

# MEDICINAL PLANT: AN EMERGENCE OF NATURAL MEDICINE FOR HUMAN BEING

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**ABSTRACT:**The term “Medicinal Plant” include various types of plants used in herbals. It is the use of plant for medicinal purposes, and the study of such uses. Plants have been used for medicinal purposes long before prehistoric period. Ancient Unani manuscripts Egyptian papyrus and Chinese writings described the use of herbs. Evidence exist that Unani Hakims, Indian Vaid and European and Mediterranean cultures were using herbs for 4000 years as medicine. Indigenous cultures such as Rome, Egypt, Iran, Africa and America used herbs in their healing rituals, while other developed traditional medical systems such as Unani, Ayurveda and Chinese Medicine in which herbal therapies were used systematically. Traditional system of medicine continues to be widely practiced on many accounts. Prohibitive cost of treatment, side effects of several synthetic drugs and development of resistance to currently used drugs for infection diseases have led to increased emphasis on the use of plant materials as a source of medicines for a wide variety of human ailments. Recently, WHO (World Health Organization) estimated that 80 percent of people worldwide rely on herbal medicines for some aspect of their primary health care needs. According to WHO, around 21,000 plant species have the potential or being used as medicinal plants.

**Keywords:** Medicinal plant, ayurveda, yunani, Indian v aids and herbal medicine.

## INTRODUCTION

The team medicinal plants include a various type of plants used in herbalism and some of these plants have a medicinal activities. Medicinal plants are the “backbone” of traditional medicine, which means more than 3.3 billion people in the less developed countries utilize medicinal plants

on regular basis. These medicine plants consider as a rich resources of ingredients which can be used in drug development and synthesis. Besides that these plants play a critical role in the development of human cultures around the whole world. The Indian sub-continent of has a very rich diversity of plant species in a wide range of ecosystems. There are about 17.000 species of higher plants, of which approximately 8.000 species, re considered medicinal and used by villager traditional medicinal systems, such as the Ayurveda. The use of traditional medicine and medicinal plants in most developing countries as a basis for the maintenance of good health has been widely observed by UNFSCO, 1996. Furthermore, an increasing reliance on the use of medicinal plants in the industrialized societies has been traced to the extraction and development of several drugs and chemotherapeutics from these plants as well as from traditionally used rural herbal remedies (Mathur, M. 2013). During the past decade, traditional systems of medicinal have become a topic of global importance. Current estimate suggest that, in most developing countries, a large proportion of the population relies heavily on traditional practitioners and medicinal plants to meet primary health care needs. Although modern medicines may be available in these countries, herbal medicines (phytomedicines) have often maintained popularity for historical and cultural reasons (Neergheen-Bhujun, V.S. 2013). Medicinal plants frequently used as raw materials for extraction of active ingredients which used in the synthesis of different drugs. Like in case of laxatives, blood thinners, antibiotics and anti-malarial medications, contain ingredients from plants. Moreover the isolated from foxglove, periwinkle, yew and opium poppy, respective. Medicine, in several developing countries, using local traditions and beliefs, is still the mainstay of health care. As defined by WHO, health is s state of complete physical mental, and social well being and not merely the absence of disease or infirmity (Naseri, M. 2004). Medicinal plants can make an important contribution to the WHO gole to ensure, by the year 2000, that all people, worldwide, will lead a sustainable socio- economic productive life. The practice of traditional medicine is widespread in China, India, Japan, Pakistan, Sri Lanka and Thailand. In China 40% of the total medicinal consumption is attributed to traditional tribal medicines. In Thailand herbal medicines make use of legumes encountered in the caesalpiniaceae, the Fabaceae, and the Mimosaceae.. In the mid-90s, it is estimated that receipts of more than US doller 2.5 billion have resulted from the sales of herbal medicines and, in Japan herbal medicinal preparations are more in demand than mainstream pharamaceutical

products. The development and the commercialization of medicinal plant-based bioindustries in the developing countries is dependent upon the availability in the developing and information concerning upstream and downstream bioprocessing, extraction, purification, and marketing of the industrial potential of medicinal plants. Furthermore the absence, of modernized socio-economic and public healthcare systems reinforces reliance of rural and lower-income urban populations on the use of traditional medicinal herbs and plants as complementary aids to routine pharmaceutical market products. Recent estimates suggest the over 9,000 plants have known medicinal applications in various cultures and countries, and this is without having conducted comprehensive research amongst several indigenous and other communities.

### **USE OF MEDICINAL PLANTS IN HUMAN HEALTH**

Traditional medicines represented the basis of healthcare throughout the world since the earliest days of mankind. Medicinal plants have been known for millennia as a rich source of therapeutic agents for the treatment and prevention of various diseases occupying an important place in the socio-culture, spiritual and, medicinal field. Over the last century, the drastic modification of human life style and food habits lead to the emergence of various chronic pathologies. Recently herbal 'renaissance' is a visible phenomenon all the over the globe and it has been suggested that two-thirds of the world's plant species may have medicinal value. The World Health Organization estimates that 80% of the Africa and Asian population use traditional medicine as the first source for their health care needs. In addition in USA, more than 40 % of the population recently reported using complements and alternative medicines, including botanical dietary supplements. In the past decade, a remarkable effort has been deployed leading to the isolation of many bioactive drugs from plants. Generally, the synthetic products are considered as unsafe while the plant products appear to symbolize the safety. Nonetheless, the safety dosage and potential interaction with standard conventional therapies are categorically needed because the plant material could be toxic due the presence of naturally occurring toxic constituents, heavy metals toxins, pesticides, or bacteria. In addition the misidentification of a plant species in a product, the possible formation of electrophonic metabolites, the eventual organ-specific reactions or the botanical-drug interactions are some serious risks which may represent the limits of the safety of any plant material.

### **THE MEDICINAL PLANTS FOR HUMAN BEING**

Medicinal plants have long played important roles in the treatment of the diseases all over the world. World health organization (WHO) recently has published a strategic plan for the development and promoting of traditional medicine in 4 area, including.

- 1- Identification of traditional medicine, presentation of a proper policy and plan.
- 2- Development of research and education, especially in the university level.
- 3- Establishment of unity and cooperation between the employees of tradition and modern medicine.
- 4- Development of cultivation of the needed herbs to prevent destruction of natural resources.

The release of this strategic plan shows the importance of this reliable source for the treatment and prevention of diseases. Now a day there is revival of interest in the consumption of herbal medicines in the form of standardized extracts, partly due to their multiple side effects, and high cost of patentable chemical drugs (Sanghi and Tiwle, 2013). A lot of medicinal plants such as Garlic, Ginger, Ginkgo, Ispaghul, St John's Wort, Saw palmetto and Mucuna pruriens have gained popularity for the treatment and prevention of a lot of disorders. The impact of journals publishing data on medicinal plants is increasing. There is also a rising trend to include phytotherapy in the curriculum of medical school. Now a days over 70% of German physicians prescribe herb, and St, John's Wort is more commonly used than any chemical medicine to treat mild to moderate depression, Phytotherapy is considered relatively safe as it contains multiple chemicals with a specific composition acting as 'effect-enhancing and/or side-effects neutralizing,' though there is limited scientific evidence for this assumption.

There is increasing evidence that in several chronic disorders an increase in production of free radicals or reactive oxygen species (ROS) play a critical role. High reactivity of free radicals causes changes in most of cellular components, leading to lipid peroxidation. Medicinal plants are a source for a wide variety of natural antioxidants and used for the treatment of diseases throughout the world. Some of these properties are antimicrobial, anti-cancer, anti-diabetic, anti-atherosclerosis immune modulatory, and reno-protection or hepato-protective effects. Recently, due to beneficial effects of antioxidants, particularly natural antioxidants, in the treatment and prevention of diseases, there has been a considerable interest in finding natural antioxidants from plant sources. The studies on medicinal plants show that most of them possess significant

antioxidant activity. In this regard various animal models including diabetes, hyperlipidemia, autoimmune encephalomyelitis, inflammatory bowel disease, ischemia-reperfusion in rat skeletal muscle or kidney, hepatotoxicity, renal, toxicity, radiation injury, and cataract, for assessing antioxidative effects of medicinal plants have been treatable with specific medicinal plants according, at least in part, to their antioxidant have also been shown to be useful for the prevention of atherosclerosis and cardiovascular diseases by reducing lipids peroxidation. Most of medicinal plants have specific compounds, other than antioxidants, which are effective in the treatment or prevention of disease. In this regard, medicinal plants have also been a reliable source for preparation of new drugs. Now a day, researches more than before are dependent on medicinal plants for discovery of new drugs with fewer side effects. Therefore, due to the importance of oxidative stress in the pathophysiology of most of the hard curable diseases, the use of medicinal plants with antioxidants properties is important and should be considered more than before. Drug therapy and even drug discovery should also be focused more than before on this source. Multidisciplinary team work including ethnobotanists, pharmacologists, physicians and phytochemists is essential for the fruitful outcome of medicinal plants research (Heidarian *et al.*, 2013). More importantly, regulations are also needed to ensure efficacy quality and safety of herbal medicines. Different define herbal medicines differently. Furthermore, different countries have adopted various approaches for trading, dispensing licensing and manufacturing of medicinal products. In most of countries in Europe, herbal medicines are either fully licensed as medicines with efficacy proven by clinical trials. However in Iran and in United States, most herbal products are considered as dietary supplements and thus are not required to meet the standards for drugs.

### **IMPORTANCE OF MEDICINAL PLANTS**

- Many herbs are used to alter or change a long standing condition by eliminating the metabolic toxins. Also known as 'blood cleansers' certain herbs improve the immunity of the person, thereby reducing conditions such as fever. Herbs such as ginseng, aloe, sandalwood, red clover, burdock, safflower, black pepper, cinnamon, myrrh are known for their alterative property, which are used to heal wounds, sores and Boils as well.

- Antibiotic herbs like turmeric are useful in inhibiting the growth of germs, harmful microbes and bacteria. Turmeric is widely used as a home remedy to heal wounds and cut.
- To reduce fever and the production of heat caused by the condition, certain antipyretic herbs such as black pepper, sandalwood, safflower and brihati are recommended by ayurveda practitioners.
- An important medical property of herbs is to serve as antiseptic. Aloe, sandalwood, turmeric, chitrak and gokshura are commonly used antiseptic herbs that are high in their medicinal value.
- Certain aromatic herbs like cardamom and coriander are renowned for their appetizing qualities. Other aromatic herbs such as cloves peppermint and turmeric add a pleasant aroma to the food, thereby increasing the taste of the meal. They serve as digestives and condiments the food as well.
- Ayurvedic practitioner recommends calmativ herbs, which provide a soothing effect to the body. They are often used sedatives.
- Herbs such as chamomile, chrysanthemum, coriander, fennel, peppermint and spearmint, ajwan, basil, calamus, cardamom, cinnamon, ginger, and turmeric are helpful in promoting good blood circulation. Therefore, they are used as cardiac stimulants
- Certain herbs have disinfectant property, which destroys disease causing germs. They also inhibit the growth of pathogenic microbes that mucus from the lungs communicable diseases. Arka gudachi and katuka are the examples of disinfectant herbs.
- In order to increase the activity of a system or an organ, certain herbs like camphor, cayenne myrrh, guggul and gotu kola are used as stimulants.
- Herbs serve as tonic. A wide variety of herbs including guduchi, latuka, golden deal, aloe barberry and bala are used as tonics or chief ingredients of a tonic. They can also be nutritive and rejuvenative.
- Honey, turmeric, marshmallow and licorice can effectively treat a fresh cut and wound. They are termed as vulnerary herbs.

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