ankit sighed and opened the door. "The root of the solution is the problem," finally, Xang responded. "Ankit, you know we're at this guarded lab facility. We had hundreds of guards to keep us safe. But we still have our concerns. Our hesitations. What if we could simply destroy them? Bury them for all eternity. What if that fear never bothers you again? A strong generation can be produced through strong brains. A generation is free of diseases and fear, a generation full of courage, excitement, strength, and knowledge. Nobody had ever seen anything like it. Think of it.” Xang rushes out of his chair and continues "Fearless, strong, without guilt, grief, suffering, or tears."

"That sounds like death to me, doctor," Ankit said. "If you did this doctor, take my word for it, it's not going to get any better, after all, it's a virus and its nature cannot be controlled by us. So just get rid of this nonsense." Ankit exited the room through the glass door. Ankit was sitting at his workstation. His new MacBook had only recently arrived. He was busy transferring all of his data to the new one. Google, Gmail, was completed. On the screen of his MacBook, a mail was waiting for him to respond. "FBI" which meant "Federal Bureau of Investigation."

'Why would the FBI contact me? What was the problem? Is this a joke and if so, what?' and a slew of questions raced through his thoughts. The call on his mobile disrupted his connection. It was a unique eight-digit number. Typically used by security agencies such as NSG, MARCOS, and others. He answered the phone call, "Mr. Ankit Agarwal... This is the joint secretary for the Research and Analysis Wing. This is an official order informing you that you must attend a meeting tomorrow. You have received an email with more information. Please take a look. Also, please don't spend your time calling back because this is a secure line. Thank you very much." Ankit checked his email. On his screen appeared POIO mail. The email was regarding tomorrow's meeting in Delhi, which would be hosted by the Prime minister Of India personally. "Has something gone horribly wrong?"

“What is the purpose of this meeting”

“Why would PM call me for the meet?" with all these questions in mind after the call, he boarded the flight the next day. "WHY WOULD HE CALL ME?" Ankit wondered all day long. He was in the car, driving to 7, Lok Kalyan Marg in New Delhi (You may look up the address on Google). The gates were thrown open for him. He exited the vehicle. That outfit looked excellent on him, over the dark blue jeans, a light blue jacket with a white shirt inside. His patience had reached its limit. The impatient movement of his leg had begun. A well-dressed man addressed him "sir," breaking his mental loop. "Mr. Prime Minister has called you in," Ankit sighed taking a deep breath. And he took another step towards the conference room. The large wooden door with intricate decorations was opened for him. Ankit was now standing in front of all of our country's famous personalities.

The home minister, finance minister, defense minister, and Dr. Ajit Joshi, a longtime friend, mentor, and Prime Minister. He was presented by the person who invited Ankit inside. "We're delighted to have you here; Dr. please have a seat." said the Prime Minister. Ankit took the seat, and the meeting began. A man approached and began to explain the true reason for this meeting. The projector was turned on after the light in the room had been dimmed.

"First and foremost, good morning to everyone. We gathered here because there would be a catastrophe in the near future. This will cause worldwide disruption and disrupt the lives of millions of people. That's exactly how serious it sounds. It is not a new strain of the covid-19 virus, this is more complicated. It was named 'saunhar,' which means 'massacre' in Sanskrit. This is a fabricated virus. Which evolved for so long without leaving any traces. It does not need to upgrade the host; it only needs a natural atmosphere and factors to grow and evolve. Its mutation rate is 20 times that of the most recent version of the covid-19 virus. It has a hexagonal form with a nucleus surrounded by a cyst. It is difficult to identify due to the years it spent in mutation. ATRO received an update on this virus from the GOVT. OF THE UNITED KINGDOM three days ago. They discovered a few examples of this virus. At first, it exhibits relatively common symptoms such as redness of the eyes, disorientation, and a lack of sleep. It begins to disrupt your Central Nervous System. These symptoms persist for 16 to 18 hours. The situation deteriorates after the 20th hour. This virus causes blackouts, unconsciousness, shortness of breath, bleeding from the nose and ears, and unhealed wounds (if any). It also causes acute vision loss. Face and foot swelling, urine flow rate decreases. We assumed that this virus affects your kidney, liver, eyes, and, in some cases, Bowman's capsule based on these symptoms. This is rapidly spreading in London. That is all we know about this virus. This is the most private information we have shared with you. The UK government is pleading for assistance. And we are concerned that it may quickly spread to India." The lights had returned. And the room was brightening up.

"The country has only recovered from the covid issue," Prime Minister stated. After that, no one, neither residents nor government, is prepared for another financial and mental crisis. We have a little request to find treatment before the virus mutates in India. India's citizens have already suffered greatly in recent years. We don't want that to happen again. Dr. Joshi, being one of the ARDI's founders, what are your thoughts? What type of virus is this?" Dr. Joshi started, "Sir, if we look at the rate of mutation, it will indicate that our country has a double rate of mutation, and sir, if the finding is correct, if this virus does not require the host to spread, then it is easy to spread. How could they be so careless if it was discovered in the UK first? A virus that has been changing at such a high rate for many years without being tested even once? We are now confronting a crisis as a result of their lack of accountability, their madness." 'madness' this word made Ankit spark. His mind's chords were hit. He interrupted Dr. Joshi's speech since he had nothing else to do. "Xang." "Dr. Che-Nung-Xang," Ankit added. "He was one of our ARDI comrades. He was exceptionally gifted and intelligent in the field of virology. His work remained an example of excellence. But, in the final days of our ARDI, he suggested an idea about a virus that could help humanity evolve. But, for various reasons, we all rejected his proposal. But I have a suspicion that this virus is related to Dr. Xang's infection."

Everyone was stunned by Ankit's statements. His talk had all of the information they required. "But why were you all opposed to that idea? If it was for the benefit of humanity? "What were those reasons?" asks the WHO envoy. "Massacre," Ankit continues, "was the price for that upgradation."

"Ankit, are you certain about this? Is this the same virus that Xang created ten years ago?" Ajit asked.

"I could be mistaken, sir. I'm not sure; I'll have to research this one. Xang never made a big deal about his creation. But, as far as I can tell, I do. But just to be sure. This virus must be researched." "How long do you need to research the virus?" PM questioned.

"A month, possibly more but I need some time. And all of Dr. Xang's study and data that he submitted to the government."

"OK, doctor, I will provide you with anything you require. Do your study and we'll meet in a month? Ajit, please assist Ankit with their task until then. And everyone else uses all of your resources to find Dr. Xang. and transport him to India." The PM's speech did not impress Ankit. His mind was preoccupied with Che-Nung-Xang.

To be continued...

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