World Journal of Current Medical and Pharmaceutical Research
ISSN-2582-0222

A one-day national level Conference on Innovations in Pharmaceutical Sciences for a Healthier World

18 March 2023

DOI: https://doi.org/10.37022/WJCMPR.2023.SC3

Organized By

ESTD : 2005

AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES

Cherukupally, Near Tagarapuvalasa Bridge,
Vizianagaram – 531162 AP, India

EFFECT OF NUTRIENTS INTAKE ON BONE MARROW DENSITY IN WOMAN

Author: B. Yerni Kumar, Assistant Professor, Sri Sai College of Pharamcy
Corresponding Author: S. SIRISHA, P. NAVYA, Dr. K. L. DEEPTHI
SRI SAI COLLEGE OF PHARMACY, GAJAPATHINAGARAM.

ABSTRACT:
In women, the menopausal transition is characterized by acid-base imbalance, estrogendeficiency and rapid bone loss. Research into nutritional factors that influence bone health istherefore necessary. The relationship between nutrient patterns and nutrients important forbone health with bone mineral density (BMD) was explored. A diet low incalcium contributes to diminished bone density, early bone loss and an increased risk offractures. Physical activity. People who are physically inactive have a higher risk ofosteoporosis than do their more-active counterparts. Tobacco and alcohol use. Studies hadshown that the nutrient pattern high in vitamin E, α-tocopherol, β-carotene and omega 6 fattyacids was negatively correlated with hip and trochanter BMD. These findings support thehypothesis that a nutrient pattern high in the intake of vitamin E, α-tocopherol and omega 6fatty acids appears to be detrimental for bone health in postmenopausal women.

Keywords: Vesicular Systems, Phospholipids, Liposomes, Marinosomes.

FORMULATION OF ALBEZIA LEBBECK AND CURCUMIN EXTERNAL PREPARATION AND EVALUATION OF ITS WOUND HEALING PROPERTY ON ALBINO RATS

Author: B. Rama Madhuri, Assistant Professor, Vignan Institute of Pharmaceutical Technology
Corresponding author: S. Satya Lakshmi, I. Tejolahari Sri *, T. Lakshmi Sujitha
Vignan Institute of Pharmaceutical Technology, Duvvada, Visakhapatnam, 530049

Abstract:
The present investigation is aimed to validate the traditional use of the bark of the plant Albizzialebbeck with the combination of curcumin in the form of an ointment for wound healing activityin Albino rats. Turmeric, a spice that has long been recognized for its medicinal properties, hasreceived interest from both the medical/scientific world and from culinary enthusiasts, as it isthe major source of the polyphenol curcumin. Albizia lebbeck is a species of plant in thefamily Fabaceae, native to the Indian subcontinent and Myanmar, this plant was selected forwound healing potential. Powder was obtained from dried bark material of Albezialebbeck andwas extracted with methanol in the ratio of 1:4. curcumin is extracted from turmeric with theuse of methanol. The study included phytochemical standardization of the ethanolic barkextract of A. lebbeck and curcumin along the evaluation of its pharmacological properties onmice. Ointments were prepared in three formulations as (F1) Albizia lebbeck – 10% ointment,(F2) Curcumin – 10% ointment, (F3) combination of Albezia and curcumin, standard andcontrol group were taken and are treated with povidone iodine ointment and a simple ointmentbase. The prepared ointment formulations were evaluated for its characteristics all theestimated parameters were in the optimum range. Total five formulations along with standarddrug povidone iodine tested in triplicate for wound healing activity on Albino rats for a periodof 7 days. The F3 has shown fast wound healing activity within 3 days where as F1 took 5 daysand F2 6 days to heal the wound.

Keywords: Combination, Evaluation, Investigation, Pharmacological properties.

ROBOTIC PHARMACY SYSTEM IMPLEMENTATION

Author: V. Hema Sundar Reddy, Associate Professor, Raghu college of pharmacy
Corresponding author: D. sravya, B. Pharmacy 3rd year. sravyadevarapalli0201@gmail.com. 9652527065
Raghu college of pharmacy. Dakamarri. Vishakhapatnam.

ABSTRACT:
One of the major technological improvements in the health sector to the robotic pharmacy system. which is rapidly gaining popularity around the world. It shows that a good number of health facilities in the middle and upper class have engaged this technology. The technology uses robotics machines to perform pharmaceutical functions. They also use an essential bag-code based medication procedure. The improved the safety of the medication. and Improver productiveness of the pharmacy and lowering the cost of Operation. Patients spend a lot of time in queues waiting for medical check-ups in hospitals and dispensaries This system provides check-up services in a faster of a more accurate. This system reduces the chances of patient & getting expired medication hence improving health services.

***Keywords*:** Technology, Improvements, Medication, Dispensaries.

3D PRINTING TECHNOLOGY IN PHARMACEUTICS

Author: Mr. B. Sunil Kumar, Assistant Professor, Department of Pharmaceutical Chemistry, ST. ANN'S COLLEGE OF PHARMACY, CANTONMENT VIZAINAGARAM
Corresponding Author: SK SHABEENA, and N HEMALATHA
ST. ANN'S COLLEGE OF PHARMACY, CANTONMENT VIZAINAGARAM

ABSTRACT:
3 -dimensional Printing technology (3D) also called additive manufacturing technology, is used to prepare personalized 3D – Printed drugs through computer-aided model design. The purpose of drug development should be to increase efficacy and decrease the risk of adverse reactions, a goal that can potentially be achieved through the application of 3D Printing to produce personalized medications. Compared with traditional drug preparation processes, 3D Printing technology has significant advantages in personalized drug manufacturing, allowing easy manufacturing of preparations with complex structures or drug release behaviours and rapid manufacturing of small batches of drugs which can play an important role in conditions of limited time and resources.

Keywords: 3 – D Printing, manufacturing, importance.

PHARMACOGENOMICS- INTRODUCTION TO ADVANCING PERSONALIZED MEDICINE

Author:Dr. K. L. DEEPTHI 2, Professor, Department of Pharmaceutics, Sri Sai College of Pharmacy.
Corresponding author: S. NANDINI, N. JHANSI
SRI SAI COLLEGE OF PHARMACY, GAJAPATHINAGARAM.

ABSTRACT:
Pharmacogenomics is defined as the study of genes and how an individual response is affected due to drugs. Pharmacogenomics is an emerging new branch with combination ofboth pharmacology as well as genomics (the branch of science that deals with study of genes)for development of effective doses and safe medications tailored according an individualpatient genetic makeup. Human Genome Project is one of the crucial projects in whichresearchers are developing and learning relation in genes and its effect on the body's responseto medications. Besides advancement in the field of science and technology till datepharmacogenomics hangs in infancy. There is limited use of pharmacogenomics, but still,novel approaches are under clinical trials. In near future, pharmacogenomics will enabledevelopment of therapeutics for treating widespread health problems like neurodegenerative,cardiovascular disorders, HIV, cancer, asthma, etc.

***Keywords*:** pharmacogenomics, genomics, personalized medicines

MARINOSOMES- A NOVEL CARRIER SYSTEM

Author: Dr. K. L. DEEPTHI 2, Professor, Department of Pharmaceutics, Sri Sai College of Pharmacy.
Corresponding author: M. ROSHINI, A. SHARMILA
SRI SAI COLLEGE OF PHARMACY, GAJAPATHINAGARAM.

ABSTRACT:
Marinosomes are the vesicular drug delivery systems. Currently one of the increasinginterests in lipid-based delivery systems are formation of vesicular system that is passive,non-invasive and is offered for immediate commercialization. Various such systems, whichhave gained an utmost importance, like vesicular systems including liposomes, niosomes,pharmacosomes, transferosomes and sphingosomes. Liposomes made of phospholipids areliable to Oxidation. Marinosomes are liposomes based on a natural marine lipid extractcontaining high ratio polyunsaturated fatty acids and can increase stability and increasescirculation lifetime [t1/2] of drug which tends to deposit in the tissues.
Key words: VESICULAR SYSTEMS, PHOSPHOLIPIDS, LIPOSOMES, MARINOSOMES

YUNIS VARON SYNDROME

Author: Dr. B. Tejasree, Assistant Professor, Department of Pharmacy Practice, Avanthi Institute of Pharmaceutical Sciences

Co-Author :Chitikireddi. Bhagya Sri

Email. :chbhagyasri07071@gmail.com

Mobile: 8919687117

Avanthi Institute of Pharmaceutical Sciences, Cherukupally (v), Near Tagarapuvalasa Bridge, Vizianagaram.

Abstract: Yunis Varon Syndrome was first discovered by Emilio Yunis and Humberto Varon in the year 1980. It affects both genders in equal number. Most of the infants are with Cleidocranial dysplasia, ectodermal anomalities, distal aphalangia. By the characteristic features which including deformity of the pelvis, dislocation of hips, bone fracture, urinary tract abnormalities, central nervous system abnormalities by this they have reported the condition as Yunis Varon Syndrome

This is an autosomal recessive inherited multisystem disorder due to FIG4 gene mutations, consanguineous marriages, Lysosomal defects, which may leads to improper in the functioning of organs in the infants. Metabolic disorders in which abnormal growth due to some toxic substances in the body. Affected people with this syndrome may experience breathing problems, abnormalities in the skeletal system, congenital heart defects.

Genetic testing for mutation can be detected through diagnosis. In some conditions they may also be detected before birth of the baby that is prenatally by ultrasonography. Many of the infants did not survive beyond on year. Genetic counselling will be of benefit for affected individuals and their families.

Keywords: Cleidocranial dysplasia, Autosomal recessive inherited, Yunis- Varon Syndrome, Consangunious, F1G4 gene, Abnormal growth, Life span

HIRSCHSPRUNG'S DISEASE

Author name: Mr. V. Uma Sankar

Assistant Professor, Pharmacy Practice, Avanthi Institute of Pharmaceutical Sciences

Co-Author : Tanuja Lakshmi Cherukuri

Email id: tanujachlaxmi@gmail.com

Mobile number: 9391611294

Avanthi institute of pharmaceutical sciences

(Cherukupally near tagrapuvlasa, bhogapuram)

ABSTRACT

Hirschsprung's (HIRSH-sproongz) disease is a condition that affects the large intestine (colon) and causes problems with passing stool. The condition is present atbirth (congenital) as a result of missing nerve cells in the muscles of the baby's colon. Without these nerve cells stimulating gut muscles to help move contents through the colon, the contents can back up and cause blockages in the bowel. Signs and symptoms of Hirschsprung's disease vary with the severity of the condition: Chronic constipation, Swollen belly ,Constipation or gas, which might make a newborn fussy. It was diagnosed by biopsy ,Abdominal X-ray using a contrast dye,manometry test . Hirschsprung's disease is treated with surgery to bypass or remove the part of the colon that's lacking nerve cells. Life style modifications include: Serve high-fiber foods, Increase fluids, Encourage physical activity. Daily aerobic activity helps promote regular bowel movements.

Keywords: Hirsh-sproongz, congenital megacolon, enteric nervous system, genetics,agnglionosis.

ECOPHARMACOVIGILANCE – Need of the hours

Author: Dr. A. Jyotsna, Assistant Professor, Department of Pharmacy practice, Avanthi Institute of Pharmaceutical Sciences

Co-Author: Kosuru Chandini

Email: chandinikosuru1@gmail.com

Mobile number: 8688255196

AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES (Cherukupally (v), near Tagarapuvalasa, Bhogapuram)

Abstract

Ecopharmacovigilance (EPV) is the process of monitoring and assessing the potential risks associated with pharmaceutical products on the environment and it involves identifying, assessing, and managing environmental risks associated with pharmaceutical production, use and disposal. The concept ofECOPHARMACOVIGILANCE (EPV) was introduced in India in 2009 by the Indian Council of Medical Research (ICMR). EPV monitors the environmental impact of drugs, including the presence of active ingredients and their metabolites in natural waters, sediments, and soils, as well as their effects on aquatic life, vegetation, and other organisms. Pharmaceuticals are widely used in medical treatments and have allowed us to maintain healthy lives. However, these drugs are also finding their way into the environment and can cause a variety of problems. Pharmaceuticals can have a negative impact on the environment i.e., ecological concerns. Pharmaceuticals entering the environment can be controlled in several ways, such as increasing awareness about the proper disposal of pharmaceuticals, using biodegradable and non-toxic alternatives to pharmaceuticals.

Keywords: Ecopharmacovigililance, Pharmaceutical products, Ecological concerns, Awareness.

3D PRINTING IN MEDICAL AND PHARMACEUTICAL DEPARTMENT

Author: Dr. G. Prashanthi, Professor, Department of Pharmaceutical Technology, Avanthi Institute of Pharmaceutical Sciences.

Co-Author: Ushasri. Kanumula

Email: Kanumulaushasri@gmail.com. Com

Mobile number: 8523836424

AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES, (Cherukupally (v), near Tagarapuvalasa, Bhogapuram)

ABSTRACT:
3D printing also called as additive manufacturing, are capturing attention in the healthcare field because of their potential to improve treatment for certain medical conditions. 3D printing has enabled the production of customized prosthetic limbs, cranial implants or orthopedic implants such as hips and knees. At the same time its potential to change the manufacturing of medical products – particularly high-risk devices such as implants. The technology is an ideal solution for creating light weight parts, resulting in considerable fuel savings. When coupled with design optimization tools like generative design software, the potential for increasing the complexity of a part is almost limitless. Since the 3D printing process works by producing layer by layer, material is, for the most part, used only were needed. As a result, it produces less waste than traditional subtractive method. 3D printing plays an important role in medical and pharmaceutical sectors due to its demand. In addition to that increasing number of accidents caused by technology and high-tech machines show the high demand for 3D printed medical parts in various areas.

Keywords: 3D printing, Medical Products, High-tech Machines, Technology

PATIENTCENTRICITY

AUTHOR: Dr. Randeep Raj Christina,
Assistant Professor,
Avanthi Institute of Pharmaceutical Sciences.
COAUTHOR:Ushasri. Kanumula

Email: Kanumulaushasri@gmail.com

Mobile number: 8523836424

AVANTHI INSTITUTE OF PHARMACEUTICAL SCIENCES

(Cherukupally (v), near Tagarapuvalasa, Bhogapuram)

Abstract: Patient centricity is a term that has been elusive in context with Pharma industry. In terms of research and development are working hardtop incorporate strategies to achieve patient centricity. These days' patients are well aware of their conditions and prefer to receive clear andtransparent health care services. Patient centricity is defined as a process of developing health care services around the patient. It involves seemlesscollaboration between medical practitioners, patients and their families to achieve decision making as per patient's demands. It is essentialbecause it lays foundation of health care. It is a time consuming process and a hectic task to overall health care team as it is a first experience forhealth care team as well as for patients. Patient centric health care providers utilize many data dependent tools and techniques to deliveroptimized health care services. It promotes and enhances understanding among patients about their health conditions, treatment options and risk factors. The future holds a bright prospect for delivery of personalized health care services.
Keywords: Collaboration, patient centered care, patient focused care, hectic task, advantages and disadvantages.

BIOSENSORS AND BIOMAKERS

Author: S. Murali Mohan, Assistant Professor, Department of Pharmaceutical Technology, Raghu College of Pharmacy

Corresponding Author: D. Pavithra

Raghu College of Pharmacy, Dakamarri, Vizianagaram, Andhra Pradesh.

Abstract: These identify and detect pathogenic agents like bacteria and the diseases can be detected morequickly and more safelyBIOMARKER is an indicator of a specific disease and physical states in the living tissue, and thebiomarker can detect the symptoms of a specific disease. Some biomarkers deliver the drug to thetissue which is labelled with that drug and is transmitted to the target tissue*These are used in the detection of Escherichia coli in water*Detection of sepsis diseaseBIOSENSOR is a biological device that is used in various fields, such as rapid detection, traceability ofpathogens, blood glucose measurements, DNA analysis, and the study of the effects of drugs.*Prostate cancer can be detected using electrochemical biosensors based on Aptamers. (aptamers are oligonucleotides ligands that can be rotated) Blood glucose levels can be detected in urine usingbiosensors made of copper oxide (Cu2O). Also,with biosensors In2O3, Chitosan.

***Keywords*:** Biosensors, Biomarkers, DNA analysis, Traceability.

ADVANCES AND TRENDS IN SONOPHORESIS

Author: Mrs. Renuka, Assistant professor, Department of Pharmacology, Maharajah's college of Pharmacy

Corresponding Author: SK. Mehak Jasmine & B. Lehitha

Maharajah's college of Pharmacy, Phool Baugh, Vizianagaram.

ABSTRACT:
There are numerous methods of administering drugs to the body, both passive and active. Active methods include the use of penetration enhancers and assisted drug delivery. One of them is sonophoresis (phonophoresis). This term is used to describe the effects of ultrasound on the movement of drugs through intact living skin and into the soft tissues. Although the exact mechanism of sonophoresis is not known, drug absorption may involve a disruption of the stratum corneum lipids allowing the drug to pass through the skin. In the future, drug release systems aided by ultrasound may be able to provide slow release of vaccines. Researchers are currently exploring the applications in various areas like cutaneous vaccination, transdermal heparin delivery, transdermal glucose monitoring, delivery of acetyl Cholinesterase inhibitors for the treatment of Alzheimer's disease, treatment of bone diseases and Peyronie's disease and dermal exposure assessment. The possibilities seem endless.
Keywords: Sonophoresis, Advancements, Vaccination.