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# CHALLENGES AND FUTURE PROSPECTS OF HERBAL MEDICINES Sunny Sudhakar Sapkal<sup>2</sup>, Akash Shivaji Nalawade<sup>2</sup>

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# ABSTRACT

Plants and herbs are not new to humans; thousands of years ago and is still practiced today. Due to the many benefits o f herbal medicines, both developed and developing countries are now turning to herbal medicines. India is the land of medicinal plants and traditional Indian medicine is based on herbs and herbs, which is also Ayurveda. India is famous for minerals derived from plants and their medicinal values are well documented. Herbs are also known as botany or botany study by the World Health Organization found that 80% of the world's population relies on herbal medicine to meet their basic medical needs. In fact, in developing countries, alternative medicine is popular and popular due to i ts effectiveness, safety and fewer side effects. Herbs have a long history of use and patient tolerance. This review artic le discusses the limitations and challenges faced by herbal medicines.

# 1. INTRODUCTION

Herbal medicine or botanical medicine refers to the use of many parts of medicinal plants. Herbalism has a rich traditi on of use outside of medicine. The advancement and development of analysis and quality control in the last few years has now become important along with the progress in clinical research. According to the World Health Organization ( WHO), herbal medicine or herbal medicine is the result of knowledge, skills and practices based on indigenous ideas a nd knowledge of insects. Different traditions, whether defined or not, are also used to manage health such as preventio n and diagnosis., development. or to treat physical and mental illnesses. Medicinal plants are natural products of plant origin, used in local or regional medicine to treat diseases, with little or no commercial use. Thousands of years befor e the development of allopathic medicine, medicinal plants were widely used for the benefit of humanity. Botanical m edicines originally derived from plants include tinctures, teas, salves, powders, and other herbal preparations. The use and use of plants for healing purposes predates human history and paved the way for many modern medicines. Resear ch and studies based on the clinical, medicinal and medicinal properties of this great plant form the basis of many of th e first medicines such as aspirin (from willow bark), digoxigenin (from foxglove), morphine (from foxglove poppy), q uinine (from Cinchona bark).) and pilocarpine (jaborandi). Herbalmedicines account for approximately 70to80% of pri mary healthcare in developed countries worldwide. The use of herbs in primary care is high because they are believed to have no side effects and are cheap and easy. According to statistics from the World Health Organization, the use of herbal medicine is approximately three times that of traditional medicine. The World Health Organization has classifie d plants according to their origin, evolution and current use as follows:

• Indigenous Herbal Medicine:

Indigenous herbal medicine includes plants that have a history of use in local communities, tribal groups, or regio ns and are known to have been used for a long time by a village or group of people due to their composition. treat ment and dosage. It should be easily accessible, easy to use and free of charge to the local community or region.

- Herbal medicine in the system:
  - Herbal medicine in the system has been used for many years and
- Modified herbal medicines: Using herbal medicine is achieved by changing the image., how much paper, how much, how much paper is obta ined by changing the way of eating it. Usage and dosage, medicinal ingredients, preparation, instruction
- Imported products with Herbal Medicines: Imported Chinese herbal products begin to cover all medicinal products of Chinese medicinal herbs, including raw materials and products. Plants may need t o be registered and sold in the country. We have different medical systems, and each body's medical philosophy a nd practice is influenced by the conditions, environment, and environment in which it was created.

### History

Natural products obtained from natural materials such as plants have been used by people as food and medicine for ma ny years, especially plants or whole plants for healing and protection from diseases. It is difficult to calculate when pe ople started using plants as medicine, but some ancient texts and other sources can prove the beginning. The earliest re cords of the use of medicinal plants to prepare medicines were found in Sumerian clay tablets from Nagpur dating bac k 5,000 years. It contains 12 medicinal preparationscontaining more than 250 different herbs, some of which contain a lkaloids such as poppy, henbane and mandrake. The holy book of Indian Vedas talks about healing with thehelp of pla nts that are abundant in the country. The Chinese Materia Medica, written around 2500 BC by Emperor Shennong and based on the use of roots and herbs, contains 365 remedies (dried parts of medicinal plants), many of which are still us **@International Journal Of Progressive Research In Engineering Management And Science** Page | 911



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Hippocrates, the father of medicine, mainly studied the human body and anatomy and wrote more than 60 medical boo ks. He also published the humoral theory, explaining that the human body consists of four fluids that are important for health: blood, phlegm, yellow bile, and black bile. Hippocrates used only medicinal plants, and his most famous sayin gs are: "Food is medicine, medicine is food" and "disease results from the body's inability to digest the environment." The beginning of the 19th century is considered a turning point in the use and use of medicinal plants. The discovery, confirmation and isolation of alkaloids from poppy and other plants (1806) and the isolation of glycosides marked the beginning of scientific pharmacy. As the medical process was developed and refined, other active substances were dis covered in herbs.

#### Present Scenario:

Plants or botanical medicine continues to spread throughout the world. Nowadays, many people in hospitals in many c ountries use herbs to treat various health problems. In the last few years, public interest in natural medicine has increas ed in both developed and developing countries. In developing countries such as Africa and India, the percentage of pe ople who still rely on traditional and herbal medicines for primary healthcare is as high as 90%, accounting for 70% of the population. In China, traditional medicine accounts for approximately 40% of all medical care, and more than 90 % of general hospitals in China have medical departments. Today, medicinal plants are used in the treatment of chronic and acute diseases as well as various diseases and problems such as heart disease, prostate problems, depression and p ain, as well as strengthening the body, preventing diseases, etc. It is used for different purposes. In Africa, African flo wers (herbs) have been used for years to treat symptoms of HIVrelated weight loss. It is now believed that nature is re sponsible for 90% ofnew drug molecules. Nature, Actinomycin, Bleomycin, Doxorubicin, Vinblastine, Irinotecan, Top otecan, Etoposide, Paclitaxel (anticancer), Metoflurane Quin, chloroquine, amodiaquine, artemisinin, dihydroartemisin in, artemether (artemether) etc. Ithas provided many good medicines such as. Other biguanides are harunganin, cryptol epine and maprouneasin (antidiabetic drugs) and calanolide A, cucumber, phenethyl isocyanate and phenolic diol (anti HIV drugs). There are approximately 25,000 potent botanical formulas in traditional use in India and more than 1.5 mi llion traditional medicine practitioners. There are 7,800 herbal plants in India and around 2,000 tonnes of plants are us ed every year. There are reports that there is a large market in traditional medicine. The Ayurvedic medicine market si ze is approximately 50 billion rupees with an annual growth rate of 14%. Exports of herbal products are worth approxi mately Rs 100crore. The demand for medicinal plants is increasing day byday, and the World Health Organization pre dicts that the global herbal market will grow from the current US\$62 billion to US\$5 trillion by 2050. More than 70% of the world's diversity is produced. by India and China. Major global plant export markets include the European Unio n, the United States, Canada, Australia, Singapore and Japan, while Brazil, Argentina, Mexico, China and Indonesia ar e important plant markets.

#### Challenges Associated :

Herbal medicines are put on the market without the necessary safety or toxicological evaluation of the relevant drugs. Many of these countries still do not have effective systems to control the practice and quality standards of herbal medi cines. The most common and widespread problems in many countries are those related to management conditions, saf ety and performance evaluation, quality control, audit safety control and negative or non-

understanding of recommendations, additions/others.

Challenges Affecting Drug Regulatory Policy:

By definition, a dietary supplement is a food that is intended to supplement ve

getables, rice and contains "food elements". The nutrients in these products will include many vitamins, minerals, herb s or other plants that the body needs. According

to DSHEA, if the herbal medicine was sold before 1994, additional toxicology studies are generally not required. In th is way, the FDA bears the burden of proving that herbal products or "food ingredients" are toxic or unsafe for use. An other important challenge faced by many countries relates to the lack of sharing of regulatory information regarding m edicinal plants between regulators and regulators.

Challenges Associated to Assessment of Safety and Efficacy: No one can deny the fact that the regulations and standards, standards and procedures of research methods for evaluati ng the safety and effectiveness of herbal medicines are more stringent than traditional or the requirements of Orthodox medicine are more complex. A single plant or herb can contain more than hundreds of natural ingredients, and herbal compounds can contain any of them many times over. Such an analysis of an active ingredient is practically impossibl e, especially when the herbal product is a mixture of two or more medicinal herbs.

Challenges Associated to Quality Control of Herbal Medicines:

The quality of the raw materials used in the production of plants determines their safety and effectiveness. The quality



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of the resource or raw material depends not onlyon the quality of the material (genetics), but also on external factors s uch as the environment, good agricultural practices and good collection of medicinal herbs, including plant selection a nd cultivation. The combination of many factors makes it difficult to control the quality of Chinese herbal medicine ra w materials. According to Good Manufacturing Practices (GMP), correct identification of medicinal plants, special sto rage and special care for various raw materials are important for the quality control of products. The main challenge is in the quality control of finished herbal products, especially herbal products. Therefore, the general rules and methods for quality control of herbal products are still more complex than for other drugs. To ensure the safety and effectivenes s of herbal medicines, the World Health Organization continues to recognize the process of quality assurance and cont rol measures for herbal products, such as national quality guidelines and standards, GMP, labeling and manufacturing licenses.

Challenges Associated to Safety Monitoring of Herbal Medicine:

In the past few years, issues relating to increasing use of herbal or natural medicines or products in developed countrie s. Furthermore, the dependence of many people living in the developing countries on plants as a major source of medi cines coupled with weak regulation of herbal medicines in most countries and the occurrence of

highprofile safety concerns has increased awareness regarding the need to monitor safety and understanding of possibl e harmful as well as potential benefits linked with the use of herbal medicines. Adverse effects arising from consumpti on of herbal medicines are due to several factors among which include the use of the wrong species of plant, adulterati on of herbal products, undeclared medicines, contamination, overdosage, misuse of herbal medicines by either healthc are providers or consumers, and use of herbal medicines with other medicines. There is a lack of proper knowledge re garding the importance of taxonomic botany and documentation by most manufacturers of herbal medicines, and this poses peculiar challenges during identification and collection of medicinal plants used for herbal remedies. To overco me the confusion created because of the common names, it is necessary to adopt the most commonly used binomial na mes for medicinal plants. For example, Artemisia absinthium L., which has at least 11 common names, contains an act ive narcotic derivativeTherefore, effective management of plants requires good collaboration between botanists, phyto chemists, chemists and other stakeholders.

#### **Future Prospects**

Future is in the phase of increasing demand and fast-growing market of herbal medicines and other herbal healthcare products, in both developing and developed countries of the world.

Growth and Integration into Primary Health Care:

As people seek better ways to heal, herbs are being accepted and incorporated into treatments. normal pain.

Advances in Scientific Research and Evidence-Based Practice:

Continuous research expands our understanding of the effectiveness, quality and safety of herbs, paving the way for evidence-based recommendations.

Potential for Discovery of New Drugs and New Treatments:

Plants represent a large source of bioactive substances and have the potential to discover new drugs and new drugs.

#### **Global Market Size of Herbal Medicine**



Global Herbal Medicine Market Estimates, By Form, 2015 - 2026 (USD Billion)



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## 2. CONCLUSION

In this context, international recognition and use of medicinal plants and related products continues to increase. With i ncreasing advances in recent years, problems with adverse reactions have also emerged and are no longer a problem b ecause herbal products are classified as "safe" because they are obtained "naturally". Therefore, the rules regarding her bal medicines around the world need to be standardized and strengthened. It is now the responsibility of regulatory bo dies to oversee the management and quality of herbal products and to

facilitate their development to the clinical trial stage.

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