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## **Pharmacological Properties of Navapashanam: An Exploration of its Therapeutic Claims and Scientific Evidence**

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### **ABSTRACT**

Navapashanam is a renowned traditional formulation rooted in the Siddha system of medicine, composed of nine toxic substances (metals, minerals, and poisons) believed to be transformed through ancient alchemical processes into potent therapeutic agents. Historically used in South Indian traditional medicine, especially in temple rituals and healing practices, Navapashanam is credited with a wide range of curative and rejuvenative properties, including anti-aging, detoxifying, immune-enhancing, and disease-preventing effects. Despite its spiritual and ritualistic origins, recent scientific interest has grown in evaluating its pharmacological basis through modern biomedical research.

This review aims to explore the traditional claims surrounding Navapashanam and its compiling pharmacological properties by critically examining available preclinical, clinical, and in-vitro studies by analyzing scientific databases such as PubMed, Google Scholar, and Scopus using predefined inclusion criteria: English-language, peer-reviewed articles focusing on Navapashanam's pharmacological effects or analytical composition; and exclusion of non-scientific sources or studies unrelated to therapeutic applications. Data was gathered from traditional Siddha texts, ethnomedical records, and biomedical databases.

The findings suggest that Navapashanam and its constituent trace elements exhibit significant antioxidant, antiinflammatory, immunomodulatory, hepatoprotective, and anti-cancer potential. These effects are hypothesized to arise from enhanced trace mineral bioavailability, enzymatic modulation, and reduction in oxidative stress. However, the review also highlights a major gap in rigorous clinical studies and standardized safety assessments. Concerns remain regarding the presence of heavy metals and potential toxicity, especially when traditional detoxification (purification) methods are not validated by modern toxicology standards.

In conclusion, Navapashanam represents a unique intersection of traditional alchemy and potential pharmacological utility. To support its integration into evidence-based medicine, further scientific validation, standardization, and regulatory scrutiny are essential.

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## **Evaluation of Geriatric Prescriptions for Polypharmacy in a Private Tertiary Care Hospital**

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### **ABSTRACT**

The study was carried out with the objective of assessing polypharmacy in geriatrics, by monitoring the geriatric prescriptions, identifying the inappropriate prescriptions in geriatrics and to assess their functional status. A prospective study was carried out in the general medicine department of a 1000 bedded private tertiary care hospital in Coimbatore. There were 110 geriatric prescriptions included for assessing polypharmacy during the study period. The occurrence of polypharmacy was assessed using a nine key questionnaire. Inappropriate medications were identified using Beers criteria. The study population's functional status were assessed using Barthel Index. Out of 110 prescriptions, 97.27% of the prescriptions were classified as major polypharmacy with 4 and more drugs. The average age of the study population was found to be 72.9  $\pm$  6.5 years. 37.2% of the prescriptions contained inappropriate medications as identified by Beers criteria. 18.1% of prescriptions were categorized as contra therapeutic polypharmacy. The assessment of functional status revealed that as the age progress, the dependency also increased. The study revealed that polypharmacy leads to higher number of drug interactions and increased hospital stay. Therefore polypharmacy could be limited by a close, intensive monitoring and rational drug use.

## **Prospective Drug Utilization Study of Corticosteroids in a Tertiary Care Teaching Hospital**

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### **ABSTRACT**

**Introduction:** Corticosteroids are extensively used, potent anti-inflammatory and immunosuppressive drugs that have established themselves as the mainstay of treatment for both acute and chronic inflammatory conditions. The study investigates corticosteroid utilization patterns across medical specialties in a tertiary care teaching hospital, aiming to characterize prescribing practices and guideline adherence.

**Objective:** This study aims to evaluate corticosteroid utilization in a tertiary care teaching hospital, focusing on analysing prescribing patterns across clinical departments and assessing the occurrence and severity of corticosteroid related adverse drug reactions.

**Method:** This prospective observational study, conducted at Karpagam Faculty of Medical Science and Research Centre, Coimbatore, Tamil Nadu, included 102 subjects over 6 months. We enrolled patients across various hospital departments prescribed corticosteroids based on inclusion and exclusion criteria. Data collection involved patient case sheets, interviews, medication histories, and laboratory reports. Adverse drug reactions were evaluated using standardized tools.

**Results:** The study, comprising 102 subjects across various clinical departments, highlighted Pulmonology (49.1%), General Medicine (17.6%), and Dermatology (19.6%) as predominant areas. Budesonide emerged as the most prescribed corticosteroid (38.2%), with nebulizers being the preferred administration method (38.2%). Notably, erythema (40%) was the most frequent adverse reaction observed in Dermatology, with prednisolone, dexamethasone, hydrocortisone, and budesonide commonly associated with adverse effects across specialties.

**Conclusion:** This study emphasizes the significance of accurate corticosteroid administration for achieving optimal treatment outcomes. Analyzing prescription patterns across medical departments offers valuable insights into effective disease management strategies. Close monitoring of dosage, drug interactions, and adverse effects is essential to ensure patient safety.

**KEYWORDS:** Adverse drug reactions; Corticosteroid; Evidence-based practice; utilization

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## **A Study of Drug Utilization Pattern in the Emergency Department at a -Tertiary Care Hospital, Salem**

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### **ABSTRACT**

**Objectives:** To study the drug utilization pattern in a tertiary care hospital in the emergency department.

**Methods:** This is a prospective observational study of 100 patients who were admitted to the emergency department at a tertiary care hospital. A total of 100 prescriptions were analyzed for drug use patterns and the rationality of prescriptions was evaluated using WHO core prescribing indicators and results were expressed in percentage.

**Results:** A total of 100 prescriptions were analyzed in our study, a total of 505 drugs were used and the average number of drugs prescribed per prescription was 5.0. Antibiotics (33.66%) were the most frequent drugs and most of the drugs were prescribed by the parenteral route(70.09%). It was found that 90.13% was prescribed by generic name.

**Conclusion:** This study highlights the need for rationalization of drug therapy. Reducing the average number of drugs per prescription is recommended to minimize adverse drug reactions and interactions. Emphasizing the use of generic names and adherence to standard treatment guidelines can further improve prescribing practices.

## **A Comprehensive Study on The Antimicrobial and Antifungal Activities of simarouba Glauca( Laxmi Taru) Leaf Extracts**

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### **ABSTRACT**

The present study investigates the in vitro antibacterial and antifungal activities of Laxmi Taru (*Simarouba glauca*) leaf extracts using the agar well diffusion method based on the Kirby-Bauer technique. Leaf samples were collected, authenticated, and subjected to cold maceration extraction using chloroform, methanol, and aqueous solvents. Phytochemical screening revealed the presence of secondary metabolites, including flavonoids, alkaloids, glycosides, tannins, proteins, terpenoids, and steroids. The extracts were evaluated for their antimicrobial efficacy against *Staphylococcus aureus*, *Escherichia coli*, and *Candida albicans*. Among the extracts, the aqueous and chloroform fractions exhibited significant antibacterial activity, with inhibition zones reaching up to 21 mm and 22 mm against *S. aureus* and *E. coli*, respectively—comparable to the standard drug Teicoplanin. Antifungal activity was moderate, with the chloroform extract showing inhibition zones of up to 14 mm against *C. albicans*. These findings suggest that *Simarouba glauca* leaf extracts, particularly the aqueous and chloroform forms, possess promising antibacterial properties and may serve as potential sources for the development of natural antimicrobial agents. Further isolation and characterization of the bioactive compounds are recommended for future research.

**Key Words** : *Simarouba glauca*, Laxmi Taru, Antibacterial activity, Antifungal activity, Leaf extracts.

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## **A Cross Sectional Study to Assess Diabetes Mellitus Awareness among Type - II Diabetes Mellitus Patients in the Community**

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### **ABSTRACT**

**Background:** Given the growing worldwide impact of diabetes, determining public awareness is essential to successful management and prevention. By guiding targeted interventions, reducing health disparities, and forming public health strategies, an understanding of awareness levels eventually improves outcomes and lowers healthcare costs.

**Objectives:** The study's objectives were to assess Type II diabetes patients' management knowledge, find differences in lifestyle and treatment choices, stress the importance of patient and family education for effective management, and gauge how well existing treatment regimens are working.

**Methodology:** Over the course of four months (March–June 2024), 80 Type II diabetes patients in Cherthala taluk, Alappuzha, participated in the study, which used a qualitative methodology. A private survey was used to collect data, and Google Forms was used for analysis.

**Results:** Based on data from 100 participants, the cohort was primarily older (80% over 50) and frequently unemployed. Although blood sugar monitoring was widespread, there was little adherence to routine examinations and lifestyle modifications following diagnosis. Notably, a sizable percentage stated that they did not receive enough visits from healthcare workers for support and education, suggesting that management awareness needs to be raised. The study's conclusion highlights significant gaps in our understanding of diabetes management, especially with regard to diet and exercise. To improve glycemic control, reduce complications, and maximize treatment outcomes for this patient population, comprehensive education and support programs are desperately needed.

**KEYWORDS:** Diabetes, Management, Awareness, Knowledge, Lifestyle, Treatment, Education, Chronic, Adherence, Diet, Exercise, Medication.