



A Brief Overview of the Role of Herbal Medicine in Daily Life

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ABSTRACT

Since ancient times, herbal medicine has played a significant role in human life, with traditional medical practices heavily reliant on the use of plant-based remedies to treat a wide range of illnesses. As more people turn to natural therapies to enhance their general health and wellness, the usage of herbal medicine has grown in popularity in recent years.

An overview of the use of herbal medicine in daily life is given in this essay. It covers the background of herbal medicine, the many herbal treatments, and the advantages and drawbacks of using them. The article also discusses some of the most popular herbs and their therapeutic benefits. A holistic approach to health is provided by herbal medicine, which addresses both the overt and covert causes of sickness. In addition to treating a variety of ailments, such as chronic pain, anxiety, depression, and digestive issues, it is a secure and efficient substitute for conventional treatment. It is crucial to remember that using herbal medicine carries some hazards. While some herbs might cause allergic reactions or side effects, others might interact with prescription drugs. Therefore, prior to using herbal remedies, especially if you are taking any medications, it is imperative to seek the advice of a trained healthcare professional. Overall, using herbal remedies can be helpful in maintaining and enhancing one's health and welfare. Herbal treatments can be a secure and reliable replacement for conventional medicine with the right information and direction. The author did her best to include information on many medicinal plants and their therapeutic applications in this review paper.

Keywords: Herbal Medicine, Bioactive Metabolites, Significance.

INTRODUCTION

Significance of Herbal Medicine:

During the previous century, medical science's effectiveness and global diffusion have increased. In contrast to a decline in untreated deaths, life expectancy is increasing (Ahmad et al., 2021). Technology advancements have widened the scope of modern research, and new life-saving medications have been

discovered to help us in the fight against many communicable and other types of diseases (Tamang et al., 2017). Women who care for their families employ medicinal plants in the home, as do medicine men or tribal shamans in the village, as do practitioners of classical traditional medical systems like Ayurveda, Chinese medicine, or the Japanese Kampo system.

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According to the World Health Organisation (WHO), 4.3 billion people, or more than 80% of the world's population, rely on conventional plant-based medical systems for their primary care. Allopathic medicine owes a great lot to medicinal plants; in a nation like the United States, one out of every four prescriptions is either produced or derived from plant components. The WHO emphasised the need to address poor sanitation, illiteracy, and poverty in order to gradually realise the goal of "Health for All" in the 1978 International Conference known as the "Declaration of Alma-Ata."

"Health for All in the 21st Century," a new global health strategy adopted by WHO in 1998, aims to achieve health equity, a longer healthy life expectancy, and health security while also guaranteeing universal access to affordable, high-quality healthcare (Cheema & Singh, 2021). Despite its numerous successes and growth, advanced medical research finds it challenging to reach everyone. However, the majority of the world's population, particularly in developing and underdeveloped nations, lacks access to cutting-edge healthcare solutions and is dependent instead on conventional medical systems. Many of these practises predate the allopathic media medical healthcare system significantly (Sen & Chakraborty, 2017).

Herbal medicines are the foundation of traditional medicine. Numerous medicines are still produced by herbs for civilization. This medicine is founded on thousands of years of scientific investigation, and some of the therapeutic capabilities attributed to plants have been shown to be false (Patel et al., 2012).

Since traditional medicine, sometimes referred to as Ayurveda, is effective in treating a variety of chronic ailments, it is becoming more and more popular in Europe. In conventional medicine, patients frequently rely on long-term medications (Ahmad, 2021b). Many medications have side effects and withdrawal symptoms; for some people,

stopping the medication may be difficult. Nowadays, traditional medicine has a lot to offer. Patients typically respond well to these medications, indicating a lessening of their symptoms, if not a full alleviation. Ayurvedic remedies are typically utilised in conjunction with or after conventional medical treatments because most patients begin taking conventional pharmaceuticals as soon as they are diagnosed (Gaur et al., 2015). As a result, a patient is more likely to seek out Ayurvedic treatment after a problem has arisen. In the last 50 years, most of the crucial medications that have changed how medicine is currently practised have been derived from plants. These chemical elements demonstrate the curative properties of medicinal plants. Since herbal remedies are widely accessible, inexpensive, and widely believed to be more effective than current synthetic treatments, WHO supports and encourages their inclusion in national healthcare systems (Rita & Animesh, 2011). Such plants, which were once believed to be harmful, have since been found to contain valuable medicinal components.

Conservational Strategies:

There is increasing strain on plant species used as medicines. IUCN categories of endangered, uncommon, or threatened may apply approximately 3,000 species, or 15.20 percent of India's overall vascular flora, according to recent estimations (Chen et al., 2016). Even though a thorough investigation of the status of medicinal plant species has never been done, it is estimated that about one-third of the plant species listed in the Red Data Book of India may have therapeutic capabilities. The biggest knowledge gap is caused by an ignorance of genetic diversity patterns and which areas of the gene pool or distribution should be protected and promoted further through domestication and cultivation (Adekunle & Adekunle, 2009). One estimate states that up to 80% of all Ayurvedic pharmaceuticals, 46% of all Unani medications, and 33% of all allopathic medications manufactured in India come from

the woods of Himachal Pradesh, which is considered as the origin of Ayurveda (Ahmad et al., 2014). People in rural areas are less interested in the therapeutic properties of medicinal plants as a result of the spread and popularity of modern illness treatment methods focused on the use of chemical pharmaceuticals (Allopath) (Sofowora et al., 2013). As a result, they receive insufficient protection and are frequently pulled out like weeds. The expanding problem of environmental contamination has had a significant impact on the population decline of plant species that are essential for medicine. A detailed indigenous medicinal plant of northeast states of India as potential therapies for Malaria has been done by researchers of Kolkata and Sikkim in the year 2020 (Ahmad & Tamang, 2020). Ahmad conducted a review in which he attempted to address the question of whether medical professionals need emotional intelligence (Ahmad, 2023).

The future prospect of medicinal plants:

The use of medicinal herbs has a promising future because there are nearly 500,000 plants in the world that have not yet been investigated for their therapeutic properties, and their untapped therapeutic potential may be crucial in the application of existing and emerging knowledge (Ahmad & Halder, 2021a). For instance, medicinal plants have been crucial in the development of human culture. Numerous modern medications, including aspirin, are made indirectly from herbs. For instance, garlic has anti-inflammatory qualities. Studying herbs can help us better understand plant toxicity. According to Patel et al. (2012), secondary metabolite synthesis by plants is responsible for the therapeutic effects of herbs.

The WHO has created strategies to deal with the importance of medicinal plants. In rural areas, medicinal plants are essential to maintaining optimum health. The effectiveness of Indian traditional medicine systems like Ayurveda and others has been demonstrated in recent studies (Naikoo et al., 2019). Even

though efforts are required to get over obstacles like quality control and standardisation issues, etc. (Dar et al., 2017). Overall, for the development of such medicine, there must be sufficient understanding of the system of such processes, as well as high-quality clinical studies and their effectiveness among regular people.

Thymoquinone: A promising natural compound with preventive and curative properties against COVID-19 could be great work if it is tested more and more to come to at conclusion regarding Thymoquinone (Ahmad et al., 2022a). An investigation has been done on Fenugreek seeds to check the bioactive metabolites present in the *Trigonella foenum-graecum* (fenugreek seeds) and their anti-cancer and antioxidant properties (Ahmad et al., 2022b)

A systematic investigation of Trigonelline, Diosgenin, Protodioscin, and Dioscin from *Trigonella foenum-graecum* (fenugreek seeds) has anti-cancer and antioxidant properties without side effects. Details are given in Table 01 & Figure 01.

Botanical medicine, commonly referred to as herbal medicine, has been utilised for ages to treat a variety of illnesses. It involves making treatments for illnesses ranging from minor discomforts to major diseases out of plant-based elements like leaves, roots, and flowers. There are several ways to take herbal medication, including as teas, tinctures, pills, and lotions. Herbal remedies can be adopted into daily life as a part of a healthy lifestyle, such as the use of chamomile or ginger tea for relaxation or digestion, respectively. The use of herbal medicine should be done so with the advice of a skilled healthcare provider, and it should not take the place of medical therapy for serious disorders. Before utilising any herbal medicines, it is important to conduct research and speak with a healthcare professional because not all herbs are healthy for everyone and some may interfere with drugs.

Table 01: Details of different medicinal plants and their therapeutic applications

Plant Name	Common Name	Family	Parts used	Chemical constituents	Secondary metabolites	Therapeutic use	References
<i>Plantago ovata</i>	Isabgol	Plantaginaceae	Seed husk and leaves	Flavonoids, alkaloids, terpenoids, phenolic acid derivatives, iridoid glycosides, fatty acids, and polysaccharides	Flavonoids, alkaloids, and terpenoids	Constipation, diarrhea, hemorrhoids, and high blood pressure.	Adekunle, and Adekunle, 2009
<i>Aegle marmelos</i>	Bael	Rutaceae	Fruits, bark, leaves, seeds, and roots	Coumarin, Xanthotoxol, Imperatorin, Aegeline, and Marmeline	5-acetoxytridecane	Antidiabetic, anticancerous, antifertility, antimicrobial, immunogenic, and insecticidal activities	Ahmad and Tamang, 2020
<i>Aloe indica</i>	Aloe vera	Asphodelaceae	Green part of the leaf	Vitamins, enzymes, minerals, sugars, lignin, saponins, anthraquinones salicylic acids and amino acids	Anthraquinones, aloe emodin and chrysophanol	Burns, allergic reactions, Rheumatoid arthritis, rheumatic fever, acid indigestion, ulcers, diabetes, skin diseases	Ahmad and Halder, 2021
<i>Ginkgo biloba</i>	Ginkgo	Ginkgoaceae	Leaf	Ginkgolides A, B, C, J, bilobalide, flavonol glycosides, biflavones, proanthocyanidins, alkylphenols, phenolic acids, 6-hydroxykynurenic acid, 4-O-methylpyridoxine and polyphenols	Flavonoids, lactones, and ginkgolic acid	Cerebral vascular insufficiency, cognitive disorders, dementia, dizziness/vertigo, intermittent claudication, glaucoma, memory loss	Ahmad and Halder, 2021
<i>Nigella sativa</i>	Black cumin or kalonji	Ranunculaceae	Seed	Thymoquinone (TQ), thymol, nigellone, dithymoquinone, thymohydroquinone, α and β -pinene, d-citronellol, p-cymene, d-limonene, 4-terpineol, carvacrol, t-anethole, and longifolene	Polyphenols flavonoids, alkaloids, steroids, terpenes coumarins, tannins, and saponins	Antihypertensive, diuretics, digestive, anti-diarrheal, appetite stimulant, analgesics, anti-bacterial, anti-cancer, anti-depression, bronchitis, asthma, rheumatism, and skin disorders	Ahmad et al., 2022a
<i>Trigonella foenum-graecum</i>	Fenugreek	Fabaceae	Seed and leaf	Carbohydrates, proteins, lipids, alkaloids, flavonoids, fibers, saponins, steroidal saponins, vitamins, and minerals, nitrogen compounds	Alkaloids, saponins, flavonoids	Gastric stimulant, antidiabetic, antilipidemic, antioxidant, hepatoprotective, anti-inflammatory, antibacterial, antifungal, antiulcer, antilithogenic	Ahmad et al., 2022b
<i>Tinospora cordifolia</i>	Gulanha	Menispermaceae	Stem, root, bark, leaf	alkaloids, glycosides, steroids, phenolics Tinosporide, Palmatine, Berberine, Alkaloids, glycosides, steroids, phenolics, aliphatic compounds, polysaccharide, protein	Anthraquinones, terpenoids, and saponins	Fever, jaundice, chronic diarrhea, cancer, dysentery, bone fracture, pain, asthma, skin disease, poisonous insect, snake bite, eye disorders	Cheema and Singh, 2021
<i>Madagascar periwinkle</i>	Nayantara	Apocynaceae	Root and leaf	Vinblastine, Catharanthine, Tabersonine, Vincristine, Ajmalicine	Vinblastine and vincristine	Diabetes, sore throat, lung congestion, skin infections, eye irritation	Tamang et al., 2017



Picture 1: Picture of some fruitful medicinal plants and seeds

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