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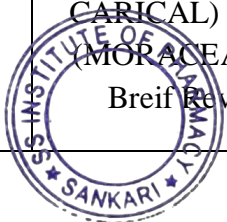
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List of National /International papers published-

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S.N O	TITLE OF PAPER	NAME OF AUTHOR/S	DEPARTMEN T OF TEACHER	NAME OF JOURNAL	YEAR OF PUBLIC ATION	ISSN-NO
1	A Review On Topical and Transdermal Delivery System	M.Gomathi	Pharmaceutics	International Journal of Pharmaceutical Research and Applications	2022-2023	2249-7781
2	Assessment Of Knowledge About Adverse Drug Reaction Among Pharmacy Students	S.Sasi Kumar	Pharmaceutical analysis	European Journal of Biomedical and Pharmaceutical sciences	2022-2023	2349-8870
3	Phytochemistry, Traditional Uses And Biological Activities Fig(FICUS CARICAL) Family (MORACEAE)- A Brief Review	T.Sampath kumar	Pharmacognosy	European Journal of Biomedical and Pharmaceutical sciences	2022-2023	2349-8870




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4	A Review On Scorpion Venom: An Unrevealed Medicine For Human Ailments: Great Scope For Pharmaceutical Research	T.Sampath kumar	Pharmacognosy	European Journal of Biomedical and Pharmaceutical sciences	2022-2023	2349-8870
5	Advancements in Ocular In Situ Gelling System to Overcome Ocular Barriers	M.Gomathi	Pharmaceutics	International Journal of Pharmaceutical Research and Applications	2022-2023	2249-7781
6	A Comparative Pharmaceutical Study of Generic and Branded Tablet's Quality Control Tests According to Pharmacopoeias	T.Sampath kumar	Pharmacognosy	European Journal of Biomedical and Pharmaceutical sciences	2022-2023	2349-8870
7	A Complete Review of Oldenlandia Umbellata Linn (impural) Plant	M.Vanitha	Pharmacology	World Journal of Pharmaceutical Research	2022-2023	2277-7105




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8	Ethnobotanical Survey of Medicinal Plants From Sankari, Salem district, Tamilnadu, India	T.Sampath kumar	Pharmacognosy	International Journal of Pharmaceutical Research and Applications	2022-2023	2249-7781
9	Pharmacognostical and Pharmacological Profile of Cynodon Dactylon: a Review	T.Sampath kumar	Pharmacognosy	International Journal of Pharmaceutical Research and Applications	2022-2023	2249-7781
10	Assesment of Knowledge about Jaundice among People of Various Districts in Tamil Nadu	G.Sekar	Pharmacology	International Journal of Pharmaceutical Research and Applications	2022-2023	2249-7781
11	A Detailed Review on Preparative Methods and Applications of Transdermal Drug Delivery System	M.Gomathi	Pharmaceutics	Journal of Current Pharma Research	2022-2023	2230-7834
12	Less Symptoms, Less Awareness- A Deep view on Osteoporosis	T.Sampath kumar	Pharmacognosy	European Journal of Biomedical and Pharmaceutical sciences	2022-2023	2349-8870



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13	A Review of Formulation and Evaluation of Tablets	M.Gomathi	Pharmaceutics	European Journal of Biomedical and Pharmaceutical sciences	2022-2023	2349-8870
14	Body Detoxification by Detox Water	T.Sampath kumar	Pharmacognosy	world journal of Pharmaceutical and life science	2022-2023	2454-2229
15	A Review on Development and characterization of Ethosomes- A novel Transdermal Drug Delivery System	M.Gomathi	Pharmaceutics	Journal of Current Pharma Research	2022-2023	2230-7834




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A Review On Topical and Transdermal Delivery System

Hemavathi D^{*1}, Gomathi M², Jothimanivannan C³, Priyanka P¹, Vinitha A¹,
Tamil Selvan R¹.

¹Students, SS Institute of Pharmacy, Sankari, Tamilnadu.

²Department of Pharmaceutics, SS Institute of Pharmacy, Sankari.

³Department of Pharmaceutical Chemistry, SS Institute of Pharmacy, Sankari.

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ABSTRACT:

Topical drug delivery systems have been shown to overcome difficulties in drug delivery, especially orally. A topical patch is a drug-containing adhesive patch that is attached to the skin and a specific dose of drug can be delivered to the blood through the skin. It promotes the healing of an injured area of the body. Transdermal drug delivery has made an important contribution to medical practice, but it has yet to fully achieve its potential as an alternative to the oral delivery and hypodermic injections. The transdermal patch may essentially can provide a controlled release of the medication into the patient, usually through either a porous membrane covering a reservoir of medication or through body heat melting thin layers of medication embedded in the adhesive. An advantage of this type of delivery systems to avoid first pass metabolism. The disadvantage of the topical delivery system is the skin is a very effective barrier, so only drugs with small molecules that can easily penetrate the skin can be delivered by this method.

KEY WORDS: Topical drug delivery, Transdermal drug delivery, Skin permeation, Systemic circulation, Kinetics.

I. INTRODUCTION:

Transdermal:

Topical formulations containing drugs showing systemic action are called transdermal delivery systems (TDS) or transdermal systems. Transdermal delivery may be defined as the delivery of a drug through 'intact' skin so that it reaches the systemic circulation in sufficient quantity to be beneficial after administration of a therapeutic dose^[1].

Advantages:

Avoidance of First pass metabolism of drugs. Self administration is possible, Topical are a painless, Prolonged duration of action.

Disadvantages:

Possibility of local irritation at the site of application, It can be uncomfortable to wear, Slower onset than oral preparation^[2].

Basic Components of Transdermal Drug Delivery Systems-

1. Polymer matrix or matrices.
2. The drug.
3. Permeation enhancers.
4. Other excipients.

1. **Polymer Matrix:** The Polymer controls the release of the drug from the device. Possible useful polymers for Transdermal,

a. Natural Polymers: e.g., cellulose derivatives, Zein, Gelatin, Shellac, Waxes, Proteins, Gums and their derivatives, Natural rubber, Starch etc.

b. Synthetic Elastomers: e.g., polybutadiene, Hydrin rubber, Polysiloxane, Silicone rubber, Nitrile Acrylonitrile, Butyl rubber, Styrenebutadiene rubber, Neoprene etc.

c. Synthetic Polymers: e.g., polyvinyl alcohol, Polyvinyl chloride, Polyethylene, Polypropylene, Polyacrylate, Polyamide, Polyurea, Polyvinyl pyrrolidone, Polymethylmethacrylate, Epoxy etc.

2. **Drug:** For successfully developing a transdermal drug delivery system, the drug should be chosen with great care. The following are some of the desirable properties of a drug for transdermal delivery.

3. **Permeation Enhancers:** These are compounds which promote skin permeability by altering the skin as a barrier to the flux of a desired penetrant.

4. **Other Excipients:** Adhesives: The fastening of all transdermal devices to the skin has so far been done by using a pressure sensitive adhesive which can be positioned on the face



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ASSESSMENT OF KNOWLEDGE ABOUT ADVERSE DRUG REACTION AMONG PHARMACY STUDENTS

Arun Sam S.^{1*}, Sampath T.², Sasikumar V.³, Gokulnath M.¹, Dhanasekaran A.¹ and Srithier R.¹

¹Students, SS Institute of pharmacy-Sankari.

²Department of Pharmacognosy, SS Institute of pharmacy-Sankari.

³Department of Pharmaceutical Analysis, SS institute of pharmacy-Sankari.

*Corresponding Author: Arun Sam S.

Students, SS Institute of pharmacy-Sankari.

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ABSTRACT

The objective was to assess the knowledge about adverse drug reactions among the pharmacy students of several colleges in Tamil Nadu. A cross sectional study was carried out among 150 students in various districts between June -July 2022 by using Google form containing MCQ type questionnaire. The students score was recognized as good and poor. The descriptive statistics were calculated using Microsoft word 2013. 150 students responded to that questionnaire and their about ADR was assessed. Despite of relatively better attitude towards pharmacovigilance and ADR, they had a limited knowledge regarding ADR and Pharmacovigilance. The study findings highlight the need to strengthen the community pharmacovigilance program for safer medications use at the community level. **Aim and Objective:** The main objective of the present work is to assess the knowledge about Adverse Drug Reactions among the pharmacy students in Tamil Nadu.

KEYWORDS: Adverse drug reaction, Pharmacovigilance, Knowledge Assessment, Pharmacy Students, Cross-sectional study.

INTRODUCTION

- We define an Adverse Drug Reaction as “an appreciably harmful or unpleasant reaction, resulting from an intervention related to the use of a medicinal product, which predicts hazards from future administration and warrants prevention or specific treatment, or alteration of the dosage regimen, or withdraw of the product”.^[1]
- ADRs are considered a major cause of patient's morbidity, mortality, hospital admissions as well as increasing length of hospitalization and cost of treatment.^[2]
- It affects irrespective of the age group of patients worldwide with varying magnitude of causing morbidity and mortality.^[2]
- Adverse Drug Reactions are unintended and undesired effects of drugs used for prevention, diagnosis, or treatment of disease.^[3]
- ADRs are reported to be the 46th leading cause of death in the United States of America.^[4]
- Adverse Drug effects are more commonly recorded in elderly clients than in young adults or middle age clients, because the geriatric population takes more drugs simultaneously than other age groups.^[5]
- More than 60% of the adverse drug events were caused by drug- drug interactions. Of these, more

than 46% were considered “preventable” because the drug-drug interaction was known.^[5]

- A study from South India revealed that 0.7% of hospital admissions were due to ADRs and a total of 3.7% hospitalized patients experienced ADRs of which death accounts for 1.3%.^[6]

METHODS

The cross-sectional study was conducted over a period of one month (June-July) of 2022 among pharmacy students from nearly 10 pharmacy colleges in Tamil Nadu. The sample size is about 150 students in Third year and Final year B. Pharm. A semi structured questionnaire was adopted from previous studies with minor changes to suit the study population and the questionnaire was validated by the faculties of SS Institute of Pharmacy, Sankari.^[7-11] It consists of 18 questions related to ADR, Pharmacovigilance, PVPI, and CDSO. Out of 18 questions, 10 questions were multiple choice questions and 08 questions were yes/no type questions. The questionnaire was distributed over pharmacy students through Google form, all the questions were compulsory, restrictions were set, and only one response can be submitted by an individual student. Each correct answer and each positive response were given a score of 1 whereas the negative response or wrong responses were



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PHYTOCHEMISTRY, TRADITIONAL USES AND BIOLOGICAL ACTIVITIES FIG (FICUS CARICA L.) FAMILY (MORACEAE)–A BRIEF REVIEW

Vijaykumar M.^{1*}, Sampath Kumar T.², Jothimanivannan C.³, Gnanavel S.⁴, Rajaguru A.⁵, Nandhkumar D.⁶ and
Veeraselvan V.⁷

^{1,4,5,6,7}Students, SS Institute of Pharmacy, Sankari, Salem, Tamilnadu-637301.

²Department of Pharmacognosy Institute of Pharmacy, Sankari, Salem, Tamilnadu-637301.

³Department of Pharmaceutical Chemistry, SS Institute of Pharmacy, Sankari, Salem, Tamilnadu-637301.

*Corresponding Author: Vijaykumar M.

Students, SS Institute of Pharmacy, Sankari, Salem, Tamilnadu-637301.

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ABSTRACT

The fig, *Ficus carica* is a species of tiny tree in the flowering plant family moraceae that is indigenous Mediterranean region. The Mediterranean region, as well as Asia's west and south. There have cultivated since antiquity and currently widely cultivated all over the world. Figs, among other fruits and leaves, are significant nutrients, including as vitamins, minerals, carbohydrates, and amino acids. And due to the phytochemical makeup, they have negative health impacts, a variety of bioactive substances such flavonoids (flavonols), phenolic compounds (phenolic acids), extracted from the *F. carica* fruits and leaves, which are the primary components of the manufacturing of a variety of alcoholic drinks, including wine, liqueur, and spirit. This chapter seeks to review the various biological and chemical traits discovered and spirits that people have ingested and been aware of throughout history. Among others, coumarins, sterols, volatiles (monoterpenes, sesquiterpenes, norisoprenoids, ketones, alcohols, esters, etc.), coumarins, flavones, and anthocyanins, as well as others, have been studied. This chapter seeks to review the various biological and chemical traits discovered and spirits that people have ingested and been aware of throughout history. Traditional medicine has employed the plant to treat a number of conditions, including cancer, inflammation, and gastrointestinal issues. The therapeutic actions are antibacterial, hypolipidemic, and hypoglycemia action. different disorders such as respiratory (sore throats, cough, and bronchial problems). It is one of the traditional Mediterranean species belonging to the family of Moraceae. Which is widely seen in the regions of sub-tropical and tropical countries. In vitro and in vivo studies has reported that figs fruits, leaves, stem, and latex have health management effect via antioxidant, anti-spasmodic, antimicrobial, anticarcinogenic and many more other effects.

KEYWORDS: *Ficus carica*, Fig, edible Fig, fig tree, phytochemistry, pharmacological activities.

INTRODUCTION

Ficus carica, the common fig is a deciduous shrub or small tree belonging to Moraceae or mulberry family. Fig is very common fruit crops grown in temperate regions throughout the world for its delicious fruits.^[1] The genus *Ficus* is one of the largest genera of angiosperms in the tropical and sub-tropical regions all over the world having more than 800 species of trees, epiphytes, and shrubs.^[2] *Ficus carica* L. is known as common fig abundantly distributed in southwest Asia and eastern Mediterranean and is also the first figs species that has been cultivated by humans. This common fig has pear-shaped fruit, hollow and fleshy receptacle; can be consumed either in fresh or dry fruit.^[3] Fig is mostly grown in Mediterranean climates, but can be grown in more humid regions including the tropics and subtropics. Turkey produces 26% of the total world's

figs alone and Egypt, Iran, Greece, Algeria, and Morocco together constitute around 70% of the total world's fig production (FAO, 2006).^[4] In addition, a group researchers reported fig's fruits, leaves and roots traditionally used to treat several disorders such as colic, indigestion, loss of appetite and diarrhea, sore throats, coughs and bronchial problems, inflammatory and cardiovascular disorders. Researchers have discovered the enormous resource of medicinal plants like figs to be incorporated in modern pharmaceutical for medicine development for treating severe diseases like cardiovascular, anti-inflammatory and antispasmodic remedy.^[5] In addition, Prophet Muhammad the Messenger of Allah also mentioned figs in his hadith as narrated by Abu Darda RA: "Eat figs! If I would say a certain type of fruit was sent down to us from the heavens I would say it's a fig because it has no seed."



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A REVIEW ON SCORPION VENOM: AN UNREVEALED MEDICINE FOR HUMAN AILMENTS: GREAT SCOPE FOR PHARMACEUTICAL RESEARCH

Srithier R.^{1*}, Jothimanivannan C.², Sampath T.³, Dhanasekaran A.¹, Arun S.¹, Gokulnath M.¹, Hemavathi D.¹

¹Students, SS Institute of Pharmacy-Sankari.

²Department of Pharmaceutical Chemistry, SS Institute of Pharmacy-Sankari.

³Department of Pharmacognosy, SS Institute of Pharmacy-Sankari).

*Corresponding Author: Srithier R.

Students, SS Institute of Pharmacy-Sankari.

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ABSTRACT

Scorpion venom components have multifaceted orientation against bacterial, viral, fungal infections and other neuronal disorders. In ancient era, venoms are considered as toxic substance. But, in this era, it is used as a valuable medicine to cure certain types of diseases and disorders such as antibacterial, anti-rheumatic etc. venomous animals found worldwide except cold geographical regions. Animal venoms are complex mixtures of highly specialized toxic short peptides enzymatic in nature which exert severe pathophysiological effects. We are killing scorpions, because sting was poison but this poison also used as a medicine. An optimum concentration of scorpion venom should not produce side effects while it crosses their limit it will be poisonous. By this the study concludes that, even if the Scorpions are dangerous their venom are useful to us and instead of killing them, they can be nourished and bred for economic purposes. And by nature we have the raw material (scorpion) abundantly in our environment; instead of killing them we should utilize them properly.

KEYWORDS: Scorpion venom, Antiviral, Anti-rheumatic, Antifungal, Poison.

INTRODUCTION

Scorpions are a very ancient group that originated as terrestrial animals approximately 300 million years ago and have persisted ever since. They are widespread around the globe, present in all continents apart from Antarctica, and are adapted to a variety of environments, including high altitudes, deserts, rainforests, and cave. Some scorpion species are endemic and dependent of their original habitats' natural conditions, living in small populations with restrict mobility.^[1] In the olden days venoms are considered as poisonous substance. But in this modern era, it is used as a valuable medicine to cure certain types of diseases and disorders and used in some cosmetic preparation. Most of us want to avoid scorpions and for good reasons. But the venom in a scorpion's sting is much more than just a toxic substance. In fact, much like snakes venom, the venoms found in scorpions have a several application that could be used to save life rather than end them. For example proteins from scorpion venoms can be used in immune suppressants and anti-malarial drugs and an amino acid in scorpion venom can help clinicians more easily detect lethal brain tumours. Now researchers have discovered a type of scorpion venom which contains two compounds that can kill bacteria resistance to Antibiotics. This scorpion

called *Diplocentrus melicis* native to Eastern Mexico and lives underground most of the year, appearing only in Mexico's rainy season. Researchers isolated the compounds in the Scorpion venom and synthesised them in the Lab. They then treated the synthetic version in mice. Unfortunately, Scorpion is the most expensive liquid on the Earth. It costs around \$38,585,507.46 per gallon (3.7 litres). It's even more expensive than Thailand's King cobras venom, which costs around \$153,000 a gallon (3.7 litres). Unfortunately, the scorpion produces just 2 mg of venom at a time. Therefore, it is necessary to make synthetic version of these venom, otherwise there won't be enough to lower the cost, and no one will be able to afford the drugs. Beyond using them to fight off anti-bacterial resistant illnesses, Researchers are looking into using scorpion venom as potential pain killers as well as using a peptide from scorpion venom to suppress immune responses, allowing it to be used in the treatment of auto immune disease. Even cancer is beginning to feel the Scorpions sting. A drug called VIDATOX is obtained from blue scorpions. It is known as Cuba's miracle drug and the drug shows promising anti-cancer activity and it has been tested on more than 10000 cancer patients. So far, the drug has yielded positive results against various



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Advancements in Ocular in Situ Gelling System to Overcome Ocular Barriers

Deepasree M^{*1}, Gomathi M², Jothimanivannan C³

¹Student, SS Institute of Pharmacy, Sankari.

²Department of Pharmaceutics, SS Institute of Pharmacy, Sankari

³Department of Pharmaceutical Chemistry, SS Institute of Pharmacy, Sankari

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ABSTRACT

Topical Application of Drugs is the method of choice under most circumstance because of its convenience and safety for ophthalmic chemotherapy. A significant challenge to the formulator is to circumvent (bypass) the protective barriers of the eye without causing permanent tissue damage. Development of newer, more sensitive diagnostic technique & novel therapeutic agents continue to provide ocular delivery system with high therapeutic efficacy. Thus, a conventional ocular dosage form has various disadvantages of its use in ocular disease. Hence, an ideal ocular delivery system has always been aimed, where the bioavailability of drug is maintained for a longer period of time. The present review aims to focus on the drawbacks of the conventional ocular therapy & the advantages of designing novel delivery system, with their certain specific advantages in ocular pharmacokinetics & the enhancement of bioavailability. A lot of research going on in this area proves the fact that in situ gelling system can be beneficial in the ocular drug delivery system. The compiled data presented in this review will act as a good information resources and reference point for further researchers in the field of ocular drug delivery aiming non-invasive sustained release of drugs in the anterior and posterior segment of the eye.

Key words: Ocular drug delivery, intraocular barriers, Ocular bioavailability.

INTRODUCTION

Eye is most interesting organ due to its drug disposition characteristics. Generally, topical application of drugs is the method of choice under most circumstances because of its convenience and safety for ophthalmic chemotherapy^[1,2]. A significant challenge to the formulator is to circumvent (bypass) the protective barriers of the eye without causing permanent tissue damage.²

Development of newer, more sensitive diagnostic techniques and novel therapeutic agents continue to provide ocular delivery systems with high therapeutic efficacy. Conventional ophthalmic formulations like solution, suspension, and ointment have many disadvantages which result into poor bioavailability of drug in the ocular cavity. The specific aim of designing a therapeutic system is to achieve an optimal concentration of a drug at the active site for the appropriate duration. Ocular disposition and elimination of a therapeutic agent is dependent upon its physicochemical properties as well as the relevant ocular anatomy and physiology. A successful design of a drug delivery system, therefore, requires an integrated knowledge of the drug molecule and the constraints offered by the ocular route of administration^[3].

The various approaches that have been attempted to increase the bioavailability and the duration of the therapeutic action of ocular drugs can be divided into two categories. The first one is based on the use of sustained drug delivery systems, which provide the controlled and continuous delivery of ophthalmic drugs. The second involves maximizing corneal drug absorption and minimizing precorneal drug loss^[4,5,6].

Ideal ophthalmic drug delivery must be able to sustain the drug release and to remain in the vicinity of front of the eye for prolong period of time. Consequently it is imperative to optimize ophthalmic drug delivery; and by addition of polymers of various grades, development of in situ gel or colloidal suspension or using erodible or non erodible insert to prolong the precorneal drug retention.

THE ANATOMY OF THE EYE^[7]

The human eye, elegant in its detail and design, represents a gateway to the process we call vision. The eyeball is spherical in shape and about



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A COMPARATIVE PHARMACEUTICAL STUDY OF GENERIC AND BRANDED TABLET'S QUALITY CONTROL TESTS ACCORDING TO PHARMACOPOEIAS

Dhanasekaran A.^{1*}, Jothimanivannan C.², Sampath T.³, Gokulnath M.¹, Srither R.¹, Arun S.¹, Gokulprasath M.¹

¹Students, SS Institute of Pharmacy-Sankari.

²Department of Pharmaceutical Chemistry, SS Institute of Pharmacy-Sankari.

³Department of Pharmacognosy, SS Institute of Pharmacy-Sankari.

*Corresponding Author: Dhanasekaran A.
Students, SS Institute of Pharmacy-Sankari.

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ABSTRACT

Generic medications are pharmaceuticals that are therapeutically equivalent to an original off patent drug. Both authorized generics and branded generics are the versions of generic medications. Generic supply medications having quality of branded drugs at lower prices and this establishes their recognition among the masses who earlier has limited options to buy only brand-name drugs. In India people have many myths about generics due to lack of knowledge and awareness. Even Doctors generally not prescribed the generics drug because of they are more doubtful about quality and safety. Pharmacist not dispenses generics because of less commission on sale of generics and less demand by peoples. So this study is taken to remove this myth from their mind set. The Present study deals with a brief overview of the comparative study of quality requirements for finished products (generic and branded) quality control Tests for tablets according to Pharmacopoeias (IP/BP). For this purpose a set of 5 different tablets from generic and branded source are taken. Quality control tests were conducted on those tablets. The pharmacopoeias have laid down the specified limits within which the value should fall in order to be compliant as per the standards. However the parameters and standards differ to some extent from each other. Hence an attempt is being made to compare the quality of the each branded and generic medicines.

KEYWORDS: Generic Medicines, Branded Medicines, Quality control, Pharmacopoeias.

INTRODUCTION

The goal of all Pharmaceutical industry is to make a good quality product. Most of the Standard products of pharmaceutical companies are the patented drugs, when a pharmaceutical company innovates or discovers new drug they file a patent for the same and only they have the rights to manufacture the drug for around 20 years. After 20 Years when the patent is expired other companies can also manufacture that particular product, which is termed as branded generics. This means generics are the copy of branded drugs manufactured by different companies. In India there are lots of myths about quality of generic products because of different types of packaging and labelling of products.

Many people consider generics as lower quality products because of lack of knowledge and not very well known manufacturers. So in this article we did comparative study of generic and branded products to understand whether generics maintain good quality and have same efficacy as that of standard drugs.

In 2008, the government of India started "Jan Aushadhi" the program contemplates making unbranded quality medicine available to the patient at affordable price through retail store.

In November, 2016, to give further impetus to the scheme, it was again renamed as "Pradhan Mantri Bhartiya Janaushadhi Pariyojana" (PMBJP).

Pradhan Mantri Bhartiya Janaushadhi Pariyojana (PMBJP) is a campaign launched by the Department of Pharmaceuticals to provide quality medicines at affordable prices to the masses. PMBJP stores have been set up to provide generic drugs, which are available at lesser prices but are equivalent in quality and efficacy as expensive branded drugs.

The Hon'ble Minister of Finance while presenting the Budget for the year 2016-17 in Parliament, made a special mention on PMJAY. The excerpt of the Budget Speech of Hon'ble Finance Minister is reproduced below:



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Review Article

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A COMPLETE REVIEW OF OLDENLANDIA UMBELLATA LINN (IMPURAL) PLANT

A. Abdul Azim^{*1}, M. Vanitha², C. Jothimanivannan³, K. Gokulnath¹, S. Ganesan¹ and
P. Hari Vishva¹

¹Students, SS Institute of Pharmacy, Sankari, Salem, Tamilnadu - 637301.

²Assistant Professor, Dept. of Pharmacology, SS Institute of Pharmacy, Sankari, Salem,
Tamilnadu - 637301.

³Professor, Dept. of Pharmaceutical Chemistry, SS Institute of Pharmacy, Sankari, Salem,
Tamilnadu - 637301.

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***Corresponding Author**
A. Abdul Azim
Students, SS Institute of
Pharmacy, Sankari, Salem,
Tamilnadu - 637301.

ABSTRACT

Oldenlandia umbellata linn plant is very well known for its therapeutics benefits in Indian systems of medicine including Ayurveda and Siddha and in other forms of traditional medicine worldwide for the treatment of several ailments. The colouring matter is found principally in this plant and is collected when the plants was dried through some extraction methods. Our review article focusses to pharmacognostical studies and give number of pharmacological activities are Anti-Tussive, Cytotoxicity, Anti-Inflammatory, Anti-Pyretic, Hepatoprotective Effect, Antioxidant, Anti-Bacterial and Anti-Microbial activity and also against Respiratory Tract Pathogens. This

article can give potential research areas to explore next, and to formulate new formulation in allopathy and some traditional medicine system.

KEYWORDS: Oldenlandia umbellate, Anti-Tussive, Chaaya ver, Chay root, Anti-Microbial.

INTRODUCTION

Oldenlandia umbellata (called chay root or choy root, from its Tamil name, chaaya ver) is a low-growing plant native to India. A colour-fast red dye can be extracted from the root bark (preferably) a two-year-old plant. Chay root dye was once used with a mordant to impart a




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KUPPANUR (PO), SANKARI (TK),
SALEM - 637301

NH-544, Kuppanur (Po), Sankari (Tk), Salem(Dt) – 637301, Tamilnadu, India

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Ethnobotanical survey of medicinal plants from Sankari, Salem district, Tamil nadu, India.

Pradeep B^{1*}, Jothi manivannan C², Sampath T³, Gokulnath M¹, Dharun A¹,
Dinesh T¹.

¹ students, SS Institute of pharmacy-Sankari.

²Department of pharmaceutical chemistry., SS Institute of pharmacy-Sankari

³Department of pharmacognosy., SS Institute of pharmacy-Sankari

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ABSTRACT:

From the olden days plants and its secondary metabolites are used in various divisions of medicine and used to cure various disease and disorders. And we knew few plants by observing its morphological and organoleptical characters but so many plants are yet unidentified. Though our ancestors had left us some knowledge about plants which have medicinal activity. The earliest mention of medicinal use of plants in Hindu culture was found long year ago in 'Rig Veda' which was written between 4500 to 1600 BC. In this present study Ethnobotanical survey was carried out in Sankari, Salem district, Tamilnadu, India. Traditional uses of 72 plant species spread all over Sankari were described in this study. This present study reveals that these plants plays an vital role in the primary health care of the people.

KEYWORDS: Ethnobotany, Medicinal plants, morphology, organoleptic, Rig Veda, Ancestors, Sankari.

1. INTRODUCTION:

Ethnobotany is the study of a regions plants and their practical uses through the traditional knowledge of a local culture and people. The ethnobotany is the study of interactions between plants and people with a particular emphasis on traditional tribal culture. According to the world health organization(WHO), about 65 to 85% of the worlds population in developed countries depends essentially on plants for their primary health care due to poverty and lack of access to modern medicine. An ethnobotanist thus strives to document the local customs involved in the practical uses of local flora for the aspects of life, such as plants as medicines, foods, intoxicants and clothing. Richard Evans Schultes, often referred to father of ethnobotany.

The knowledge of medicinal plants as been accumulated in the course of many countries based on different medicinal systems such as Ayurveda, Unani and Siddha. In India, it is reported that traditional healers use 2500 plant species and 100 species of plants serve as regular source of medicine. During the last few decades there has been a increasing interest in the study of medicinal plants and their traditional uses in different part of the world.

The idea of ethnobotany was first proposed by the early 20th century botanist John William Harshberger. Ethnobotany is not new to India because of its rich ethnic Diversity. There are over 400 different tribals and other ethnic groups in India. The tribals constitute about 7.5% of about India's population. During the last few decades there has been an increasing interest in the study of medicinal and their traditional use in different parts of India and there are many reports on the uses of plants in traditional healing by either tribal people or indigenous community of India. Apart from the tribal groups, many other dwellers and rural peoples also posses unique knowledge about the plants. Research interest and activities in the area of ethno medicine have increased tremendously in the last decade. Since the inception of the discipline, scientific research in ethno medicine has made important contribution to the understanding of traditional medical knowledge and practice. The detonation of the ethno medicine literature has been motivated by an increased awareness of the consequences of the recognition of native health concepts as a means of maintaining ethnic identities, the search for new medical treatments and technologies. Species like *Pterocarpus santalinus*, *Coscinium fenestratum*, *Janakia aryalpathra*, *Cycus circinalis* and *Saussurea costus* are critically endangered in the wild are found in the Eastern Ghats. Tribes dwelling in remote places



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Pharmacognostical and pharmacological profile of Cynodon dactylon: A review

Manikandan S^{1*}, Jothimanivannan C², Sampathkumar T³, Pradeep B¹,
Madeshwaran B¹, Muthukannan S¹

¹students, SS Institute of pharmacy-Sankari.

²Department of pharmaceutical chemistry,, SS Institute of pharmacy-Sankari

³Department of pharmacognosy,, SS Institute of pharmacy-Sankari

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ABSTRACT:

Cynodon dactylon (L.) Pers. (family- Poaceae), is a long-lived herb found in various regions of India. It is native to Europe, Africa, Australia and much of Asia. It has been introduced to the Americas. The plant has been rich in metabolites notably proteins, carbohydrates, minerals, flavonoids, carotenoids, alkaloids, glycosides and triterpenoids. This review includes several biological activities of the plant C. dactylon such as, antimicrobial, antiviral and wound healing properties.

KEYWORDS: Cynodon dactylon, Pharmacognostical, pharmacological profile.

1. INTRODUCTION:

From the olden days plants and its secondary metabolites are used in various disease divisions of medicine and used to cure various disease and disorders. And we knew few plants by observing its many plants are yet unidentified. Though our ancestors had left us some knowledge about plants which have medicinal activity.^[1] According to an estimation of the World Health Organization, about 80 percent of the world's population uses herbs to fulfil its primary healthcare needs. More than 35,000 plant species are being used around the world as medicinal plants in traditional and ethnomedicinal practices. Among numerous species of plants growing in India, Durva or taxonomically the Cynodon dactylon occupies a key position in ethno medicinal practices and traditional medical knowledge systems (Ayurveda, Unani, Nepalese, and Chinese).^[2]

During the last few decades there has been an increasing interest in the study of medicinal plants and their traditional use in different parts of the world.^[3] Herbal products were being the effective source of both traditional and modern medicines which are used widely to treat several medical problems. It is evident that the plant

kingdom contains enormous and inexhaustible source of active ingredients vital in the management of many diseases. Use of plants as to cure health related problems in the traditional way is very popular. America and Middle Eastern countries. Use of such plants has minimal side effects. In recent years, pharmaceutical companies spent substantial amount of time and money in developing therapeutic products which is based upon natural products extracted from plants [Ben Sassi et al., 2007 and Coruh et al., 2007]. Whole plant of the Cynodon dactylon is traditionally used to treat painful and inflammatory condition. C. dactylon was generally known to be in the east of Africa. It was then distributed extensively at above the sea level of 2000 meters of height or altitude. It is one kind of monocot weed that is inherent to Africa. It started to grow along the coastal region in the temperate parts and in the tropical areas where 650-1750 millimetres of rainfall was seen. It also grew along the riverside and the landscape regions irrigated in the arid zones of the Earth. It can grow nearly anywhere in the world between about 30° S and 30° N scope and it can tolerate annual precipitation of 10 to 430 cm. It is indeed a perennial, monocot warm weather grass that occurs on almost all kind of soil types.^[4] Cynodon dactylon may be applied both externally as well as internally due to its various medicinal value.^[5]




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NH-544, Kuppanur (Po), Sankari (Tk), Salem (Dt) – 637301, Tamilnadu, India

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Assesment of Knowledge about Jaundice among People of Various Districts in Tamil Nadu

Shanmugam G.¹*, Jothimanivannan C.², Sekar G.³, Gokulnath M.¹,
Dhanasekaran A.¹, Srinivasan M.¹ and Prameshwaran A.¹

¹ Students, SS Institute of Pharmacy-Sankari.

² Department of Pharmaceutical Chemistry, SS Institute of pharmacy-Sankari.

³ Department of Pharmacology, SS Institute of pharmacy-Sankari.

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ABSTRACT:

Jaundice in adult can be caused by a wide variety of benign or life threatening disorders. Newborn jaundice occurs when a baby has a high level of bilirubin in the blood. Bilirubin is a yellow substance that the body creates when it replaces old red blood cells. The liver helps to break down the substance and so it can be removed from the body in the stool. High plasma bilirubin level (hyperbilirubinemia) can cause various manifestations involving gastrointestinal bleeding, diarrhoea, anemia, edema, weight loss and can be fatal. The objective was to assess the knowledge about jaundice disease among the people of Tamil Nadu. A cross sectional study was carried out among 200 people in various districts between November – December 2022 by using Google form containing 15 MCQ type questionnaire. The descriptive statistics were calculated using Microsoft excel. 200 people responded to that questionnaire and their knowledge about jaundice was assessed.

KEYWORDS: Bilirubin, Hyperbilirubinemia, Jaundice, Knowledge assessment, Cross sectional study.

AIM AND OBJECTIVE:

The main aim of this present study is to assess the knowledge about the jaundice among the people of Tamil Nadu.

I. INTRODUCTION:

Jaundice is when clinically there is an increase in the amount of bilirubin in serum rising above 85mmol/L (5mg/dl). When in utero, unconjugated bilirubin is cleared in the placenta to produce cord serum bilirubin of approximately 35mmol/L (2mg/dl). After birth, jaundice is a reflection of the bilirubin present in the liver, the rate of hepatic excretion and the ability to bind to serum proteins to retain the bilirubin present in the

plasma. Many variations in individual responses to bilirubin load prevent specific levels of psychological Jaundice^[1] Jaundice is defined as a yellowing of skin, mucous membranes and sclera due to the deposition of yellow orange bile pigment i.e. bilirubin^[2] The bilirubin is an endogenously synthesized pigment that can be toxic specially in new born children^[3] Jaundice is a yellowing of the skin, whites of the eyes, and body fluids. It is caused by an increase in the amount of bilirubin in the blood. Bilirubin is a yellowish pigment that is produced from the breakdown of heme, primarily from hemoglobin and Red blood cells (RBCs). Bilirubin is transported by the blood to the liver, where the liver process it, allowing it to be excreted in bile. Bile is a thick yellow-green-brown fluid that is secreted into the upper small intestine (duodenum) to get rid of waste product (such as bilirubin and excess cholesterol) and to aid in the digestion of fats. Jaundice may arise from increased breakdown of Red blood cells, inherited changes in bilirubin metabolism, liver disease or damage, and whenever there is interference with bile excretion. Normally, about 1% of our Red blood cells retire every day, to be replaced by the fresh Red blood cells. The old ones are processed in the liver and disposed of. Much of the resulting bilirubin leaves the body in the stool. If there are too many Red blood cells retiring from the liver to handle, yellow pigment builds up in the body. When there is enough to be visible, Jaundice results. Jaundice can be caused by too many Red blood cells retiring, by the liver being overloaded or damaged, or by the inability to move processed bilirubin from the liver through the biliary tract to the gut. Most babies have Jaundice during the first week of life. The ordeal of birth can send many Red blood cells to an early retirement (especially if a vacuum is used) and babies livers are often unprepared for the load. Before Moms milk comes



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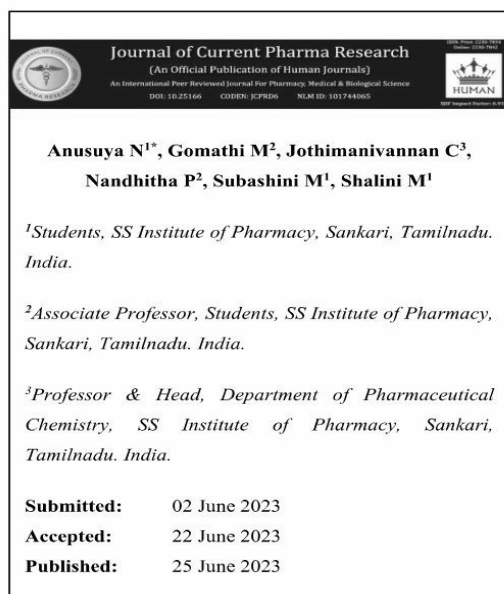
Human Journals

Review Article

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A Detailed Review on Preparative Methods and Applications of Transdermal Drug Delivery System



Keywords: Skin Transdermal drug delivery systems, polymers used, Preparative methods.

ABSTRACT


Human skin comprises three distinct but mutually dependent tissues a) The stratified, vascular, cellular epidermis, b) the Underlying dermis of connective tissues and c) Hypodermis. In 1981, FDA approved the first TDDS device for commercial use which provides the controlled systemic absorption of the drug through the different layers of skin. Transdermal drug delivery systems are defined as self-contained, discrete dosage forms which, when applied to the intact skin, deliver the drug(s), through the skin, at a controlled rate to the systemic circulation. Transdermal medication delivers a steady infusion of a drug over an extended period of time. Transdermal delivery can increase the therapeutic value of many drugs by avoiding specific problems associated with the drug. The first transdermal treatment of Alzheimer's disease was done through the Rivastigmine patch. This review article focuses the on advantages, disadvantages, applications, basic components, preparative methods involved in the fabrication of transdermal patches.



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LESS SYMPTOMS, LESS AWARENESS-A DEEP VIEW ON OSTEOPOROSIS

Syed Yasin S. M.^{*1}, Jothimanivannan C.², Sampath Kumar T.³, Gomathi M.⁴, Sundrakannan D.¹, Vasanth Raj S.¹ and Naresh Kumar M.¹

¹Student, SS Institute of Pharmacy, Sankari, Salem – 637301.

²Professor & Principal, SS Institute of Pharmacy, Sankari, Salem – 637301.

³Assistant Professor, SS Institute of Pharmacy, Sankari, Salem – 637301.

⁴Associate Professor, SS Institute of Pharmacy, Sankari, Salem – 637301.

*Corresponding Author: Syed Yasin S. M.

Student, SS Institute of Pharmacy, Sankari, Salem – 637301.

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ABSTRACT

Osteoporosis increases the risk of breaking a bone. About one half of all women over the age of 50 will have a fracture of the hip, wrist, or vertebra (bones of the spine) during their lifetime. Osteoporosis itself has no symptoms; its main consequence is the increased risk of bone fractures. The aim of our study was to assess the knowledge of osteoporosis symptoms, treatment, diagnosis in the population. A prevalence study was carried out to evaluate the knowledge of osteoporosis among the medical and paramedical students of in various designation Tamilnadu, India. We used the online survey tool (Google form). A total of 217 participants completed the online questionnaire. A semi structure questionnaire was adopted from previous studies with minor changes to suit the study population and the questionnaire. We found that their knowledge was not as adequate and sufficient so should be recommended to increase the level of knowledge on osteoporosis among healthcare profession

KEYWORDS: Osteoporosis, knowledge assessment, pharmacy, awareness, cross sectional studies

INTRODUCTION

- Osteoporosis is a disease which makes bones weak and fragile. This greatly increases the risk of breaking a bone even after a minor fall or bump. The disease has no obvious symptoms, so many people don't know they have osteoporosis until they suffer a fracture. Fractures can be life-altering, causing pain, disability and loss of independence.^[1]
- Osteoporosis is the major cause of fractures in postmenopausal women and in older men. Fractures can occur in any bone but happen most often in bones of the hip, vertebrae in the spine, and wrist.^[2]
- Data of 2013, sources estimate that 50 million people in India are either osteoporotic (T-score lower than -2.5) or have low bone mass (T-score between -1.0 and -2.5).^[3]

MATERIAL AND METHOD

The Cross-sectional study was conducted for month between 15th oct to 15th nov (one month) of 2022 among medical and paramedical students nearly 15 medical college in Tamilnadu. We used the online survey tool (Google form). A total of 217 participants completed the online questionnaire. A semi structure questionnaire was adopted from previous studies with minor changes to suit the study population and the questionnaire was validated

by faculties (no7-10) of SS Institute of Pharmacy, Sankari.^[4] It consists of 10 questions on knowledge of Osteoporosis (yes/no type questions). All the 10 questions were compulsory. Restrictions were set, only one response can be submitted by an individual student. The responses were collected and the data were analyzed in a statistical manner.^[5]




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SALEM - 637301

NH-544, Kuppanur (Po), Sankari (Tk), Salem(Dt) – 637301, Tamilnadu, India

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A REVIEW ON FORMULATION AND EVALUATION OF TABLETS

Abishek J.^{1*}, Gomathi M.², Jothimanivannan C.³, Nandhitha P.² and Dinesh S.¹

¹Student, SS Institute of Pharmacy, Sankari, Tamil Nadu.

²Associate Professor, SS Institute of Pharmacy, Sankari, Tamil Nadu.,

³Professor and Head, Department of Pharmaceutical Chemistry, Sankari, Tamil Nadu.

*Corresponding Author: Abishek J.

Student, SS Institute of Pharmacy, Sankari, Tamil Nadu.

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ABSTRACT

Tablets are the most commonly prescribed dosage form as offer a convenient form of drug administration provides dosage uniformity from tablet to tablet. As per IP tablet, pharmaceutical tablet are solid, flat or biconvex dishes until dosage form prepare by compressing a drug or a mixture of drug, with or without diluents. Tablet are now the most popular dosage form accounting for some 70% of all ethical pharmaceutical preparation produced. The excipients include diluents, binders adhesive, disintegrant etc., Tablets vary in shape and differ greatly in size and weight depending on the amount of the medicinal substance. Among the various step involved in tablet manufacturing granulation is one of the most important until operation in the production of pharmaceutical tablet dosage form. The present work aims to comprehensively review the advantages ,disadvantages, formulative ingredients preparation methods, applications and evaluation of tablets.

KEYWORDS: Tablets, excipients, granulation techniques, equipments, evaluation test.

INTRODUCTION

Oral route is the most commonly preferred route of drug administration. The popularity of the oral route is due to patient acceptance, ease of administration, accurate dosing and cost effectiveness.^[1] Solid medicaments may be administered orally as powders, pills, cachets, capsules or tablets. Tablet is the most widely used dosage form among the total available dosage forms because it is simple administration, lower price of production, and elegance.^[2] The aesthetic quality like color, texture, mouth feels, and taste masking is depending on coating techniques. Tablets are solid dosage form manufactured either by dry granulation, wet granulation or direct compression medicaments with or without excipients, intended to produce desired pharmacological response.^[3] The oral route is the most popular route used for administration of drugs, which is due in part to the ease of administration and to the fact that gastrointestinal physiology offers more flexibility in dosage form design than other routes. Oral route is most popular for systemic effect due to its easy of ingestion, pain, avoidance, versatility and most importantly, patient compliance.^[4] Solid oral delivery systems (especially tablets) is system of choice among all drug delivery system and they do not require special treatment and are therefore less expensive to manufacture, likewise immediate release tablets are more among all the tablets. An ideal dosage regimen in the drug therapy of any disease or the goal of any delivery system is the one,

which immediately attains the desired therapeutic concentration of drug in plasma (or the site of action) and maintains it constant for the entire duration treatment.^[5] Oral drug delivery is most widely utilized route of administration among all the routes [nasal, ophthalmic, rectal, and Parental routes] that have been explored for systemic delivery of drugs via pharmaceutical products of different dosage form. Oral route is considered most natural, uncomplicated, convenient and safe [in route] due to its ease of administration, patient acceptance, and costeffective manufacturing Pharmaceutical products designed for oral delivery are mainly immediate release type or conventional drug delivery systems, which are designed for immediate release of drug for rapid absorption.^{[6],[7]}

Definition

According to the Indian Pharmacopoeia (IP); Pharmaceutical tablets are solid, flat orbiconvex dishes, unit dosage form, prepared by compressing a drug or a mixture of drugs, with or without diluents.

According to the United States of Pharmacopoeia (USP); Tablet is defined as a compressed solid dosage form containing medicaments with or without excipients. According to the Indian Pharmacopoeia Pharmaceutical tablets are solid, flat or biconvex dishes, dosage form, prepared by compressing a drugs or a mixture of drugs, with or without diluents. It is the most popular dosage



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NH-544, Kuppanur (Po), Sankari (Tk), Salem(Dt) – 637301, Tamilnadu, India

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BODY DETOXIFICATION- BY DETOX WATER

Aravind R.^{*1}, Sampath Kumar T.², Jothimaniyannan C.³, Syed Yasin S.M.¹, Thirumurugan R.¹, Bharath Kumar R.¹ and Vasanth Raj S.¹

¹Student, SS Institute of Pharmacy, Sankari, Salem – 637301.

²Assistant Professor, SS Institute of Pharmacy, Sankari, Salem – 637301.

³Professor and Principal, SS Institute of Pharmacy, Sankari, Salem – 637301.

*Corresponding Author: Aravind R.

Student, SS Institute of Pharmacy, Sankari, Salem - 637301.

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ABSTRACT

Detox Water is a type of alternative-medicine treatment which aims to rid the body of unspecified "toxins" – substances. Fruits, vegetables, and herbs consist of various bioactive compounds like flavonoids, carotenoids, phenolic acids. These phytochemicals act as antioxidants by scavenging free radicals. The phytochemicals can be released from the plant materials by immersing into water. This method is known as water infusion. Detox water is more helpful and better than the soft drinks, carbonated drinks available in the market. These infused water helps our body's vital organs to make their work easy. Various detox water recipes available, which has more benefits to our body. Detox water is easy to make and use. And the fruits are easily available and are cheap. During a detox diet, it is recommended that no fruit be consumed, so that the body is forced to draw its energy from the stored fat, instead of from the sugar in the fruit. We discussed preparation methods for the detox water.

KEYWORDS: Detox water, metabolism, phytochemicals, and natural detox diet, detox water recipes.

INTRODUCTION

Detoxification (often shortened to detox and sometimes called body cleansing) is a type of alternative-medicine treatment which aims to rid the body of unspecified "toxins" – substances. Consumption of fruits and vegetables have been shown to increase life span, improve mental and cardiovascular health, prevent cancer and help in weight management among other ailments. It has been shown that fruits, vegetables, and herbs consist of various bioactive compounds like flavonoids (quercetin and kaempferol), phenolic acids (chlorogenic acid and caffeic acid), and carotenoids (lutein and zeaxanthin), as well as vitamins, minerals and fibers. These bioactive compounds have proven to exert beneficial effects on human health by preventing diseases caused by oxidative stress. Oxidative stress releases free oxygen radicals in the body and has been implicated in several disorders including cancer, autoimmune disease and ageing. These phytochemicals act as antioxidants by scavenging free radicals. The phytochemicals can be released from the plant materials by immersing into water. This method is known as water infusion.

DETOXIFICATION

i. Why to detox^[2]

The liver is the natural system of detox our body

The aim of detoxing and why should anyone consider it?

- ❖ Drug, virus, bacterium, artificial chemical, pesticide, hormone (endogenous and synthetic) is metabolized by the enzyme pathways inside the liver cells, it may become overworked and congested so that we need to respect and take care of this vital organ.
- ❖ In a nutshell, detoxing necessitates the elimination of all carbonated drinks, alcohol and processed foods, while simultaneously cutting down on calories, so that the fat soluble toxic chemicals (trapped in fat stores) a drainage to break down fat released when fat is converted to energy. Detoxing usually involves exercise, massage and lymphatic drainage to break down fat stores so that they are released along with the toxins.
- ❖ During a detox diet, it is recommended that no fruit be consumed, so that the body is forced to draw its energy from the stored fat, instead of from the sugar in the fruit.
- ❖ Because it is easier to derive energy directly from sugar the liver will always use sugar preferentially, before tackling the more complex process of converting fat to energy. When no sugar is



PRINCIPAL,
SS INSTITUTE OF PHARMACY,
KUPPANUR (PO), SANKARI (TK),
SALEM - 637301

NH-544, Kuppanur (Po), Sankari (Tk), Salem(Dt) – 637301, Tamilnadu, India

Phone : 04283 241080 | E-mail : ssip1718@gmail.com | Website : www.ssip.edu.in



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A Review on Development and Characterization of Ethosomes - A Novel Transdermal Drug Delivery System



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**Dinesh S^{1*}, Gomathi M², Jothimanivannan C³,
Nandhitha P², Abishek J¹, Arun Venkateshwaran S¹,
Sutha D G¹, Sundrakannan D¹, Syediasin S M¹**

¹Students, SS Institute of Pharmacy, Sankari, Tamilnadu,
India.

²Associate Professor, Department of Pharmaceutics, SS
Institute of Pharmacy, Sankari, Tamilnadu., India.

³Professor & Head, Department of Pharmaceutical
Chemistry, SS Institute of Pharmacy, Sankari,
Tamilnadu., India.

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preparative methods, characterization.

ABSTRACT

Skin is the largest organ of the human body that restricts the movement of drugs into the systemic circulation. A topical drug delivery system is a system where the drug reaches the systemic circulation. The major obstacle in this route is the low diffusion rate of drugs across the stratum corneum. Exosome are a novel vesicular carrier showing enhanced delivery of drugs to the deeper layers of skin. The autosome system is composed of phospholipid, ethanol, and water. Ethosomes are "ethanolic liposomes". Ethanol has long been known to have permeation-enhancing properties. The size of ethosomes may vary from nanometers to microns and they permeate through the skin layers more rapidly and possess significantly higher transdermal flux. In this review, we have focused on the advantages, disadvantages, preparative methods, and characterization of ethosomal formulation.



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PRINCIPAL,
SS INSTITUTE OF PHARMACY,
KUPPANUR (PO), SANKARI (TK),
SALEM - 637301

NH-544, Kuppanur (Po), Sankari (Tk), Salem(Dt) – 637301, Tamilnadu, India

Phone : 04283 241080 | E-mail : ssip1718@gmail.com | Website : www.ssip.edu.in