

# THE SCOPE OF RESEARCH IN AYURVEDA

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## **Abstract**

The importance and the urgent need of research in traditional system of medicine including Ayurveda has been felt at all levels after the Alma Ata Declaration of WHO-"Health for all by 2000 AD". The potentialities of Ayurveda such as basic principles of health, its well founded humoral theory, certain unique concepts of etiopathogenesis, preventive medicine (Swastha Vrittam) and therapeutic regimens of various stress disorders may be well utilized in present times for Primary Health Care all over the world. In the present context, there is a great scope of research in Ayurveda and other traditional systems of medicine on scientific parameters to evaluate the legitimate role of Ayurveda in primary health care and effective global health care delivery.

**Key words:** Ayurveda, Swastha Vrittam, Research in Traditional System of Medicine, Primary Health Care

## THE SCOPE OF RESEARCH IN AYURVEDA

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The importance and the urgent need of research in traditional system of medicine including *Ayurveda* has been felt at all levels after the Alma Ata Declaration of WHO—"Health for all by 2000 AD". The potentialities of *Ayurveda* such as basic principles of health, its well founded humoral theory, certain unique concepts of etiopathogenesis, preventive medicine (*Swastha vrittam*) and therapeutic regimens of various stress disorders may be well utilized in present times for Primary Health Care all over the world. In the present context, there is a great scope of research in *Ayurveda* and other traditional systems of medicine on scientific parameters to evaluate the legitimate role of *Ayurveda* in primary health care and effective global health care delivery. ecir

### Introduction

In India research in *Ayurveda* had been pursued for many decades. But the results had not been very spectacular. This is mainly because of the fact that there is lack of interest of studying these problems by the scientists in general and modern medical scientists in particular. Even in this sphere, perhaps one should not blame anyone. Because all the Ayurvedic texts are written in classical Sanskrit language. Unless one understands the basic theories of *Ayurveda*, one cannot start research into the subject. Save a few exceptions, there are not many good English translations of these classics of *Ayurveda*. Hence, it is conceivable to understand that the lack of interest in the study of this ancient science, *Ayurveda*, is possibly due to lack of opportunity to study this science by the modern medical men and scientists. It is only recently that good English translations are coming up and now it is

expected that more and more people will study these great volumes of ancient Indian medical texts and initiate as many research projects as possible for the betterment of humanity as a whole.

### Alma Ata Declaration

Ever since all the nations of the world solemnly pledged to provide Health for All by the year 2000 A. D. at the Alma Ata Conference in the year 1978, the urgency and importance of conducting research into various traditional medicines including *Ayurveda* has become very great. Because, for all the developing countries it would be utterly impossible to achieve the above goal unless they take the help of various traditional medicines, specially for serving the people of rural areas where 80% of their people live. Thus Dr. Halfdan Mahler, the Director General of W.H.O., stated: "My early and formative years in W. H. O. were spent in South-East Asia

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region where I became aware of Indigenous Systems of Medicine like *Ayurveda*, *Siddha*, and *Unani*. For many centuries such systems have rendered valuable service to the population in your region specially in the rural areas. I, therefore, believe that in order to obtain Health for All by 2000 A.D., we should mobilise the resources offered by Traditional Systems and make the greatest possible use of all that over the centuries has proved most effective in those systems."

In view of the above, we must try that all possible steps are taken to conduct research into all aspects of *Ayurveda* as soon as possible so that the developing nations can take the fullest advantage of this great Indian Science, *Ayurveda*, for introducing effective health care to their people.

According to W.H.O. definition : "Health is not only the absence of the diseases, but the physical, mental and social well-being." In *Ayurveda*, *Sushruta* had defined health more elaborately :

*Samadoṣaḥ Samāgnis̥a Samadhātu Malakriyaḥ.  
Prasānnātmdriyamanāḥ Swastha ityabhidhīyate.*  
Su. Su. 16:44

"He is a healthy person who has balanced humors, balanced hormones, optimal metabolic activity of all the tissues of the body, pleasant functioning of sense organs, mind and consciousness".

From this, one can say that Ayurvedic definition of good health is much more elaborative with much wider meaning than that of W. H. O. In fact, one should conduct extensive research into the subject of health as defined by *Sushruta*. We had some opportunities of conducting some research

into this topic and hence the same can be quoted as an example so that the research into this ancient science can be conducted to enrich the knowledge of modern medical science.

#### (a) **Balanced Humors**

*Ayurveda* lays a great stress on the importance of humors which are nothing but neuro-humors of modern medicine. After conducting studies on the subject, we have come to the conclusion that *Vata* indicates acetylcholine activity, *Pitta* means catacholamine activity and *Kapha* shows histamine activity. These neurohumours play a vital role, both during health and disease. *Ayurveda* describes three types of psychosomatic constitution, *Vata*, *Pitta* and *Kapha Prakriti*. Our studies on nearly 600 healthy people fully support our hypotheses that in these three body constitutions the respective neurohumours are found increased in each individual in comparison to the remaining two. Similarly Histamine is more dominant in the young; Catacholamine in middle-aged persons and Acetylcholine at the old age. From all these and other similar findings, we are convinced of our hypotheses. Because of, this we have extensively used for studying the pathogenesis of various diseases also.

#### (b) **Balanced Hormones**

Good functioning of all the endocrine organs is also very important for maintaining a good health. Hormones are mainly secreted by the various endocrine organs although there are many hormones which are directly secreted by various organs into the blood such as "gut hormones". Optimal hormonal activity, which ultimately leads to optimal enzymatic activity in various organs and tissues, is also the indication of good health.

### (c) Optimal Metabolic Activity

As a result of the optimal neuro-humoral or hormonal activity, the functioning of all the organs and tissues also remains excellent. This is because there is a good anabolic and catabolic activity of all the cells of the body, tissues and organs leading to sufficient excretion of all the waste products through various excretory organs of the body. Thus when the neural, endocrinal or metabolic functions of the body remain good, one is bound to enjoy a good bodily health. However, *Ayurveda* does not end by describing only the good of bodily health, but also it covers the psychic and spiritual health.

### (d) Pleasant Functioning of Sense Organs, Mind and Consciousness

This is the most vital compartment of good health. One must have good and efficient sensory organs so that he can be alert, efficient and responsive. Similarly he must also possess a good mental health in order to face all the situations boldly and efficiently. In addition, he should also have a good power of consciousness which indicates optimal spiritual health to deal with the welfare of the humanity as a whole. There is no better description of good health than what *Sushruta* had given about 2,500 years ago. However, it needs extensive research to explain how to promote good health throughout one's life. *Ayurveda* has described many measures called *Rasayanas* (tonics), the use of which would ensure a perpetual good health and delay the ageing process. Similarly for maintaining a good mental and spiritual health, the ancient authors described various *Yogic* measures in great detail, the practice of which would keep the mind and consciousness to highly alert, sensitive and creative level. Amongst the texts *Patanjali's Yogasutra* and

*Bhagavadgita* are the most important ones and if one uses the techniques described by these authors, one can achieve the maximal results. Extensive research into this field also would yield many useful results for the betterment of humanity. Our own experiences of conducting research into the field of different types of *Yogic* practices in healthy individuals, have brought rich dividends. We can now explain scientifically how the beneficial results of *Yoga* produce gradual changes in human beings stage by stage. If modern scientists and medical men initiate and conduct such studies in people living in various parts of the world, it would go a long way to achieve the goal of Health for All by the year 2000 A. D. in a real sense. Otherwise, I am afraid, it may remain a slogan only, specially for the people living in the rural areas of the developing countries.

### Study of Disease Pattern

Research can also be conducted in understanding the pathogenesis and pathology of diseases, their clinical features and diagnosis and also their management by using Ayurvedic methods.

In the pathogenesis of diseases, Ayurvedic concepts surpass all other concepts of different medical sciences. Here the ancient physician, *Charaka* described four stages depending upon the states of neurohumours in the body in each stage; whereas *Sushruta* with a surgical background described six stages of pathogenesis which included systemic and local manifestations of neurohumours. We had several occasions to study the neurohumours in certain stress diseases such as anxiety neurosis and thyrotoxicosis. We could clearly observe these changes of neurohumours in the initial or prodromal stages of these diseases. Thus, if one follows the Ayurvedic concepts, one can suspect

and treat the diseases in much earlier stages, before the full manifestation of these diseases appear in a given patient. Thus, if one can treat the diseases before their full manifestation, it naturally leads to easier, faster and complete recovery from these diseases. Thus the extensive study of neurohumoral manifestations in various disease-patterns will go a long way to make an easier and quicker diagnosis and rapid management of all the patients.

Similarily there is a need for research into easier diagnostic methods, such as through radial pulse examination and other similar procedures. It is known that some of the ancient Ayurvedic physicians used to diagnose the diseases through pulse examination. If one could establish this method for diagnosis scientifically, it would be a great boon for the patients living in the remote rural areas of the developing countries. It looks that the main basis of pulse examination is the neurohumoral changes that take place in a patient leading to changes that occur in the radial pulse. Based on this observation the patients are treated against the disturbed neurohumors, both systemically and locally. However, this needs extensive clinical research.

### **Research into Ayurvedic Therapy**

From the point of patients, this is the main area of research. Here a large number of recipes have been discovered, originated from vegetable, animal and mineral sources. Amongst them the medicinal plants are the most popular ones. Extensive research had already been carried out on a number of medicinal plants by using all the modern parameters. However, leaving a few exceptions, the results have not been commensurate with the efforts so far made in this field. In the past, scientists started their investigation by using botanical, clinical, pharmacognostical and pharmacological

research methods before they studied them clinically. Since this was a long process, not much progress could be made nor many fruitful results could be demonstrated. However, in recent years, scientists started studying this problem through clinical cases, by using all the clinical, pharmacology methods with encouraging results. Already some useful herbal medicines have been standardized against some of the commonly seen stress diseases such as Diabetes mellitus, Bronchial asthma, Ischaemic heart diseases, Peptic ulcers, Viral hepatitis, Jaundice, Ulcerative colitis, Anxiety neurosis, Arthritis, etc. However, all these methods of management need further clinical and experimental investigation before they can be laid down as standard methods of management for universal use in the whole world. However, it is gratifying that certain basic studies have been conducted in this very important field of clinical medicine with encouraging results.

### **Primary Health Care**

Now, from the point of primary health care, there is an urgent necessity of conducting research as to which of the ancient methods can be utilised for this purpose. Apart from the use of herbal preparations for the treatment of common ailments, there is a need for studying the efficacy of other regimens for improving maternity and child welfare, as also the body resistance against diseases and similar other measures. These measures will have to be cheap, readily available and should not cause any harmful effects. Thus in this field, *Ayurveda* can provide a revolutionary answer to meet urgent requirements of primary health care and, I am sure, scientists will rise up to the occasion to meet the challenges of this task.

At the end, one can say that research into the different aspects of *Ayurveda* and other

related fields such as *Yoga* and *Meditation*, is a most fruitful area of study for the scientists and modern medical men. The importance and urgency of research into this area is increased greatly in view of the recent Alma Ata Declaration of "Health For All by 2000 A.D." Hence all those persons who are interested in serving humanity, should join their hands and take urgent measures to tackle all the health problems of the world as expeditiously as possible. Then only, we will be able to achieve the goal stated above.

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# Important Announcement

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The issue will contain contributions from experts and eminent medical persons on the subject which they will present under various topics and each contributor will focuss a particular topic with the Medio-therapeutic advances in Yoga Therapy and Education.

You will perhaps be happy to know that special issue shall be edited by our Consultant Editor Dr. R. H. Singh, Ph. D., Reader in Kayachikitsa, Institute of Medical Sciences and Co-ordinator, University Centre for Yoga, Banaras Hindu University, Varanasi-221005 (India).

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