

## An Overview and Approach towards Herbal Drug Research in Ayurveda

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### Abstract

Herbal medicine is the main component of the traditional system of medicine. In earlier times the Ayurveda Physician (*Vaidya*) were themselves collecting herbs and other ingredients for treating the patients and were used to prepare the medicines required to patients. In many communities and regions herbal medicine is an available, affordable, effective and culturally-acceptable health care modality. According to Ayurveda, a drug should have all the qualities with many properties and having ability of preparing its many formulation without disturbing the basic properties. Efforts should be made to upgrade the research capability of standardisation & quality control of herbal medicines & it is also become necessary to prove the efficacy of various Ayurvedic formulations on modern scientific parameters.

**Keywords** *Herbal, Unani, Sidhha, Cultivations, Aushadham*



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## INTRODUCTION

Herbal medicine is the main component of the traditional system of medicine. It has been used for thousands of years and has made a significant contribution to human health. Today, people still confer considerable importance to herbal medicine for various illness or disorders in terms of home remedies, particularly in our country like India.

The Ayurvedic system of medicine has been existing in India since the Vedic period, and it still remains the mainstay of medical relief for over 60 per cent of the population of the nation. In earlier times the Ayurveda Physician (*Vaidya*) were themselves collecting herbs and other ingredients for treating the patients and were used to prepare medicines for their patients. For the purpose of obtaining raw materials of crude herbal drugs *Vaidyas* now depends on commercial institutes, shops and dispensaries. Under the circumstances and responding to opinions of the scientific community after Independence, the Govt. of India began a series of measures to introduce a quality control system, from 1964 onwards similar to that existing already under the Drugs and Cosmetics Act,

1940 for western medicine. The Government of India introduced an amendment in 1964 to the Drug and Cosmetics Act 1940, to control to a limited measure the Ayurvedic, Siddha and Unani drugs.

Medicinal plants are valuable in natural and genetic resources and an inventory survey of medicinal plants should be conducted for making the monographs from the various part of country. The cultivation of plants needed for medicinal purposes should be encouraged to ensure adequate local supply.

### Use of Herbal Medicines in Health Care

In many communities and different areas of the country herbal medicine is an available, affordable, effective and culturally-acceptable health care modality. The use of herbal medicine can meet certain primary health care requirements of the people, particularly in less developed, rural and remote areas. Even today, in many tribal areas peoples are mostly believe to treat certain condition with the help of herbal remedies rather than existing modern treatment for the concerned disease or condition. The existing community-based traditional medicine projects in several countries have demonstrated the vital role

that can be played by herbal medicine in primary health care.

### **Research on Herbal Medicines**

Although herbal medicines used by traditional systems of medicine have been tested through long historical practice, scientific research on herbal medicines will provide additional evidence of their safety and efficacy. Research will also provide data on herbal medicines to meet regulatory requirements. However, respect of the principles of the traditional system of medicine under study must be an important consideration when the research project is prepared, conducted and evaluated. The Research guidelines for evaluating the safety and efficacy of herbal medicines, prepared by the WHO Regional Office for the Western Pacific, provide suggestions and guidance on research methodology, pharmacodynamic and general pharmacological studies, toxicity investigations and clinical trials.

Efforts should be made to upgrade research capability of herbal drug standardization & quality control in the field of herbal medicines. It can be done by establishing well Drug Research Laboratory in the

country. Research should initially be utilization-based and preferably include the participation of practitioners and consumers to ensure maximum support from the community.

Whenever necessary, research projects should be conducted in collaboration, involving various research agencies like DBT, DST, CSIR, CCRAS, ICMR etc and steps should be taken to incorporate its use in the health care system. For this purpose CCRAS (Central Council of Research in Ayurvedic Sciences) New Delhi, has bringing uniformity in clinical research by conducting various clinical trials in India.

The knowledge available in communities about the use of medicinal plants should be collected and assembled, preferably with the participation of the communities themselves. Medicinal plants commonly used in the communities should be selected.

As per Ayurvedic contexts (As per Charakacharya) A drug should have '*Bahukalpam Bahugunam Sampannam Yogyam Aushadham*'- which can be described as- Drug should have all qualities with many properties and having ability of preparing many formulation without

disturbing the basic properties. The basic criteria in the selection of plants should be: (1) locally available; (2) useful for common health problems; and (3) availability of references on their safety and efficacy.

Educational and training materials on these selected plants should be prepared and disseminated through the various ways of publications. Community health workers should be trained in the identification, collection, processing, storage and utilization of the plants. Villagers should be encouraged to plant medicinal plants in their gardens or backyards.

### **Process of Drug Research-**

Whenever we wanted to know the desired effect of a substance or any material for well being of human being it needs to prove its efficacy in terms of scientific research and can be called as drug research.

### **Steps includes in drug research:**

- a) Proper identification of drug
- b) Literary study on drug
- c) Cultivation and collection
- d) Testing efficacy of various part of drug
- e) Study of morphology
- f) Adulteration
- g) Study of phytochemistry

- h) Toxicology study
- i) Study of various formulation on various phases
- j) Testing of drug action

### **Comprehensive Approach towards the Herbal Research**

The herbal medicine practices should be coordinated and integrated into the country's health care system. They can be components of health care establishments at the primary, secondary and tertiary levels or can stand alone. Countries are encouraged to be aware of recent developments in herbal medicine throughout the world and to adopt such treatments into their health care services as and when appropriate, if it is beneficial to the community. It will be better to integrate traditional medicine into their health delivery systems, particularly in extending the coverage of primary health care.

In China, Japan, The Republic of Korea the use of herbal medicine is an integral part of the formal health service system. In other countries, herbal medicine is usually used only in the community or in private practice.

Health authorities in several countries and areas are reviewing the current status of herbal medicine and the possibility of bringing it into the mainstream of the health

service. Mechanisms for ensuring the safety and control of herbal medicine need to be introduced as part of its formal incorporation into the health service system.

## CONCLUSION

After systematic reviewing the literature on herbal research, it can be concluded that there is increasing future in herbal drug research as many pharmaceutical companies are involving in marketing these herbal products. Herbal drug research should be emphasized, focused ethically keeping in the view of the betterment of human health. In addition to this there is contemporary demand, globally for various Ayurveda herbal products particularly in cosmetics, health tonics, nutrients etc. There will be huge opportunity in research area for the herbal drugs and it could be achieved by reforming the current scenario for herbal research procedure by leveraging modern technology in operations provided with the help of regulatory framework.

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