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# INNOVATIVE COLLEGE OF PHARMACY

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# *SOUVENIR*

## PHARMACIST DAY

— TITLED ON —

THE EFFECT OF ANXIETY, DEPRESSION  
AND AGGRESSIVE BEHAVIOR  
ON HUMAN HEALTH

Date : 18<sup>TH</sup> FEBRUARY, 2020

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## 1. A Review on Dispersible Tablets: A Novel Drug Delivery System for Pediatrics and Geriatrics

Nutan Prakash Sharma<sup>1</sup>, Shivam Pandey<sup>2</sup>, Hariom Sharma<sup>3</sup>, **Jaya Singh**

<sup>4</sup>Innovative College of Pharmacy, Greater Noida

**ABSTRACT** Novel Drug Delivery system offer great chance to invent new drug delivery system for the betterment of the life. Oral dispersible tablets are modern day technology and extensively used for those formulations which are required for pediatrics and geriatrics. Dispersible tablet disintegrate rapidly into the mouth in presence of saliva, as they don't require water for disintegration. Such rapid disintegration is helpful for the person having problem of dysphasia. Dispersible tablet requires a key ingredient called supradisintegrants for such rapid and effective disintegration. There are various methodologies used for preparing such effective dispersible tablet like – Compaction method, Freeze Drying, Molding Method, Sublimation. All such methods are effective to make dispersible tablets. There is need of evaluation of each and every tablet after manufacturing which require evaluation parameters such as weight variation, Disintegration test, Dissolution Test, Hardness, and Thickness.

**Keywords:** Dispersible Tablets, Dysphasia, Supradisintegrants

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## 2. Spirulina, The Boon of Nature

Vidya Banakar\*<sup>1</sup>, Qumre Alam<sup>2</sup>, Rajendra SV<sup>3</sup>, Aman Pandit<sup>4</sup>,  
Acquiline Cladius<sup>5</sup>, Gnanaprakash K<sup>6</sup>

<sup>2</sup>Innovative College of Pharmacy, Greater Noida

**ABSTRACT:** Dr. Darwin, who was an algae scientist from Germany discovered the spiralshaped algae presence and designated it Spirulina. Spirulina, a seaweed which is a blue-green algae biomass, belongs to the class of cyanobacteria discovered by non-referenced Mexicans in the 16th century and has been used as a daily food source. The first large-scale spirulina plant was created in 1970 and is now being grown in many areas of the globe. Many species of spirulina have been identified in recent decades, but among them are spirulina platensis and spirulina maxima. It is enriched with lots of vitamins, nutrients, antioxidants, proteins, pigments, minerals etc and is considered a wonder of nature. It is a powerful dietary supplement wealthy in nutrients and vitamins used by National Aeronautics and Space Administration and European Space Agency as a food supplement during space missions and capable of fighting against multiple microbial illnesses by enhancing immunity. Spirulina exhibits anticancer, antidiabetic, anti-inflammatory, immunomodulatory and many other activities and also found useful in the production of feedstock.

**Keywords:** Spirulina, cultivation, chemical composition, immunomodulatory, antidiabetic, anticancer

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## 3. Formulation & In-vitro Evaluation of Orodispersible Tablet of Dabigatran

**Deepika Chauhan<sup>1\*</sup>, Manoj k Sagar<sup>2</sup>, Sachin Kumar<sup>3</sup>**

<sup>1</sup>Innovative College of Pharmacy, Greater Noida

**ABSTRACT:** The aim of the study was to optimize the formulation of orodispersible tablets of dabigatran. It was prepared having direct compression method and evaluated for different types of superdisintegrant such as Dabigatran-  $\beta$ -CD complex, SSG, CCS, CP, Mg stearate. at different concentrations. All the formulations were evaluated for effect of disintegrant on tablets as S1, S2, S3. Obtained result was satisfactory for each formulation but S3 was reported better result. The idea optimize in this study helps to research about formulation processing variable on tablets properties. It could be concluded that all the formulations are suitable for development of ODT Dabigatran.

**Keywords:** Oro-dispersible, dabigatran, fast disintegration, tablet, formulation

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## 4. Depression in Women: A Threatening Aspect of the Modernising Society

Anjali Mishra<sup>1</sup>, Deepika Chauhan<sup>2</sup>

<sup>2</sup>Innovative College of Pharmacy, Greater Noida,

**ABSTRACT :** "WOMEN" eternally considered as the most enthralling and alluring creation of God, are the vital pillars of the society. It has always been felicitated about them to be the mentally strongest when it comes to dealing with situational, personal or social causes.

Briefly the most beautiful and loving creature of God whose endeavour take our life to the right track and whose problems are never sorted and always taken at least consideration. It is said that if a women is healthy physically and mentally, then she can keep the family healthy too. The same is implemented when it comes to education, discipline and social etiquettes. However, with the increasing frictions in maintaining the daily life, it is becoming difficult for them to manage both personal and professional lives.

This study is a small tribute to all the ladies whatever form they are in, to understand their problems, and in some way an effort to find the solutions out for preventing and curing those problems. This poster also covers a small survey done on women of various age groups, and statistical data has been included.

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## 5. Understanding Alzheimer's Disease: Pathophysiology & Treatment

Suraj Kumar<sup>1</sup>, Himanshu Arya<sup>2</sup>, Aditya Kushwaha<sup>3</sup>, **Dr. Amarjeet Singh**  
<sup>4</sup>Innovative College of Pharmacy, Greater Noida

**ABSTRACT** : Alzheimer's disease (AD) is the most common neurodegenerative disease leading to dementia worldwide.

While neuritic plaques consisting of aggregated amyloid-beta proteins and neurofibrillary tangles of accumulated tau proteins represent the pathophysiologic hallmarks of AD, numerous processes likely interact with risk and protective factors and one's culture to produce the cognitive loss, neuropsychiatric symptoms, and functional impairments that characterize AD dementia.

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## 6. Anti Hypertension

Vivek Chaudhary<sup>1</sup>, Mohd. Ariz<sup>2</sup>, **Mrs. Renu Tiwari<sup>3</sup>**,  
Mohd. Azam<sup>4</sup>, Ayush Kumar<sup>5</sup>

<sup>3</sup>Innovative College of Pharmacy, Greater Noida

**ABSTRACT :** Hypertension is a key risk factor for cardiovascular disease.

Currently, around a third of people with hypertension are undiagnosed, and of those diagnosed, around half are not taking antihypertensive medications. The World Health Organisation (WHO) estimates that high blood pressure directly or indirectly causes deaths of at least nine million people globally every year. It has been estimated that by 2025, 1.56 billion individuals will have hypertension. The increasing prevalence of hypertension and the continuously increasing expense of its treatment influence the prescribing pattern among physicians and complain to the treatment by the patient. Clinical evidence such as that lowering blood pressure with antihypertensive drugs reduced the risk of myocardial infarction.

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## 7. Anxiety Disorders

Sudheer Kumar<sup>1</sup>, Shikhar Porwal<sup>2</sup>, Ajay Pratap Verma<sup>3</sup>,  
Prajiwal Gupta<sup>4</sup>, Amarjeet Singh<sup>5</sup>

<sup>5</sup>Innovative College of Pharmacy, Greater Noida

**ABSTRACT :** Anxiety is arguably an emotion that predates the evolution of man. Its ubiquity in humans, and its presence in a range of anxiety disorders makes it an important clinical focus. Developments in oncology, epidemiology and psychobiology have led to significant advancement in our understanding of the anxiety disorders in recent years.

Advances in pharmacotherapy and psychotherapy of these disorders have brought realistic hope for relief of symptoms and improvement in functioning to patients. Neurotic disorders are basically related to stress, reaction to stress (usually maladaptive) and individual proneness to anxiety.

Interestingly, both stress and coping have a close association with socio-cultural factors. Culture can effect symptom Presentation, explanation of the illness and help-seeking. Importance given to the symptoms and meaning assigned by the physician according to their cultural background also differ across culture. In this way culture can effect epidemiology, Phenomenology as well as treatment outcome of psychiatric illness especially anxiety disorders. In this review an attempt has been made to discuss such differences.

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## 8. Malnutrition in Asian Countries

Mohd. Naseem Khan<sup>1</sup>, **Jaya Bhati**<sup>2</sup>

<sup>2</sup>Innovative College of Pharmacy, Greater Noida

**ABSTRACT** One of the major causes for malnutrition in Indicator i economic in equality. Due to the low social status of some population groups their diet often lacks both quality and quantity .Women who suffer malnutrition is less likely to have healthy bodies. Deficiencies in nutrition inflict long term damage to both individuals and society compared with their better-fed peers; nutrition-deficient individuals are more likely to have infections disease suchas pneumonia and tuberculosis which lead to higher mortality rate. In addition nutrition-deficient individual are less productive a work.

Low productivity not only gives them low pay that traps them in a vicious circle of under-button, but also brings decency to we society, especially in India where labour is a

Major input factor for economic product Despite India's 50% increase in GDP since 1991 more than one third of the world's malnourished children live in India among these halves of children under three years old are underweight and a third of wealthiest children over nutrients.

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## 9. Drug regulatory Affairs in Pharma

Jitendra Pandey<sup>1</sup>, Amarjeet Singh<sup>2</sup>, Manish Dubey<sup>3</sup>, Omkar Patel<sup>4</sup>

<sup>2</sup>Innovative College of Pharmacy, Greater Noida

**ABSTRACT:** Regulatory affairs (RA) professionals play critical roles in a pharmaceutical industry because it is concern about the healthcare product life cycle, it provide strategic, tactical and operational direction and support for working within regulations to expedite the development and delivery of safe and effective healthcare products to individuals around the world.

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## 10. Antidiabetic Activity on *Butea Monosperma* (Seeds) and *Ficus Benghalensis* (Aerial Roots)

Shadab Alam<sup>1</sup>, Jyoti Gupta<sup>2</sup>, Amarjeet Singh<sup>3</sup> and Anil K Sahdev<sup>4</sup>

<sup>3,4</sup> Innovative College of Pharmacy, Greater Noida

**ABSTRACT** Antidiabetic activities of the extracts of *B. monosperma* (seeds) and *F. benghalensis* (aerial roots) were performed on alloxan induced diabetic rats and showed the antidiabetic activity. The administration of alloxan increased the various serum lipids. Treatment with the extracts of *F. benghalensis* decreased the lipid parameters significantly (P0.05).

**Keywords:** Antidiabetic activity, *Butea monosperma*, *Ficus benghalensis*, lipid parameters

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## 11. A comparative Study of the Different Parts of Acacia Arabica (Desi Babool) & Prosopis Julifera (Vilayati Babool)

Anil Kumar Sahdev<sup>1</sup>, Bhawana Sethi<sup>2</sup>, Amarjeet Singh<sup>3</sup> & Preeti Anand  
Innovative College of Pharmacy, Greater Noida

**ABSTRACT:** Natural products are products from various natural sources, plants, microbes and animals. They can be an entire organism (e.g. a plant, an animal or micro-organism), a part of an organism (e.g. leaves or flowers of a plant, an isolated animal organ). The present study was aimed at pharmacognostical study. Plants Acacia Arabica and Prosopis julifera were studied for pharmacognostical characteristic, namely morphology, microscopy, physicochemical, parameters which can be utilized in identification and Authentication of plants. Successive, extractive and phytochemical screening revealed the presence of tannin, alkaloids, steroids and terpenoids in various extracts. However, most of the medicinally potential phytoconstituents were present in alcoholic and aqueous extracts. Results show that the leaf of Acacia arabica has maximum moisture content followed by stem bark, and twig, while Prosopis julifera twig had maximum moisture content followed by bark and twig. Acacia arabica has more percentage of Ash content followed by stem bark and twig. But in Prosopis julifera twig, it contains maximum percentage followed by stem bark and twig. Leaf of Acacia arabica has maximum percentage of Ash content. In vitro DPPH free radical scavenging activity of the methanolic extract of all the parts of Acacia Arabica and Prosopis julifera were compared with Ascorbic acid and quercetin (standard used) was observed which showed that extract of Arabica leaf shows higher activity followed by bark, and twigs. At a concentration of 0.1 mg/ml the scavenging activity of the leaf reached 62.34%, while at the same concentration bark and twig have 52.3% and 52.35% activity, Prosopis leaf has minimum 40.88% activity and twig and bark have 49.4% and 50% activity. We have done the comparative pharmacognostical study between Acacia arabica and Prosopis julifera and conclude that Acacia arabica plays a more significant role and has more scientific value.

**Keywords:** Acacia arabica (Desi Babool), Prosopis julifera (Vilayati Babool)

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## 12. Epigenetic Modulation of Drug Metabolism Enzymes In Liver Disease

**Qumre Alam**

**Innovative College of Pharmacy, Greater Noida**

**ABSTRACT:** This research investigates the role of epigenetic modification in altering drug metabolism enzyme expression in various liver diseases. We examined liver biopsy samples from patients with non-alcoholic fatty liver disease (NAFLD), alcoholic liver disease (ALD), and hepatitis C virus (HCV) infection. Epigenome-wide association studies were performed to identify disease-specific DNA methylation and histone modification patterns affecting key cytochrome P450 enzymes. Results demonstrate significant epigenetic dysregulation of CYP3A4, CYP2C19, and CYP2D6 in liver diseases, leading to altered drug metabolism profiles. In vitro studies using primary hepatocytes confirmed the functional impact of these epigenetic changes on drug biotransformation. Our findings provide new insights into the mechanisms underlying variable drug responses in liver disease patients and suggest potential epigenetic targets for therapeutic intervention.

**Keywords:** Epigenetics, drug metabolism enzymes, liver disease, DNA methylation, histone modifications, cytochrome P450, pharmacoeogenomics

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## 13. Polypharmacology-based Drug Design For Multi-target Alzheimer's Disease Therapy

**Qumre Alam**

Innovative College of Pharmacy, Greater Noida

**ABSTRACT:** This study employs a polypharmacology approach to develop novel multi-target directed ligands (MTDLs) for Alzheimer's disease (AD) treatment. Using in silico methods, we designed a series of compounds targeting beta-secretase (BACE1), acetylcholinesterase (AChE), and tau protein simultaneously. The most promising candidates were synthesized and evaluated in vitro for their multi-target activity. Lead compound AD-202 demonstrated potent inhibition of BACE1 and AChE, along with tau aggregation inhibition. In vivo studies using transgenic AD mouse model showed significant improvements in cognitive function, amyloid-beta reduction, and tau pathology amelioration. Pharmacokinetic and toxicological assessments revealed a favorable safety profile. Our results support the potential of polypharmacology in addressing the complex pathology of AD offering a new paradigm for more effective therapeutic interventions.

**Keywords:** Polypharmacology, multi-target directed ligands, Alzheimer's disease, BACE1, acetylcholinesterase, tau protein, drug design

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