

## THE PHILOSOPHY OF AYURVEDA

Introduction: The word meaning of Ayurveda being Science of Life. In our Indian culture, the main aim of a human being is to attain Dharma, Arth, Kama & Moksha. These four objects can only be achieved if the person has got complete health. A Sick Person or an unhealthy man can neither follow the Path of Dharma (the duty) nor he can earn money. It is also not possible for him to enjoy life & he cannot conceive of getting Salvation or moksha. Therefore, the Success of life is the attainment of happiness which can only be had through health. From time immemorial the Indian Science of living is giving Priority to health. Health rules had become part and parcel of living. The Prime aim of Ayurveda is to

२४२५२५ अर्जुनः ३११२२५ विकार प्रहान् य ॥

"Preserve the health of the healthy and to eradicate the disease of the diseased".

### 2. Historical aspect:

- (a) History of Ayurveda can be described in different periods, the earliest being Vedic Period. This is the period when the Aryans compiled four Vedas or Sacred books of knowledge during the Period 1500 to 800 B.C. Amongst them, Rig Veda and Atharva Veda have made maximum references to the healing art. They have in these texts mentioned in detail the methods of Preservation of life, Prevention of illness & healing of the sick.
- (b) The next Samhite Period which can be named as the period of classical Ayurvedic texts starts from 6th century B.C. to 1000 A.D. Three great authors compiled their classical

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classical books during this period. They were Charaka, Susrutha & Vagbhata. This Charaka Samhita was written sometime in 5th Century B.C. as Atreya the great Physician and teacher of Charaka taught and practised medicine Taxila University in the 6th Century B.C. Susruta a Surgeon taught & practised Surgery in Varanasi at about 5th century and compiled his great Book Susruta Samhita. This book not only describes various diseases & treatment and also gives vivid description of Surgical Operational techniques & surgical instruments. The classical description of Thimoplasty by Susruta is too well known. Vagbhata in the 7th Century A.D. Summarised very nicely the views of Charaka & Susruta and gave his original thoughts to the management of many different diseases. All these authors described not only the principles of General Medicine and Surgery but also the principles of different specialities. They have described 8 specialities namely --

- (1) <sup>Kaya chikitsa</sup> Internal medicine (G.M) (2) <sup>Bala chikitsa</sup> Paediatrics (3) Diseases of <sup>Shalakyas</sup> Ear, nose & Throat (4) <sup>Bohachikitsa</sup> Psychiatry (5) <sup>Shalya chikitsa</sup> Surgery (6) <sup>Visha chikitsa</sup> Toxicology (7) <sup>Jara chikitsa</sup> Geriatrics (8) Rejuvenation (*Unshya Rasayana*)

It is interesting to note that there was some dispute with regard to the relationship of Ayurvedic Medicine of the classical period with Greek Medicine of Hippocrates Era. In this connection, Medical Historian Major States - After the conquest of Alexander the Great in 4th Century B.C. a contact with India was established and Indian Medicine became the part of Greek Heritage. Greek Physicians became well acquainted with Hindu culture and Medical Science.

Alexander himself had Indian Physicians. In this period, Indian medicine not only flourished in India but also spread to the neighbouring countries. In the west, it influenced the Greek and Arab Medicine. In the East its influence went along with Buddhism to China and to many other South East Asian Countries.

(c) Medieval Period during which Ayurvedic Medicine as a Science did not make much progress save few exceptions, because of the political and economical instability. In addition, during 13th Century A.D. Greeco Arab Medicine named Unani Medicine was introduced in India by Muslim Rulers.

(d) British period where an attempt had been made to revive Ayurvedic system of medicine, a Chopra Committee was formed to introduce Integration of Indian system of Medicine with that of Modern Medicine. Report was considered by Govt. of India. Since it was deeply undermining the vested interests, valuable recommendation made by Chopra Committee was not accepted on the following grounds. " Integration of different systems of medicine on the lines contemplated by Chopra Committee is impracticable as the theories and principles of Modern Medicine are very different from theories and principles enunciated by Ayurveda and Unani. The evolution of an Integrated System will be possible only after the methods of Modern Scientific Research have been applied to the principles and practice of Ayurveda and Unani and it has been ascertained

*14/11/55  
Chopra  
- Calcutta*

what is the proved merit of value in these systems.

- (e) Post Independent period: After extensive studies, the Chopra Committee recommended as follows:-  
Ayurveda is not only the original science of Medicine but also a rich store house of principles and generalisation of medicine which can be of greater value to the modern science in general and medicine in particular. The aim of all systems is the maintenance of health and cure of the disease. Any thing of value emerging from these should be integrated and utilised for the benefit of humanity as a whole without any reservation.

Unani,  
Siddha - an  
the short of  
Ayurveda

Supra  
- all the  
mentioned

#### CONCEPT OF HEALTH ACCORDING TO AYURVEDA.

Everybody is in search of happiness. The basis of happiness is health. Acharya Susruta <sup>is</sup> the famous dictum of health.

समं दीपं समाग्निं उप समवानु मनःक्रियाः ।  
प्रसन्नान्मात्सर्गिद्रूपे मनः स्वच्छं च हृत्पद्मीसीयते । सु ॥

Thus in Ayurveda health is not considered complete unless along with the body, mind, sense organs and even soul are poised for a satisfactory composed state. In other words, a person is said to be healthy, only if the physiological, mental, social, and spiritual well being is maintained in equilibrium.

Three Supporters of Health.

1. Ahara (Controlled diet)
2. Swapna ( Sleep or Complete rest)
3. Brahmacharya (Control of Sexual activities).

If above three are kept in their limits, an individual can attain not only complete health but also long life. Preservation of the physical energy and stability of the body are the two symptoms of physical health which can be had if one follows Dhina- ~~Pran~~charya (Daily Routine) and Rutu charya (Seasonal routine) throughout his life, and should find out as to what diets and living habits are useful and what are detrimental to the health.

- 6 notes  
body changes  
according to  
Season  
- prognosis  
month.

Our body is like a machine just as there is wear and tear of a machine by doing work, the tissues of the body also undergo wear and tear. So, like we protect the machine with oiling similarly the body also needs oiling and rest.

Arthas  
Shrestha - with  
Vasas  
Kamashit - w  
Shrestha - w

Cause of Mental illhealth is nothing but Pragnaparadha means (knowingly committing the mistake). Self Control and Self satisfaction are the two important factors to keep one mentally happy. This can be achieved through the practice of Yoga (Mind calming down technique)

Dina charya

BASIC PRINCIPLES OF AYURVEDA.

In Ayurvedic medicine the creation of living beings mainly consists of the theory of Panchamahabhūthas (Five eternal substances) tridoshas (three humours) and Saptha Dhatus (Seven basic tissues). All living beings are created by the combination of five basic elements and the soul.

The Akaasha (space) Vayu (Air) Agni (Fire) Jala (Water) and Prithivi (earth) are the five basic eternal substances designated as Panchamahabhūthas. It is believed that Panchamahabhūthas are the ultimate physical constituents from which the physical world is derived. These five primary eternal substances get intermixed with each other in a special and specific manner in order to create

discussed  
and concluded

various types of substances which exist in the world. The tridosha theory is nothing but the further biological application of Mahabhutas. In view of the predominating rate of Vayu, <sup>agni</sup> Theja and Jala the Panchamahabhutas can be categorised in three applied groups of the living body constituents namely Vata, Pitta, & Kapha. According to Ayurveda human body is a combination of three primary essential factors Vata, Pitta, & Kapha. These three are responsible for maintaining the integrity of the human body.

Vata: Vayu is invincible and is known by its functions. It is responsible for unification and division of cells. Thus vayu controls or directs the <sup>inter</sup> cellular process and is responsible for movements of intracellular currents.

Pitta: The catalysts or enzymes which break down complex substances into simple ones during catabolism and liberate energy.

Kapha: which is responsible for cohesiveness. It keeps the big molecules together in the intercellular material, tissues, fluids etc. Thus it plays an important role in anabolism.

Charaka says, that tridoshas maintain the integrity of living human organisms in their normal state, they are responsible for proper functioning of the body and when they are vitiated, they are responsible for various types of somatic disorders. In healthy condition, Vata, Pitta, Kapa, are called as Dhatus meaning supporters when they are imbalanced they are known as Doshas literally meaning 'faults'. When abnormally disposed they are in their 'mala' or impure state.

Three  
Pankajinis

Which carries  
Pam

Which carries  
heat (energy)  
(Gatis)

Which keeps  
all systems  
stable  
(Gatis)

Vayu  
(in heart region)  
Pitta  
(chest)  
(blood)

The term Dathu has also a Secondary Meaning. When the phrase 'Sapta Dhatu' is used. In this context, it means the seven elementary tissues of the body namely- Rasa(chyle) Rakta (blood connective tissue) Mamsa (muscular tissue) Medas(adipose), Asthi (bone) Mjja( Marrow) & Shukra.(Semen). The Sapta Dhatus are also known as dusya because they have the tendency to be vitiated by doshas. XXXX

Mala has been defined as polluting agents or impurities and as waste products. Malas comprises of faeces, sweat & urine.

The term agni is used in Ayurveda for various factors which participate and direct the course of digestion and metabolism in a living organism. In common language agni means fire. But in Ayurveda, the term Agni is used in a technical sense. According to Charaka, the strength, health, longevity of life and all the living processes are mainly dependent on Agni. It provides energy, necessary for normal functioning of innumerable vital activities. It converts, food in the form of energy. Therefore all the digestive and metabolic processes come under the action of Agni. If the Agni is in normal state, man can live healthy long life.

- Sucharita ML

AYURVEDIC CONCEPT OF DIABETES / MADHUMEHA

Ayurveda the ancient science of life whose Prime aim being "Preservation of ~~the~~ health of the healthy and to eradicate ~~the~~ disease in the diseased", has dealt in detail regarding the manifestation and treatment of several diseases.

"Madhumeha" is considered to be one among Asta Maha Gadas (eight tremendous diseases) by ancient seers. The history of the disease Madhumeha can be traced back to the time of Vedas, Samhitas and other Ayurvedic literatures.

The term Madhumeha and Prameha are used in the same sense. Prameha are of twenty types. Those due to Kapha are ten; due to pitta six and due to vatha ~~are~~ of four types. All the authors are unanimous on the point that Madhumeha is a variety of Vatnaja Prameha and all the Pramehas eventually and ultimately if left untreated or mismanaged lead to Madhumeha. The term "Prameha" emphasises ~~of~~ two points viz., Pra meaning Abundant, profound and Meha meaning passing of urine. Prameha is defined to be characterised by repeated, excessive, turbid urination. From the above description it is evident that Prameha is a disease characterised by urine disorder but it may not be inferred that all the urine disorders caused by urinary tract pathology are included in Prameha.

CLASSIFICATION OF MADHUMEHA

Madhumeha is classified by the Acnaryas in different ways as under.

- I (1) Janaja (congenital)
- (2) Apnaya Nimitaja (Due to violation of the rules of health and food /acquired)
- II (1) Sindula Pramehi (Obese diabetes)
- (2) Krishna Pramehi (Asthenic type)

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- III (1) Avrutna Vatajanya (Due to obstruction of channels)
- (2) Snudda Vatajanya (Due to Snudda vata)
  
- IV (1) Swatantra (Independent)
- (2) Paratantra (As a result of other urinary disorders)

AETIOLOGICAL FACTORS:

Two etiological factors which are taken into consideration are (A) Intrinsic (B) extrinsic

- (A) Sahaja (Intrinsic, appearing in progeny)
  - (B) Apathya nimittaja (extrinsic which includes food & Habits)
- In general food which are provocative of Kapha, Pitta & Vata like intake of iretely cropped grains, latty and starchy food stults and frequent ingestion. Habits like Day time sleep Secentary, sluggish<sup>ness</sup> and laziness, as also mental strain like continous anxiety, stress, irritability etc.

The pathogenesis of Prameha in general and Madhumeha runs as under.

- (1) Firstly, Kapha dushti (vitiation) is the primary factor in the Production of Prameha vitiated kapha circulates in the body.
- (2) Secondly meda (fat or adipose tissue) may be in excess, unbound and unutilised. The vitiated Kapha and medas combines because both posses similar properties and comes in contact with mamsa dhatu ( muscular tissue) and also kleda (fluids) in the body and inturn vitiate them. If mamsa dhatu is intiated dermatitis and other skin diseases like Prameha Pidaka (carbuncles and boils) are produced. If Kleda is vitiated urine quantity is increased along with frequency. From the above pathogenesis it is seen that Prameha is not the disease of only urinary tract but there is derangement of fat metabolism.

SYMPTOMS AND SIGNS

Sweet taste, excessive thirst and appetite, dryness of the mouth and throat, excessive accumulation of waste matter in the channels there by producing stickiness in the skin and hairs. Lethargy, drowsiness and burning sensation in the limbs, hand and feet. Typical odour to the urine, urine becomes sweet so that ants are attracted to the urine and there is abundant and frequent flow of urine.

COMPLICATIONS: No organ is exempted from undergoing pathological changes in this metabolic disorder. The grave complication being Mada, Murcha and Sanyasa (giddiness, unconsciousness and coma)

PRINCIPLE OF TREATMENT:

It is classified as follows:-

- I. In obese type - treatment must be focussed on proper utilisation of excessive fat that is he should be given.
  - (a) Shodhana (purifactory procedure)
  - (b) Apatarpana (reduction in body weight by way of diet and drugs)
  - (c) Vyayama (Exercises)
- II. In Asthenic type:- Treatment is mainly based on the line of increasing stamina and vitality by use of tonics (Brimhana) diet and drugs etc.

Diet:- Chiefly advised are

1. Cereals : barley, wheat and old rice
2. Pulses : Green gram, Bengal gram
3. Vegetables: bitter gourd, Methi etc.
4. Ajuvants: Mustard oil.

*Sunderthil*

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THE ROLE OF AYURVEDA IN CHILD HEALTH

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According to Hinduism, the treatises that encompass the whole knowledge of universe are Vedas. They are four in number, viz: Rig Veda, Yajur Veda, Sama Veda and Atharva Veda. Among these, since the Athar Veda mainly deals with different facts of health welfare, it is considered to be the predecessor of Ayurveda. The term Ayurveda is conferred to this system because it gives the knowledge of the whole of the Ayu ( the life); to say, in brief, this term heralds each and every facet of life from birth to death, or in other words the creation, sustenance and destruction phenomena are elaborately explained and this was the reason for which affix Veda is added in Ayurveda.

The creation and destruction of the World have of course been deducted in many ways, but living creatures, particularly the human being has its own importance, because the humanbody is a boon of nature the supreme and in itself bears all the characteristics of its originator.

Prakriti and Purusha are claimed to be the root factors behind the creation of the World, but neither the Prakriti nor the Purusha alone can form anything for the existance of either, alone is of no use.

Prakriti, per se, is said to give rise to Mahatatwa, Mahattatwa to Ahankar, Ahankar to Mana, and thereafter five Tanmatras, five Mahabhootas and Gyanendriyas and Karmendriyas are said to evoke. But even after being a conglomeration of all these components the true existance in life comes only when the Jivatma is joined (Soul).

Thus the living body which is just a minute part of almighty God is manifested in different phenomena in this World. The property of perception in the sense organs, the diversion of mind in various activities and the power of introspection in any individuals are

all due to some indistinct impetus. The science which deals with the principles and practices of ways of healthy and happy living is known as Ayurveda. It is believed that the corporeal human body is a medium in materialising the Dharmas ( human-duties) Arth, ( Activities) Kam ( Desire) and therefore it is the duty of every individual to preserve it by best possible means. But at the same time we must keep in mind that the ultimate goal of human life is to achieve Moksha i.e. Salvation upto the Supreme Soul. And for this reason only we are supposed to indulge in everything good, on human grounds from childhood.

The main object of Ayurveda is prevention of health and cured the diseases. In this regard Ayurveda is serving the suffering humanity. Today's child is tomorrow's adult so from the birth, we must very careful about child health care.

FEEDING :- Baby should be fed milk only thrice in first 24 hours. It is to be kept on mother's milk for first few weeks. If mother's milk cannot available that baby needs supplementation of cow's milk is available.

Baby loses a little amount of body weight in first couple of days, but it is not an issue to be bothered for the weight spontaneously increases afterwards.

A healthy baby of 3 kgs. weight needs to be fed four times a day. Mother's disturbed moods, annoyance worries, tension, starvation and lack of love towards baby are the main causes of suppression of milk. Hence the mother is expected to avoid all these causes and conditions. Suppose breast feeding and animal milk is impure then baby will suffer from several diseases.

CHILD CARE: - As the children in the first stage, require nothing but milk of the mother or of the wet-nurse, or its substitute, so long as the quality of milk is sufficient in every respect, the child will continue healthy and playful. But

if the milk is insufficient the child may have any number of diseases, the human constitution is heir to.

In the case of children sustained on milk only, if the child gets diseases the other or the wet-nurse also, should be treated alongwith the child. And if milk substitutes are used for sustaining it, the substituted milk should be properly purified with medicines in addition to the treatment given to the child. A child is likely to get any number of diseases at the time of its teething. These however, pass off when the teeth come out prominently in the mouth. These ailments should therefore, be treated with mild remedies befitting children, by a proper physician.

The breathing mechanism sets in soon after birth. The temperature after birth starts going down. It is therefore, desirable to keep the baby wrapped for at least an hour.

5 GENERAL RULES OF CONDUCT:- "Child is the father of a man" is a proverb which is as true in medicine as in other worldly affairs, health instructions should be observed even from childhood, if youth and adult life is to be healthy.

Childhood is not suitable for such attempts as the constitution responds most easily and improves quickly.

Ayurveda offers suggestions for the faults that remain in the constitution of the foetus, where we are unable to do anything for want of proper and definite knowledge.

The maintenance of health in the care of this child in its baby condition is thus important. Beyond this period, general rules of good behaviour, in point of health apply equally to children as well as to adults.

Age as a whole has been divided into four phases viz. Childhood, early adulthood ( Youth), late adulthood and senility. The term

childhood is used for the age between the birth and sixteen years. This is again subdivided into three phases, which are :-

1. Shishu 0 - 5 years
2. Bala 5 -12 years
3. Kishore 12 -16 years

The child should thus be looked after till it attains youth.

There are three stages of Shishu viz:

1. Sustenance on milk only.
2. Sustenance on milk and ordinary food,
3. Sustenance on ordinary food alone.

5- DAILY DEEDS:

Massage : External application of oil daily, followed by gentle massage with flour paste keeps the baby's skin soft and healthy, it helps as a nutritive agent, hot water bath is to be served after massage. Both these massage and bath are to be conducted in closed chamber as to save the baby from external air. Then the baby should be made dry by towel, the powder is to be sprinkled and loose clothes are to be covered.

Eye : For preservation from various diseases and to maintain the eye sight normal it is necessary to use the Anjanas from the child-hood daily at bed time. There are many Ayurvedic medicines, which are useful in preserving and improving the eyesight.

Exercise : Child has not required any special exercise but his movements walking, running, sports ( indoor and out-doors) are enough, for developing in the physical strength and growth.

Sleep : For human body sleep is very essential for health preservation, according to the age. The sleep will balance the physical and mental strength, so it is basic requirement of our body.

- 1) Baby requires sleep near about 16 to 18 hours.
- 2) Infants sleep about 12 to 16 hours.
- 3) Child requires sleep 10 to 12 hours.
- 4) Age from 12 to 16 sleep require 8 to 10 hours.

COMMON DISEASES IN CHILD : The irregularity diet and deeds create the various diseases. They are few common diseases in children whom we must understand to prevent the baby, as such colds, cough vomiting, gastritis, Typhoid, constipation, or diarrhoea, dysentery or retention of urine stomatitis, feverish abdominal disturbances etc.

Pain:- When a child feels any pain it starts crying, the degree of pain can be easily measured by the degree of crying. The location of pain should be ascertained from the place of his body where he/she frequently touches or cries when touched, after birth starts going down. It is therefore, desirable to keep the baby wrapped for at least an hour.

Eruption of Teeth:- When teeth begin to appear there is a possibility of every type of ailment appearing in the body of the child. These should be temporarily treated, because it passes away when the teeth actually appear.

Memory :- It is having important role in human life but from the child age we have developed the memory.

So we can improve our remembrance in whole of the life. For this purpose we have to maintain daily routines properly and nourish diet required in daily meal, specially milk, butter, curd, butter ghee, fruits, dry fruits, are helpful for the improvement of the memory.

CONCLUSION :- The Brahma, the creator of the human body i.e. Prakruti and Purush.



This is based on the triangular form i.e. Father, Mother, and Child and thus they are inter-connected.

Today's child is tomorrow's mother and father so we have to be very careful from the child-hood to maintain the physical and mental health of the child. Therefore, these Ayurvedic rules of diet and deeds are beneficial to achieve the complete health.

This fitness enables to achieve the Dharma ( duties), Artha ( Functions of organs), Kama ( Desires), Moksha ( Salvation) these are the Chaturvidh Purushartha, they are known as a four human mottos. These mottos are based on the health and happiness of the child.

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OJAS " SPIRIT OF LIFE" i.e. IMMUNITY IN PHYSIOLOGICAL AND  
PATHOLOGICAL ASPECTS AND MANAGEMENT WITH SUDHA BINDU.

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The definition of health is " A state of complete  
physical mental and social well being not merely absence  
of a disease "H.O. says". In ancient years itself in a  
brief way the great Indian scholar of Medicine Acharya  
Nagarjuna says the same thing. "Siddha Rasa Karishvadi  
Niradadraganam Jagat". In present world, because of vari-  
ous adulterations, pollution of water, air etc., various  
Malnutrition causing imbalance, in state of health; &  
psychosomatic, physical and social manifestations <sup>causing</sup> ~~occur~~.  
Some of new diseases <sup>and</sup> in a larger way invading the human  
life, gradually the life span of an individual getting pro-  
blomatic. The reason not merely the external causes, but  
their influence on unexposed, unidentified vital force of  
the body that is OJAS; which is hidden in one's physiological  
and Pathological state of life. The traditional Arthodocs  
as well as comprehensive system of Medicine that is Ayur-  
veda says one's well being depends upon the condition of  
OJAS; The well being mentioned is of swastha.

In recent times it is felt that in no. of wasting  
syndromes are due to defective or deficiency of innuity  
of the body. Any form of degeneration of any tissue ulti-  
mately leads to defective immunity and this defective  
immunity causes various changes in structures and tone of <sup>an</sup> ~~of~~  
tissues. In the other hand the immunity plays a vital role <sup>in</sup>  
keeping one's physiological state sound, and also the pro-  
gnosis of any pathological or clinical state. The study  
of this immunity though much developed still it is  
unconvenced to the scientists.

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Ayurveda proposes this vital force as OJAS in its classics. As per the description the OJAS or human resistive force or immunological factor in Ayurveda it is neither a substance, pigment, material nor a tissue. It is an ultimate of all Dhatus i.e. Rasa, Rakts, <sup>M</sup>amsa, <sup>M</sup>edho Ast, <sup>M</sup>Majja and <sup>M</sup>Sukra. It is a force which maintains the integrity of vital functions of the body.

As we can't visualise the action of a hormone, we can't visualise the ojas also. <sup>h</sup>The pathway of indocrine response we can't visualise. <sup>so</sup>the passage or site of OJAS, <sup>can't be visualised</sup> But we can perceive its influence, action existence in living body both physiological & <sup>P</sup>athological condition and analysis. The standards of vital functions of the body, and by observation of variations of vital functions of the body, variations of basic <sup>M</sup>etabolic rate, variations in tone of <sup>T</sup>issue levels, probably cellular function estimations may indicate us the variations of OJAS and its manifestations indirectly. <sup>It</sup> may, but the above clinical <sup>M</sup>anifestations indicates OJAS vikruti. The levels of <sup>G</sup>lycogen variations, and <sup>O</sup>xygen levels of RBC <sup>P</sup>athological <sup>M</sup>anifestations in cellular level etc., also may indicate variations of <sup>O</sup>JO spirit. As per Dalhana's statement Rakta is OJAS. Because all the essential material of life that is nutrition and oxygen maintained by Rakta at Cellular level and organic levels.

The dynamic force of Rakta ~~which~~ maintains Defensive Mechanism of the body by it's W.B cells. Hence all this functional force of Rakta is OJAS. The ancient scientists of Ayurveda visualise this Hidden force in human body which maintains tone of tissues, life of cells, functional ability of organs as OJAS. It prolongs the span of life. It maintain the life in living body. If it is diminished completely the entire vitality of life will be exhausted.

Though we can't visualise OJAS Ayurveda says that it has got sweet taste and it is cool and viscus in nature; mixed ghee yellow and Red colours. Probably the Ayurvedic Scientists might have felt it in very powerful spiritualistic macroscopic attitudes, *through deep meditations*.

Though the discription of the site, character and quantity of OJAS may not be of confermative in moder parameters. But it may be so ddeep hidden force. Which can be felt only through a most powerful macroscopic attitudes only.

Though infaction, malnutrition acquired immunity defficiency may scope of new growths. Congenital ~~Wasting~~ syndromes Metabolic disorders are indicate severe pathogenesis of the body as per the modern medicine. The ultimate by above causes is gradual decrease in the spirit of life i.e. OJAS. In otherwords maintainence, of this OJO level gives one's physiological activity i.e. life.

What about Modern scientists say? when Robert galls of U.S Cancer Research Institute, Who are the keep figures in the discovery and <sup>i</sup>isolation of the casitive vires the A.I.V say that, till this day thereis lack of cure for aids.

Ayurveda prescribed good receipies to enhance the OJAS in order to prevent and to terminate the diseases. The grant eminent physician charka revealed "Nachā Sariyru sareeraabu Vyadhikshmatva samarthani bhavanti", in his sutra stana. <sup>u</sup>It means all bodies can't bear same immunity that's why some people are prone to get diseases by simple reasons. The modern system of medicine also adopting the same theory.

The breast milk contains large, amounts of lactoferrin, Lysozymes. Immunoglobulins, and <sup>i</sup>ron binding protein.

Therefore due to the lack of iron availability for the metabolism of E.Coli the growth of which is inhibited while the baby is in a breast. Besides this the remaining contents of the breast milk also prevents the growth of E.Coli Ayurveda has lime lighted this as "Stanyam bals Jeevanamam" obviously long years ago.

Among all above said ways, agni has got a very good role to enhance immunity, Agni means the coordinative functional activity of all enzymes, digestive and Alimentary tract. Because if the Agni is in normal condition the OJAS will be increased, otherwise it can't.

The combines oetiological factory, which causes of Dhatu sosha ultimately results ozosodha. The character<sup>ka</sup> is in his sutra stane the factors mentioned for Dhatu sosha indicates that the same ostilological factors either psychosomatic or physical, results, a gradual bad prognosiss which may be the essential force of the body tissues i.e. OJAS gradual decrease. ~~The renal and infattie conditions~~ <sup>As per</sup> mainly ~~as per~~ modern medicine, mallnutrition synddromes, causes this vital force in a weak state otherwise one state of OZO Kheenatva. The Parighbhika, Ksheeralaska later stages of Rajayakshma, Chronic wound's of body. Chronic existence of Krimi complicatory stages of Ageerna i.e. chronic indigession and mall absorbed syndromes are the contributed factors indirect y and gradual variations of OJAS.

Sudha Bindu an Ayurvedic compound preparation consisting o several plant materials, has been reported to possess anti aids activity. As the possible mechanisms of its activity were not evaluated as yet and as SDH enzyme

plays an important role during stress in the conservation and utilisation of energy. The present study was undertaken for estimating the activity of live of W.B cells and functions of tissues. The results indicate a clear role of W.B.C in maintaining body immunity and Sudha Bindu appears to help adaptive processes by further increase in the activity of W.B cells and body immunity system.

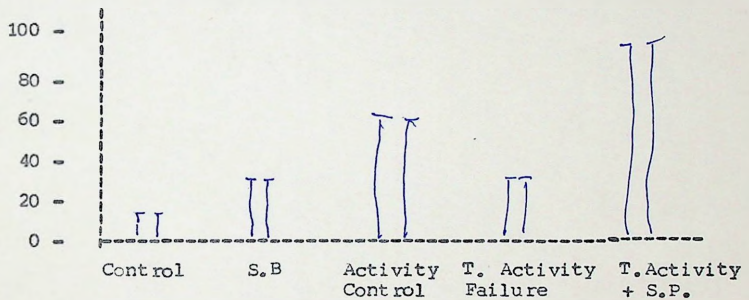


TABLE - I

Changes in levels following 'S.B' Therapy

S.No.	Group	Initial value	1st month	2nd month	3rd month comparison
1.	B.M.R.	+	++	+++	++++
2.	Anxiety Neurosis	+++	-	--	--
3.	Activity of W.B Cells	+	+	+++	++++
4.	Cardice tension	+++	++	++	+
5.	General tone of muscels	+	++	+++	+++

CONCLUSION:

Many indigenous compounds are used in the management of enhancement of immunity of the body earlier in Ayurved field. This specific ingredens of Sudha Bindu an unique Ayurvedic compound and clinical research results indicated that it has got a satisfactory roles as prevent theraphy in maintaining the immunity levelsi.e. Voja Vridhu if administered a three months course.

# ĀYURVIJÑĀNA

ಆಯುರ್ವಿಜ್ಞಾನ



आयुर्विज्ञान

(Founder Editor : Late Vaidya Y. Parthasarayana Pandit)

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## Editorial

The Academy conducted during the last month a seven-day camp of lectures, demonstrations and clinical consultations pertaining to 'health'. The camp was called 'Svasthya-saptaha'.

The expression 'svasthya' is of great interest not only to the Ayurvedic scholars and practitioners, but to the medicare systems all over the world. The Sanskrit word which has come to mean 'health' etymologically signifies 'abiding in oneself'. The healthy person is by definition one who abides (stha) in himself (sva). An unhealthy person, on the contrary, is one who, not being able to abide in himself seeks to depend on other persons like the physician or other things (like the drugs). He is, therefore, unable to rest in peace and becomes anxious

and agitated. The Sanskrit word for the sick person, 'atura' means precisely this condition.

Anxiety and agitation are, of course, not desired normally, and are sought to be eliminated or prevented. Any medicare system is directed towards such elimination and prevention of distress. But the attempt to eliminate a distressing condition when it is actually there is more common than the attempt to avoid the possibility of such a condition arising.

Ayurveda, however, is defined by Charaka as the system which concerns itself with the sick as well as those who are well -

स्वस्थानुरपरायणम् ॥

COMMUNITY HEALTH CELL  
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BANGALORE - 560 001



That is to say, Ayurveda, in its original framework, is more than a medical system; it concerns all aspects of life, and it is both an art and a science of living.

The textual tradition of Ayurveda is based on the most fundamental and ancient of the philosophical viewpoints in India, namely Sankhya. Both Charaka and Susruta include accounts of Sankhya in their celebrated samhitas. The purpose of the viewpoint is to teach the human being how he can free himself from three kinds of distresses, physical and mental (adhyatmika), environmental (adhibhautika) and accidental and unforeseen (adhidaivika), all three of which are a common concern of everyone. Ayurveda has inherited this viewpoint and seeks to address itself to all three of these distressing situations which comprehend life. It is unnatural and ineffective to isolate one kind of distress from the general condition of life. Body, mind, environment and the spiritual envelop are all considered in Ayurveda as constituting one whole.

A person is well or ill only in this general context, which is dynamic and uncertain. The prescriptions of Ayurveda recognize this factor: they are meant to enable the healthy person to maintain his health and enhance it, and to enable the sick person to regain his health and maintain it.

*"A healthy person is one whose doshas are in balance, whose digestion is good, and whose bodily constituents and excretory functions are in proper proportion and whose sensory organs and mind are calm and collected"*

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# ‘ಸ್ವಾಸ್ಥ್ಯಸಪ್ತಾಹ’

—ಡಾ|| ಬಿ. ಜಿ. ಗೋಪೀನಾಥ  
(ಪ್ರೌಢಶರ್, ಜಿ.ಸಿ.ಎಂ. ಬೆಂಗಳೂರು)

ಆಯುರ್ವೇದ ಆಕಾಡಮಿಯು ಬೆಂಗಳೂರಿನಲ್ಲಿ ಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಷತ್ತಿನ ಸಭಾಂಗಣದಲ್ಲಿ 19-11-89ಂದ 25-11-89ರ ವರೆಗೆ “ಸ್ವಾಸ್ಥ್ಯ ಸಪ್ತಾಹ” ವೆಂಬ ಆರೋಗ್ಯ ಚಳುವಳಿಯೊಂದನ್ನು ಧ್ವನಿಯೆತ್ತಿ ಜಯಂತ್ಯುತ್ಸವದ ಅಂಗವಾಗಿ ಅತಿವಿಜೃಂಭಣೆಯಿಂದ ಆಚರಿಸಿತು.

ದಿನಾಂಕ 19-11-89ರಂದು ಸಂಜೆ 4 ಘಂಟೆಗೆ ಆರಂಭವಾದ ಈ ಸಪ್ತಾಹದ ಉದ್ಘಾಟನೆಯನ್ನು ಬೆಂಗಳೂರಿನ ಮಾನಸಿಕ ಸ್ವಾಸ್ಥ್ಯ ಮತ್ತು ನೆರರೋಗ ಸಂಸ್ಥೆಯ (ನಿಮ್ಯಾನ್ಸ್) ಮಾಜಿ ನಿರ್ದೇಶಕರಾದ ಡಾ|| ಆರ್. ಎಂ. ವರ್ಮಾರವರು ನೆರವೇರಿಸಿದರು. ನಗರದ ಸುಪ್ರಸಿದ್ಧ ಹೃದಯರೋಗ ತಜ್ಞರಾದ ಡಾ|| ಎ. ಪರಮೇಶ್ವರರವರು ಈ ಸಮಾರಂಭದಲ್ಲಿ ಮುಖ್ಯ ಅತಿಥಿಗಳಾಗಿದ್ದರು. ಕನ್ನಡ ಸಾಹಿತ್ಯ ಪರಿಷತ್ತಿನ ಗೌ. ಕಾರ್ಯದರ್ಶಿಗಳಾದ ಶ್ರೀಮಾನ್ ಗೊ. ರು. ಚನ್ನಬಸವಪ್ಪನವರು ದಿ|| ಡಾ|| ವೈ ಪಾರ್ಥನಾರಾಯಣ ಪಂಡಿತರವರು ನಡೆಸಿಕೊಂಡು ಬರುತ್ತಿದ್ದ, ಹಾಗೂ ಅವರ ಮರಣಾನಂತರ ಆಯುರ್ವೇದ ಅಕಾಡಮಿಯು ವಹಿಸಿಕೊಂಡ ಆಯುರ್ವಿಜ್ಞಾನ ಮಾಸಪತ್ರಿಕೆಯ, ಹಾಗೂ ಅಕಾಡಮಿಯ ಮೊದಲ ಸಂಚಿಕೆಯನ್ನು ಬಿಡುಗಡೆ ಮಾಡಿದರು. ಈ ಕಾರ್ಯಕ್ರಮದ ಅಧ್ಯಕ್ಷತೆಯನ್ನು ಅಕಾಡಮಿಯ ಅಧ್ಯಕ್ಷರೂ ಆಗಿರುವ ಪ್ರೊ|| ಎಸ್. ಕೆ. ರಾಮಚಂದ್ರ ರಾಯರು ವಹಿಸಿದ್ದರು. ಅಕಾಡಮಿಯ ಗೌ. ಕಾರ್ಯದರ್ಶಿಗಳಾದ ಡಾ|| ಅನಂದಾಚಾರ್ಯರವರು ಎಲ್ಲರನ್ನೂ ಸ್ವಾಗತಿಸಿದರು. ಅಕಾಡಮಿಯ ಕಾರ್ಯಕಾರಿ ಸಮಿತಿಯ ಸದಸ್ಯರಾದ ಡಾ|| ಎ. ಆರ್. ಪದ್ಮನಾಭ ರಾವ್ ರವರು ವಂದನಾರ್ಪಣೆ ಸಲ್ಲಿಸಿದರು. ಅಂದೇ ಸಂಜೆ ಏಳು ಘಂಟೆಗೆ “ಆರೋಗ್ಯ ಮತ್ತು ಯೋಗಾಸನ” ಎಂಬ ಭಾಷಣ ಮತ್ತು ಪ್ರದರ್ಶನವನ್ನು ಮೈಸೂರಿನ ಡಾ|| ಎನ್. ಆರ್. ರಮಾನಂದರವರು ನಡೆಸಿಕೊಟ್ಟರು.

ಸ್ವಾಸ್ಥ್ಯ ಸಪ್ತಾಹದ ಸಂದರ್ಭದಲ್ಲಿ ಸಾರ್ವಜನಿಕರ ಆರೋಗ್ಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ ಒಂದು ಕಾರ್ಯಕ್ರಮ ‘ಆರೋಗ್ಯ ತಪಾಸಣೆ’. ಇದು ಪ್ರತಿದಿನ ಬೆಳಿಗ್ಗೆ ಒಂಬತ್ತು ಘಂಟೆಯಿಂದ ಮಧ್ಯಾಹ್ನ ಒಂದು ಘಂಟೆಯ ವರೆಗೆ ನಡೆಯಿತು. ಈ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಸೇವಾ ಮನೋಭಾವದಿಂದ ಭಾಗವಹಿಸಿದ ಹತ್ತು ಜನ ವಿಶೇಷ ತಜ್ಞರಾದ ವೈದ್ಯರುಗಳಿಂದ ನೂರಾರು ರೋಗಿಗಳು ಉಚಿತ ಆರೋಗ್ಯ ತಪಾಸಣೆ, ಚಿಕಿತ್ಸೆ ಮತ್ತು ಸಲಹೆಗಳನ್ನು ಪಡೆದರು. ಈ ಉಚಿತ ಚಿಕಿತ್ಸಾ ಶಿಬಿರದಲ್ಲಿ ರೋಗಿಗಳಿಗೆ ಡಾ|| ಬರ್, ವೈದ್ಯನಾಥ, ಬಾನ್ ಮಾರ್ಕ್ಸ್, ಜಿ. ಎಸ್. ಫಾರ್ಮ್, ಗುರುರಾಜ ಫಾರ್ಮ್‌ಸಿ, ಮುಂತಾದ ಸುಪ್ರಸಿದ್ಧ ಔಷಧ ಕಂಪೆನಿಗಳು ಸಾಕಷ್ಟು ಪ್ರಮಾಣದಲ್ಲಿ ಔಷಧಗಳನ್ನು ಸರಬರಾಜು ಮಾಡಿರುತ್ತವೆ. ಈ ಶಿಬಿರದಲ್ಲಿ ಚಿಕಿತ್ಸೆ ಪಡೆದ ರೋಗಿಗಳಿಗೆ ಚಿಕಿತ್ಸೆಯನ್ನು ಮುಂದುವರಿಸಲು ಜಯನಗರ ಐದನೇ ವಿಭಾಗದಲ್ಲಿರುವ ಶ್ರೀ ಕೃಷ್ಣ ಸೇವಾಶ್ರಮ ಧಾರ್ಮಿಕ ಆಸ್ಪತ್ರೆಯಲ್ಲಿನ ಆಯುರ್ವೇದ ಅಕಾಡಮಿಯ ವಿಭಾಗದಲ್ಲಿ ವ್ಯವಸ್ಥೆಗೊಳಿಸಿರುವುದು ಒಂದು ವಿಶೇಷ. ಈ ಕಾರ್ಯವ್ಯವಸ್ಥೆಯನ್ನು ಡಾ|| ಗಣೇಶ್ ರವರು ನಿರ್ವಹಿಸಿರುತ್ತಾರೆ.

ಈ ಸಂದರ್ಭದಲ್ಲಿ ಸಾರ್ವಜನಿಕವಾಗಿ ಇನ್ನೊಂದು ವಿಶೇಷ ಚಿಕಿತ್ಸಾ ಸೌಲಭ್ಯವನ್ನೇರ್ಪಡಿಸಲಾಗಿತ್ತು. ಅದು ಮೂಲವ್ಯಾಧಿ ಮತ್ತು ಭಗಂದರ (ಫಿಸ್ಟುಲ) ರೋಗಿಗಳಿಗೆ ಕ್ಷಾರಕರ್ಮದ ವ್ಯವಸ್ಥೆ. ಆಯುರ್ವೇದದಲ್ಲಿ ಶಸ್ತ್ರ ಚಿಕಿತ್ಸಾ ವಿಭಾಗಕ್ಕೆ ಸೇರಿದ ಈ ಅಪರೂಪದ ಚಿಕಿತ್ಸೆಯನ್ನು ಹುಬ್ಬಳ್ಳಿಯ ಪ್ರಸಿದ್ಧ ವೈದ್ಯರಾದ ಡಾ|| ರಾಯಚೂರ್‌ರವರು ಉಚಿತವಾಗಿ ನೆರವೇರಿಸಿದರು. ಈ ಚಿಕಿತ್ಸೆ ಪಡೆದ ಎಫ್ಫಾ (25) ರೋಗಿಗಳಿಗೂ ಗಾಂಧಿಜಾರ್‌ನಲ್ಲಿರುವ ಶಾಂಕಿಂಗ್ ನರ್ಸಿಂಗ್ ಹೋಂ ಆಧಿಕಾರಿಗಳು ಉಚಿತವಾಗಿ 10 ದಿನಗಳ ಕಾಲ ವಾರ್ಡ್ ವ್ಯವಸ್ಥೆಯನ್ನು ಒದಗಿಸಿದ್ದರು.

ಈ ಕಾರ್ಯಕ್ರಮದ ಉಸ್ತುವಾರಿಯನ್ನು ಡಾ| ಎನ್. ಅನಂತರಾಮನ್ ಮತ್ತು ಡಾ| ವಿ. ಆರ್. ಪದ್ಮನಾಭ ರಾವ್‌ರವರು ವಹಿಸಿದ್ದರು.

ಸಾರ್ವಜನಿಕರಿಗೆ ರೋಗ ಚಿಕಿತ್ಸೆ ನೀಡುವುದರ ಜೊತೆಗೆ, ಆರೋಗ್ಯ ಶಿಕ್ಷಣವೂ ಅವಶ್ಯಕವೆಂಬುದನ್ನು ಪರಿಗಣಿಸಿದ ಅಕಾಡಮಿಯು ಈ ದಿಸೆಯಲ್ಲಿ ಎರಡು ವಿಧವಾಗಿ ಕಾರ್ಯಕ್ರಮವನ್ನು ಹಮ್ಮಿಕೊಂಡಿತ್ತು.

(1) ಶಿಬಿರದಲ್ಲಿ ವಿಶೇಷತಜ್ಞರಿಂದ ವಿವಿಧ ವಿಷಯಗಳಲ್ಲಿ ಉಪನ್ಯಾಸ (2) ಮತ್ತು ಪ್ರೌಢಶಾಲೆಗಳಲ್ಲಿ ತಜ್ಞರಿಂದ ಭಾಷಣ.

(1) ಪ್ರತಿ ದಿನ ಸಂಜೆ ೬ರಿಂದ ೭ ಘಂಟೆಯ ವರೆಗೆ ಆಯುರ್ವೇದ ಪರಿಚಯ, ಸ್ವಾಸ್ಥ್ಯವಿಜ್ಞಾನ, ರೋಗಪ್ರತಿರೋಧ, ಆಹಾರವಿಜ್ಞಾನ, ಪಠ್ಯಾಪಠ್ಯಗಳೇ ಮೊದಲಾದ ವಿಚಾರಗಳಲ್ಲಿ ಆರೋಗ್ಯಕ್ಕೆ ಸಂಬಂಧಿಸಿದ, ಸಾಮಾನ್ಯ ಜನೋಪಯೋಗಿ ಭಾಷಣಗಳನ್ನೇರ್ಪಡಿಸಿತ್ತು. ಈ ಕಾರ್ಯಕ್ರಮಗಳಲ್ಲಿ ಅಧ್ಯಕ್ಷರಾಗಿ, ಮುಖ್ಯ ಅತಿಥಿಗಳಾಗಿ, ಭಾಷಣಕಾರರಾಗಿ,

ಡಾ| ಜಯಪ್ರಕಾಶ್ ನಾರಾಯಣ, ಶ್ರೀಯುತ ಜಿ. ನಾರಾಯಣ, ಡಾ| ಚಿದಾನಂದಮೂರ್ತಿ, ಡಾ| ಕೆ. ಆರ್. ಶ್ರೀಕಂಠಮೂರ್ತಿ, ಶ್ರೀಯುತ ಕೆ. ವಿಷ್ಣು ಮೂರ್ತಿ ಯರ್ಕಡಿಪಾಯ, ಡಾ| ಕೆ. ಆರ್. ಯತಿರಾಜ ಆಯ್ಯಂಗಾರ್, ಡಾ| ಕೆ. ನಿಜಲಿಂಗಪ್ಪ, ವಿದ್ವಾನ್ ಎಚ್. ಡಿ. ಬ್ರಹ್ಮದೇವ ಜೈನ್, ಡಾ| ಬಿ. ಗೋಪೀನಾಥ, ಡಾ| ಟಿ. ಎಸ್. ವನಜಾಕ್ಷಮ್ಮ, ಶ್ರೀಯುತ ವೈ. ಕೆ. ರಾಘವೇಂದ್ರ ರಾವ್, ಡಾ|| ಬಿ. ವಿ. ಹೊಳ್ಳೆ, ಶ್ರೀಯುತ ಸಿದ್ದಲಿಂಗಯ್ಯ, ಡಾ| ಎಲ್. ಎನ್. ಶಾಸ್ತ್ರಿ, ಮುಂತಾದವರು ಸಹ ಕರೆಸಿದರು.

(2) ಪ್ರೌಢಶಾಲಾ ಕಾರ್ಯಕ್ರಮಗಳಿಗಾಗಿ ನಗರದಲ್ಲಿನ ಆಯ್ದ ಆರು ಶಾಲೆಗಳಲ್ಲಿ (ಸರಸ್ವತೀ ವಿದ್ಯಾ ಮಂದಿರ, ವಿಶ್ವೇಶ್ವರಪುರ; ವಿಮನ್ ಪೀಸ್‌ಲೀಗ್ ಬಸವನಗುಡಿ; ಮೀರಾ ವಿದ್ಯಾನಿಕೇತನ, ಹನುಮಂತ ನಗರ; ಅರಬಿಂದೊ ವಿದ್ಯಾಸಂಸ್ಥೆ, ಪಶ್ಚಿಮ ಕಾರ್ಡ್ ರಸ್ತೆ; ವಿದ್ಯಾವರ್ಧಕ ಸಂಘ, ರಾಜಾಜಿನಗರ; ಸರಕಾರೀ ಪ್ರೌಢಶಾಲೆ, ಜೀವನಹಳ್ಳಿ) ಹೆಸರು ನೋಂದಾಯಿಸಿಕೊಂಡ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಮೇಲೆ ಹೇಳಿದ ವಿಷಯ

ಗಳಲ್ಲಿಯೇ ಆಯಾಮ ಶಾಲೆಗಳಲ್ಲಿ ತಜ್ಞರಿಂದ ಭಾಷಣಗಳನ್ನೇರ್ಪಡಿಸಲಾಗಿತ್ತು. ಈ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ ಡಾ| ವಿ. ಆರ್. ಪದ್ಮನಾಭ ರಾವ್, ಡಾ| ಪ್ರಭ್ವಾ ಮೋಹನ್, ಡಾ| ಬಿ. ಎಸ್. ವೆಂಕಟರಾಮ್, ಡಾ| ಗೀತಾ, ಡಾ| ಬಿ. ಜಿ. ಗೋಪೀನಾಥ್, ಡಾ| ಜಿ. ಕೆ. ಮಹಾಲಕ್ಷ್ಮಿ, ಡಾ| ರಂಗೇಶ್ ಪರಮೇಶ್, ಡಾ| ಅಪಲ್ಯಾ, ಡಾ| ಬಿ. ವಿ. ಹೊಳ್ಳೆ, ಡಾ| ರಾಧಿಕಾ ಮುಂತಾದವರು ಸಕ್ರಿಯವಾಗಿ ಭಾಗವಹಿಸಿದ್ದರು. ಈ ಕಾರ್ಯಕ್ರಮದ ಕೊನೆಯಲ್ಲಿ ಒಂದು ಸರಳ ಪ್ರಶೋತ್ತರ ಸ್ಪರ್ಧೆಯನ್ನು ಏರ್ಪಡಿಸಲಾಗಿತ್ತು. ಇದರಲ್ಲಿ ಅತಿ ಹೆಚ್ಚಿನ ಅಂಕ ಗಳಿಸಿದ ಪ್ರತಿ ಶಾಲೆಯ ವಿದ್ಯಾರ್ಥಿಗಳಿಗೆ ಮೂರು ಬಹುಮಾನಗಳನ್ನೂ, ಪ್ರಶಸ್ತಿ ಪತ್ರಗಳನ್ನೂ ನೀಡಲಾಗಿದೆ. ಈ ಕಾರ್ಯಕ್ರಮದ ಉಸ್ತುವಾರಿಯನ್ನು ಡಾ| ಕೆ. ಆರ್. ಶಾರದಾಮಣಿ, ಡಾ| ಎಚ್. ಎಲ್. ಸುಚರಿತಾ, ಡಾ| ವಿಜಯಲಕ್ಷ್ಮಿಯವರು ವಹಿಸಿದ್ದರು. ಈ ಕಾರ್ಯಕ್ರಮವು ಅತ್ಯಂತ ಪ್ರೋತ್ಸಾಹದಾಯಕವಾದುದಾಗಿ ಕಂಡುಬಂದಿದೆ. ಇವಿಷ್ಟು ಸಾರ್ವಜನಿಕ ಕಾರ್ಯಕ್ರಮಗಳು.

**ರಾಜ್ಯಮಟ್ಟದ ಅಂತರ ಆಯುರ್ವೇದ ಕಾಲೇಜುಗಳ ಸ್ಪರ್ಧೆ**

ಆಯುರ್ವೇದ ವೈದ್ಯ ವಿದ್ಯಾರ್ಥಿಗಳ ಸರ್ವತೋಮುಖ ಪ್ರತಿಭೆಯ ಅಭಿವೃದ್ಧಿಗಾಗಿ ಆಯುರ್ವೇದ ವಿಷಯಗಳಿಗೆ ಸಂಬಂಧಿಸಿದ ಪ್ರಬಂಧ ಸ್ಪರ್ಧೆ, ಭಾಷಣ ಸ್ಪರ್ಧೆ, ಕಂಠಪಾಠ ಸ್ಪರ್ಧೆ, ಆಶು ಭಾಷಣ ಸ್ಪರ್ಧೆ, ರಸಪ್ರಶ್ನೆ ಸ್ಪರ್ಧೆ, ಮುಂತಾದ ಸ್ಪರ್ಧೆಗಳಲ್ಲದೆ ವಿಶೇಷವಾಗಿ ಆಯುರ್ವೇದ ವಿಷಯಗಳನ್ನೊಳಗೊಂಡ ನಾಟಕ ನೃತ್ಯ ಮೊದಲಾದ ಸಾಂಸ್ಕೃತಿಕ ಸ್ಪರ್ಧೆಯನ್ನು ಏರ್ಪಡಿಸಲಾಗಿತ್ತು. ಈ ಕಾರ್ಯಕ್ರಮದಲ್ಲಿ;

ತಾರಾನಾಥ ಸರಕಾರೀ ಆಯುರ್ವೇದ ಮಹಾವಿದ್ಯಾಲಯ ಬಳ್ಳಾರಿ; ಮೇಲ್ಮಳಿಗಿ ಆಯುರ್ವೇದ ಮಹಾವಿದ್ಯಾಲಯ, ಗದಗ; ಆಯುರ್ವೇದ ಮಹಾವಿದ್ಯಾಲಯ, ಬಿಜಾಪುರ; ಸರಕಾರೀ ಆಯುರ್ವೇದ ಮಹಾವಿದ್ಯಾಲಯ, ಬೆಂಗಳೂರು; ಸರಕಾರೀ ಆಯುರ್ವೇದ ಮಹಾವಿದ್ಯಾಲಯ, ಮೈಸೂರು ಮತ್ತು ಎ. ಎಲ್. ಎಂ. ಆಯುರ್ವೇದ ಮಹಾವಿದ್ಯಾಲಯ, ಕೊಪ್ಪ, ಈ ಕಾಲೇಜುಗಳು ಮುಖ್ಯವಾದವುಗಳು. ಸುಮಾರು

ನೂರಕ್ಕೂ ಹೆಚ್ಚು ಮಂದಿ ವಿದ್ಯಾರ್ಥಿಗಳು ವಿವಿಧ ಸ್ಪರ್ಧೆಗಳಲ್ಲಿ ಭಾಗವಹಿಸಿದ್ದರು.

ಧನ್ವಂತರಿ ಜಯಂತಿಯ ನಿಮಿತ್ತ ದಿನಾಂಕ 25-11-89ರಂದು ಬೆಳಿಗ್ಗೆ ಶಂಕರಪುರದ ಶ್ರೀ ಶೃಂಗೇರಿ ಶಂಕರಮಠದಲ್ಲಿ ಧನ್ವಂತರಿ ವ್ರತ ಮತ್ತು ಹೋಮವನ್ನು ವಿದ್ವಾನ್ ಪದ್ಮನಾಭ ಐತಾಳರ ನೇತೃತ್ವದಲ್ಲಿ ಏರ್ಪಡಿಸಲಾಗಿತ್ತು. ಅಮೃತಬಳ್ಳಿಯ ಸಮಿತ್, ಅಪಾ ಮಾರ್ಗ ಸಮಿತ್, ತುಷ್ಠ ಮತ್ತು ಹಾಲಿನಲ್ಲಿ ಅದ್ದಿದ ದೂರ್ವಾ, ಮತ್ತು ಕೇವಲ ಅಜ್ಜ ದ್ರವ್ಯಗಳಿಂದ ಸಹ ಸ್ನಾಹುತಿಗಳಲ್ಲಿ ನಡೆದ ಧನ್ವಂತರಿ ಹೋಮವು ಶ್ರದ್ಧಾ ಭಕ್ತಿಯನ್ನು ಉತ್ತೇಜಿಸಿತ್ತು. ಈ ಸಂದರ್ಭದಲ್ಲಿ ಅನೇಕ ವೈದ್ಯರು, ವೈದ್ಯ ವಿದ್ಯಾರ್ಥಿಗಳು ಮತ್ತು ಗಣ್ಯರೂ ಉಪಸ್ಥಿತರಾಗಿದ್ದರು.

ದಿನಾಂಕ 25-11-89ರಂದು ಸಂಜೆ ನಡೆದ ಸಮಾರೋಪ ಸಮಾರಂಭದ ಅಧ್ಯಕ್ಷತೆಯನ್ನು ಭಾರತೀಯ ವೈದ್ಯಪದ್ಧತಿಯ ಡೆಪ್ಯುಟಿ ಡೈರೆಕ್ಟರಾದ ಎಸ್. ಎಂ. ಅಂಗಡಿಯವರು ವಹಿಸಿದ್ದರು. ಡಾ. ಪಿ. ಆರ್. ಸೀತಾರಾಮ್ (ಸೀತಾರಾಘವ ವೈದ್ಯ ಶಾಲಾ, ವೈಷ್ಣೂರು) ರವರು ಮುಖ್ಯ ಅತಿಥಿಗಳಾಗಿದ್ದರು. ಇದೇ ಸಂದರ್ಭದಲ್ಲಿ ವೈದ್ಯನಾಥ ಆಯುರ್ವೇದ ಭವನ ದಪರೋಡನೆ ಮೂವರು ವೈದ್ಯವೈದ್ಯರಾದ ಡಾ. ಗುಂಡಪ್ಪ, ಡಾ. ವೆಂಕಟ ರಂಗಾಚಾರ್ ಮತ್ತು ಡಾ. ಕೆ. ಆರ್. ಯತಿರಾಜ ಆಯ್ಯಂಗಾರ್ ರವರನ್ನು ಸನ್ಮಾನಿಸಲಾಯಿತು.



ನಮಾಮಿ ಧನ್ವಂತರಿಮಾದಿದೇವಂ

ಸುರಾಸುರೈರ್ವಂದಿತ ಸಾದಪದ್ಮಂ |

ಲೋಕೇ ಜರಾರುಗ್ಭಯ ನ್ನುತ್ಯುನಾಶಂ

ದಾತಾರಮಿಶಂ ವಿವಿಧೌಷಧೀನಾಂ ||

ಧನ್ವಂತರಿಯು ಆಯುರ್ವೇದದ ಮೂಲಪುರುಷ; ಅವನ ನೆರವು ದೇವತೆಗಳಿಗೂ ಅಸುರರಿಗೂ ಅಗತ್ಯವಾಗಿದ್ದು ಅವರಲ್ಲಿ ಅವನನ್ನು ಮೊರೆಹೊಕ್ಕರು. ಜಗತ್ತಿನಲ್ಲಿ ಮುಪ್ಪು, ರೋಗ, ಭಯ, ಅಕಾಲಮರಣ ಇವೆಲ್ಲವನ್ನೂ ನೀಗಿಸುವವನು ಅವನು. ಅನೇಕ ವಿಧವಾದ ಮದ್ದುಗಳನ್ನು ನೀಡಲಿಲ್ಲ ಸಮರ್ಥ ವೈದ್ಯ ಅವನು.

# THE VOICE OF ATREYA

(Gleanings from Charaka-Samhita)

(The Charaka samhita which is one of the earliest medical treatises was compiled perhaps in the 5th or 6th century B.C. It is in the form of a dialogue between the teacher Atreya and his disciples.)

## CODE OF CONDUCT FOR A PHYSICIAN

A physician should speak the truth, accustom himself to vegetarian food and food which enhances intelligence, should have compassion for all living beings, should try with all means at his disposal to make sick people regain their health, should be modest in speech and appearance, should only utter words which are sympathetic, noble, modest, well-intentioned and virtuous, should always be mindful of the time and place, should be courageous, observant and always try to contribute to the arousal of wisdom.

While entering the house of a patient, the physician should be conducted by a known person, should be well-attired, modest, keenly observant but not inquisitive, and should confine his attention only to the sick person. The affairs of the family should not be disclosed to others.

The physician should not carry any weapons, should not cause trouble to the sick person even for his own livelihood, should not commit adultery or cast envious eyes on other people's property, should not associate with criminals; should not administer medicines to people who are excessively greedy, perverted, wicked, misanthropic, and unrepentant, to a person who is moribund, and to persons who have no one responsible to care for them, should not administer medicine or accept payment from women who are unattended by their husbands or guardians, should not divulge bad prognosis either to the patient or his family if it will distress them, and should not flaunt his learning.

# SVASTHYA SAPTAHA

The specific use of words in our language is particularly significant, as important dimensions get lost when translated.

I am convinced that this event is the beginning of a process of wide ranging implications which will go far beyond the field of health.

Let us look at it more closely.

1) This brings to public awareness the reality of great insights, treasures implicate in our culture.

2) Health in the western language has its root in healing; (W) hole. Although holistic, the use of this word is restricted. It smacks of absence of disease and does not indicate its positive aspects. The emphasis seems to be on the physical aspect. The 'whole' model started with the physical, though it is opening out now.

3) The concept of Svasthya is interesting.

Svastha is 'to stay in oneself', i.e., to be authentic. Our concept brings about a harmony between the internal and external, facilitating a transcendence. This is a forward movement.

A cell when it receives an input from the environment gets excited and then tries to return to itself.

In the West, physics taught the concept of inertia, while physiology taught the concept of Homeostasis.

In the East, our svasthya is not a return to the earlier state, but an integration at a higher state, a series of higher levels of integration incorporating all the dimensions of existence, not merely the physical and the physiological, but the whole of the multi-dimensional man, the

physical, the mental, the social and the spiritual. Here, the higher centres of identity express or present higher levels of harmony and authenticity, towards which we are moving.

Here emerges a hierarchy and harmony which permit no distortion or disorder. This was the vision the ayurvedic seers had, as their roots were in the Vedas.

Having the deepest knowledge of every aspect of the human phenomena, they have developed a methodology, tools and techniques for the fullest flowering of human potential.

This is the movement towards Svasthya; in

*Notes from the inaugural talk by*

**DR. R. M. YARMA**

*Emeritus Prof. of Neuro-Surgery, NIMHANS, Bangalore.*

short, this is actualisation of the human potential. Sky is the limit of this aspiration, sky having no limit.

Today, there is hardly any public awareness about this ideology. In the urban areas, the changed language of international technology has dimmed the inner light of holism. The rural areas witness a sad scene of a diluted, half-hearted ineffective technological spread with a rapidly disappearing indigenous wisdom.

In the horizon, however, there is the proverbial silver lining in the cloud. The latest revolution in the physical and medical sciences is opening out into a holistic approach, and they are seeking the roots of holism in our country. It is in this context that I applaud this event of today.

# SVASTHYA-SAPTAHA

*Notes from the key-note address delivered by*

**DR. V. PARAMESIVARA**

MBBS, FRCP (Lond), FACC, FAPI, FISE, FAID, FLMSA, FICA, FICN

Consulting physician and cardiologist

Since time immemorial the place of a physician in society was by and large one of friend, philosopher and guide. With the extension of society, emergence of competition and explosion of knowledge, times have changed. In recent years, public opinion has changed, radically, as members of the medical profession have accepted increasingly complex and demanding roles in society. The modern system of medicine, which is most widely respected among all professions and which has never been more competent technically, is in trouble. Its health is not too well. The layman's discovery of falliability of the present day representatives of the noble profession of medicine, has led to the inevitable dilution of influence, suspicion and even mistrust.. Medical care is costly and not equitably available. The practice of clinical medicine is not a precise art with exact answers to fundamental questions. There are those who expect sophisticated modern technology to provide precisely correct computerised solutions to all problems that confront the physician. Finally the aims and goals of medical practice often remain unclear; for example, even the basic distinction between health and disease, and for that matter, even the distinction between life and death. The average doctor sees many more patients than he should, but many fewer than he would like to see. A modern doctor is overtrained for the job he is doing, yet undertrained for the job he is expected to do. Physician's powers and expectations from him have grown enormously owing to explosion of knowledge and mode of diagnosis and treatment. His responsibility has

grown enormously. All kinds of problems now roll to the physician's door. It is ironic but not accidental, that great technical powers of medicine is under confusion about its standards and goals.

When its powers were fewer, its purpose was clear. In fact, medicine was considered the very model of an art in the past. Today, even though fully armed and eager to serve, its targets are not clear. Health is not the only possible and reasonable goal of medicine. There are other goals as well, where the place of a physician is to serve the desires of the consumer - a task of an agent rather than a doctor. This means, transforming a physician into a mere public servant, a technician or a helper for hire.

Without clearly defined views, medicine may prove to be only a set of means and the doctor reduced to a technician or engineer selling his service on demand. Endless profession is an ended profession. There will be an end to medicine unless there remains an end for medicine. Let us nurture the hope that physicians of the future will maintain their position, not just as students of science but as disciples of learning and wisdom. Physicians of tomorrow must be better equipped than their predecessors to meet the complex needs of society. A doctor should not be a tyrant but neither he be a servant. Public misperception of medicine is more dangerous than the doctor's misperception of himself. the doctor should remain as a leader and the community also

respects the fact that medicine is an art and the doctor is a dossier.

We need advice on better indices of healthiness than mortality and morbidity statistics. Thus the importance of epidemiological reasons for health, about what promotes and what determines health. I have the highest respect for nobel prize winners, for discovery of chemical wonders of enzyme structure, etc, but surely, he who suggested adding chlorine to drinking water or invented indoor plumbing system and closed drainage, has contributed far more to the health of mankind. One view is that further preventive efforts may be more cost effective than further investment in curative medicine. What is important to note is

that major improvements in mortality in U.K and U.S.A. occured before the massive investment of last few decades and before the advent of high technology in medicine. And also, the countries that spend the most on health services do not necessarily have the best health. Technological revolution has become a controversial issue. Now it is a technological problem.

It is a matter of regret that the Ayurvedic physicians of today are diffident and suffer from an inferiority complex, when on the contrary, we should proud of our culture and heritage, and I am convinced that if medicine were to retain its holistic approach, it would be through the philosophy of Indian system of medicine- Ayurveda.

## TREES :HOW TO KNOW THEM

By H.W.STARTE

(Deputy Conservator of Forests in India)

In order to learn how to distinguish trees the following are some of the points to be noticed;-Whether the tree grows to a large size or not.

(i) The colour of the bark, and whether it is thick or thin, and rough or smooth.

(ii) The shape and size of the leaf. (It may be remembered that the leaves of young saplings are often larger than on the mature tree); whether the surface is rough or smooth, and whether the colour of both surfaces is alike. As regards shape, notice whether the leaf is simple or compound, stalked or other wise, sharp or blunt pointed, and whether the edge is smooth or toothed. You are strongly recommended to make carbon imprints of the leaves of trees about to be described in the manner recently explained in these columns (Major Packenham Walsh).

The colour, shape and size of the flower, and fruit. In order to distinguish different kinds of timber the followig are some of the points to be noted:- Whether the wood shows a distinct heart-wood, its colour, weight and hardness, whether concentric annual rings are plainly visible or not, whether the woodpores are easily distinguishble, and whether the medullary rays or silver grain are visible as narrow bands running out from the centre.

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# MEDICINE AND ALLIED SCIENCES IN SIVA-TATTVA-RATNAKARA

Dr K.R. SRIKANTA MURTHY

It is common knowledge that good amount of information on medicine and many other sciences is available in the non-medical literature of our country and this has not been given the attention it deserves. Here is an attempt, to acquaint the interested, with references to medicine and allied sciences in the great work, Sivatattvaratnakara.

Sivatattvaratnakara is an encyclopaedia of ancient Indian learning. Its author, Basavappa Nayaka (Basavabhupala or Basavaraja) was a famous king of a feudal state of Keladi (also known as Ikkeri or Bidanur) which comprised of the coastal areas of Karnataka in the east. He ruled from 1694 to 1714 A.D. and brought prosperity to the kingdom. He belonged to the Virasaiva sect and revived ancient Hindu tradition. He was a great scholar and a patron of learning. He is the author of two more works also viz., Subhashita Suradruma in Sanskrit and Suktisudhakara in Kannada language. But his magnum opus is undoubtedly the Sivatattvaratnakara.<sup>1</sup> The treatise was intended to educate his son, prince Somasekhara Nayaka, in all branches of ancient Indian knowledge.

The treatise consists of nine kallolas (tide = sections), each one having many tarangas (waves = chapters) which are one hundred and eight in total, with an impressive number of thirty thousand verses of different meters, in Sanskrit language. As can be expected, it is a compilation from various earlier texts and the author has magnanimously enumerated his sources at the end of every section. Commencing with the Vedas, the sources

extend over the whole gamut of ancient Indian literature-philosophical, religious, literary, scientific, historical, social and others. Important among the sciences dealt with are - cosmology, astronomy, meteorology, geology, agriculture, horticulture, medicine-human, veterinary and horticultural-chemistry, alchemy, metallurgy pyrotechnique, weaponry, defence sciences, toxicology, erotics, astrology, town planning, public health and sanitation, statecraft, finance, trade and commerce, vocations of livelihood, sports and pastime, arts and crafts etc. Philosophical systems and doctrines, religions, worship of gods, traditions, etc., are also dealt with. In addition to ancient knowledge, it also describes contemporary matters such as history of Vijayanagara empire, the kingdoms of Keladi, Mysore and Coorg; the colonisation of Portugese, French and British, life and achievements of Basavaraja, the 12th century saint-minister of King Bijjala of Kalyana and the propagator of Virasaivism, the doctrines, philosophy and rituals of that sect, etc., the chapters on those subjects being interspersed in the text. Thus with a brief description of everything under the sun (including the Sun also) this voluminous treatise stands out as a useful reference manual of indology.

Medicine (Ayurveda) and some sciences allied to it, form the chief subject matter of the fifth, sixth and seventh kallolas (sections).

The following table furnishes the details of topics found there in.

Kallola (Section) 5

Taranga (Chapter) 1

Kalajana (foretelling) and arishtalakshana (signs of oncoming death) - 145 verses

Taranga (Chapter) 3

Swapnaphala (auspicious and inauspicious dreams, their effects and remedies) - 72 verses

Taranga (Chapter) 8

Sakuna (auspicious and inauspicious omens and remedial masures) - 115 verses

Kallola (Section) 6

Taranga (chapter) 10

Upavana Vinoda (horticulture and Botony) - 141 versees

Taranga (Chapter) 11

Tarucikitsa- Vrksayurveda (horticultural medicine) - 97 verses

Taranga (Chapters) 12 & 13

Kamasastra (Sexology) - 139 verses

Taranga (Chapters) 14,15 & 16

Upabhogas- pleasures of gandha (perfumes) malya (garlands) vastra (dress) abhushana (jewels) etc. - 283 verses.

Taranga (Chapter) 17

Ratnasastra (gemmology) tests of precious stones, valuation etc. - 187 verses.

Taranga (Chapter) 18

Vividha ahara (different kinds of food)

Vishapariksha (tests for poisonous foods, drinks, etc.) - 315 verses.

Taranga (Chapter) 19

Bhakshya Nirmana-Preparation of different kinds of eatables, dishes etc. - 315 verses.

Taranga (Chapter) 20

Bhojanavidhi (dietetrics) Tambula, Sayyabhoga (chewing of betel- leaf, comfort sleeping) etc. 194 verses.

Taranga (Chapter) 21

Medicine (Vaidyasastra) Ayurveda and its eight branches, tridoshasiddhanta, Nadipariksha (pulse reading).

Aushadha ganas (materia medica) Aushadhasangrahana (procedure of collecting herbs) - 208 verses.

Taranga (Chapter) 22

Pathya ahara (suitable and healthy foods & drinks) iatrochemistry, Maharasas (Ores and minerals) Lohas (metals) (their purification, oxidation, etc.), eight famous mineral medicinal formulae - 129 verses.

Taranga (Chapter) 23

Alchemy (rasayana) rasa (mercury) its kinds sources, purification, worship etc. Sadharana rasas (salts, alkalies, etc. and their purification, incineration (calcination) etc. - 141 verses.

Taranga (Chapter) 24

Alchemy (contd) rasasamskaras (The 18 mercurial operations) Preparation of elixirs of life - transmutation of metals etc. - 195 verses.

Taranga (Chapter) 25

Alchemy (contd) Rasashala (laboratory) Yantra, musha, puta etc. (apparatus and other appliances) - 87 verses.

Taranga (Chapter) 26

Toxicology (visha-vijnana) kinds of snakes, scorpions etc. - 109 verses.

Taranga (Chapter) 27

Toxicology (vishacikitsa) - (Treatment of snake-bite and poisons of other poisonous animals) vegetable and artificial poison etc. - 142 verses.

Kallola (Section) 7

Tarnaga (Chapter) 7

Paediatrics - Kumarabharana (bringing up of children, child care etc.) - 124 verses.

Taranga (Chapter) 8

Horasastra, Jatakaphala - Horoscope, Astrology etc. - 128 verses.

Taranga (Chapter) 9

Physiognomy (female) - 145 verses.

Taranga (Chapter) 10

Physiognomy (male) - 207 verses.

Taranga (Chapter) 11

Gajasastra-Gajacikitsa (science of elephants, their treatment) - 225 verses.

Taranga (Chapter) 12

Asvasastra-Asvacikitsa (Science of horses, their treatment) - 479 verses.

Taranga (Chapter) 13

Go-Pasucikitsa (science of cow & cattle, their treatment etc.) 479 verses.

Taranga (Chapter) 15

Yogasastra- Hathayoga- asanas etc. - 192 verses.

Apart from these, many other subjects related to personal and community health, sanitation, moral and right conduct, philosophy of life etc., are described in other chapters also.

Some of the authors and treatises enumerated as sources at the end of the sixth and seventh sections are Vatsyayana, Sarngadhara, Nala, Gauri, Dhanvantari, Asvins, Rasaratanakara, Rasahrdya, Hamekhala, Merutantra, Manasollasa, Kautukacintamani, Vagbhata, Amrtanandi, Dasarupaka, Vidyathathiya etc.

This brief survey is enough to convince the medical scientists about the value and importance of this great work. A detail study is sure to furnish more knowledge both the physician and medical historian alike.

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# ON TIBETAN MEDICINE

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**Dr. TENZIN CHOEDAK**

(Senior Physician to His Holiness the Dalai Lama)

(talk delivered at the First International Conference on Holistic Health and Medicine, at Bangalore)

The origin of Tibetan Medicine dates back to some 3,000 years ago and is one of the most precious heritage of Tibetan tradition and culture. In the Tibetan buddhist tradition it believed that the essence of Tibetan Medicine was taught by Lord Buddha himself in the manifestation of Medicinal Buddha. However, there are many historical evidences and support to claim that the system existed well before the Buddha's period. Passed down through the centuries it still enjoys unbroken continuity and popularity.

According to the great 4 tantras, it was clear mentioned that those who want to prevent and cure disease should study this great science of healing. Those who want to attain the virtue or religion, wealth and worldly satisfaction should also study this great science of healing. And those who wants to save people from all forms of sufferings and commands high respect from the people should practise this great science of healing.

The fundamental concept of Tibetan Medicine revolves around the theory of 54 cosmophysical elements and 3 humours. Human life by nature is impermanent and transitory. It is said to be endowed with all kinds of power, suitable for practising anything positive or negative. Human life is the supreme life form. The physical form of a human being is created by the union of healthy sperm and ovum, the consciousness comes from the intermediate state because of a karmic relationship with the parents, and is influenced by the afflictive

emotions. This leads to the formation and development of the foetus which requires the aggregation of the five elements; earth, fire, water, air and space. The healthy qualities of the father's sperm contributes to bone, brain, and vertebral column; the mother's ovum contributes to flesh, blood, vital and vessel organs. The consciousness of five senses develop from the consciousness of the foetus. Of the five elements, the earth element contributes to the formation of the flesh, bone, nose and its sense of smell; the water element contributes to the formation of blood, body fluids; tongue and its sense of taste; and fire element provides body heat, complexion, eyes and its sense of vision; air with respiration, skin and its sense of touch; and space contributes to all body cavities, ears and its sense of hearing. The body is thus formed and developed by the interrelationship and the aggregation of cause and effect.

The root and general cause of all diseases and suffering is ignorance which gives rise to 3 inborn mental poisons - The desire or attachment, hatred or aversion, delusion or obscuration. These in turn give rise to 3 humours (Wind, Bile and Phlegm) which ultimately determines body's health and disease. Therefore it is quite clear that until and unless we are free from the ignorance and 3 inborn mental poisons, we cannot free ourselves from the diseases. The important causative factors which trigger the manifestation of humours into disorders are four, namely improper diets,

improper behaviour, seasonal factors and mental factors.

Our physical body, its illness, and treatment, all basically have the same material basis. All basically made up of five cosmo-physical elements. Earth element provides foundation, water provides moisture, fire provides heat, air provides room for the development. Depending upon the predominance of the elements, six basic tastes, sweet, sour, salty, bitter, hot and astringent tastes are formed. Each taste has its own qualities and potency which are therapeutically very important.

The five elements also gives rise to the 3 humours, as already mentioned above. The maintenance or disturbance of the homeostasis of these 3 humours will determine health or disease states of the person. Wind or pitta, which is named after its function and qualities, governs clarity of consciousness in the heart, brain and sense organs. It also governs breathing, all movement, action, the opening and closing of the organs, all expansion and contraction of the limbs and proper functioning of all bodily constituents in their respective vessels.

Tripa or bile is responsible for all internal and external heat of the body. This governs bodily heat, assists in digestion, absorption, metabolism, physical radiance, courage and intelligence.

Badkan or phlegm helps in the proper maintenance of a stable body and mental state. It induces sleep, lubricates the joints, provides moisture and smoothness to the skin and also provides patience against thirst, hunger and fatigue.

To attain holistic health there must be a state of perfect harmony between the five external and internal elements. For example, with

Diabetes, which is considered to be an increased level of the earth and water element, in the gastro-intestinal and pancreas. This condition occurs when one over indulges in foods having a predominance of earth and water elements like unripe wheat, and beans, green vegetables, yoghurt, cold water, sugar, fats, salt, mutton and pork, strong tea and coffee and also in those who indulge in habits like taking rest after a heavy meal, sleeping during the day and sleeping in a wet and humid place for long periods, immersing oneself in cold water, wearing thin clothing, exposure to cool breeze, these can all raise the sugar content in the body. Therefore one should be very careful about one's daily food and behavioural regimen.

It is very important to study the strength of illness and the prescription of medication after careful scrutiny of variables such as the causes and factors of the illness, time and period of symptoms, manifestation before and after eating, the site of the illness, digestive heat, physical strength and susceptibility. Disease will thus ensue either because of under nutrition, over eating or because of improper or wrong dietary intake and indulgence in unwholesome lifestyle. Undernutrition is the main cause of all kinds of wind disorders, which therefore hinders proper growth and development. On the other hand, over eating also is the main cause of indigestion and this obstructs all the channels of wind energy. Because of the loss of digestive heat, this increases mucus accumulation that can lead to indigestion. One must fill two parts of the stomach with solid food, one part with liquid and one must keep one part for air. Therefore, proper intake of food and indulgence of wholesome lifestyle, maintains the symbiosis of the qualities of elements, thereby bodily strength and life span, governs freshness, improves appetite and brings about a clarity of sense organs and expulsion of excrement.

Before concluding, I would like to focus on one of the most urgent problems facing our society. According to the 4 tantras of the Tibetan Medical Text propounded in the 8th century and which is the basic foundation of Tibetan Medicine, it has been prophesied that in the future, due to great material progress human beings will become very intelligent and highly competitive. Materialism will receive more attention and the feeling of love and compassion will gradually diminish. This leads to disturbance of ecology and excessive use of chemicals which will pollute the environment and thereby affect all forms of vegetation which on consumption by human beings will weaken the useful organisms in our body which provide immunity and there by invite many fatal diseases having many different manifestations. In view of the above

consequences nutrition and human behaviour needs careful attention.

And here are some suggestions regarding social behaviour; never accept all statement as true unless you examine them thoroughly. Remember the past kindnesses of others, take care of your relatives and others with love and affection. Respect one's teachers, parents, family and those senior to you.

Always try to be harmonious in thought and actions with your associates; confess and accept your mistakes and be satisfied with your successes. Subdue your pride if you are learned and be content with your riches. Avoid being envious of your superiors and contemptuous towards subordinates. Never entrust power to evil people or support them. Perseverance will bring success.

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EDITOR

**Prof. S.K. RAMACHANDRA RAO**

assisted by **DR. S.R. SUDARSHAN**

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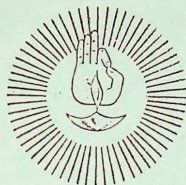
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# NEW WAVE OF TRADITIONAL LINES

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PURANAMITYEVA NA SADHU SARVAM,  
NA CAP! KINCIT NAVAMITYAVADYAM.  
SANTAH PARIKSYANYATARAD BHAJANTE  
MUDHAH PARAPRATYAYA NEYA BUDDHIH.

This verse has a profound message to convey. Regarding the choice between ancient and modern, the sensible stand is advised. It goes thus-“ Nothing can be considered valuable just on the ground that it is ancient, so also anything that is modern cannot be rejected just because it is new. The wise examine the matter first and then make the judgement while the fool is led ~~forwarded~~ by the opinion of others”.

Today when attempts are being made to reconcile ancient and modern knowledge, this small verse is worth remembering. Let the measuring rod be the utility of the knowledge for human welfare and not sentiments

A noble ideal indeed reflecting the deep passion for truth of the poet, from the depths of whose heart this statement came forth.

## THE PERSPECTIVE

The crisis in the field of ayurveda is multifaceted and far reaching. There is confusion and differences of opinion regarding the significance and the role that ayurveda is to play as a part of the health care system of our times.

Sometime in the seventeenth century, as a result of great ferment in thought, a clash took place between the old and the new in the west that marked the beginning of a new culture; modern civilisation as we have come to call it. A whole revision of values and radical changes in world view resulted. Great philosophers and scientists like Descartes, Francis Bacon, Newton, Galileo and so on were behind this transformation. Modern culture is characterised by the exaggerated importance given to man's faculty of intellect, the rational mode of consciousness. Competition, aggressions, the idea of conquering and controlling nature, stress on material prosperity are some of the basic elements of the new value system. Whatever did not fit into the new framework was discarded as useless and superstition. This wave of the new culture spread throughout the world, even to the east, where activities were at a low ebb, conquering and establishing itself everywhere.

To this culture we owe the unprecedented and phenomenal developments made in the field of technological sciences. The radio, television, motor vehicles, the telephone, the aeroplane; spectacular technological innovations in the field of medicine and many more gifts are the unique contributions of the age of reason or the "Scientific era". As is being realised now, slowly though, this development has not been that balanced and

healthy. With the new culture has come the threat of self-destruction, of total annihilation of the phenomenon of life, a horrifying degeneration of morals, that in this background even the mesmerizing achievements in the field of science and technology fade into insignificance.

It is no wonder therefore that in the west has developed a strong urge for self introspection among at least the contemplative. Many scientists and philosophers are looking back, re-examining the origins and the basic assumptions that gave rise to the new culture. There is renewed interest in eastern cultures at the cost of which in one way western culture has prospered. Eastern philosophies and sciences are based on an altogether different background. The value system is different, they are more closely linked with nature. The spiritual potential of man has in fact blossomed to its full here throughout the centuries. Modern science, Especially modern physics now validates the eastern way of thinking. And as many feel, revitalisation of the message that eastern cultures and perhaps also the western traditions of yore propound is necessary to balance things and bring new meaning in life. In other words, much of what was discarded as valueless and superstition at the turn of the seventeenth century is now being approached from a new perspective.

The new framework and its basic assumptions have greatly influenced the development of all positive sciences such as medicine, economics, biology and so on. These disciplines therefore:

reflect the fragmented and reductionistic way of thinking that is characteristic of modern science. Although these enterprises have made very significant contributions in many aspects, they are not able to provide satisfactory solutions to many of mankind's problems today. The problem, as a scientist has remarked is a crisis of perception. This does not mean that all that has been achieved has become invalid, but that they have limitations in many areas.

Digressing from the details of this new trend that is emerging by the end of the twentieth century, let us come back to ayurveda. Based on what may be called the organic or holistic approach in understanding reality, ayurveda has the potential of shifting the health sciences to a new dimension and perspective. Ayurveda is verily the treasure house of valuable insights into the nature of health and disease that man has extracted from nature when he had close links with her in the past. With modern medicine in a blind alley in many matters of health care, ayurveda acquires a new significance and relevance of great importance today.

With the rise of modern civilisation, all eastern cultures began to fade. In India, colonial invasion dealt a severe blow to the cultural and intellectual activities of its people leading to a decline of its science and philosophy. With the introduction of the new value system, people began to view their own culture and philosophies with suspicion and started associating it with things vague, mysterious and superstitious. Those who held on to tradition were branded as people of the past, prejudiced and

unable to accept the new culture on grounds of sentiments. The result is that today when people of the west are vigorously probing into various aspects of Indian cultures and philosophy, (in fact, eastern culture as a whole), in India, such activities have virtually come to a standstill and state of dormancy. There are not many who can expound the basic tenets of our philosophy in its true sense and demonstrate the effectiveness of its sciences. On the other hand, misinterpretations and distorted conceptions are widespread. Researches and investigations done in the framework of western science often backfire and does more harm than good.

Ayurveda is but one of the victims of this development in recent times. Ayurvedic institutions and hospitals reflect without words the degeneration that has set in. Generally, ayurveda today is sought after by only those who fail to get admission to the allopathic medical colleges. In fact, ayurveda is taken as a career more by pressure or chance than by choice. This has naturally stopped development and activities in the field. Many are disillusioned or pessimistic, some are indifferent, while some try to find meaning from their perspective. In spite of all this, it is encouraging to note that there are emerging thinkers; few though they may be, who are perhaps capable of expounding the science in its true sense and who have the will and enthusiasm to go about it.

The new wave of Traditional lines is the materialisation of the hope that lies in those individuals and lives other sources in whom and which Ayurveda still <sup>has</sup> as a matter of experience and

Inspiration, it is a medium of communication, a platform for the exchange of ideas or if we dare say, an attempt to pave the way for creating a common ground where the various rivers of the great ocean of Ayurveda, that is now scattered here and there; in many individuals and folk cultures may once again merge and express its full potential as a system of medicine.

The limitations of modern medicine led to the search for alternative systems and practices of medicine in the west. Thus, the W. H. O. also recognised the role that TSMs (Traditional systems of medicine) can play as a part of the health care system. However not much productive research and concrete result have been achieved so far. The problems that Ayurveda faces in contemporary society are multi dimensional. The Ecological crisis that has led to severe loss of the natural resources of Ayurvedic medicine that include not only plants but also many animal products and many minerals poses a serious threat to the practice of Ayurvedic medicine in the future. Ayurveda is yet to be fully recognised as a valid system of medicine although the awareness of its efficiency is spreading. The role of the Ayurvedic physician in the health care system has not been clearly defined. Frequently one hears about clashes and differences of opinion between the people of different medical systems. Integration of medical systems, though of much importance is not the concern of Ayurvedists alone. Exponents of other medical systems and people outside the field are to involve themselves to expand the concept of integration of medical systems. This is also true of the ecological crisis which should be the concern of the whole of humanity as it threatens the very existence of life on earth. Lack

of support from the Government has led to poor maintenance of Ayurvedic hospitals. Research institutes and Educational institutions which are ill-equipped and poorly managed. But in the midst of all these problems and many more the central and most serious of all is the dearth of capable physicians who have grasped the essence of Ayurveda, a task which has become quite difficult in the prevailing confusion. Decline of the clinical expertise in the field of Ayurveda is the most serious shortcoming today, we feel that the need of the hour is the creation of capable and well trained physicians who have imbibed the true import of the science and can demonstrate its effectiveness with the existing resources. Practical results convince without words. Development and revival of interest will surely follow ~~soon~~<sup>soon</sup>. All other problems are secondary from this standpoint. We do not say that they are to be totally neglected. Moreover, as students the most appropriate direction to choose should naturally be the subject matter itself, especially since there is so much of misunderstanding and confusion regarding the same. Therefore in this magazine we wish to dwell upon and concentrate on those aspects that will help in the true appreciation of Ayurveda and the development of capable physicians.

Research of great magnitude will have to be done in the literature of Ayurveda and deep studies have to be carried out. We appeal to our knowledgeable readers to come forward and participate in this humble venture. The opinions of personalities of vast experience will indeed be valuable.

With these words and after an interval of over a year we present before our readers the first issue of the fourth year of publication of the magazine for critical examination.

EDITORS

The different means of knowledge must not trespass into the domains of another. One cannot disprove by inference the existence of a thing (devoid of fallacies of sense perceptions) that is very evident to the senses

Śruti or śabda denotes recorded knowledge from the extrasensory sphere as experienced by pure individuals. But such statements should not also trespass into the spheres of senses and reason

15. Śrutisca no/tindriarthavisaye vijñānotpattau nimitam.

Śrutis are the means to furnish us with knowledge of spheres of existence beyond our senses.

16. Śrutisca nah pramanam atindriyavijñānotpattau.

Śrutis constitute our source of knowledge about truths beyond our sense-perception and mind.

17. Na hi pratyakṣa virodhe sruteḥ pramaṇyam. Na hi śrutisatamapi sito/gñih aprakāśah iti bruvat parmanyam upaiti

Certainly śruti cannot be an authority as against observed facts. Even if hundreds of texts declare that fire is cold and devoid of light, they cannot become an authority on this point.

This cursory view reveals the level of development that intellectual activities had attained in ancient India. The passion for truth is definitely reflected by these terse aphorisms on the various aspects-implications of SAŚTRA.



## Ayurveda is Co-existent with life.

Instinct is the inner compulsion that the animal organism feels in choice of what is good and beneficial for its survival and protection. In the early man, this grew into the higher faculty of the mind called intuition. The propounders of Ayurveda thus knew that the protective power and device was ingrained in life itself and acquired varied expression in the plant, animal and man according to the exigencies that each of these stages of animation gave rise to. The plant developed its thorns and a thick coat of back to prevent its easy vulnerability.

Animals and birds knew by instinct what particular action or things helped to get over an affliction. And equally naturally did the early man see with his mental eye the measures and things that relieved him of ailments. In caraka, we find it expounded that there never was a time when Ayurveda did not exist, even as it was the case with life. The life stream carried in its current its own supporting and protecting wisdom that became manifest at the beginnings of each cycle or time to the seers. It is only in that sense that Ayurveda can be said to have

a beginning. Otherwise it is as beginning-less as life itself and runs parallel to it through all times (caraka, sutra 30-27) The veda thus naturally contains reference to such instinctive and intuitive origins of medicine.

Osler, the great writer on modern medicine refers to (1) natural phlebotomy which the hippopotamus knows for its thrusts itself against a sharp pointed seed in the river bank when it feels it needs phlebotomy (2) the use of emetics by the dog. (3) the use of enemata by the ibis. Berdoe refers to the use of valerian by cats, antidotal herbs for snake-poison by the mongoose, of plantago major by the toad, or salt by the cow, buffalo, horse and camel. Similarly, licking of the wounds by the animals stopping the bleeding by monkeys and other instinctive performances have been noticed and described by writer on the history of medicine. The Atharvaveda mentions the animals and birds from whom the use of healing herbs and drugs could be learnt.

Varaho veda virudham nakālo veda  
bhesajim. Sarpah gandharva ya vidustah  
asma havase huve (23)

The boar knows the plant, the  
mongoose knows the remedial (herbs)  
what ones the serpents, the Gandharvas  
know, those I call to aid for him.

Yah suparna angirasirdivya yah  
raghato viduh. Vayamsi hamsa yah  
viduhyas'ca sarve patatrinah. Mrgah  
yah vidurosadhistah asma havase  
huve (24)

what herbs of the Angirases the  
eagles know, what heavenly ones the  
Raghatas know, what ones the birds,  
the swans know and what all the  
winged ones, what herbs the wild beasts  
know-those I call to aid for him.

Yavatinamosadhinam gavah  
pras'nantyaghnya yavatinamajavayah.  
Tavatostubhyamosadhih yacchantva-  
bhrtah (25)  
(All from Atharva veda, kan a 2, sutra 7)

Of how many herbs the inviolable  
kine partake or how many the goats and  
sheep let so many herbs, being brought  
extend protection to thee.

The natural desires and inclinations  
of the ailing man are even now indications  
of his needs not to be disregarded by  
the attending physician. Susrutha is  
emphatic on the value of such inclination  
known as PRAKANKSA

(Courtesy :

Introduction to caraka samhita, vol-I  
Gulabkunverba Ayurvedic Society'  
Jamnager -- India).



## An Appreciation of the Concept of Health in Ayurveda.

Disease is a deviation from the normal state of functioning of the living organism. It is a particularity that can be understood only in the background of a generality, i.e., the healthy state of living phenomena. Any system of medicine has as its objective the understanding of various manifestations of pathology - a condition synonymous with pain; and the development of means to counteract the same. Therefore, the most basic and fundamental step in the development of a medical science is the conception of the normal state of functioning of life. In other words, a concept of health is indispensable for the progress of study of disease and formulation of therapeutics.

Here is recorded an attempt to understand and elaborate the concept of health as propounded by the promulgators of Ayurveda.

Dynamicity is an inherent characteristic of the phenomenon of animation. For that matter, reality at the material level of existence is itself a flux, a process of constant change and transformations that maintains states of balance on the whole. Any individual event or state is conditioned/controlled by so many other events and in turn exerts influence on various events. In other words, nothing exists in isolation; the essence of material existence is diffuse interactions between various events and phenomena. In the development of a concept of health in

Ayurveda, this fact has been recognised and extended to the biological plane.

Health is a relative phenomenon subject to variations when viewed from without; yet retaining its balance and therefore is not a quantifiable commodity capable of being expressed within the frame work of units of measures. The terms samadosa, samagni, samadhatu etc are therefore to be understood not as equations of units but as states of equilibrium of various levels. The term 'sama' may therefore be applied to a particular system even when the state is known to contradict well being of an other system, subject either to a totally different environ or even to the same one. A relatively weaker system like the vata prakrti, often spoken of as 'sadathura' being prone to ailments more frequently in relation to other bodily prakrties is still considered to be healthy and the acme of absolute well being attainable to that system confines to the constraints of the prakrtic trait; which the particular case of vata prakrti is relatively lower.

On quantification of dosa, dhatu; mala etc susrutacarya says:-

Valaksanyat sariraram asthayitvat  
tathaiva ca. Dosa dhatu malanam tu  
parimanam na vidyate

A static parametre from without is unable to quantify the physiological entitics of the body as they ere in a state of

constant change and are very much unlike each other to be gauged by the same unit. The only pointer to the state of equilibrium is therefore the state of harmony as experienced by the particular system of disequilibrium is similarly inferred from functional states of the indriyas and the degree variant from well being.

Selection of parametres from within the system itself as the anguli pramana, in attempting to quantify the gross constituents of the body submits to contradict the utility of gauges from without; more so if the object of measurement is a physiological entity as agni, dosa or

health. It is worth noting that the measurement of the limbs, location of anatomical sites of importance, vital points or marmas and the like are also based on inbuilt units of measurements like the anguli/anjali pramana which as imagined tends to differ between individuals.

To sum, the state of well-being or health of a system is a state of equilibrium maintained by it at various levels of its interaction with the environ or even within itself between the physiological entities. Similarly the concept of attainable well being by therapeutics is considered as a variant; subject to the varied aspects of the body, its environ and their mutual interaction.



## The Microscopical dimension of reality- the perspective of Indian Scientists.

It would surprise most of us if it is told that this book in the front of one's eyes is not in reality of the texture, shape, size dimensions that our sense perceptions makes us believe. Yet this proposition is true, and in complete agreement with science. Indeed we see the world as limited by our senses; we are able to grasp only a certain aspect of reality because our sense organs have limitations and fixed ranges of operation. Let us be more clear. Haven't we heard of animals that can see in the dark? Doesn't the elephant sense by sharp olfaction presence of creatures far away? And does not the snake sense small vibrations, sounds that are not with the threshold of our sense of hearing. Well,

scientists say that the structure of the eyes of lower creatures are such that they comprehend different visual Patterns of objects that we humans comprehend in a particular manner. All this proves that there are dimensions of reality beyond the ken of our sense perceptions. If the structure of our sense organs were to change, the whole nature of the experience of the outside world would change. The humming of a bee may sound like the roar of an aeroplane, ultra violet and infrared rays would perhaps become visible and radically change shapes, forms and colours. In fact, it will be an altogether new world.

One such dimension of reality that we are oblivious of in ordinary awareness



is that of the microcosm-or the minute. Since the invention of the microscope, "invisible to the naked eye" has become a popular usage. Yes, thanks to modern science and its techniques Visual perception has been extended to penetrate into the domain of the microscopic. The existence of cells, bacteria and other microscopic forms of life, and so many other facts are supposed to have been unearthed as a consequence of the emergence of the microscope. We speak so much about Indian Sciences and their merits. It would indeed be interesting to delve into the same and understand the perspective of this aspect of reality in the view of Indian Scientists.

We confine the scope of this enquiry to the field of Ayurveda. What do the professors of medicine have to say? PRATYAKSAMALPAM, ANALPAM HYA-PRATYAKSAM goes the basic proposition by Caraka. "Regarding reality, what is perceivable by the senses is only little, while what is beyond the scope of perception is vast". Caraka goes still further by enlisting the various factors due to which visual perception is limited such as extreme remoteness, extreme Proximity, covering and so on of which minuteness is one. This means that the existence of objects although too minute to be perceived by the eye has been recognised. The concept of paramanu level of existence is in the extrasensory realm. It is interesting to note here that Caraka has mentioned about JIVAPARAMANUS (Biological atoms) which are innumerable and minute.)

Here is a startling observation from the Vrskayurveda of Maharsi Parasara.

PATRE RASAKOSTU RASASYA-

SAYAH ADHARASCA KHALU. VRKSA PATRE RASA KOSTVAPARISANKHYEYAH SANTI. TE KALAVESTITASYA PANCABHOUTIKA GUNA SAMANVIT. ASYARASASYA ASAYASCA. EVAM RANJAKA YUKTAH ANAVASCA, KALA TU SUKSMACCHAPATRAKA YA BHUTUSMAPACITA KALALADUPAJAYATE.

In describing the internal structure of a leaf. Parasara says that there are innumerable cells (RASAKOSA) in a leaf. They serve as the store house of the sap (RASASYA ASAYAH ADHARASCA that has got all the elementary properties (PANCABHOUTIKA GUNA SAMANVITASYA). These cells are of microscopic size (ANAVASCA), they contain colorific principles (RANJAKAYUKTAH) and have got cell wall, (KALAVESTITASYA). In describing the cell wall, parasara says that it is a fine transparent membrana (SUKSMACCHAPATPAKA) transformed from protoplasmic substances (KALALADUPAJAYATE) by various energies acting upon it. (BHUTUSMAPACITA) This agrees with the modern concept of a cell membrana which is formed out the constituents of the cell itself.

Really gripping. How did the ancients make such observations in an age when the microscope could not even be dreamt of. Perhaps it is just a shrewd common sensical observation, Whatever it is, this proves that the microscopical aspect of reality had a place in the frame work of Indian Sciences. All that we require to know is what value these ancient scientists gave to observations of this dimension.

Coming to the question of microscopic forms of life, we are in again for surprise. Here goes the text.

VIMSATI H KRMIJATAYAH.....  
SONITANAM ..... SAMSTHA-

NAM ANAN<sup>U</sup>O VRTTASCAPADASCA. SU-  
KSMATVATCAIKE BHAVANTYADRSYAH.

"There are twenty varieties of parasites. of those that are seen in the blood ..... they are microscopic, circular, without feet some are invisible due to extreme minuteness.

The Acarya has clearly stated that there are microscopic forms of life, some in the blood, of which many are invisible due to minuteness. What does all this point to? Indian scientists in no way overlooked the limitation of sense organs. They have made some very accurate observations in the microscopic level too. But they did not feel the necessity to invent a microscope. They were satisfied with the imperfect senses that nature had bestowed upon them. Doesn't this seem paradoxical?

Even another stand point, where is the limit for extending the capability of human sense perceptions. We say that the range of audibility for humans is within the range of 20 to 20,000 decibels. If we try to extend this capability, the world of sound around us takes a new aspect. The limit of visual perception is limited to the VIBGYOR; says science. Try extending it; the world changes.

Thus, if we play with the senses and try to alter our experience of the world, our field of study will take new facets and patterns of varying combinations that it will become too staggering for the human mind to comprehend and make sense of. If we try to view the world as a cockroach does and so on, it becomes a never ending process leading at no where. True, the microscope does not go so far, it only magnifies the world for us. But the approach of Indian science takes a different path. With the limitation of sense organs, it searches for methods and ways in which the essence of the manifestation of reality may be comprehended and understood. So the difference between modern and Indian science lies in the very radical approach taken to understand reality. Indian sciences have very much relied upon man's higher faculty of intuition and in refined states of awareness have gone to super sensory spheres in understanding the mystery of existence.

To conclude, it will be productive if more research is carried to unearth such observations made by Indian scientists and evaluate them so that the basic attitude and framework of science in ancient India may be appreciated.



## A SAMHITA KĀLA

We take you back to those good old days when the rivulets and streams not polluted by the dirt of sophistication so synonymous with the modern world, lapped passively at the feet of scores of rishis and their disciples come for early morning dip, far too earlier for the first cock - a - doodle - doo to be heard. A time when the holy smoke from hundreds of throats seemingly unaffected by the chill of the morning rent the sky merging with the chirping of the birds perched atop the green trees in the proximity of the thatched huts in perfect harmony. An age of dedication, perseverance and selfless service so dear to India and to the brain child of its native intellectuals Ayurveda - the Science of life. An age when the knowledge of health described as the supreme foundation of virtue, wealth, enjoyment and salvation was a living culture. People were aware by themselves as to the needs of their body and soul and the means to derive from nature without in any way destroying ecological balance. Man lived in perfect harmony with nature as part of it and the Science of life lived with him as natural knowledge instilled through various modes of oral communication. Ayurveda then was a living culture.

As the community widened the limited scope of oral import of knowledge was forseen by the venerable Acharyas who lost no time to preserve the knowledge by writing down their experiences & Views supplemented by a very wide range of information from all quarters giving lucid

explanations wherever the need was felt. Later, these "doctors diaries" were to be accepted as the sole tool for promulgation of Ayurveda at large. The samhitas, the life line of an exemplary science are therefore hailed and rightly so.

Samhitas that gave a leash of life to Ayurveda was contemplated upon by its followers who developed upon them creating their own treatises reflecting their views making attempts at clarifications in spheres of contradiction wherever possible. Whatever the scope of these secondary treatises, the attempt to enlighten is laudable.

Somehow the enthusiasm of the enterprising activists got preched as time went on and what followed was a period of "Black age" when no contribution worth the name was made towards Ayurveda. This inertia has stretched itself even to the present time and we remain content to rest on our laurels.

This therefore is the new "Samhita kala". The need of the hour being to supplement the wealth of knowledge already imparted, in the light of investigative exposures to new areas now available; judiciously as need be.

The fact that certain areas in Ayurveda calls for revitalization is indisputable. The debate is on the direction of the approach. With no references even inadvertently made, it is felt safe to come up with a statement that the stress is to be laid (esp. in researches) at delving the mode of

functioning of a particular drug in the indications mentioned and not to check whether the drug can be administered in a particular ailment. As said before, the statements made in our samhitas are but dictations of the personal experiences of the Vaidyas and are therefore infallible and authoritarian by their own merit. Contradiction of authority is incompatible to thirst of knowledge as authority is attributed only to acme of knowledge. The seeker is allowed to be guided by these mandates and is expected to realise the same as he cruises along in his search. This in essence, has to be the philosophy we need adopt in our bid at revitalization. Reception of knowledge from other sciences has been realized and accepted very long ago to require mentioning here.

There are many fields in Ayurveda to tap from like salakya, salya kayachikitsa, Rasayana & Vajikarana to name just a few. Especially in the case of SALAKYA it would be very much in the interest of science as a whole if we could, aided by modern clinical experience, identify and evolve remedial measures to the scores of diseases mentioned in the Texts than to leave imagination conjure their features.

In essence, it is called upon the present generation to contribute by observation and logic wedded to the contemplative ingenuity of the Ancient seers towards revitalization of an all encompassing science as fruitful living denied for long due of our misapprehension of the reasonings given therein.



The acarya speaks -

## On the nobility of medicine

Weapons, learning and water are wholly dependent for their merits or demerits on their holder, hence one should strengthen his intelligence by diligent learning. Science is like a lamp and the expansive intellect like the eye. The physician who avails of these two wisely never fails in treatment.

Verily poison, blazing fire or molten

iron is preferable but never avail of material gains from patients who are destitute. The noblest of physicians who abides among the diseased with the ideal that compassion towards the living is the superior virtue, having realised his cherishments transcends everything.

(ASTANGA SANGRAHA; SUTRASTHANA, CHAPT-TWO)

Today many of the practices of traditional science and technology have undergone considerable distortion and decay and in most areas the traditional practices are being rapidly replaced by western S and T. It has become common among a section of historians and scientists to offer a post factum explanation for this situation to the effect that this decay is a "natural" process by which a science that was not serving the needs of the people and not suited to changing times, was replaced by modern science, which represented an intrinsically "superior rationality". However, what this report clearly establishes is that, even after a long period of neglect due to absence of state patronage and well over a Century after the introduction of western medicine which became the sole recipient of state help, the indigenous systems of medicine were not only serving the need of over 90% of our people, but doing so much

more effectively and economically than western medicine. This is a remarkable comment on their intrinsic strength, vitality and effectiveness. The decline that was setting in was not because they had ceased to be useful or effective, but the result of constraints being imposed on them by a political process that favoured western medicine.

In the testimony of the practitioners, there is a clear statement that Ayurveda is a science with its own distinct world view, which was in consonance with our culture and civilization and ideally suited to the needs and conditions of our people. Ayurveda to them, is not a mere compilation of recipes, but an entire philosophy of approach towards health care.

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# NEW WAVE OF TRADITIONAL LINES

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DISAANAYAA SESHAMPI SVAYAMOOHETA  
BUDDHIMAAN

NA SAASTRAMAATRASARANO  
NACHAANAALOHITAAGAMAH

After describing a number of paradoxical situations, Vaagbhata concludes the discussion with the verse quoted above. He says that there is no fixed law for deciding the good and the bad such as a particular drug/food is good for such and such disease. Due to factors like time, combination, geographical peculiarities etc; pathological situations present themselves in complex combinations and mutations. Science only shows the path through examples and gives a general out line of the principles. The intelligent physician must properly analyse each situation with his intellect that has properly dissected the textual instructions and grasped the essence of the teachings. In fact, Vaagbhata says that the physician must decide the path of action himself and must not merely repeat in a mechanical manner what the text has laid down. The creative ingenuity of the physician has to blossom forth and plays a great role in proper diagnosis and treatment



## Positive Sciences in India

The Vedic age has been a glorious period in the history of mankind, at least in the history of Indian civilisation. The most puzzling question for man has been himself and the meaning of his existence. Even in this age of reason and scientific achievements, man is far from having come up with a satisfactory answer to this mystery. In fact in many ways he is more puzzled and disillusioned. Nobel laureate and biologist Alexis Carrell remarked that the man we know about is only a fraction of reality. There is Man, the unknown, that infinite dimension, for discovering which we have to look inward and probe into the depths of our consciousness.

In this context, the contribution of the Vedic seers has indeed been very fundamental and everlasting. That aspect of man, which we in the modern society are generally unaware of - Man the unknown, has been the greatest discovery of the Vedic sages and they have left it behind as an eternal legacy for the whole of mankind. As Alexis Carrell opines; the science of man must be the base, the synthesising link between all other sciences of inert matter. Only then will we be able to tread on the right path, which the Upanishads describe as sharp as a razor's edge and extremely difficult to keep to. This knowledge of the self, so elusive, yet very much within us has been the eternal discovery of the Vedic age. The Vedas contain descriptions of the experiences of the highly refined souls called Rishis, in non-ordinary states of awareness. All later developments in Indian thought has

been the confirmation and reassurance of the experiences of the Rishis through reasoning backed up by realisation. This has led to emergence of different schools of thought. Although these systems are based on the Vedas, the difference is in the distribution of emphasis in the process of interpretation.

True, the whole globe has seen such mystics. A glance back into the past will show that the West has produced great mystics and spiritual teachers. But this mystical experience has been so beautifully interpreted into a comprehensive science of the true nature of man in India that it has existed here as a living inspiration; in a continuous stream for over thirty centuries. It has been the backbone of Indian culture and the balanced and integrated outlook and way of life that India cherishes as a precious heritage.

In the west, generally more emphasis has been given on pure reason. The study of the external world has always been the dominant theme of Western thought. But the Indian approach has been different. The great sages were bent on discovering the mystery of existence. As Prof. Ranade says, the seers first sought the ultimate reality in the creation of the world, i.e. the physical and objective field of experience. When they were not satisfied in their search in the cosmic field, they tried to enquire from the religious stand point. After being disappointed here also they searched for it in the psychological field. It is here that they found the ultimate principle

of self. In ecstasy they proclaimed the discovery, of what they called the ABHAYA JYOTI. When we intellectually interpret this experience, we can say that this principle is the one behind the many, the changeless behind the changing and the real behind the appearances beyond the reach of sensual experience. This science of the self established itself as a rocklike foundation on which all enterprises of Indian thought have been based and inseparably interlinked like pearls in a necklace.

It is generally believed that in the field of positive sciences, India has always been backward and lagging although in the field of spiritualism, it is very advanced. This appears to be a grave misunderstanding. True, India cannot boast of the kind of highly sophisticated science and technology that the west has bestowed upon mankind. But a subtle inspection of Indian culture will show that India has made its mark in the field of positive sciences also. Life in its totality and integrity seems to have been the motto of the sages. No aspect of human activity has been left untouched. However, the direction of development that positive sciences took in India is very much different from what happened in the west. The organic world view that developed by the influence of the science of self gave a nature oriented direction to Indian sciences and technology. All positive sciences have as their aim alleviation of the physical and material challenges of worldly existence. Backed up by BRAHMA VIDYA, positive sciences in India took up the theme of achieving this by harmonising with nature, whereas in the west, the dominant theme has been conquering nature.

Prof T M Srinivasan beautifully puts it-All ancient technologies have a holistic and theocentric conception of the universe with the position and role of humans well defined. The western science and hence, technology is still homocentric or anthropocentric. This difference in outlook is basically due to the cosmological models pursued by each of the cultures.

Western science and technology modifies and interferes with the natural environment as opposed to Indian sciences and technology.

Ayurveda is the science of life, the discipline of medical science which falls under the category of positive sciences. All the Acharyas are of unanimous opinion regarding the utility of the science of medicine in the cultural and spiritual life of the society. Health is the basis for realisation of the fourfold aspirations of human life: the pursuit of wealth (ARTHA) to satisfy the basic human impulses (KAMA) strictly under the guidance of the knowledge of right and wrong or proper conduct (DHARMA) and ultimately the attainment of spiritual liberation (MOKSHA). Health the objective of medicine is not an end in itself. It is the means for the realisation of a higher end - spiritual fulfilment.

The discovery of pure non dual consciousness and consequently its establishment as the fundamental reality gave a permanent foundation to all sciences in India. Positive sciences like Ayurveda sought to discover and interpret eternal principles that govern the phenomenon of the physical world in the light of the fundamental reality.

Perhaps this is why the concepts of Ayurveda exhibit an axiomatic character and universality. Borrowing technical terminology, positive sciences in India seem to possess an inclusive framework capable of assimilating narrower models of reality - exclusive frameworks which cannot include the former.

It will be much productive if such basic differences in approach and origin of nature oriented sciences like Ayurveda are probed into before making a hasty judgement or deciding the manner of interaction with modern sciences and technology.

EDITORS



Neither the sense organs nor their objects alone can bring about happiness or miseries. The latter are in fact by the four fold combination viz Proper utilisation, wrong utilisation, excessive utilisation and non-utilisation. Even if there are sense organs and their objects present, there would be no disease, nor any happiness unless the four fold combination is involved. So this combination itself constitutes a causative factor for happiness and miseries.

Tactual contact and mental contact are the two types of contacts which bring about happiness and miseries. Happiness and miseries bring about lust in the form of likes and dislikes respectively. Then again this lust is responsible for happiness and miseries. It is lust which gathers factors, which serve as substrata for happiness and misery. Unless such factors are gathered there will be no contact whatsoever and there can be no happiness or miseries without such contacts.

— CHARAKA SAMHITA; SAAREERA STHAANA

## WORKING OF THE HEART-AN EXTRA AYURVEDIC REFERENCE

In the Yoga Vasietha, one finds a reference on the working of the heart and the relation of cardiac function with respiration described in vivid terms. Though the description is very concise and compact, it implies the special characteristics of cardiac function in a surprising manner. It is also worth noting that such a description is not seen in the Samhitas on Ayurveda.

The translation of the verse under reference goes roughly thus:-

"The heart is the reflector of the states of joy and sorrow in embodied beings (ie these states of mind exert influence on cardiac function) It contracts and relaxes in cyclic manner of its own accord. (The term Svatah indicates the independence of muscular functions of the heart; the impulses for heart contraction and relaxation is self generated) As the heart contracts, a movement spreads out of the heart and it subsides on its relaxation. Due to this movement of Vayu, the blood conveying vessels pulsate. Even as the heart and vessels rhythmically contract and relax, Pranavayu enters and leaves the bhastrika (Bellows-can be taken as lungs as it resembles bellows) in an intermittent manner. This bhastrika is full of air spaces (aakaasapadaatmakam) Thus vayu always moves in and out, and also the heart contracts and relaxes".

Thus the Yoga Vasistha tersely describes the function of heart and respiration in brief words but implying depth of meaning.

This appreciation of cardiac and lung function by Yogis appears to have been made in refined states of awareness. Yogis are known to have the power of exerting influence on the so called autonomous functions of the body which are beyond the control of will for ordinary humans.

As mentioned, it is puzzling to note why such a description is not seen in the treatises of medicine, the Ayurveda Samhitas.

In this context it may be noted that the less popular Bhela Samhita which is not available intact now, mentions the seat of mind to be in the head. Seated there it is said to comprehend the diverse objects of the senses.

Again in the Ayurveda Sutras, one finds an aphorism stating that Rasa and Rakta are inseparably associated.

The Rasavaisesika Sutra also throws light on many obscure points in Ayurveda.

It can perhaps be concluded that the Ayurveda Samhitas have only preserved the most fundamental principles of Ayurvedic therapeutics. In ancient India brevity and conciseness of expression was very much emphasised. Moreover, education was not imparted by means of books alone as is the case generally today. A lot of details were conveyed by word of mouth which are now fading into oblivion. Perhaps other works related or otherwise to Ayurveda as mentioned above may help to retrieve and preserve such scattered information.

# Understanding Ayurveda - 1

by

Dr. K. P. MURALEEDHARAN.

(Paper presented in the Ayurveda Seminar conducted at the Ayurveda College, Patanjaliपुरi, Coimbatore, on the 26th of October 1985)

There are clearly three classes of thought prevalent in the field of Ayurveda. There is one more class consisting of its well wishers who are not its professionals. I think we can comprehend today's subject while we discuss on these different classes of thought accepting the reasonable and rejecting the unreasonable.

1) One class of thought proposes a "belief in Ayurveda". We have to believe in Ayurveda because it emerged from Brahma and reached us through great sages. The motto of this class is explained by a verse from the Ashtaanga Hridaya- "IDAM AAGAMA-SIDDHATVAAT ...". "For, this has been derived from the Vedas and because solid results are seen, this may be practised as we practise Mantra. It should never be subjected to logical analysis". These believers look like blind devotees and their class of thought is the one most laughed at

2) Another class considers Ayurveda only as a compilation of what people were knowing about health, disease and treatment in ancient times. I mean they take Ayurveda for a collection of medical informations only in the form of inferences. Most of these inferences are accidental findings and are yet to be proved by means of modern scientific research. They do not see any reason

to appreciate the theory of Ayurveda because it was not by this instrument (modern scientific research) that the inferences in Ayurvedic texts have been reached at. It is not capable of inventing new medicines and is not significant in this new world witnessing the zenith of scientific progress. I think this is the most popular class of thought because its adherents constitute a vast majority among the Ayurvedic intelligentsia itself. Indeed, the present Ayurvedic academy along with its researchers are tuned more or less to the same accent

3) This class of thought proposes an idea of medical monism. According to it medical knowledge is indissociable or at least there is no justification for its existence as different medical systems. This idea is propagated most often in the circles of Indigenous Medicine and of course, it is being well appreciated there. So the general notion is this - The indigenous medicines being less efficient, less popular and nothing more than collections of some medical inferences, their individual existence involves the dangerous possibility of producing half doctors. Moreover, we can preserve these ancient medical inferences just by handing them over to the already well established, efficient and most popular Modern Medical System. Why should we waste a big lot of public money just for the sake of satisfying

conservatism? In my opinion, the present academy of Ayurveda also has a tinge of positive attitude towards this idea.

4) Unlike many other branches of sciences, Ayurveda enjoys a strong friendship with a class of its wellwishers. This class consists mainly of sociologists, politicians and sometimes botanists also. They have a genuine interest in Ayurveda because they think Ayurveda can benefit the suffering populace with its easily available drugs and simple methods of pharmacy and treatment in a better way while modern medicine is becoming an inaccessible pompous establishment.

Before I give my reflections on these classes of thought I take your permission to present a somewhat detailed prologue. This is because I think a criticism on Ayurveda is reasonable only in a background which is quite different from our present innate convictions about scientific reasonability.

There is always a misunderstanding not only between Ayurvedic professionals and those of other sciences but also between many of the Ayurvedic people and their science itself. Ayurveda is an ancient theory and we have all done our basic education in the style of modern sciences. We cannot agree with anything which is not scientifically proved. Till now, we have no treatise on "Scientific Ayurveda". Is it because Ayurveda is unscientific or because science is unable to prove its reasonability? By the word science we mean the particular authoritative system of knowledge presently popular throughout the world. Even in ancient times there were systems of knowledge. Of course, they were spiritual philosophies. But to

think that they are immaterial in the field of physical sciences is nothing but ignorance. They too have an explanation of the material world, but one, which by no means is contradictory to or different from spiritualism. Though they have not been proved "Scientific", they are proved to be reasonable. If a reasonable idea is unscientific, does it mean that science is unreasonable? I am sorry to say, yes, because the reasonability of these unscientific ideas are proved by scientific methods. You know you can prove  $1=2$  mathematically. It is a mathematical fallacy.

For ancient philosophy, the following concepts were matters of common sense.

- 1) Truth is the pure consciousness, i.e. the one which is the knower, the known and the knowledge at the same time. One among two or more cannot become an absolute and so it is not an object of perception.
  - 2) The perceived is existent as if it is existent. That means the whole universe is a homogenous and simultaneous mixture of the opposites. In other words, the fact and the negation are the same.
- i) "AGHATITAGHATANAA PATEEYASSEE MAAYAA".
  - ii) "NA AATMABHAAVENA ....."
  - iii) Evolution of all things living and inert are by the same factors. So the difference between inert matter and intelligence is not in stuff but in units.
  - iv) Absolute nothingness is not there because nothingness itself is nothingness. So, still, when it is present in all things in the accent of limitation, it has no free existence.

(v) Among the opposites, negation is not absolute. So in the conditioned existence also knowledge or consciousness is superior and more basic. According to the mode of conditioned consciousness its world changes "LOKAH KARMAPHALAANI LOKYANTE DRISYANTE BHUJYANTEITI JANMANI" A deva's time is smaller than ours

(vi) Let it be space, time energy or atom any substratum which is perceivable is explained by the second concept, i.e., even when they pervade 'the whole' they are limitedly bound even to the minutest. So any perceivable substratal unit is a composed one and it is divisible.

For our modern Classical science, only the perceived becomes true. The truth is the perceived world as it is. The opposites are differentiated and material truth is sure and certain. Knowledge would not have been there, if there was no object. So matter is superior and more basic than consciousness. Nothingness is there; free. Because when the absolute existence of the postiveness is considered immaterial, the negation of the absolute nothingness never happens. Space and time are not matter bound. They are attributed with the adjectives of the absolute; immovable, filling the whole and continuous. Energy is also almost another absolute entity; that being continuous and without another. The substratal atom is indestructible according to Democritus, solid according to Newton and indivisible by its definition. Modern Classical science looks truthful without confusion and uncertainty. The ancient philosophies look contradictory, confusing and uncertain.

What happened in the 20th century was like an enormous structure collapse. It started with some experiment passing electricity through gases. The structure wobbled while Albert Einstein presented a paper on space and time in 1905. It shook violently in Alaska when the atom split and it actually collapsed with the theory of uncertainty which in other words says, "The fact and the negation are the same; the same interpretation of the conditioned or the material by the ancient philosophy.

First the Euclidean three dimensional space became elastic with Fresnel, mobile with Lorentz transformation and then simply matter bound by Einstein. Time also became matter bound by the Minkowski four dimensional space and the atom split. Now the world is a new one. It is not absolutely true as was told by Classical science. My world is my closed system of space time continuum. You are free to imagine upto the 'nth' dimension. Tackling time in space you can change it even to past time. The perceived is nothing but fallacious. Then Max Planck shattered the continuity of energy thus making uncertainty reasonable in the substratal plane. Tesla proved that emptiness was not empty. After this negation of the negation, the most wonderful concept arised. The photon is conscious, very sensitive and intelligent. It remembers its far past. It is capable of action, reflection, knowledge and love. (Ref - The unknown Spirit, G E Charon). Ilya Prigogine assumed that time has different speeds. So it becomes scientific that my time is big when I am sad and it is small when I am happy. Here the 'I'

gets prominence in the uncertain plane of the 'material' and I quote the great scientist of quantum physics, Dr. Werner Heisenberg, "It becomes difficult to consider matter truly real ..... basically speaking, the same concept of 'truly real' has already been discredited by modern physics and the point of departure of materialistic philosophy must be modified at the point..... For modern natural science there is no longer in the beginning the material object, but form, mathematical symmetry. And since mathematical structure is in the last analysis an intellectual content, we could say in the words of Goethe's Faust 'IN THE BEGINNING WAS THE WORD'- THE LOGOS'.

By all means, science repeats the unscientific ancient philosophy. Now this is a scientific fallacy and so a fallacious reality. Here we get three inferences

1) Because the reasonability of the unscientific philosophy is proved by science, science becomes unreasonable. But as it is proved by science itself, one another reasonable science is there. The former is called classical science and the latter higher science pronounced by the theories of relativity and quantum mechanics.

2) The nature of ancient philosophy is spiritual and that of classical science is material. The former agrees with the absolute truth and says that ultimate physical reality is the reality of uncertainty; i. e. the fact and the negation are the same.

3) The nature of ancient philosophy is introvert; that means it deduces from the absolute upto the physical entity. Materialism deduces from the physical entity upto what height it can reach. We saw the classical science climbing up. Then it came upto such a height where it can understand and deal with ancient philosophy. Its classical nature was lost.

This is the whole reason why I presented this long prologue. We examine Ayurveda which is a derivative of ancient philosophy; and that too with the reasoning of classical science. Its theory does not yield. Then we think it is bogus and take Ayurveda only for the drugs told in its treatises. We are the fools who try to cut diamond with a pocket knife. My other intention is to remove our prejudice about modern science; that it is the only instrument which can prove and invent physical truths. Our ancient philosophy is much more promising and its style of reasoning is higher than that of modern science. This is proved by the history of science itself.

Now we may pass on to the subject where the reasonability and the potentiality of Ayurveda will be examined against the new background where there is no difference between modern higher sciences and the material explanations of ancient spiritual philosophies.

Devotion without discrimination is praised only when it is towards God with the proper spiritual awareness. Science is quite a different field. There a slip is



a slip. Even if you have not consulted a physician, provided the drug you took was the correct one, you are saved. Even then, the belief that "belief is blind" is more blind. It is an academic prejudice. Blind believers may be there. But belief is not concerned with them. I sympathise more with the rationalists who cannot differentiate between ignorance and belief. This is the crux of today's subject. The professionals of classical science know their theory. We, the Ayurvedists believe in our theory. Why? You cannot say "I believe we are present here now" because you know it for sure. You can say "I believe I will leave the place tomorrow" because you don't know it for sure. So the meaning of "to believe" is not to know for sure. This is also not fully correct. Because your assumption is not blind, you have sound reasons to believe the proposition. If there were no reasons at all you could not even have imagined about your leaving. So the meaning of to believe is to know, not for sure". This is the difference between "not to know for sure" and "to know, not for sure". When you apply the verb "to know" concerned with a physical thing the expression is totally positive. It is wrong. No physical thing is totally positive. In absolute positiveness, there cannot be more than one factor. There the knower, the known and the knowledge becomes one. In physical or material plane, the truth of a thing is that the fact and the negation are the same. It is a homogenous and simultaneous mixture of the opposites i.e., the positive and the negative. Moreover, because the negation (the

negative) never becomes absolute unlike the fact (the positive) the positiveness is more significant even in the material plane. Here, when you say "not to know for sure", the negative becomes significant. So the most correct conception about the nature of "to believe" is that it means "to know not for sure". This is the most proper nature of knowledge according to the material explanation of the ancient spiritual philosophy which is a homogenous and simultaneous mixture of the opposites where the positiveness is more significant.

In this context, what is the meaning of "to know? To know, not for sure" is the most proper knowledge; not to know for sure "has no difference from ignorance and "to know" is a wrong assumption. How? We say we know the apple. It is because we perceive it. But what we perceive is nothing but the properties of the apple - the shape, colour, smell, touch, taste and sound and not the apple. A thing is not its properties. When I said I know the apple, I was only knowing its properties. So "to know", is a misunderstanding. Now I bring the same idea in the background of higher science. What the classical science lacked was the wisdom of self discrimination. It believed it was knowing things. I have never known anyone who knows a thing other than its properties. Can anybody tell me what is light? You can say it is photon: what is a photon? It is a corpuscle of energy. When I ask what is energy, you start to say it is a thing which is potential.....or something

like that. But you forget that you are always describing a property. This is the same with a question about air, fire, water table, chair, or anything. If you know any single thing then you know the absolute and is it not an object of knowledge. Classical science ignored the thing and was satisfied with the misunderstanding that it knows the thing while it was knowing the properties. The quantum theory searched for an answer to this in spiritual philosophy. Here I quote Dr. Heisenberg, Kant, (who resisted materialism in Europe) had spoken of the thing in itself (thing beyond properties). He was later often accused, even from the philosophical view point, of inconsistency in his concept of "the thing in itself". In the quantum theory, this problem of the objective background of phenomena has arisen in a new and very surprising form". Consequently, he refers to another spiritualist Plato. "Therefore in Plato, at the lowest limit of the series of material structure, there is really no longer anything material, but a mathematical form if

you like; an intellectual construct. The ultimate root from which the world can be uniformly understood is, in Plato mathematical symmetry—the image, the idea. Thus we saw Plato saying the material expression about the "real, thing" will not pass beyond the "form." Form is also nothing but a property. Again I quote what Dr. Heisenberg said after proposing all the newest mathematical possibilities to catch the "real thing". Regardless of the ultimate decision it can even now be said that the final answer will be nearer to philosophical concepts expressed for example in the Timaeus of Plato than to those of ancient materialists. Like the regular elementary bodies of Plato's philosophy, the elementary particles of modern physics are defined by the mathematical conditions of symmetry; they are not eternal and invariable and are therefore hardly what can be called "real" in the true sense of the word. Here Dr. Heisenberg proceeds to the paragraph which I have quoted before and ends like this: "In the beginning was the word, the logos."

(to be continued)



It should be recognized that the most fundamental question in medicine is why disease occurs rather than how it operates after it has occurred; that is to say, conceptually the origins of disease should take precedence over the nature of disease processes.

— THOMAS McKEOWN.

## DYNAMICS OF DISEASE CAUSATION - A GENERALISED VIEW

In Indian medical tradition, the general factors that lead to disease have been studied from various angles and a very broad scheme of disease causation has been worked out by synthesising the spiritual, psychological physical and sociological aspects of human personality and also the interaction with the external environment.

The LAGHU YOGA VASISTHA beautifully describes the types of diseases and their causation from a very synthetic point of view. Human pains are of two kinds—those afflicting the physical body known as DEHADUKHAS or VYADHIS and those afflicting the mind in form of innate tendencies or VASANAS known as AADHIS. Of these, AADHIS are considered as primary diseases and VYADHIS as secondary diseases. The general pattern of operation of AADHIS is described as follows. Lack of transcendental knowledge want of control over the sense organs and cultivation of desire, aversion and egoism in the mind makes it deluded. Desires and all sorts of mental agonies are thus produced. Lack of emotional culture and proper discrimination breeds seeds of poison in the mind which when intense try to manifest themselves externally in the form of perverted karmas or deeds. This in turn leads to improper interaction with the environment and disobedience of the basic laws of healthy living. Thus the BHAUTIC (Physicochemical) balance of the body is disturbed and bodily diseases or VYADHIS are born. When the mind is agitated, the body

is also affected. Unable to perceive the proper path, the course of prana becomes abnormal due to this trauma, just as a deer staggers, running here and there being wounded by an arrow. Consequently the vibration of prana becomes topsyturvy. The food taken into such deranged body where the prana is under wild fluctuations becomes digested incompletely, improperly or too much and diseases are produced due to improper nutritional processes.

Here it can be seen that ultimately all diseases have been traced to mental causes. Though it may seem to be rather far fetched it can easily be proved by a little discussion that in the final analysis, all diseases have their root in a deluded mind or PRAJNAAPARAADHA as known in Ayurveda. All other causes are secondary or instrumental from this stand point.

But this remote cause-delusion of mind tiggers off a complicated chain of reactions and a number of secondary or instrumental causes come into operation to produce a physical ailment. A man indulges in luxurious diet habits due to pull of his emotions. This leads to indigestion and weakening of the body. Further he indulges in other unwholesome activities due to weaknesses of the mind. In the process a lot of causes - factors act upon him to produce a particular derangement of his bhautik set up and leads to a particular disease. Thus a wide variety of bodily diseases are produced due to differences in nature of combination of the secondary or instrumental causes.

Although it is easy to say that delusion of the mind is the primary cause of all diseases, it is very much more difficult to subdue the same. The Acharyas say that such radical elimination of diseases can be achieved only by purifying the mind through TATVAJNAANA or AATMABODHA. True, this should be the aim of all but it certainly is not attainable overnight by all. A lot of unwholesome interactions and consequently diseases will always afflict those who have not attained this high state in the aspiration of which only a few are successful. So a more practical approach for those struggling with mental passions is required. And Ayurveda based on the pancha mahabhutas is the answer. On basis of its Tridosha Siddhanta and analysis of the medicines in terms of GUNAS (physicochemical properties), Ayurveda seeks to restore the bhautik balance of the body which has been disturbed by the influence of secondary or instrumental causes by proper administration of medicines, diet control etc. The mind also plays a part in this treatment but not in the radical manner mentioned above. The most generalised aetiology of diseases according to Ayurveda is trifold :

- 1) PRAJNAAPARAADHA - Mental delusion
- 2) ASAATMYENDRIYAARTHA  
SAMYOGA - Unwholesome interaction of the senses with the sense objects
- 3) PARINAAMA - The principle of change or time and thus changing environmental influences.

For purpose of specific treatment and understanding this generalised classification has further been subdivided into

many categories which are not being dealt with here.

The above mentioned trifold aetiology is very comprehensive and includes all other subdivisions. It is interesting to note how the Charaka samhita points out that even epidemic diseases have their root in mental delusion. In Ayurveda, four factors are considered to be the cause of epidemic diseases; AIR, WATER, PLACE and TIME. Normally these four factors are conducive to the healthy existence of a society. But when they become deranged, they are causative of fearful diseases that lead to the destruction of a society. This is because the four factors are common to all in a particular society and produce the same diseases. Deranged air contains toxins, germs etc. that lead to specific diseases, so also water and place. Derangement of time means disturbances in the rhythms of the seasons. Charaka says that the derangement of these four factors occurs because of the ADHARMA of the society. This point of view can be elaborated. Man is always interacting with the external environment for his survival. In the process of this interaction he exerts influence on the external environment and even modifies it to some extent. The whole world pulsates in a particular rhythm and order. When man led by his passion, takes too much from nature and disturbs its order and rhythmicity the above mentioned disturbances are produced. Charaka rightly lays down the responsibility of maintaining this natural harmony on the ruler of the kingdom. In the case of diseases specific to an individual, generally he is himself responsible for the calamity, though others may also become the cause in

certain cases. But in the case of epidemic diseases, the collective actions of all the persons in the society are responsible for maintaining the fourfold factors normal or deranging them. So the ruler has to see that the social life is well regulated and natural harmony with the environment is preserved. This includes proper sanitation, hygiene etc. In olden days yagas were conducted now and then which are claimed to correct many of the abnormalities in the rhythm of natural processes.

From the above discussion one finds that in Ayurveda, there is great emphasis on individual and social responsibility for prevention of diseases. The right mental attitude and save way of living alone can give a fundamental remedy to the problem of diseases.

Even genetic diseases are viewed from such a radical viewpoint. They are also traced to hereditary influences which are in turn produced by unwhole some actions of his parental lineage. Measures of prevention of such diseases; Eugenics as it is known in scientific jargon forms a major portion of the SAAREERASTHAANA of Ayurvedic texts. Here the classification of diseases into POORVAAPARAADHAJA DRISHTAA

PARAADHAJA and UBHAYAJA varieties explains the incurability of many diseases. Many diseases are produced due to effects of deeds performed not in this life. Such diseases are cured only when the effects wear out. Other diseases produced by known causes may be reversed. UBHAYAJA denotes the mixed variety.

Thus Ayurveda by laying more emphasis on individual responsibility gives the message that man is the maker of his destiny in the choice between a healthy existence and a life afflicted with dreadful diseases.

Well, there will always be diseases with mankind and the ideal that the acharyas have put forth is quite difficult to stick to. But even a striving to achieve this ideal can lead to prevention of many diseases already known or unknown.

This scheme of disease causation presented here is very generalised and cannot account for details of individual bodily diseases. For this a more specialised scheme work has been worked out in Ayurveda. However it is not being dealt with in this context for fear of too much elaboration.



## ON THE FRAME WORK OF INDIAN SCIENCES

a) Role of reason in Indian thought :

Sankara, in his commentary on Vedanta sutras observes: "One sees how arguments which some clever men had excogitated with great pains are shown by people still more ingenious to be fallacious and how the arguments of the latter are refuted in their turn by other men. So it is impossible to accept mere reasoning as having a sure foundation. Nor can we get over this difficulty by accepting as well founded the reasoning of some persons of recognized eminence, whether Kapila or any one else, since we observe that even men of the most undoubted intellectual eminence, such as Kapila, Kanada and other founders of philosophical schools have contradicted each other'.

Reason does not supply the premises for Indian Philosophy. Revelation sets its working hypothesis, which is finally accepted after experience. Reason interprets clarifies and works out the implications of its working hypothesis. The experience of the sages, or highly purified souls is the premise for reason to work on.

The validity of reason itself rests on something that cannot be demonstrated by reason. If it rests on some other reason, we shall have to go on from one truth to another, which lands us in an infinite regress. Such tests and criteria of truth as non-contradiction and coherence are not themselves obtained through reasoning. They are the pre-suppositions of reason. Hence, reason

is given a limited place in Indian Philosophy.

To be fruitful, reason must be based on experience. Otherwise it becomes a blind instrument leading us nowhere. Though the omnipotence of reason is not accepted in Indian thought, it is made use of at every stage in interpretation.

... Introduction to Vedanta,  
Dr. P. Nagaraja Rao.

b) Traditional sciences, at least the traditional Indian Sciences, seem to respect the common sense method of looking at the world in its integrity. They, it seems, seek to systematise the commonsense method to make it rigorous without destroying its essential unity in its multifactness. Thus for Charakat Samhita, the canonical text of Indian medicine, science is dependent on what the text calls YUKTI. And YUKTI by definition is the intellect that perceives the phenomena brought into existence by the coming together of multiplicity of causes. Again, perceiving the multiplicity of causes of which the phenomena are constituted, YUKTI is to bring together appropriate actions and materials at the appropriate time and place.

Thus Traditional Indian Sciences even in their theoretical formulations define their task to be a pragmatic understanding of the world in order to act appropriately within the natural complexity of this world. This is exactly what conventional wisdom and commonsense attempt. Their objective is to find ways of healthily living in the world

They seek neither to dissect, it, nor to change it. No miracles can be expected from the sciences and the methods that are modelled on commonsense. These however are perhaps the appro-

priate methods for finding ways of ensuring balanced production of essential commodities and for carrying on the mundane business of living.

- 'Impact of modernisation on milk and oil seeds
- J. K. Bajaj, Jansatta, New Delhi
- Samir Shah and H. S. Shankar, Department of Chemical Engg IIT Bombay  
(PPST Bulletin, Serial No : 11, June 1987)

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To .....

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Sir,

The New wave Traditional Lines is a trimonthly published by the students of Ayurveda College, Coimbatore. This is the fourth Year of publication of the magazine.

The inspiration behind this venture has been the need felt for creating a common medium for communication between the various personalities in the field of Ayurveda and allied disciplines, especially the emerging younger generation. In fact, an intellectual revival in Ayurveda is very much the need of the hour

Only true understanding will lead to effective application of any science. To day, the situation in Ayurveda due to many reason is such that true appreciation of its teachings has become rather difficult. Through this magazine we hope to initiate discussions and serious thinking on these lines. We need the help and support of all who are interested in the promotion of Ayurveda for the promotion of human welfare.

We appeal that you come forward and take part in this venture by sending in opinions, sincere views and so on.

For

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BASIC CONCEPTS OF HEALTH ACCORDING TO AYURVEDA

Each system of medical Science in the world has described the nature of Swasthya (Health) and Vikruthi (Pathological condition) according to its own concepts. The basic aim of the concepts and fundamental principles of all the sciences is to establish happiness in the human being. But a correct and thorough knowledge of the basic principles of the universe and the human body leads to the correct path to happiness. While deceptive knowledge leads to the wrong path. Here Acharya Charaka suggests that the correct path of understanding Vikruthi and Swasthya can be attained only through a knowledge of Dosha, Dhatu and Mala.

TRIDOSHA THEORY :- Dosha-Dhatu-Mala vignana is the foundation of the whole Ayurveda. Its embryological, anatomical, Physiological, Pathological and therapeutical conceptions rest upon this foundation. The Tridosha theory is very wide in its application it is applicable to every living entity from microbes to man. And it explains every aspect of the phenomenon of life. The three doshas are responsible for all the normal physiological activities Acharya Vagbhata concludes that

सोमस्तु दोष वैषम्यं दोष साम्यमरोगता ॥ A.H.

When Doshas are in equilibrium they bring about the health of the body & when they are vitiated they are responsible for various types of somatic disorders. Important point has to be noted that the state of equilibrium is not a mathematical or absolute one. Increase and decrease of each Dosha are bound to occur in order to maintain the normal functions of the body. Changes in nature like diurnal and seasonal variations also bring about increase and decrease of dosha. The predominance of one of the doshas can be observed in each age group, proper routine of life suited to the diurnal and seasonal variations (dinacharya and Ritucharya) is recommended in order to prevent

the vaishamya from becoming a pathological one.)

Now we come to the consideration of vata, pitta and Kapha separately.

Vata, Pitta and Kapha (shleshma) come from the Sanskrit root va, tapa and shlish and indicate their action in the body. Some have translated vata as wind, pitta as bile and Shleshma as foetid sputum which is evidently misleading. The meaning of the root va isgati (motion or movement) and gandhana (initiation) This means that the natural attributes of vata are motion, sensation and power of imparting that motion and sensation to other bodies along with initiation. Similarly the meaning of tapa is heat which means that the natural attributes of pitta are to produce heat and biochemical activities in the body. The attributes of shleshma is cohesion, union & integration. So let us take them up one by one and study them from a physiological as well as pathological point of view.

#### PHYSIOLOGY OF DOSHAS :-

Vata :- This Dosh is the most powerful of the three acts through nervous system (central, peripheral & autonomic) on the evidence of its normal and abnormal functions. They are classified into 5 types based on their place & mode of action.

1) Prana vayu :- This resides in mouth, head, ear, tongue, nose and chest. Is responsible for a) Mental functions, b) Functions of the special senses, c) Functions of heart, lungs, deglutation.

2) Udana vayu :- This resides in larynx, chest & umbellical region & is responsible for speech.

3) Samana vayu :- This vayu resides in the stomach & duodenum & is responsible for digestion of food.

4) Vyana vayu :- This is present every where in the body. Is responsible for circulatory functions, locomotion and sensation.

5) Apana vayu :- Resides in region of umbilicus, colon, Rectum, & bladder. is responsible for excretion of urine, menstrual blood faeces & foetus.

Pitta :- Which in general term performs all the chemical changes in the body as enzymes, hormones and digestive secretions & is responsible for producing heat & energy. They are classified into 5 types.

1) Pachaka pitta :- It resides in lower part of the stomach & in the small intestines. It represents the digestive secretions of the digestive tract, enzymes of the tissues & for that matter every cell.

2) Ranjaka pitta :- Resides in liver, spleen & stomach & represents the Haemopoietic principle in the liver.

3) Alochaka pitta :- Located in the eyes & represents the Rhodopsin or visual purple of the retina.

4) Sadaka pitta :- Located in brain and represents different hormones.

5) Bhrajaka pitta :- Located in this skin & represents the substances in the skin regulates the surface temperature & the complexion.

Kapha :- Now we take up kapha whose general functions are cohesion & fluids of the body. These are also divided into five types.

1) Avalambaka kapha :- Its chief place is in chest as we infer may be the pleural & pericardial fluid & mucous secretion of the respiratory tract.

2) Kledaka kapha :- Which resides in GIT, may represent, the mucus secretion of the digestive tract which lubricates it & helps to breakdown the particles of food for easy digestion.

3) Bodhaka kapha :- Resides on tongue may represent the mucous secretion of the mouth and keeps the tongue moist for appreciation of taste.

4) Shleshaka kapha :- Resides in the synovial membranes of all

the joints of bones & may represent the synovial fluids.

5) Tarpaka kapha :- Resides in the head & may represent the cerebrospinal fluid.

We say in general that what has been mentioned above should be taken as an outline but there are many substances in the body which are not mentioned specially in the above divisions of tridoshas. However, they can be included in vata, pitta & kapha according to their nature & functions. It will be seen from the foregoing description of tridoshes that many of the physical & mental Phenomena ascribed by modern Physiologists, primarily to the activities of the Nervous system, in all its aspects the central, vegetative, the peripheral including the autonomous can be identified with the concept of vata. Similarly, many of the physical phenomena attributed to pitta are among those, which modern physiologists include under the activities of the thermogenetic & nutritional systems (including the thermogenetic the activities of the glandular structures, espically enzymes and some of the hormones) whose functions are of vital importance in digestion, assimilation, tissue building & metabolism generally. Likewise, many of the functions of kapha are among those, which the modern physiologists include under the activities of the skelstol & anabolic systems.

It will be safe to assume, for the sake of clarity & proper comprehension that the tridoshes nameiy vata, pitta & Kapha represent a grouping of multitudinous events which take place in the living body, under three broad based headings, or properly speaking, they represent a broad based generalisation of life processess & vital activities, clasified under three main headings. This theory of tridosha can be adequately explained when it is studied in the light of modern science. And we believe that it would stand the scrutiny of modern science. Tridosha concept as laid by the seers of Ayurveda, governs the causative facts regarding disease

& its treatments by simple methods. Tridosha concept is an ideal gift of Ayurveda to the whole world. Like sun, moon & air which are essential for the external health, tridosha is closely related with the internal health of an individual.

by  
Dr. SUCHARITHA.L.

Dhatu - 7

Dosha - 3

Mala - Urine / Stool / Sweat.

## CHAPTER 4

*Ayurveda*P. N. V. Kurup<sup>1</sup>*I. Ayurvedic medicine*

Ayurveda means the science of life. This is one of the oldest formulated systems of medicine, which has spread to East and West and also contributed to the development of contemporary medical science. It is considered divine in origin and is widely practised in southeastern Asia, especially in Bangladesh, India, Nepal, Pakistan, and Sri Lanka. There are scattered references to health as well as to diseases in the Vedas (the book of wisdom) especially in the Rig Veda and Atharvaveda. Atharvaveda has as many as 114 hymns which describe the treatment of diseases. Ayurveda originated from this Veda, which is the most ancient text and gives more information than any other extant literature.

According to Hindu philosophy the universe and all the laws of the universe have been decreed by Lord Brahma. He is believed to have taught Ayurveda to Daksha Prajapati who taught it to the Ashwinkumar twins. They in turn taught Lord Indra, who is considered to be the common teacher of all the branches of medicine.

**Doctrines of Ayurveda**

Ayurveda is based on certain fundamental doctrines known as the *Darshanas* which encompass all sciences—physical, chemical, biological and spiritual. Ayurveda, born out of intuition and revelation, developed in due course into eight well defined specialized branches as indicated below and

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two major schools, the School of Physicians (*Atreya sampradaya*) and the School of Surgeons (*Dhanvantri sampradaya*).

The specialties comprise the following:

1. Internal medicine (*kayachikitsa*).
2. Paediatrics (*balachikitsa/kaumarabritya*).
3. Psychological medicine (*grahachikitsa*).
4. Otorhinolaryngology and ophthalmology (*urdwangechikitsa/shalakyatantra*).
5. Surgery (both general and special) (*shalyatantra*).
6. Toxicology (*damshtrachikitsa/agadatantra*).
7. Geriatrics (*jarachikitsa/rasayanatantra*).
8. Science of eugenics and aphrodisiacs (*vrishyachikitsa/vajikarantantra*).

The basic theories of Ayurveda arise from the concepts of *Panchamahabhutas* and *Tridosha*, which embrace the process of creation and evolution of the universe and all laws of life therein. According to Ayurveda the human body and all matter in the universe are composed of *Panchamahabhutas*. So far as the function of the body is concerned this system considers the body, mind and soul as complementary to one another.

All the physical and physiological processes in the human body and the pathogenesis of various diseases and their symptoms are explained by the theory of the *Tridosha*: three basic constituent complexes in the physiological system—motion (*vata*), energy (*pitta*) and inertia (*kapha*); and the seven *dhatu*s: body fluids (*rasa*), blood (*rakta*), muscular tissue (*mamsa*), adipose tissue (*meda*), bone tissue (*asthi*), nerve tissue and bone marrow (*majja*), and generative tissue including sperm and ovum (*shukra*). There are also the waste products (*malas*).

*Vata*, *pitta* and *kapha*, the three basic biological elements derived from the five basic physical elements, constitute the bodies of all the living creatures from microbes to man. *Vata* particles control the utilization of energy by various cells and organs for their anabolic as well as katabolic activities. *Vata* also controls the movements of *pitta* and *kapha* and thus controls all the functions and activities of the body. Energy exists in the body in the form of *pitta* particles. *Pitta* particles are responsible for all the biochemical reactions and metabolic processes and supply heat and energy to the body. *Kapha* particles constitute the cellular as well as intracellular structure of the body and maintain the internal environment of the body. They impart strength and stability to the body. The balanced state of *vata*, *pitta* and *kapha* is health. The imbalanced state of these three *doshas* gives rise to disease. A detailed study of the *Tridosha* principles may reveal that these are nothing but motion, energy and inertia.

There are seven *dhatu*s or tissues in the body as already stated. These tissues constitute the supporting or structural units of the body. Each tissue

P. N. V. Kurup<sup>1</sup>

is one of the oldest formulated to East and West and also temporary medical science. It is practised in southeastern Asia, Pakistan, and Sri Lanka. There are diseases in the Vedas (the book

Atharvaveda. Atharvaveda has treatment of diseases. Ayurveda is the oldest ancient text and gives more

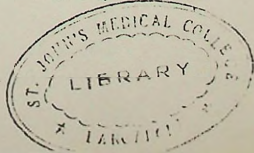
life and all the laws of the body. He is believed to have taught it to the Ashwinkumar twins. It is considered to be the common

mental doctrines known as the physical, chemical, biological and medical revelation, developed in due branches as indicated below and

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has its own specific metabolic capability which helps it to digest the specific food and to manufacture its associated higher tissues. During such metabolic activity, each tissue forms its specific waste products or *malas*. There are many *malas* or waste products in the body—stool, urine, sweat, nails, hair, etc. Health depends on the balanced state of all the *dhatas*, *doshas* and *malas* both quantitative and qualitative. Ayurveda defines a healthy person as one in whom there is equilibrium of the humours (*tridosha*) and the body tissues with normal digestive as well as excretory functions associated with the gratification of the senses, mind and soul. In the light of these principles Ayurveda considers human beings in their totality and in their subtle relationship with the universe. Its approach is that since disease or proneness to disease occurs due to imbalance in the equilibrium of the three *doshas*, restoration of the equilibrium eliminates the disease. The treatment aims at not only curing the disease but also enhancing the body vitality to combat the disease and minimize the chances of relapse. Ayurveda epitomizes the philosophy of total health care, and naturally the patient as a whole is given considerable importance. The aim of care is therefore to improve his vitality to resist the disease and to strengthen his immune mechanism so that disease automatically is prevented or cured.

For the promotion, prolongation and maintenance of positive health and prevention of disease, Ayurveda prescribes the observation of certain principles: daily routine (*dinacharya*), nightly routine (*ratricharya*), seasonal routine (*ritucharya*) and ethical routine (*sadvrata*), and also emphasizes that one must follow a regulated diet (*ahara*), sleep (*nidra*) and regulated gratification of sex (*brahmacharya*). Thus Ayurveda is not merely medical science but is in fact a way of life.

### Diagnosis and treatment

Before starting the treatment the physician examines the patient as a whole and takes a careful note of his internal physiological characteristics and mental disposition. He also studies such other factors as the affected bodily tissues and humours (*dushya* and *dosha*); the individual bodily state (*deshya*) and the site in which the disease is located; the strength, resistance and vitality of the patient and the severity of disease in terms of vitiated humours and bodily tissues (*bala*); the time or season of onset of disease or the gravity of the clinical condition (*kala*); the strength of digestion and metabolism (*anala*); individual constitution (*prakriti*); the age of the patient as well as the relation of age with the principal vitiated humour (*vaya*); psychic power (*satva*); the habits of the patient in relation to the vitiated humour (*sathmya*); and dietary habits (*ahara*).

The classics of Ayurveda prescribe two types of examinations—examination of the patient (*rogi pariksha*) and examination of the disease (*roga pariksha*).



In the examination of the patient one or more of the following methods are employed:

1. Pulse examination (*nadi pariksha*). This is undertaken to determine the state of disturbed *doshas* (*vata*, *pitta* and *kapha*), vital phenomena indicative of particular disease (*roga*), and prognosis with reference to a particular sick person (*rogi*).
2. Urine examination (*mutra pariksha*)
3. Examination of the faeces (*pureesha pariksha*)
4. Examination of the tongue (*jihwa pariksha*)
5. Examination of the eye (*netra pariksha*)
6. Examination through auscultation (*sabda pariksha*)
7. Examination of tactile stimulation (*sparsha pariksha*)
8. Examination of body structures (*akriti pariksha*)

#### *Roga pariksha*

Ayurveda advocates *roga pariksha* for the examination of the disease and for the determination of the pathological condition. The line of treatment is based on the presence of a number of etiological factors (*nidana*), such as the degree to which metabolic activity in *dhatu*s, *doshas* etc. is affected and their mode of premonitory signs (*poorva rupa*), onset and the severity of symptoms (*rupa*), on an assessment of the response to possible causative factors (*upashaya*), and on the stage of pathogenesis of the disease or the symptoms.

The following are the mechanisms which determine the manifestation of the disease state and the pathological signs and symptoms in the body.

Due to the etiological factors responsible for the vitiation of humours (*doshas*), a qualitative and quantitative increase of humours takes place (*sanchaya*). These vitiated *doshas* will create imbalance in various body tissues and also liberate waste products (*malas*) that could spread or circulate all over the body (*prasara*) through channels (*srotas*) which may be large (macroscopic) or small (microscopic) in calibre (*khavaiqvaya*) and eventually create blockage in the channels (*sathanasamsharva*), or settle in particular body tissues to cause pathological changes. The expression (*vyakti*) of the pathological changes occurs in the form of signs and symptoms, thus permitting a differential diagnosis (*bheda*) to be made.

Treatment of disease consists in avoiding the causative factors, in advising medicines, suitable diet, activity and regimen which will restore the balanced state of the body, or in surgical procedures. It requires the combined effort of the physician, nurse, patient and medicine. The treatment of disease can be mainly classified as *shamana* therapy and *shodana* therapy.

### Shamana therapy

Elimination of vitiated *doshas* or humours. The process by which the vitiated *dosha* subsides or returns to normal without creating imbalance or other *doshas* is known as *shamana*. The administration of carminatives (*pachana*), digestives (*deepana*), the creation of hunger (*kshudha*) or thirst (*trishna*), exercise (*vyayama*), the sun's rays (*atapa*) and exposure to sun (*marutha*), etc. come under *shamana* therapy.

### Shodhana therapy

Emesis (*vamana*), purgation (*virechana*), enemas (*basti*), and blood-letting (*nasya* and *rakta mokshana*) are classified under the *shodhana* type of treatment. They are also called *panchakarman* treatment. Ceremonial washing of the patient (*snahna*) and diaphoresis (*swedana*) are two important techniques of treatment in the above categories.

### Surgical treatment

Ayurvedic classics also advocate surgical treatment for those diseases which are not curable by medical treatment or in cases where surgical treatment may provide immediate relief. Details of preoperative, operative and postoperative methods are also discussed in the ayurvedic classics.

### Diet

Ayurveda lays great emphasis on regulation of diet and other regimens as part of the treatment (*pathya-apathya*).

All therapeutic measures can be classified under *vipareeta chikitsa* and *vipareetathakari*. In *vipareeta chikitsa*, the therapeutic measures, i.e., medicine, diet and activity, antagonize the disease. They include *hetu-vipareeta*, i.e., treatment counteracting the etiological factors; *vyadhi-vipareeta*, i.e., treatment counteracting the various manifestations of disease; and *hetu-vyadhi-vipareeta*, i.e., treatment counteracting the etiological factors as well as various symptomatic manifestations. In *vipareetathakari chikitsa*, the therapeutic measures, i.e., medicine, diet and activity, appear to exert effects similar to the etiological factors of the disease process.

### Drug sources

The practitioners of Ayurveda normally prepare the medicines needed for their patients in their own clinics. For simple decoctions, powders etc., the physician often advises patients to prepare them in their own homes from locally available herbal resources. However, in urban areas the practitioners give prescriptions to the patient for dispensing by chemists. They also prescribe patent drugs. The large-scale production of ayurvedic

drugs is now undertaken by modern technology. These include patent and proprietary drugs and classical preparations. There are as many as 4500 pharmacies which produce these drugs in southeastern Asia. Statutory controls over the manufacture of ayurvedic drugs are also enforced in some countries.

### Pharmacopoeia

Ayurvedic scholars have compiled all the available information about the drugs and their therapeutic uses. There are some 70 such books containing about 8000 recipes. Besides these publications there are large numbers of recipes which have not been published but which are in use in everyday practice. Ayurvedic medicines are prepared in the form of distillates (*arka*), fermented preparations (*asava* and *arista*), linctus (*avaleha*), incinerated matter, minerals, shells etc. (*bhasma*), powder (*churna*), ghee (*ghrita*), tablets, pills (*vati gutika*), decoction (*kwatha*), and so on.

### Drug action

In Ayurveda the drugs have been classified according to the predominance of one or other of five *bhutas* and in view of this the drug action can be correlated with the particular property of the *bhuta* which is predominant. In addition to pharmacodynamics, the drugs exert their effect through one or more of these properties, though ultimately an action entirely different from the ascribed properties might appear, which is known as *prabhava*.

The various tastes (*rasas*) of the drugs are also the results of permutation and combination of the five *bhutas*. Ayurveda attributes the action of the drug to its various therapeutic qualities. They are indicated as taste (*rasa*), property (*guna*), potency (*veerya*), metabolic changes of taste (*vipaka*), and special action (*prabhava*). The knowledge of the above qualities of a particular drug will assist the physician to select the suitable drug for medication.

### Patient-physician relationship

The ayurvedic practitioners are closely related to the society in which they live and practise, and their advice as elders in the village is much sought after in all village activities, whether cultural, social, economic or political. They are accorded great respect by the villagers; the village physician is not merely regarded as a physician but considered as a friend, philosopher and guide by the community. Even today in rural areas these physicians remain the first contact of the villagers in times of illness and difficulties. The village physicians do not normally charge any fees, but the

village people generously compensate their services by giving them small gifts. However, in cities and semiurban areas the physicians charge fees like modern practitioners. But in general the charges for treatment by this system are lower than those of modern medicine.

#### **Duration of diagnosis**

Even though the physicians in Ayurveda have to carry out detailed examinations of the patient and the disease from various angles, applying a methodology, including intuitive knowledge, as briefly listed above, the time taken to make a diagnosis may be similar to that taken by an allopathic physician.

#### **The preparation of physicians for practice**

Ayurvedic practitioners fall broadly into the following groups:

1. Traditionally trained practitioners.
2. Institutionally trained practitioners.
3. Institutionally trained practitioners who have undergone training concurrently in traditional systems of medicine and, to some extent, in modern medicine.

The traditionally trained practitioners, who may be generalists or specialists, possess thorough knowledge, having been directly under the guidance of an expert either as an apprentice or as an understudy over a number of years. The second category comprises practitioners who are trained systematically for 3-5 years in institutes imparting training only in the traditional system of medicine. Even in the olden days renowned schools of ayurvedic medicine existed in southeastern Asia. At present about 150 well established colleges are giving training both at undergraduate and postgraduate levels in various countries. In India a uniform syllabus has been formulated and adopted throughout the country. The duration of undergraduate courses is 5½ years after secondary schooling and the doctorate course is a further 3 years after graduation.

There are a number of professional associations of Ayurveda in the region which are engaged in various activities, including ayurvedic education. The practice in this system is being regulated through registration of both institutionally qualified and traditionally trained practitioners in the registers that are maintained by the Governments concerned. Their sincerity and devotion to service remain exemplary, and malpractice is said to be minimal. This may not be altogether true of some of the considerable number of practitioners who, while not registered with any competent authority, practise nevertheless, especially in the villages.

## Research

Research is essential in every department of human endeavour and preeminently in Ayurveda, which has been the mainstay of the people of southeastern Asia for several centuries and continues to contribute largely in medical relief programmes. Research, while rehabilitating and popularizing Ayurveda, will be able to provide a meaningful interpretation of the fundamental principles, medicines and modes of treatment. The methods of research employed in Ayurveda should be such as do not deviate from the basic principles of the system. In considering the different areas of research, the common man should remain the focal point, and the entire gamut of ayurvedic knowledge should be fully utilized for his benefit and welfare. At the moment, research in Ayurveda is being conducted in the following fields:

1. Clinical research oriented not only to determine successful drug therapy but to establish the pathogenesis of disease.
2. Research on the drugs used in Indian medicine and folk practice at multidisciplinary level.
3. A medicobotanical survey of the entire region to assess the availability of medicinal resources.
4. Collection of folk information and recipes not described in classical works.
5. Development of quality control for drugs and pharmaceutical preparations used in Ayurveda.
6. Research into fundamental doctrines on which the medical system is based.
7. Medicohistorical research concerned with Ayurveda and its influence on contemporary systems and society.
8. Research into medical literature interpretation, and the publication of critical editions.

Clinical research is one of the fruitful lines of approach to clarify the principles and methods of diagnosis and treatment of diseases mentioned in classical works. It covers research into the mechanism of causation of a disease, its prevention and cure. As already stated, such investigations should give due regard to the concepts and doctrines enunciated in Ayurveda. Scientists should be well qualified investigators belonging to both ayurvedic and modern systems of medicine. Several advantages could be realized by utilizing the following scheme: (1) diagnosis and treatment strictly according to Ayurvedic principles, (2) diagnosis under ayurvedic and modern principles and treatment in accordance with ayurvedic medicine, (3) diagnosis under modern medical principles and treatment in accordance with doctrines of Ayurveda, and (4) diagnosis and treatment according to modern medical methods.

However fruitful and potent the clinical research might be, it cannot be forgotten that drugs play a key role in the success or otherwise of the treatment. This naturally highlights the subject of drug research, which includes a number of components such as medicobotanical survey, plant cultivation, and pharmacognostic, chemical and pharmacological studies.

The pharmacognostic studies have to be planned so that there can be scientific and uniform methods of checking for authenticity of drugs and plants. There is a need for standardization not only of the raw drugs but also of the methods of manufacture and finished products so that genuine medicinal preparations with proven efficacy can be available for clinical application. The results of research should be evaluated on the basis of possible utilization by the profession and by industry. Such results could be disseminated through workshops, seminars, conferences, and the publication of monographs.

The countries of southeastern Asia permit parallel functioning of their traditional, indigenous systems with the modern health care system. Although integration of the various systems is considered the ultimate goal, certain prerequisites are mandatory, such as the introduction of basic elements of Ayurveda into the curriculum of modern medical education in order to bring about a closer relationship between the two systems.

Every system of medicine has its own merits and demerits. No medical system in isolation can fully meet all the challenges and complexities of health problems in modern times. The various systems must therefore collaborate and pool the available knowledge to their mutual advantage and for the good of the community they endeavour to serve. A realistic approach which appears to have a better chance of achieving the ultimate goal of providing adequate health care coverage for all peoples is to adopt whatever is best in the various health care systems.

### The Siddha system of medicine

The Siddha system of medicine owes its origin to the Dravidian culture which is of the prevedic period. An examination of the ancient literature would reveal that the vedic Aryas owed allegiance to the cult of Shiva and the worship of the phallus (*linga*) which was later on absorbed by and incorporated into the vedic culture. The Shiv cult is associated with its medical counterpart, the Siddha system of medicine which is mainly therapeutic. Mercury, sulfur, iron, copper and gold, bitumen, white, yellow and red arsenic, and other minerals as well as vegetable poisons are extensively used in the pharmacopoeia of the Siddha tradition. The Siddha system of medicine is prevalent in the southern states of India, and in Sri Lanka, Malaysia and Singapore where the Dravidian civilization was dominant. The principles and doctrines of this system, both fundamental and applied, have a close similarity to Ayurveda, with specialization in iatrochemistry.

## II. Medical astrology

Ayurveda postulates the theory that the human being is a replica of the universe in miniature and has therefore close mutual relationships with it. Permutations and combinations of the influences shed by 12 zodiacs, 27 stars and 9 planets is the basis of astrology. This is yet another area of knowledge based on scientific astronomical facts; it deals with the close relationship between the various celestial bodies and human beings. Astrology therefore supports and runs parallel to the doctrines postulated by Ayurveda. It is for this reason that since ancient times the study of astrology, without which the study of medicine is considered incomplete, has been given great importance in the course of ayurvedic studies.

It is believed that various celestial bodies exert varying degrees of influence on individuals depending upon the position of the planet at the time of their birth and its subsequent placement at different periods of their life. Every human being is radiating energy which is not visible to the naked eye, and the health and general well-being of the individual depend on the harmonious relationship or interaction between the amount of radiation or energy received from the universe and the amount radiated by his own body. A detailed astrological study of the individual horoscope provides the information required for the prediction of an individual's proneness to illness and even the severity and duration of the illness that he is likely to endure. For both Ayurveda and astrology the planetary influences categorize individuals into three groups according to their mental constitution; the *sathvic*<sup>1</sup> characteristic is influenced by the sun, moon and Jupiter, the *rajasic*<sup>2</sup> is influenced by Venus and Mercury, and the *Thamasic*<sup>3</sup> by Saturn, Mars, *Rahu*<sup>4</sup> and *Kethu*<sup>5</sup>. The planets likewise have direct influence on the three humoral factors and together with the sun and Mars cause disturbances of energy (*pitta*), while Venus, the moon and Jupiter cause disturbances of inertia (*kapha*), and Saturn, *Kethu* and *Rahu* cause disturbances of motion (*vata*)<sup>6</sup>. Mercury causes disturbances of all the three *dhatus*.<sup>7</sup> The planets also influence the functioning of the various organs of the body, in the same way as they influence animate and inanimate objects. Therefore astrological studies give the ayurvedic physician the knowledge to select the requisite herbal medicines (which are ruled by the planet having opposing influence to the planets that rule the *doshas*<sup>8</sup>) for correcting the imbalance of *doshas* to cure the disease. Thus

<sup>1</sup> Existence, entity, goodness. <sup>2</sup> Royal, kingly. <sup>3</sup> Ignorance, vile, vicious. <sup>4</sup> A demon said to be the cause of eclipses. <sup>5</sup> The last of the 9 planets, flag. <sup>6</sup> Air, wind, rheumatism, gout. <sup>7</sup> Metal, any constituent of the body. <sup>8</sup> Pathological conditions.

the study of astrology enables the ayurvedic physicians not only to diagnose patients accurately but also to make a correct assessment of the root cause of the disease and prescribe the appropriate remedy.

Medical astrology has made an elaborate classification of diseases and the particular planetary combinations that could be influencing them. As an example, the moon rules the mind, the sun controls the soul and Mercury influences the nervous system. Afflictions by the moon and Mercury, and Mars or Saturn generally indicate mental disorders. The influence of the sun, Jupiter, Mars centred on Mercury, or the moon induces schizophrenia. Melancholia is produced by the conjunction of the moon and Saturn. Planetary positions also have an important effect on the periodicity of epidemics of malaria, influenza, etc.

The astrologer's main function is, however, to make a realistic assessment of the personality of man, his physical and mental characteristics, his strengths and weaknesses, and the influences exerted over him by various planets at any given time. Thus it is possible to make predictions about the disease before its occurrence, through astrological study as opposed to the diagnosis made by an ayurvedic physician after the onset of the disease.

Much of the mystery of the human body and its intricate working, and of the life force which controls it, still remain inexplicable despite scientific advances. A study of medical astrology could prove to be of great use to the physician by supplementing his own knowledge. Another contribution that astrology offers to medical science is to provide a working knowledge about diseases that might strike an individual during a certain period of his life and to suggest methods by which he can strive to lessen the adverse effects if not altogether ward off the illness. Here astrology recommends the use of *mantras*. Astrological literature from ancient times is replete with references to this important aspect of *mantra sastra*. The afflictions (*arishtayogas*) merely indicate the deficiency of the requisite or normal energy-quantum and this can be compensated by *mantras* which are nothing but packets or bundles of adjusted forms of sound vibrations.

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## Medico friend Circle - Annual Meet 1985

## BACKGROUND PAPER - IV

TUBERCULOSIS IN THE AYURVEDIC SYSTEM OF MEDICINEDEHUV MANKAD

The term 'allopathy' has been used for the sake of descriptive ease as an equivalent to Modern Medicine, more precisely the system of medicine taught in the M.B.B.S. Course. This is despite the fact that the equivalence is not accurate.

Tuberculosis has been with humankind and has been known to it as a dreadful disease since ancient times. Over a period of several centuries, the understanding of this disease has evolved differently under different cultures. And as a necessary consequence, we find that the disease is looked at differently by various non-allopathic systems.

An attempt is made here to briefly present how Ayurveda, one of the two major non-allopathic systems—the other being homeopathy—extant in India regard tuberculosis: its aetiopathogenesis, treatment and prognosis.

TUBERCULOSIS IN THE BRUHATRAYI OF AYURVEDA:

Bruhatrayi (the three major texts) consists of the three major original textual sources of Ayurveda. They are Charakasamhita (c.700-600 B.C.), Sushruta Samhita (c 100 AD) Ashtangahriday Samgraha (c 400 - 500 AD). These three texts together describe the aetiopathogenesis, clinical features, diagnosis and medical (mainly Charakasamhita) as well as surgical treatments (Sushrutasamhita) of diseases.

In Ayurvedic texts only pulmonary tuberculosis is described as a separate disease and is known to them as Rajyakshama (Raj=King; Yakshama=Wasting disease). It is so named because, according to a myth it first affected Chandrama, the King of Constellations.

HISTORICAL BACKGROUND

Rajyakshama finds its first mention in Rigveda which describes how a physician treated a patient of Yakshama with mantras? But its more 'rational' history dates from Atharvaveda in which it is described under the section of fevers (Atharvaveda 5/5/22-134).

AETIOLOGY:

According to Ayurveda, diseases are caused as a result of several factors viz., genetic, congenital, constitutional, environmental, regional, occupational, sex, diet and so on. But the most important factors are those related to the constitution of a person's body. A human body is deemed

to have been constituted by seven tissues (saptadhatus - blood, muscle, fat, nerve tissue, semen, fibres and o-j-energy) each of which in turn, is formed as a result of the combinations of two or more of the five basic elements (pancha mahabhoots, air, water, space, earth and fire). The tissues carry in various proportion physiological qualities of tridoshas (kapha, Pitta, Vayu) each of which again comprise of a combination of the qualities of two or more panchamahabhoots.

In a healthy state of body, the saptadhatus, panchamahabhoots and the tridoshas are in a state of equilibrium both quantitatively and qualitatively. Any derangement of this equilibrium causes a disease state.

According to Ayurveda, tuberculosis is caused by an excessive accumulation of all the three doshas as a result of one of the following causative factors:-

- (a) Excessive strain beyond one's physical capacity (sahasik)
- (b) Suppression of natural urges like, thirst, hunger, micturition, defaecation, sexual - urge etc. (Vegavidharanaj)
- (c) Emaciation of tissues following injury etc. (Kshayaj)
- (d) Intake of food etc. which is unsuitable to one's constitution (Vishashanaj).

#### PATHOGENESIS:

Any of the above factors leads to irregularity in one's digestive power, By digestive power, it is probably meant what in modern terms could be called the process of metabolism as Ayurveda talks of both digestion of food (aharagni) and that of tissues (dhatragni), (Vishamagni). As a result, metabolism (Digestion and assimilation of food as well as tissue metabolism) suffers. This in turn ends up in accumulation of kapha. Kapha vitiates body channels thought to be carrying vital body - fluids other than blood (Srotodushti) and result in destruction of tissues like blood (Raktadidhatukshaya) and loss of tissue metabolic power (dhatvagnikshay). This causes imbalance in the constitution of ~~the~~ body tissues and accumulation of waste products (malas) in the body causing in turn accumulation of all the three doshas viz. Kapha, Vata, Pitta.

SYMPTOMATOLOGY

The disease caused by each of the causative factors outlined above manifests as different symptoms. Out of these, five symptoms are common to all the aetiological types of Rajyakshama. They are: cough with expectoration, loss of appetite, fever, headache and backache. Others like change in voice (in a, b, d. above), weakness of voice (in c.) pain in the throat (in b), feeling of discomfort in throat (in a), or hemoptysis (ind), hot sensation around throat (in c, d) are the differentiating symptoms. Out of these change in voice, backache, are caused by accumulation of vata; fever, hot sensation around throat and hemoptysis are caused by accumulation of pitta; and headache, cough with expectoration, loss of appetite and loss of voice are caused by Kapha dosha.

The patient spits out a thick, sticky, sour smelling, yellow, green or white sputum. The patient may spit blood too, as a result of bursting of blood vessels.

TREATMENT

Since, according to Ayurveda, tuberculosis is caused by accumulation of all the three doshas, the physician should treat it according to the relative strengths of the doshas.

The treatment consists of diet (pathya), fomentation (swedan), local application (alepan) and drugs (oushadha).

(a) DIET: Several strengthening diets are prescribed for a patient of tuberculosis.

1. Soup of partridge, quail or chicken meat cooked in ghee to be taken with rock salt, lemon juice and black pepper.

2. Soup of mutton cooked in ghee, with pepper, barley or horse gram, dried ginger powder (soonth) and seeds of pomegranate to be eaten with Amla.

(Charaksamhita Chikitsa  
Sthana 67 - 68.)

b) Fomentation:

This is prescribed in order to relieve back ache and pain in the chest.

1. A poultice of barley, horsegram, kidney bean flour kneaded with hot milk should be applied to head, chest and back.

(Ch. sam - Chikitsasthan 71)

2. A poultice of jivanti, aniseed, liquorice, root, vidarikand, meat of wild animals or animals living in water cooked in ghee, nerve and fibrous tissue should be applied to the site of pain (Ch.Sam. Chikitsasthan 75-76)

(c) Local applications: This, too is prescribed for the relief of pain.

1. An ointment prepared from aniseed, liquorice, costus, tagar, red sandalwood in ghee should be rubbed at the site of pain (Ch.Sam. Chikitsa sthan - 77)

2. In case of fever, an application of Chandanadi Taila followed by a hot water bath is prescribed. Alternatively, sponging with liquorice root decoction or cow's milk is prescribed (Ch.Sam.Chikitsasthan 85-86)

Bleeding and mild purgation / laxation is also indicated.

d) DRUGS: As mentioned earlier, drugs to be prescribed for tuberculosis would depend upon the relative strength of the three doshas. However, some formulations are prescribed which treat various symptoms of the disease.

1. Change in voice: Inhalation of a powder of variarmool, and shalaparni or ghee medicated with vidarikand, liquorice and rock salt is indicated to relieve this symptom. (Ch.Sam. Chikitsasthan 90)

2. Cough with expectoration (kasa), breathlessness (Shwasa) and chestpain.

A medicated ghee containing dashmool or cow's milk and meat juice is prescribed to be taken internally for cough and breathlessness while a paste made of variarmool is indicated to be applied at the site of chest pain (Ch. Sam Chikitsasthan 93)

A linctus made of long pepper honey, sugar ghee in a paste of dates and raisins should be given to a patient suffering from cough and breathlessness.

Another drug prescribed for these symptoms is a linctus called Yakshmanashakleh: (i) dates, long pepper, raisins bark of myrobalan, Kakdashringi, Durlabha (ii) Triphala

(Amla, Behada, Haraḡa) long pepper, Nagarmotha, Water Chestnut, gur and sugar (iii) Kshir Kakoli, Kachur and gur., any of these powders taken with honey and ghee cures cough with expectoration, breathlessness, change in voice and chest pain (Ch.Sam Chikitsasthan 100-102)

Another formulation prescribed is sitopaladi churna containing sugar - 16 parts, vamshalochana 8 parts, long pepper 5 parts, small cardamom 2 parts and cinnamon 1 part to be taken with ghee and honey. This relieves the symptoms of breathlessness, cough, loss of appetite, loss of digestive power and backache. (Ch.Sam.Chikitsasthan 103 - 109).

Other drugs like Vasaghrita and Shatavari Ghrita are also prescribed (Ch.Sam Chikitsasthan 105).

#### SPREAD OF THE DISEASE:

According to Madhavnidanam, pulmonary disease is considered to be an infectious disease. It spreads through the breath, the saliva and sneeze of a patient. Also one can contract the disease by using patients utensils bed, scents etc.

#### Comments on the research on medicinal herbs used in the treatment of tuberculosis:

One thing that strikes any one going through the pages of medicinal and Aromatic Plants Abstract and CSIR bimonthly claiming to provide the latest information on the state of research in medicinal herbs, is the absence of any worthwhile research on the medicinal plants used in treatment of this disease. During the last four years (24 issues) there is only one research paper reported. It is on the relationship between rifampicin bioavailability and Adhatoda vasica.

Adhatoda vasica is perhaps the only herb that has been studied to any extent in its usefulness in the treatment of tuberculosis. It has been found to have an antitubercular effect in vivo. Essential oil of A vasica was found to inhabit all strains of M.tubercle in concentrations ranging from 2-20 Hg/cm in Youman's modified media (0, 7, 8). But the "drug was found to be useless in curing or preventing the progress of the disease either in experimental animals or in human beings. It only relieves irritable cough by its soothing action on the nerves and by liquafying the sputum whch makes expectoration easier". This view is supported by others too. Other herbs found useful as expectorants in Tuberculosis are Allium sativum (garlic), Moringa oleifera (drumstick tree).

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APPENDIX - I

SOME OF THE HERBS USED IN THE TREATMENT OF TUBERCULOSIS IN  
BRUHATTRAYIE

<u>English Name</u>	<u>Hindi Name</u>	<u>Botanical Name</u>
1. --	Jivanti	Leptadenia reticulata
2. Fennel seeds	Saunf	Foeniculum vulgare

<u>English Name</u>	<u>Hindi Name</u>	<u>Botanical Name</u>
3. Licquorice	Mulhatti (Jeshtimadh)	Glycyrrhiza glabra
4. --	Vidharikand	Ipomea Panniculata
5. Flag	Vach	Acorus Calamus Linn.
6. Costus	Kuth	Saussurea lappa C.B. Clarke.
7. Wax Flower	Tagar	Ervtania coronaria stapf.
8. Red Sandalwood	Raktachandan	Ptercarpus sanctalinus linn
9. ..	Variyarmool	Desmodium
10. ..	Salparni	Gangeticum D.C.
11. Long Pepper	Lindipipper	Piper Longum
12. Dates	Khajur	Phen dactylifera Linn.
13. ..	Munakka	Vitis Vinifera Linn
14. Myrobalan	Harida	Terminalia Chebula Retz.
15. ..	Kakadsingi	Pistacia integerrina Sav.
16. ..	Durlabha	Fegoina cretica linn
17. Emblic Myrobalan	Amla	Emblica officinals belerica.
18. Chebulic myrobalan	Behada	Terminalla Roxb
19. ..	Nagarmotha	Cyperus rotundus
20. Waterchest nut	--	Trapa bispinosa Roxb.
22. ..	Kshirkakoli	Luvunga Scandens
23. Small Cardamom	Chhoti Ilaychi	Elettaria Cardomomum
24. Cinnamom	Dalchini	Cinnamomum Zeylanicum Blum
25. ..	Vasa	Adhatoda Vasica.

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BACKGROUND PAPER V

TB in 'SIDDHA'

In Siddha, TB is referred to as "Chaya Rogam". Chaya is not a Tamil word originally. It is said to have a double origin: (i) Chayam which means 'phlegm' (sputum) in Sanskritized Tamil and (ii) Chinitha which means 'to become weak'. It is, however, not the same as Kasa Noyee-- a pure Tamil phrase meaning 'phlegm formation' which in Siddha refers to milder sputum-producing diseases. This terminology causes some confusion since allopaths use TB and 'Kasa Noyee' as synonyms.

Chaya Rogam is due to a deficiency of food and blood constituents (? vitamins) such as 'minerals' and 'calcium'. The body is affected by this disease, since it has less "resisting power" (? immunity). Predisposing factors include certain diets (depends on individual constitution), environments (living in dark places, work in factories) and "customs" (habits - smoking, drinking). The affectation (? route of infection) is through diet or in the womb itself. Thus a child whose mother dies in giving birth to it may be affected. A child whose life in the womb is affected by deficiency may also be affected.

"Pathology": The Iral are affected--first there may be no outward sign or symptom but when the lungs are affected it is noticed as this is the place where Pranvaya (oxygen) goes to.

The three Iral are: Man Iral (Earth Iral), Norai Iral (Frothy Iral), Kal Iral (Stone Iral) or spleen, lung and liver. Again confusion occurs here because Iral is sometimes taken to mean 'liver' alone.

Treatment: Medicine forms one part and diet forms two parts of Siddha treatment. The 'Chaya Roga' patient cannot be simply given the same diet as the rest of the family.

Specific treatment is expensive and one of the ingredients is gold. The course of this treatment takes at least two Mandalams (2 x 48 days). After this the body still has to be strengthened and so the length of treatment depends on the condition of the body.

Non-specific and cheaper medicine will take 6 months at least. It will also be effective.

On diagnosis: There are 3 pulses to be felt in the wrist of these the PITHA NADI is--

1. increased in intensity in Chaya Rogam. Pitham melts fat and the causes the weakness in TB;
2. The 'pitha nadi' "connects" with the SLETHAMAM NADI (? character of pulse);
3. Pulse rate is raised and corresponding increase in temperature and respiration rate may occur. Since pitha is strong after 2 pm the rise in temperature will be towards evening.

Other locations: Bone affectations causes the bone to be "bumpy" or "in and out" wherever blood "clots" eg., lymph nodes, bone, spleen, lungs, but also nerves abdomen etc., can be affected by Chaya Rogam.



## Effect of Some Psychotropic Ayurvedic Drugs and Intensive Special Coaching on the Psychological Development of Mentally Backward Children

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### ABSTRACT

A study with 72 mentally backward children given psychotropic Ayurvedic drugs singly or in combination with special education shows that special education without drugs produces beneficial effect in academic scores only. The combination of drugs plus special education is more effective than drugs alone in many of the parameters. The combination, Mandookaparni plus special education group has shown a consistently promising response.

### INTRODUCTION

The present day treatment of mentally retarded and backward children is not wholly satisfactory. From a psychiatrist's point of view (1), "proper treatment of mental retardation relieves symptoms, reduces morbidity and allows the individual sufferer to operate the best way he can within the limits of his permanent disability". Especially in the field of mental retardation, as Blackman (2) pointed out, "any drug which makes a 'just noticeable difference' in a positive direction should be considered to be effective" since total cure is ruled out.

Various drugs have been tried with mental retardation to improve their intelligence and adaptive behaviour. Glutamic acid (3), vitamins (4), L-glutavite (5), tranquillizers (6), encephabol (7), etc., are some of the drugs widely prescribed by doctors dealing with mental deficiency. In general, these studies are ambiguous. Whereas some studies have shown a positive therapeutic effect, subsequent studies have not stood the test of scrutiny. Many of these studies lack controls thus precluding the advantage of double blind trials.

Scientists all over the world, are presently turning to other systems of medicine in fields where allopathy has failed to make a dent, with the hope of finding new therapeutic measures. Ayurvedic, medicines have the advantages of being cheaper, easily available, with least adverse reactions. A number of drugs

have been mentioned in ancient classics (8) for their *rasayana* property and *medhya* effect (Intelligence promoting property). Of these, a single drug Mandookaparni (*Centella asiatica* Linn) and 2 combinations viz. Brahmi Gritham and Sarasvatha Churnam were taken up for investigation in this study. The main drugs in Brahmi Gritham and Sarasvatha Churnam are Brahmi (*Bacopa Munneri*) and Vacha (*Acorus Calamus*) respectively. The drugs were procured from the Indian Medical Practitioners Cooperative Pharmacy Ltd, Madras.

Any remedial therapy for mental backwardness does not stop with drugs. It must inevitably include special education also, as the problems of the mentally retarded and backward, require different emphasis and careful handling which only special education can give.

Hence, it is decided to combine the 2 variables and conduct a systematic study.

#### MATERIALS AND METHODS

Seventy two children of both sexes in the age range of 5-13 years and I. Qs ranging from 50 to 90 were selected from a local home (Bala Mandir, Madras) for destitutes and allocated randomly to the following groups.

- Group I Special coaching alone  
 Group II a. Sarasvatha Churnam alone  
           b. Mandookaparni alone  
           c. Brahmi gritham alone  
 Group III a. Sarasvatha Churnam + special education  
            b. Mandookaparni + special education  
            c. Brahmi gritham + special education  
 Group IV Control group

The drugs were administered twice a day in the following dosages:

	Below 8 yrs	Above 8 yrs	Administration
1. Mandookaparni	1 gm / day	2 gms / day	with milk
2. Brahmi gritham	$\frac{1}{2}$ teaspoon per day	1 teaspoon per day	with milk
3. Sarasvatha churnam	$\frac{1}{2}$ teaspoon per day	1 teaspoon per day	with milk

Special education was provided by 4 teachers who are specially trained in teaching slow learners. The needs and capacities of each child were taken into account in preparing for the remedial lessons which are school-based. The concept of "special education" is modified, with the basics of education taught in the morning and some craft or skill taught in the afternoon. The overall idea is to make the child self-sufficient at the end of the project.

The following were the parameters of assessment:

1. Intelligence quotient as assessed by Binet-Kamat test (9).
2. Academic scores in the various examinations.
3. Matron's assessment of behaviour problems (10).
4. Rutter's behaviour rating scale.

- a. General behaviour—as assessed by the matrons.
- b. Classroom behaviour—as assessed by the teachers.

The project's tenure was 3 years. This paper presents the results of the analysis at the end of one year.

### RESULTS

*The effect of special education alone* (Table 1): The control group shows a decline in I.Q. and special education group shows a numerical increase in I.Q. though it is not statistically significant. In academic scores, the special education group shows a significant increase ( $p < 0.05$ ) at the end of one year. In all other parameters, decrease in the values is taken as a positive response as they all relate to behaviour problems. As can be seen from the table, the special education group has registered a greater numerical decrease in all the behaviour problems (even though not significant) whether assessed by matron or teacher.

*The effect of drugs alone*: The groups with drugs alone do not differ much from the control groups in any of the parameters. Probably the treatment period of one year is not adequate for the drugs to show their actions. Subsequent assessments may bring to light the effects of drugs alone.

*The combined effect of drugs plus special education as compared to control*: The group with Mandookaparni plus special education shows a statistically significant increase in I.Q. at the end of one year. The control group shows a decline in I.Q. In academic scores, the groups a) Sarasvatha churnam plus special education and b) Brahmj gritham + special education have registered a significant increase. In behaviour problems, the group with Mandookaparni + special education shows a significant decrease and overall, this combination seems to be more beneficial than others.

Table 1. Analysis with regard to the effect of special education

Sl. No.	Parameter	Control group	Special education group
1.	Intelligence quotient	$-2.80 \pm 3.67$ (8)	$1.31 \pm 3.51$ (9)
2.	Academic scores	$7.83 \pm 10.10$	$35.00 \pm 7.98^*$
3.	Matron's assessment of behaviour problems	$-4.56 \pm 4.22$ (9)	$-11.67 \pm 3.88$ (9)
4.	Rutter's behaviour scale		
	a. General behaviour (as assessed by Matron)	$-3.33 \pm 1.91$ (9)	$-4.45 \pm 2.35$ (9)
	b. Classroom behaviour (as assessed by teacher)	$-2.89 \pm 1.68$ (9)	$-3.56 \pm 1.39$ (9)

Values are mean difference  $\pm$  standard error. Figures in the paranthesis represent sample size.

\*  $P < 0.05$

Table 2. Analysis with regard to the combined effect of drug + special education as compared to drugs alone.  
Values are mean differences  $\pm$  standard error

Sl. No.	Parameter	Sarasvatha churnam + sp. education	Sarasvatha churnam alone	Mandookaparni + special education	Mandookaparni alone	Brahmi gritham + sp. education	Brahmi gritham alone
1.	Intelligence quotient	0.80 $\pm$ 4.01 (9)	-1.28 $\pm$ 2.81 (9)	3.80 $\pm$ 2.17 (9)	1.19 $\pm$ 2.74 (9)	2.43 $\pm$ 1.74 (9)	-0.19 $\pm$ 2.58 (9)
2.	Academic scores	26.60 $\pm$ 1.90* (5)	4.85 $\pm$ 12.69 (7)	—	9.80 $\pm$ 2.24 (5)	38.66 $\pm$ 6.12* (3)	-1.14 $\pm$ 9.15 (7)
3.	Matron's assessment of behaviour problems	0.11 $\pm$ 2.56 (9)	-3.11 $\pm$ 2.59 (9)	-9.22 $\pm$ 2.39** (9)	0.33 $\pm$ 1.80 (9)	-5.89 $\pm$ 1.32 (9)	-2.44 $\pm$ 9.15 (9)
4.	Rutter's behaviour scale						
	(a) General behaviour (assessed by Matron)	-2.55 $\pm$ 1.03 (9)	1.22 $\pm$ 1.24 (9)	-6.78 $\pm$ 2.30* (9)	0.00 $\pm$ 1.86 (9)	-1.12 $\pm$ 1.72 (9)	-3.23 $\pm$ 1.61 (9)
	(b) Classroom behaviour (assessed by teacher)	-2.36 $\pm$ 1.72 (9)	-2.11 $\pm$ 1.72 (9)	-1.56 $\pm$ 2.25 (9)	-3.89 $\pm$ 1.11 (9)	-4.33 $\pm$ 1.58 (9)	-1.56 $\pm$ 1.18 (9)

\*P < 0.05. \*\*P < 0.01

The combined effect of drugs plus special education as compared to Drugs alone (Table 2): In I.Q. among the drugs alone groups, only the group with Mandookaparni shows a numerical increase while the other two groups show decrease. In the combination (drugs + special education) groups too, the group with Mandookaparni + special education registers an increase in I.Q. which is greater than the other 2 groups. In academic scores, the combination seems to be more effective than drugs alone. Again, the combination seems to be more effective in reducing the behaviour problems than the drugs alone and among the combinations, Mandookaparni + special education, is more beneficial in its effect consistently.

### DISCUSSION

Among the Indian medicines, *Centella asiatica* (Mandookaparni), *Celastrus paniculata* (Jyotishmati), *Convolvulus Pluricalis* (Shankapushpi) are some of the drugs subjected to experimentation. Appa Rao *et al* (11) found significant increase in the general mental ability at the end of 6 months with Mandookaparni in 30 mentally retarded children. Though in the present study, the drugs without special education have not shown any substantial improvement in the parameters so far, prolonged administration is expected to bring the desired results.

The superiority of the special curriculum over the normal classes for the mentally backward children is well established in this study. Educationists prefer a special curriculum for the educationally handicapped persons as the order of priority takes into account the disadvantages of each child (12).

The combination of drugs and special education is found to be more effective in this study as the problem is approached from two angles—drugs on the physiological plane and special education on the psychological line. Among the combinations, Mandookaparni + special education shows a consistently better result. This corroborates the study by Appa Rao *et al* (11) which also found a promising action by Mandookaparni. A review of the first year progress of study in this paper has become imperative to take stock of the situation viz, change in the dosage of medicines, introduction of special diet to increase the potency of the drug, changes in teaching methods, etc.

### ACKNOWLEDGEMENTS

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BRIMHAN TREATMENT IN PRATISHAYA-SHWASA  
( RESPIRATORY TRACT MANIFESTATIONS )

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Hon'ble Chairman of the Session, Co-Chairman,  
Hon'ble Chairman & Secretary of the organising committee,  
Hon'ble members on the dias & Vayovridha-Gyana Vridha-  
Papovridha ( Senior in age, knowledge and practical aspects  
of life & science ) members of the audience,

I <sup>express</sup> extend my gratitude for the opportunity given to  
me to stand before you all and put forth my humble  
experiences in the management of respiratory tract mani-  
festations based on the following principle.

" बलम् ह्यलं निगृह्यत दोषाणाम् "

Balam Hialam Nigrahaya doshanam, as stated by  
Maharshi Charak in Jwar- Chikitsa &

" तर्क्ष्यं बृहणे ह्यल्पं शक्यश्च प्रायसो भवेत् ।

नार्यथं समनो पायो भूतो शक्यश्च कश्चिः । [च. वि. १७/१४९]

Sarvesham Brimhanam Hialpa Shakyascha Prayasho  
Bhavet, Natyarthem Shammopayo Bharasho ashakyascha  
karshne ch.ch. 149. 17.

That is the patients suffering with shwasa do  
respond better and damages if caused are potentially less  
with Brimhan treatment. Shaman Chikitsa may not be causing  
more damage but Rookshan treatment which is most widely  
used today, definitely has the more potential for damages  
leading to irrecoverable phase of the disease.

I have the privilage to present the case study of 50  
patients from indoor section of Govt. Ayurvedic college,  
Nanded with refrence to Brimhan treatment in Pratishaya-  
Shwasa major attraction to take up this study was availabi

of limited resources to assure the sufferer in relieving from the present state of attack and to assure him of non-recurrence. This can only be practiced in between the two attacks.

The principle of management is the preventive treatment in Kapha Prakopkal i.e. February- March & Vyakti phase i.e. from June to December alongwith Vihar treatment of Yogasana and Pranayam.

From the preliminary studies at the indoor section of Govt. Ayurvedic college, Hospital Nanded, there is ample evidence to assure the patients as above.

The study is spread over fifty patients from 1984 to 1988 admitted from C.P.D. section of Govt. Ayurvedic college & hospital Nanded to the indoor section.

The study was undertaken in three phases.

1. Assessment of Sthansamsraya i.e. Nasa( Nasal) Kantha (Pharynx) and Phuphus (lungs fields ).The Methods employed were simple to practice at remote places also i.e. inspection palpation percussion & auscultation.
2. Shodhan treatment & pachan in required potency including Vaman when needed.
3. Brimhan treatment after the acute phase is relieved, with Siddha-Ksbeer,
  1. Sthan Samsraya revealed the distribution as follows.

(A)	Jeerna Pratishya in	30 patients i.e. 60%
(B)	Jeerna kasa in	14 patients i.e. 28%
(C)	Nasabhishyanda in	28 patients i.e. 56%
(D)	Kanthabhishyanda in	41 patients i.e. 82%
(E)	Pathogenesis in phuphus	46 patients i.e. 96%



Raised respiratory rate was as follows :

Group - I	18-24	18	i.e. 36%
Group - II	25-32	13	i.e. 26%
Group - III	more than 32	17	i.e. 34%

Most <sup>Patients</sup> were not in Vegavastha i.e. 4 %

The treatment is divided in two phases.

1. Pachan & shodhan in required potency, Vaman if necessary alongwith Nasya ( with shehan-svedan ) for pathogenesis in Nasa.
2. Gandush, Lehan, Achushan for Kanthabhishtyanda ( Pharyngeal Pathogenesis )
3. Ras-sindoor, Shwaskuthat alongwith Yeshtimadhu + Pippali quath throughout the day as and when required : which yeilded satisfactory results.

The patients are switched to Brimhan treatment after the potency of attack is reduced as per the principles of Rasayan Treatment.

The assessment of the results is calculated as follows.

1. Normalised respiratory rate i.e. upto 18.
2. Reduction in inflammatory pathogenesis in Nasal, pharyngeal and lung fields.
3. Normal auscultation in lung fields.
4. Increased hunger, proper digestion, excretion in proper time.
5. Feeling of freshness.

The Brimhan treatment is administered in siddha ksheer siddha mamsa Rasa on the following principle.

"मण्डूकपर्ण्यं स्वरसः प्रयोज्यः क्षीरेण कटकीपुष्पस्युण्म

रसोगुडूच्यास्तु मूलं पुष्पाः कल्कः प्रयोज्यः क्षु शीघ्रपच्यः" [ च. वि. १० ]

The form in which Rasayana treatment is given is restituted as follows.

1. Fresh juice of Manduookparni
2. Yashtimadhu representing jeevaneeyagana with ksheer.
3. Guduchi flower and root as swarasa & grinded form of Phankhapushpi. Ch.Su. 4.

Contents of powder for Siddha- ksheer,

Sanskrit Name	Latin Name	Part used.
Shunthi	Zingiber Officinale	Stem
Pushakermul	Inula racamosa	root
Pippali	Piper longumlinn	fruit
Mangishta	Rubia cardifolie	Stem
Sariva	Memidesmus indicus	stem
Ashavaganda	Withania somnifra	stem
Shatavari	Asparagus racemo	stem
Arjun	Terminalia Arguna	stem
Yeshitimadhu	Glycyrrhiza glabra	stem

Siddha ksheer is prepared as follows.

Five gram of mixture above fine powders +

One cup of milk +

One cup of water is boiled and reduced to one cup of milk. Filtered & administered twice a day in the morning & evening.

We could start Siddha ksheer & had response as follows in 50 patients under study.

No. of Pts.	Initiation of Siddha Ksheer in weeks.	% of relief	Follow up in weeks.
8	I st	16%	4 weeks
19	II nd	38%	4 weeks
10	III rd	20%	4 weeks
3	IV th	6%	4 weeks
2	Not relieved	4%	4 weeks
4	Transferred	8%	--
4	Left during treatment	8%	--

Hence I may state that Brimhan treatment with Siddha ksheer <sup>has humble</sup> ~~is~~ potential in the treatment of Pranvaha-srotus diseases.

In our study 80% were relieved we have also put our efforts to have follow up with the treatment of shodhan in prakop-  
cala and maintaining Bala with diddh ksheer from June to  
December upto five years.

I am very much greatful fo V.S. Amravat Dean Govt.  
Ayurvedic college & hospital Nanded for the encouragement  
and permission to under take this project.

R.M.O. Govt. Ayurvedic Hospital Nanded for providing  
the records for the study. I ~~extend~~<sup>express</sup> my gratitude to Vd.  
B.S. Katti for his valuable guidance in selection of the  
problems and studies.

I am thankful to you all to have enabled me to  
putforth my experiences with encouraging response for  
which I am obliged to all of you also.

Thanking you,

CONTRIBUTION OF PATHOGENESIS OF MAHASROTAS IN  
RESPIRATORY TRACT DISEASES.

Author : Vd. B.S. Katti,  
Reader Kayachikitsa  
Govt. Ayurvedic dcollege  
Nanded- 431601 (India)

Hon'ble Chairman of the Session, Co-Chairman,  
Hon'ble Chairman & Secretary of the organising committee,  
Respected members on the dias and elite members of the  
audience,

~~extend~~<sup>express</sup> I extend my gratitude for the opportunity extended  
to me for humble submission of the mode and results of the  
study of importance of Pathogenesis of Mahasrotasa in  
respiratory tract manifestations.

It's my privilege to quote that the initiation of  
this study is the result of the Ahmedabad conference,  
organised by dept. of science and technology Govt. of India,  
Gujarat Ayurvedic University and Lokaswasthya Parampara  
Samwardhan Samiti a few years back. Respiratory tract  
manifestation was one of the Ten problems for which altern  
therapy was looked in to.

From Ayurvedic point of view, the basic principle

" प्राणवहानाम् स्त्रोतसं द्व-दयं मूलम् महास्त्रोतस्य "[च. वि. १]  
i.e. the proper functioning of Mahasrotas -proper digestion  
and proper excretion in time alongwith the production of  
poshak doshas has the control over pranvahasrotas (Respira-  
tory system ) The other Moola-sthana of pranvahasrotas is  
Hridaya. My study is limited to Mahasrotasa only.

The study is conducted both at inpatients and out  
patients level. The study on inpatients is conducted at  
Govt. Ayurvedic college & hospital Nanded, contributing  
fifty cases and the outpatients from Health Centre of Nanded

Dist. Branch of National Integrated Medical Association situated at Ganeshnagar, Manded and Sane Guruji hospital a unit of Manava Loka Ambajogai.

It is observed in this study that the complete study of the function of Mahastrotasa (Alimentary canal) can only be covered in indoor units. The available methods set out patients neither can not be ruled out nor neglected.

The sex and age group of the patients attending indoor and outdoor is as follows :

Age Group	Indoor 50		Outdoor 79	
	Male	Female	Male	Female
1-10	1	0	4	3
11-25	1	5	14	8
26-50	11	12	29	13
50 & above	17	3	7	1
Total	30	20	54	25

It is clear from the above chart <sup>that</sup> the age groups from 11 to 25 and 26 to 50 have reported in more numbers probably due to uncontrolled Aahar & Vihar either as a result of negligence of food <sup>discipline</sup> ~~rules~~ or unable to follow the regime due to over work.

Proper digestion and proper excretion, the major functions of Mahastrotasa, are attributed to following four disciplines.

1. The diet must contain Sneha, ~~to~~ <sup>to</sup> be able to be transformed to end products.
2. Tepoid hot food is a major asset for digestion.
3. The food by which one can Nourish his own body- Hitahar.
4. A little less quantity than required must form the quantum.

The above factors positively keep up proper samana vayu only when Anuloman of Apan is maintained.

The specific food articles especially, the products prepared out of fermentation or which promote fermentation have the major role in Pathogenesis of Mahastrotas, which are as follows :

i)	Mutton (especially of large animals )	15	30%
ii)	Curd	14	28%
iii)	Tomato	11	22%
iv)	Tobacco smoking, Chewing	09	18%
v)	Alcohol consumption	08	16%
vi)	Mur dal	07	14%
vii)	Eggs	06	12%
viii)	Lime	05	10%
ix)	Fish	04	8%

Total No.of fermentative and sour products point towards fermentative dyspepsia which is responsible for the disorders as follows.

Disease	IPD(50)	OPD(79)
i) Agnimandya	40(80%)	15(18.9%)
ii) Amlapitta	20(40%)	43(54.4%)
iii) Liver enlargement	15(30%)	17(21.5%)
iv) Aadhman	04(8%)	06(7.5%)
v) Udar sthambha (Abdomen not soft )	22(44%)	24(30.3%)
vi) Tenderness on deep palpation	23(46%)	4
vii) Sam purish (Total Quantity.)	24(48%)	39(49.3%)
viii) Hard stools	11(22%)	06(7.5%)
ix) Normal stools	05(10%)	01(1.2%)
x) Coated tongue	33(66%)	--

Hence I conclude that it is crystal clear, Ama potent diseases & Hard stools do have a major part in our statistics. According to Ayurveda, other four types of Vata, Pitta & Kapha in the body are nourished by Kledaka Kapha, Pachak pitta & Apana Vayu which are produced as a daily routine from digested food.

Hence the respiratory tract manifestations can not be cured without maintaining proper functioning of three awasthapakas of Mahastrotasa because the pathogenesis of Mahastrotasa is predisposing factor in the diseases of respiratory system.

The key to reduce the potency/prevent the manifestations of respiratory tract is keeping up proper digestion, proper excretion of urine & stools in time & maintaing vitality of pranvahastrotasa by Nasya, Vyayama Yogasanas & pranayam.

I acknowledge the helps rendered by Vd. Milind Rampurkar in scrutening, tabulation and preparation of this paper. I am thankful to-

The dean, Vaidya V.S. Amravat, Govt. Ayurvedic College & Hospital Nanded Maharashtra for encouragement and extending every help to prepare this paper. R.M.O. Govt. Ayurvedic college, & Hospital Nanded as he has generously made the records available for the study and staff of the hospital who has helped me in the wards. I am particularly thankful to you all who have not only listened me but also encouraged to deliver the study to full extent.

Thanking you all once again.

URMILA THATTE  
SHARADINI DAHANUKAR

# AYURVEDA : THE NATURAL ALTERNATIVE

**Ayurveda, among the world's oldest medical systems, often evokes extreme reactions. The romantic revivalists feel our sages had 'divined' everything about healing, herbs and health. Quacks and charlatans have long thrived on such worshipful and uncritical sentiment. Scoffs and sceptics, on the other hand, dismiss ayurveda as unsubstantiated gibberish. Can the extremes be bridged? What are the problems of 'validating' ayurveda in modern medical terms?**



An ayurvedic class on anatomy

CHILDREN love its tangy taste. Youngsters, hoping to beef-up their muscles, swallow daily dollops of the brown-black stuff. Older citizens, trying to regain youth and strength, turn to this concoction made from *amla* (improperly named the Indian 'goose-berry'). All of them have made *chavanprasha* India's best-selling and best-known tonic, a sort of ayurvedic answer to China's ginseng and other elixirs of life.

Ayurveda is arguably the world's most ancient medical discipline, one to which western medicine owes much in its earlier stages of development. Documentary evidence shows that some of *samhitas* or compendia of ayurveda are written in pre-Paninian Sanskrit. Since the era of Panini, the great Sanskrit grammarian and systematist, has been placed before the 7th century BC by historians like Gold Stueber, some of the *samhitas* predate the 7th century BC. It has been practised continuously ever

since. Like many other indigenous systems, however, ayurveda seems to have stultified in the medieval ages and overtaken by western systems, particularly after the colonial conquest of India. Today it enjoys at best only an alternative status compared to that of the western or allopathic system. Ayurveda is recognized by the Government of India along with the non-allopathic systems and regimens in the Indian Systems of Medicine (ISM). These include siddha, unani, nature cure, yoga, tibbia and amchi. According to government sources ISM has about 400,000 registered practitioners, mostly in rural areas. (By contrast, the number of registered allopathic doctors in the country at the end of 1987 stood at 332,000).

ISM has 13,770 dispensaries and 1,691 hospitals/wards having 19,568 beds. There are 98 ayurvedic colleges functioning in the country in both the government and non-government sectors for undergraduate education with an annual admission capacity of 3,857. Besides the National Institute of Ayurveda, Jaipur, the two full-fledged post-graduate institutions at Bahara

s Hindu University, Varanasi, and Gujarat Ayurveda University at Jamnagar, there are 22 colleges having post-graduate education facilities in ayurveda with annual admission capacity of 318.

Despite the overall primacy of the allopathic system, ayurveda still caters to almost the entire rural population mainly because of the scarcity of modern health care in our villages. (To consider just one indicator, the bed-population ratio which was 0.24 per 1,000 of population at the time of the First Plan has now "improved" to 0.74 per 1,000.)

Even in urban sectors most ayurvedic physicians have crowded outpatient clinics. Why do these people flock to the ayurvedic vaid? There is no simple answer. First is the perception among patients that ayurveda offers most appropriate or first-line therapy against certain diseases like jaundice. Also, many patients suffering from chronic diseases like bronchial asthma, rheumatoid arthritis or diabetes mellitus turn to ayurveda in order to reduce the use of modern drugs. Allopathic medicine has as yet no cure



An ayurvedic pharmacy practical

for such diseases, only palliative therapy. Moreover, drugs like insulin or tolbutamide for diabetes, salbutamol or aminophylline for asthma and prednisolone or aspirin for arthritis, while easing the symptoms without eradicating the disease produce many morbid side-effects. Thus patients already crippled with the disease, further burdened by drug-induced effects turn to ayurveda, hoping for cures without having to tolerate adverse reactions.

Another category of patients which turns to ayurveda are those suffering from terminal illnesses like cancer or congenital haematological (blood-related) diseases like haemophilia or thalassaemia. Many of these people come to the vaid after modern medicine has given 'given up' on them. They or more often their relatives are literally clutching at any straw — ayurvedic or otherwise. In their search for miracle cures, they are sometimes goaded by sensational reports in the popular press or the market-place of alleged cures with herbal medicines.

Curiously, many allopathic doctors also prescribe so-called ayurvedic

medicines. A survey by Indian Drug Manufacturers Association (IDMA) showed that more than 80 per cent of prescriptions issued by practitioners of allopathy include one or more preparations containing herbal drugs. These are usually fixed drug combinations of plants, sometimes herbal extracts, sometimes using a metal like iron or mercury and marketed by pharmaceutical companies. India leads the world in the use of herbal drugs: the sale of herbal products is almost one-and-a-half times that of allopathic drugs. The advent of commercials on national network television is undoubtedly a factor that has boosted tremendously the sale of herbal and so-called ayurvedic preparations. More importantly, these preparations are freely available over the counter without prescription.

Also, sustaining the boom is the so-called green sweep gripping the world. The marketing mandarins have, in the process, equated all plant or herbal medicines with ayurvedic medicines. The organized sector of manufacturers with their aggressive salesmanship and promotion of products

through media, has successfully sold an attractive myth to a gullible public: take 'ayurvedic' medicines, they are effective and safe. This has led to a widespread self-prescription of so-called ayurvedic drugs, particularly 'tonics' most often sold with unsubstantiated claims.

Marketing 'ayurvedic' drugs is particularly lucrative as it is not covered by the Drugs & Cosmetics Act (1954) nor the Magical Remedies Act (1954). The manufacturer is under no obligation to prove the clinical efficacy of a preparation and worse, does not have to subject the drug to stringent safety studies required of allopathic medicines. Consider, for example, the marketing of a so-called youth-restoring elixir. All you need to do is to pick up some plants mentioned in ayurvedic texts — and there are over fifty of them recognized by the Maharashtra state FDA — put them together in any way you like and sell! The comparable procedure for a new allopathic product involves a 10 to 20 years gestation period costing millions of rupees and batteries of animal tests and clinical trials to prove not only safety but also efficacy. No wonder then that even large multinational pharmaceuticals are jumping on to the money-spinning 'ayurvedic' bandwagon.

What needs to be reiterated is that 'herbal' or 'herbal plus mineral' preparations are not really ayurvedic. Nor does ayurvedic philosophy permit the kind of over-the-counter consumption of fixed-drug combination so rampant today.

What then is the ayurvedic approach to therapy? Ayurveda, as the name implies, is the knowledge of life (*ayu* Sanskrit for life and *veda* stands for knowledge). It describes ways to treat and prevent diseases. More importantly, ayurveda emphasizes procedures to maintain a state of positive health. This concept is only recently creeping into western medical thought.

The therapeutic approaches of ayurveda are well defined into four categories: *prakritisthapani chikitsa* (maintenance of health), *roganashani chikitsa* (cure of disease), *rasayana chikitsa* (restoration of function, bolstering function) and *naishthiki chikitsa* (therapy for the spirit or the psychiatric



approach in modern terms). These methods are used to bring back the deranged *doshā-dhātu-mala* equilibrium to normalcy, through removal of causative factors, dietary manipulation and drug therapy. The trinity-*doshā* (three humours); *dhātu* (seven tissues); and, *mala* (metabolic end products) is the foundation of life according to ayurvedic philosophy. Disease is believed to be the result of an imbalance in the triad. Ayurveda also emphasizes that equal attention should be paid to the 'tripod of life'—the body (*sharira*); the mind (*manas*); the soul (*atman*)—to attain sound health.

An ayurvedic doctor is supposed to make a diagnosis only after eliciting an exhaustive history, examining the patient thoroughly and determining the constitution (*prakriti*). Ideally, therefore, the whole person is taken into consideration before deciding a therapeutic measure which is not just symptomatic.

This is the very essence of ayurveda. Unlike western medicine, which mostly epitomizes the one-symptom-one-disease-one-drug paradigm, ayurveda is holistic.

Curiously, the digestive system is the main target used by ayurveda not only for administering therapy but also to explain pathogenesis of symptom complexes. The key concept here is that of *agni*, or the metabolic fire. If the *agni* is poor—a fact to be ascertained by taking a meticulous history—the food that you eat is not properly digested. This is believed to result in the formation of *ama* or undigested food molecules that are

### Ayurvedic drugs can, by themselves, produce unwanted effects

absorbed and deposited in different organs of the body to produce diseases ranging from rheumatoid arthritis, ulcerative colitis, liver cirrhosis and even metabolic diseases. The single therapeutic approach common to such a diverse spectrum of diseases, is to improve digestion and alter diet rather than symptomatic relief for the pain or diarrhoea and so on.

The point is that ayurveda considers each patient unique. The drug therapy therefore has to be highly individualized. And, even more importantly, equal emphasis is given to modifications in diet and life style.

Obviously then taking 'over-the-counter' drugs such as 'pain-killers' or 'cough syrups' labelled as 'ayurvedic' militates against the very spirit of ayurveda and can tarnish the reputation of this rigorous discipline.

This also highlights some of the myths associated with ayurveda. First is the fallacy of assuming that all ayurvedic therapies are safe. Second is the belief, already stated earlier, that plant-based drugs are necessarily ayurvedic and the third concerns the acceptance of ayurveda as a first-line medical system in some selected conditions.

To illustrate the problem of safety first, consider the case of two epileptic patients at the King Edward Vllth Memorial (KEM) Hospital, Bombay. They were well-controlled on phenytoin, the standard anti-epileptic drug. They started taking an allegedly ayurvedic formulation with 'anti-epileptic actions' to reduce their dependence on phenytoin which was producing side-effects. However, after some days of concurrent therapy, both boys lost control of epilepsy and began to get seizures. Although the dose of phenytoin had not been changed, the so-called ayurvedic agent was probably interfering with the allopathic drug. Subsequent animal research at the Hospital confirmed this as aspect of drug action.

Prescribing ayurvedic drugs or herbal remedies in combination with modern or allopathic medicines without knowing their possible interactions can, therefore, be dangerous. This is especially so in cases of drugs that have a very narrow therapeutic window, that is, drugs which can become toxic with the smallest changes in levels. The effects of these small changes can be catastrophic. Some of the drugs which need to be watched are anti-epileptic drugs, digoxin (used in heart failure) and tolbutamide (used in diabetes).

Moreover, ayurvedic drugs can, by themselves, produce unwanted effects. Charaka, the ancient master of ayurveda, says as much in his treatise *Charaka Samhita*:

"Like poison, weapon, fire and thunderbolt, a drug not perfectly understood is fatal; while a perfectly understood drug can be a life-saver." (*Ch.Sam.1:124*)

Indeed, ayurveda describes different procedures mitigating or reducing side-effects. For example, *avipatkar churna* given for hyperacidity, can produce abdominal cramps if not taken with warm water!



Ayurveda's teacher-disciple tradition

The second fallacy we have to rebut is that all plant-based medicines are 'ayurvedic'. Plants are only a part of the therapeutic repertoire at the hands of an ayurvedic doctor. The system describes over 600 plants of medicinal value in over 70 books containing more than 8,000 recipes of drug combinations.

Assuming safety, how efficacious are these drugs? If taken without following the elaborate ayurvedic rules of diagnosis and treatment, they can hardly be expected to be effective. If and when they are successful—and there are anecdotal accounts aplenty to attest this—one does not know to what extent some of these are due to the placebo effect or due to spontaneous remission. However, even in its most pristine and authentic forms ayurveda cannot hope to supplant modern medicine because of some inherent limitations. Let's examine these.

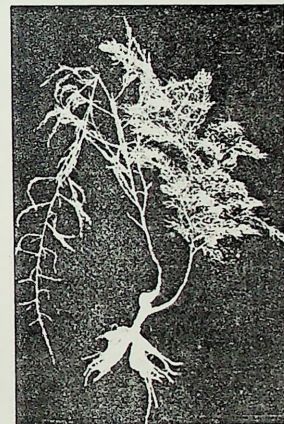
Firstly, ayurveda is a system that froze around the 13th century. By contrast, western medicine has been constantly evolving incorporating technological advances in all the sciences. To cite just a few examples, in the last ten years alone diagnosis has been radically transformed by advances in imaging such as CAT and PET scans or NMR as also by increasing sophistication in laboratory techniques. Therapy has been revolutionized by astonishing advances like lithotripsy (for 'shocking' kidney stones into oblivion with ultrasound waves) or lasers. Recombinant DNA technology used for making hormones like insulin is taken for granted today. Consider the latest example in this tradition: in October 1990, a four-year-old with a rare genetic disease in Washington, USA, became the world's first patient to be treated with genetically altered copies of her own cells. Notwithstanding the criticism that this approach is increasingly technocratic, overspecialized and expensive, ayurveda cannot really compare in terms of growth and development. Standard textbooks used to train medical students are excellent indicators of the state of the art. Modern medical texts have a high obsolescence rate: new editions appear every four to five years to account for burgeoning advances. Very often the first edition has only antique value and bears very little resemblance to the current one.

By contrast, ayurvedic colleges in this last decade of the 20th century use the first and only edition of *Sushruta and Charaka Samhitas* published in the 6th century BC and 1st century AD

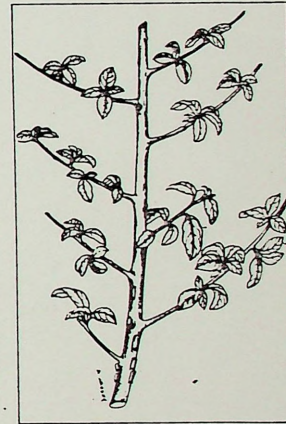
respectively! How to apply these for the immeasurably changed life-styles and environment of today?

This, then is the primary reason why modern science has relegated ayurveda to an 'alternative' or 'complementary' status.

Another important factor in the eclipse of ayurveda concerns infections and epidemics. It had been ineffective against the proverbial scourges in the sub-continent, the waves of bubonic plague and small pox. Modern medicine, on the other hand, triumphed precisely in this area in the 20th century, thanks to advances in epidemiology, public health and preventive medicine. Contributions of people like Lister, Jenner, Pasteur and Fleming have had the greatest impact



The tonic (left) shatavari (*Asparagus*) and the lipid-lowering guggul (right) plants



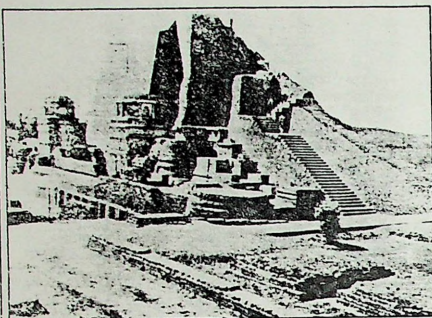
on human health and disease. To cite just two examples, the lengthening of the average life span of Indian citizens from 32.7 years in 1941 to 58.6 years in 1990 in this century, thanks to control of killers like typhoid, tuberculosis and cholera with the liberal use of chloramphenicol, rifampicin and tetracycline.

Even more spectacular is the second example: the total eradication of smallpox from the planet with appropriate immunization and control measures. A number of other factors contributed to the decline of ayurveda. These include the language in which it was written—Sanskrit, a classical language with very little mass base and contact.

Although ayurvedic texts are full of astute observations and logical inferences, they are not backed by direct proof or experimental analysis. In fact, Charaka says, "There is very little that can be obtained from direct proof. The province beyond direct experimental evidence is vast." (*Ch.Su.11:7*) Traditionally, and even today, ayurveda is taught in a didactic way: rote-learning of sanctified *sutras* stifles doubt, enquiry and experiment leading to fossilization of the discipline.

What prevents modern scientists from enlarging, updating and revalidating the vast corpus of ayurvedic knowledge? The first hurdle is not just linguistic—how to decode aphorisms written in Sanskrit? Being terse and elliptic, they need amplification and ex-

tensive interpretation. Even if you can make some headway with some translations how do you proceed? Assuming that we can formulate reasonably accurate hypotheses, what research methodologies do we adopt? The approach to diagnosis and therapy in ayurveda is quite different from that of modern medicine. As we saw earlier, the one-disease-one-drug-one-action, generally reductionist paradigm so prevalent in allopathy does not feature anywhere in ayurveda. Its therapeutic approach, on the other hand, is geared at correcting system imbalances and 'tuning' organs in line with environmental influences. How can such a therapy be evaluated with objective animal or clinical models to be subject



Ruins at Nalanda, Bihar, where a great ayurvedic university once flourished



ted to statistical validation? Animals like mice, rats and guinea-pigs which have contributed immeasurably to allopathic research, have constitutions, diseases and therapies different from humans. Indeed, there are separate branches for horses (ashwa-ayurveda) and elephants (hasti-ayurveda). Moreover, ayurvedic therapeutics seems to be far too custom-tailored to be subjected to gross generalization and extrapolation. Any programme of testing, done on lines of pure ayurvedic practice would become fiendishly complicated. How then can we test any remedy with any hope of success? Thus, we may end up discarding many actually useful remedies because they cannot achieve a single quantifiable end-point like lowering the blood-pressure or blood glucose.

Despite all these obstacles, many individuals and government institutions have made several reasonably successful attempts to evaluate ayurvedic therapies over the last thirty years. In the late sixties the Indian Council of Medical Research (ICMR) brought together ayurvedic experts, modern clinicians, pharmacognosists, chemists and pharmacologists to evaluate a batch of herbal remedies. Ayurvedic physicians gave therapy while allopathic doctors evaluated the patients. Although 27 plants were initially selected, only 10 proved effective enough for detailed investigation. These included *shatavari* (*Asparagus racemosus* for promoting lactation), *guggul* (*Commiphora mukul* to reduce cholesterol), *haldi* or turmeric (*Curcuma longa* to reduce pain and inflammation), *kutki* (*Picrorrhiza kurroa* liver tonic), *jatamansi* (*Nardostachys jatamansi*, tranquilizer), *pippli* (*Piper*

*longum* for respiratory disorders) and *raasna* (*Vanda roxburghii*, anti-arthritis).

Of these, *guggul* has been successfully marketed after thorough investigations at the Central Drug Research Institute, Lucknow, much the same way as if it were an allopathic drug. The story of *guggul* illustrates how ayurvedic principles if correctly interpreted and applied can yield useful drugs. Dr. G.V. Satyavati, currently Senior Deputy Director of the Indian Council of Medical Research, along with her guide Dr. C. Dwarkanath, found a strong analogy between the ancient concepts of *medoroga* and the modern views on atherosclerosis. Inspired by a shloka from the *Sushruta Samhita* which described the effects of *guggul* in *medoroga*, they screened it

### There are separate branches for horses (ashwa-ayurveda) and elephants (hasti-ayurveda)

for its ability to reduce cholesterol and scored a success. This is not to suggest that Charaka knew of cholesterol but that there are aspects of the time-tested ayurvedic therapeutics which can be validated in terms we have begun to understand only recently. The development of the drug *guggul* as a marketable formulation in the same way as an allopathic medicine took almost two decades.

What is striking is that the drug was prepared in the same way as prescribed in ayurveda using modern equipment. In ayurvedic practice, the drug has to be purified by tying the resin obtained from *Commiphora mukul* in a muslin cloth and then immersed in plain or medicated boiling water. The soluble portion seeps out and the extract is obtained after evaporation. The medicinal properties of *guggul* can be changed by altering the plants used in the boiling process. For instance, boiling the *guggul* with *triphala* (a mixture of *amala* (*Embilca officinalis*), *harda* (*Terminalia chebuli*) and *bebeda* (*Terminalia bellarica*) yields *triphala guggul* used to relieve pain and inflammation; boiling it with *kanchanar* (*Bauhinia variegata*) yields *kanchanar guggul* used in cardiac disorders and so on.

Ayurveda's insistence on boiling the gum *guggul* to isolate the active portion is validated by modern techniques of extraction. Two fractions can be separated from *guggul* after boiling: one which is insoluble and toxic, and the other which is soluble and active.

Ayurveda which has been practised for millennia, has thus adopted time-tested safety devices and practices to screen ineffective or toxic remedies. This is one of the reasons why many senior scientists have advocated un-

dertaking of direct clinical studies without preliminary screening for animal or human toxicity. However, what we should not forget is that this is only true when rules of ayurveda are followed, not only with respect to choice of drug but also for preparation of the drug, its combination with other drugs, associated dietary restrictions and so on. New combinations, new methods of manufacturing or isolation of 'active ingredients' call for the same stringent rules of drug development as applied for modern drugs. A well-known example of this is reserpine.

The story of reserpine begins with the *Sushruta Samhita* which describes a creeper called *sarpagandha* for treatment of insomnia, psychiatric disorders, lack of appetite, snake bites and hypertension. In 1931, G. Sen and K.G. Bose reported the efficacy of the roots of *sarpagandha* (*Rauwolfia serpentina*) in psychosis and hypertension in an Indian journal. The findings were ignored until 1955 when Rustom Jal Vakil reported Rauwolfia's efficacy in the *British Heart Journal*. With a characteristically reductionist approach, German scientists isolated among other alkaloids, reserpine from the root of *Rauwolfia* and demonstrated its activity. Reserpine was thus marketed as an important drug for hypertension and psychosis. However, when used in this isolated and purified form, the alkaloid almost invariably produced side-effects including Parkinsonism, sedation and weight-gain. This after enjoying a brief vogue, reserpine was replaced. These side-effects were unknown in ayurveda possibly because *sarpagandha* is used as a crude extract and always in combination with other plants like *Acorus calamus*, *Piper nigrum* or *Picrorrhiza kurroa*.

The vast materia medica of ayurveda is being tapped by institutions like the Central Drug Research Institute (CDRI), and the Central Council for Research in Ayurveda and Siddha (CCRAS). Besides drugs, some therapeutic procedures prescribed in ayurveda have also been evaluated and found useful. For instance, Dr. R. D. Bapat, Head of Gastroenterology Surgical Services, KEM Hospital, is working with ayurvedic doctors, to treat piles and anal fistulae. After using ayurvedic procedures including medicated enemas, drugs and modifications in diet on patients, he has achieved a high success rate: not only does bleeding stop, but the pile masses also regress and very few recur. The most benefi-

cial aspect of this is that no surgery is required!

Dr. Bapat has found *ksharsutra* to be very useful in treatment of anal fistulae. This refers to the use of a medicated thread to stimulate healing. (Done with Dr. D. H. Nikam, the work won a prize at the recent annual conference of the Maharashtra chapter of the Association of the Surgeons of India.) Intriguingly, a recent article in the *Journal of Ethnopharmacology* from Holland describes the utility of *ksharsutra*: the work was done at an ayurvedic centre in Japan!

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An ayurvedic panel discussion

All this means we can still hope to put ayurveda back as a first-line therapy in selected diseases on the world map of medicine. To do this effectively, however, we will have to eschew romantic and unrealistic revivalism as well as the dismissive hard core West-oriented approach branding it as unsubstantiated gibberish.

Efforts to build a bridge between ayurveda and modern medicine are being made at some centres in India. At the Centre for Therapy & Research in Ayurveda at the KEM Hospital, post-graduates of modern medicine and experienced ayurvedic doctors are exploring several concepts of ayurveda.

For example, one of the key areas of research is that of *rasayana*. The classical translation of this term means 'rejuvenating drugs'. *Sushruta* and *Sharangdhara*, the ayurvedic authorities, ascribe multiple properties to *rasayana* drugs such as delaying ageing, improving mental functions and preventing infections. The question before the experts is: how can a single plant have such a variety of effects? How can it affect such a diverse range of bodily functions? If validated it would be nothing short of discovering the proverbial elixir of life.

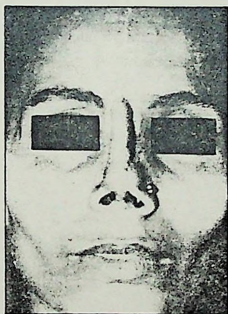
Front-line discoveries in modern medicine have now shown us that nature tends to be conservative and a biological molecule once found to be useful, is retained and used in bewildering variety of ways through the evolutionary ladder of life. Thus you have a peptide which tickles lowly

yeasts into mating. This is very similar to the gonadotropin-releasing factor in humans, a cousin molecule which controls the release of sex hormones. And the same powerful mood-altering chemicals found in the human brain occur on the skin of frogs! Following the discovery of these couriers of information — the neuropeptides — in places where they were not expected, even within the human body itself — came the recent attempts at unification of the nervous, endocrine and immune systems carried out under the rubric of psychoneuroimmunology (PNI, see cover story 2001, January 1991). It has been suggested and proved with many intricate experiments that the brain can influence the immune system which in turn can send impulses back to the brain by means of secreting hormones and neuropeptides. Hence the Cartesian chasm posited between the apparently diverse systems of the body has now been bridged by the psycho-neuro-endocrine-immune axis. In view of all this, can we hypothesize that ayurvedic *rasayanas* produce their wide-ranging effects by affecting cells which secrete or receive these informational molecules?

So, simply translating into English the Sanskrit *shloka* of Sushruta will not suffice. The information packed into the stanza has to be interpreted in the light of modern discoveries. Using the framework of the psycho-neuro-endocrine-immune axis, five plants have been studied at the KEM Ayurvedic Research Centre. These are: *Tinospora cordifolia*, *Asparagus racemosus*, *Withania somnifera*, *Terminalia chebula*, and *Piper longum* which are described as *rasayanas* by ayurveda. These were chosen from a large group of *rasayanas* particularly because they are specified to be used as single entities or *ekadravya*. Total extracts of the part specified were used. For instance, stems of *Tinospora*, roots of *Asparagus* and *Withania*, fruits of *Piper* and *Terminalia* were used in the form of a decoction with water. Commercial preparations were avoided and initially experiments on animals were performed to prove the effects of these drugs on the psycho-neuro-endocrine-immune axis in parts without studying the whole system. The researchers found that these plants, particularly *Tinospora* and *Asparagus*, stimulated the cells of the immune system profoundly. They also prevented organ dysfunction produced by psychological and physical stress in ani-

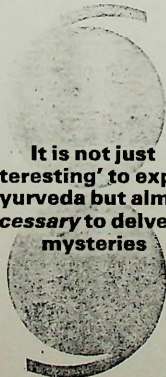


Indian rhinoplasty as taught by Sushruta



Indian rhinoplasty as done today

It is not just 'interesting' to explore ayurveda but almost necessary to delve into mysteries



mals. This anti-stress effect was mediated through their effects on the immune cells. Thus, it was found that the single action of stimulating immune cells could, through activation of the PNI axis, lead to wide variety of effects. One of the actions ascribed to *rasayanas* is that they help the body in getting rid of infections. Does this mean they actually kill the invading bacteria? Experiments showed that *Tinospora* was not an antibiotic. Yet it was as effective as antibiotics like gentamicin in preventing infections in mice. So, the researchers looked at the third, often ignored angle in the ding-dong battle between the bug and the drug: the patient. Did *Tinospora* prevent infections by bolstering the host's defences against the bug? That is, did it exert a 'pro-host' effect? Indeed it did. It not only recruited more soldiers (neutrophils) against the invading pathogens, but also armed them better by 'activating' them. *Tinospora* was as effective in humans as in animals. The post-operative recovery of patients operated for obstructive jaundice was remarkably smooth: a conclusion arrived at after meticulously controlled clinical studies.

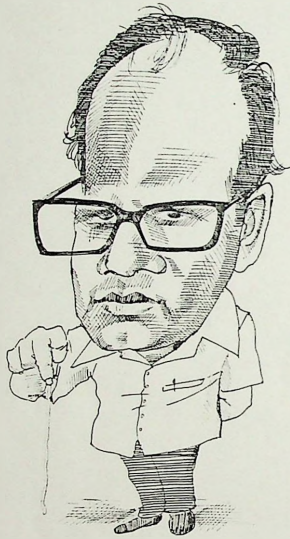
As early as 1940, Henry R. Zimmer, a scholar of Hindu medicine said about ayurveda, "There lurks a secret truth from which modern research might take its flight towards a new insight." The history of medicine seems to have turned a full circle. Concepts like holistic medicine are 'in'. Western medicine is now talking about dietary therapy for diseases like colitis and rheumatoid arthritis, about giving drugs at specific times (chronopharmacology), about regular exercising and specific life-styles and habits. Are we reinventing the wheel? Many of these concepts form the backbone of ayurvedic practice. They are waiting to be validated in contemporary terms. This means that it is not just 'interesting' to explore ayurveda but almost necessary to delve into its mysteries.

An uncritical rejection of any science is as detrimental to it as its uncritical acceptance. With expanding frontiers in molecular biology, cell physiology and immunology, it might be possible to test the validity of certain ayurvedic claims. This may, in turn, help us to use some of its insights in a meaningful way and integrate them into a richer medicinal system. Ayurveda may represent a somewhat esoteric, archaic script, the decoding of which may help us write newer symphonies of health, happiness and vitality.

46-16

# INTERVIEW

## B. L. SHARMA



Ayurvedic vaid Banwar Lal Sharma is a legendary figure in the guineaworm-infested areas of Rajasthan. The guineaworm extraction technique that he has perfected has brought solace to thousands of patients in the area. The technique allows the removal of the worm before it forms a blister and tries to get out on its own causing great pain and hardship to patients.

"In general if the diagnosis is rightly done, ayurvedic treatment can be as effective as allopathy," says the 50-year-old vaid from Udaipur who works for SWACH (integrated sanitation, water, guineaworm control and community health project) of Rajasthan government. The United Nations Children Fund (UNICEF) which helps to run SWACH, has recently shot a lengthy film on the technique to employ it as a means of training for African doctors who would use it to bring relief to patients there.

Vaid Sharma says, "I have handled over 10,000 patients so far without a single complication. In one case, I have extracted 50 worms from a single person." The extraction technique is unique to ayurvedic mode of treatment which has been generally ignored by allopathy.

Chief sub-editor Sylvester Lobo met vaid Sharma in Udaipur and talked about his work and the general status of ayurveda in the country.

Likeness: Prabhakar Bhatlekar

# INTERVIEW

**2001:** Ayurvedic treatment often fails to attract people because it is felt that drugs take their own time to heal diseases. Is this true?

**BLS:** No doubt, compared to allopathic drugs, ayurvedic medicines act rather slowly. However, the main reason why ayurvedic drugs may not act quickly is that the diagnosis may have not been done correctly. If diagnosis is done accurately, I feel ayurvedic preparations can be as effective as allopathic drugs.

**2001:** What is the basis of ayurveda? What are its founding principles?

**BLS:** Well, the word ayurveda has been coined from ayur which means life and veda meaning science. So it is the science of living. It has its foundation on preventive measures. There are long theses written in ayurveda for preventing diseases. Ayurveda also deals with human beings with a holistic approach. It does not concentrate on symptoms but tries to diagnose the root cause of the disease and cure it.

**2001:** But what about terminal diseases like cancer and AIDS? Does ayurveda provide any solution to these diseases?

**BLS:** Right now we do not have any definitive medicines for these diseases. But work is going on in several ayurvedic research centres to find remedies to these and other terminal diseases.

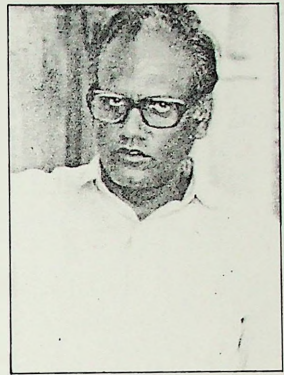
**2001:** But the work seems to be going very slow at the moment. What problems hinder the progress of ayurveda?

**BLS:** Limited research is one of the main problems. Research should be stressed to develop new drugs to combat diseases.

**2001:** But what is holding up research?

**BLS:** There are not enough funds and the central and state governments are not taking sufficient interest on the subject. If certain capable individuals want to do something, they fail to succeed because they do not happen to have necessary contacts and shifarah in government circles.

Another distressing fact is that our forests are being rapidly destroyed posing a threat to herbal plants. The destruction of forests should be



**The destruction of forests should be stopped with a vengeance so as to preserve herbs which are the basic sources of ayurvedic medicines**

stopped with a vengeance so as to preserve herbs which are the basic sources of ayurvedic medicines. In ayurvedic colleges there aren't enough stocks of herbs to educate students so that they can later identify these herbs in forests. This situation is alarming and does not augur well for the future of ayurveda.

**2001:** There are reports of ayurvedic medicines being mixed with allopathic ones to make them effective in healing process. Have you come across with such cases?

**BLS:** I have not come across such a case. I do not think people mix drugs. Yes, I know of cases where vaid prescribe allopathic medicines. But I don't think they mix medicines to make them more effective.

**2001:** But why should ayurvedic vaid prescribe allopathic medicines at all?

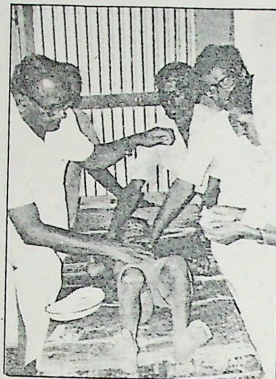
**BLS:** Well, they are keeping up with the changing times. When people want quick relief for small ailments, allopathic drugs come to a vaid's rescue. They are just catering to people's needs. Another reason is that ayurvedic medicines are not easily available. For instance, in Rajasthan if a hospital has been sanctioned Rs. 10,000 worth of medicines, only Rs. 2,000 worth are supplied. So the vaid resort to allopathic medicines which are easily available.

**2001:** What are the reasons for this scarcity of ayurvedic medicines?

**BLS:** The scarcity is basically due to bureaucratic hurdles. Government pharmacies purchase raw materials on the recommendations of a state-level committee after issuing tenders. This is always a cumbersome procedure. It usually so happens that if one preparation requires ten ingredients and one is missing, that particular medicine won't reach hospital stores. And this keeps on happening for a number of medicines. The procedural wrangles need to be simplified to a great extent to make medicines easily available. It would be better if this tender business is totally abolished and corporations are formed in each state for the manufacture of ayurvedic medicines. We have reached such a sad state of affairs today that sometimes even bandages are not available in ayurvedic hospitals.

**2001:** What role does surgery play in ayurveda?

**BLS:** In the olden times surgery played a major role in ayurveda. In fact, ancient texts show that plastic surgery was carried out with finesse in this branch of medicine. But history was not kind to ayurveda. At different points of history it was dominated by other branches of medicines like unani, allopathy, etc. And when Jainism and Buddhism came, they brought along the doctrine that it was a sin to make cuts on the body. As a result, surgery in ayurveda suffered. Of course, surgery is not totally eliminated in ayurveda. Minor surgeries are still taken care of in cases like piles, cataracts and others. In our case we have made use of surgery to extract guineaworms.



**2001:** Why should guineaworms be extracted at all? What is the problem with guineaworms?

**BLS:** The larvae of guineaworms live in water where water cyclops feed on them. When a person drinks this water, he also drinks the larvae. Once inside the body they penetrate stomach lining and enter body tissues. There they grow for ten to twelve months. Once they have matured, they seek their way out towards the skin. They form a blister, which develops into a wound and while the worm takes a long time to get out of the body, it gives rise to abscess formation and severe inflammation. The patients become bedridden for several days.

**2001:** So what you do is intervene before the worm tries to get out of the body on its own and extract it. How do you carry out the extraction.

**BLS:** The main thing in this technique is to identify the exact location of guineaworms below the skin. This can be at times difficult because nerves and blood vessels can be mistaken for guineaworms. The ability to recognize guineaworms comes out of experience. Once one is sure of a guineaworm, the location where the incision has to be made is sterilized and local anaesthesia is given. Then a small cut is made, the worm is hooked on to a blunted end of a needle and slowly pulled out of the body with a gentle massage of the area. In case the worm is around a bone, more than one cut is made and if necessary the worm is cut into two and pulled out of the body taking care no larvae remain behind.

**Allopathy does not accept the fact that a guineaworm exists in the body unless it forms a blister and tries to get out**

**2001:** If this procedure is so simple and so much beneficial to patients, why allopathy has ignored it so far?

**BLS:** There are several reasons. One of them is that the technique is a time-consuming one. It may take half an hour to forty-five minutes to extract a single worm. Secondly, people in the economically backward areas where there are no safe sources of drinking water are mostly affected by guineaworm disease. So one cannot expect high monetary gains. One has to be ready to spend lot of time and energy without many rewards. Thirdly, allopathy does not accept the fact that a guineaworm exists in the body unless it forms a blister and tries to get out. If one waits till the blister is formed, then one can expect all kinds of complications.

**2001:** How many guineaworm-affected patients have you handled so far?

**BLS:** Under SWACH I have handled over 4,000 patients extracting over 10,000 guineaworms.

**2001:** What is the post-extraction treatment?

**BLS:** We give an ayurvedic medicine for local application and a pill called aruplex. With these the incision wound heals quickly.

**2001:** You carry out extractions in remote villages where facilities for sterilization hardly exist. Haven't you faced the problem of tetanus?

**BLS:** No, we haven't had a single case of tetanus so far. We take extreme care to sterilize all our equipment. We haven't faced any complications in this respect.

**2001:** The UNICEF has prepared a film on your pioneering work in guineaworm extraction. What are some of the highlights of this film?

**BLS:** The film is meant to be a training tool for doctors who want to specialize in extraction work. It has been prepared in 14 modules depending on the different stages of guineaworm treatment including the ways of recognizing the worm within the body, sterilization of body parts and instruments used for surgery, ways of making incisions without breaking worms and methods of extracting worms. The film includes several case studies of patients with guineaworms from whom worms could not be extracted in time and who, as a result developed problems

**2001:** Why is it that an organization like UNICEF has accepted the efficacy of guineaworm extraction while National Institute for Communicable Diseases (NICD) has not?

**BLS:** I do not have any satisfactory explanation to offer why NICD has not accepted this technique. One reason could be that UNICEF is actively involved in the work that we are doing here while NICD is not. We have asked NICD authorities to come and see our work which they have not done so far. The other reason could be that they don't want to recognize this technique because it has not come from them but we have developed it here on our own. But then these reasons are no reasons at all. They are also saying that the technique is not scientific. But we have the evidence of over 10,000 patients who have benefited from this technique.

**2001:** No doubt, the extraction technique has helped guineaworm patients to overcome pain and hardship to a great extent. But don't you think the overall advantages of ayurveda are not fully tapped today?

**BLS:** Yes I agree with you that ayurveda is not being fully exploited today. For this people should be extensively informed about the advantages of ayurvedic treatment,

there should be more publicity about its plus points. The government has started in a small measure to educate people through Doordarshan on how to prevent diseases. This should be done in a much wider scale. Non-government organizations should also come forward to spread the message on the usefulness of ayurveda among people. In fact, some of us have started a non-profit organization called Chetna Health and Social Service Centre here in Udaipur for this very purpose. It has been doing well in the tribal areas.

**2001:** What are the career prospects in ayurveda?

**BLS:** They are very bright for hardworking people. After obtaining the bachelor's degree people can either begin independent practice or specialize in pharmacology, gynaecology and other subjects.

**2001:** What are the organizations at the central and state level that lay guidelines for ayurvedics?

**BLS:** We have the Indian Medicine Board in Delhi with its branches in all the states. We also have the Central Council for Research in Ayurveda and Yoga based in Delhi with nearly hundred regional centres which work in the areas of

developing new medicines and improving the present ones.

**2001:** These days we see a lot of commercial firms advertising ayurvedic medicines which promise youth and a long energetic life. What is the efficacy of these medicines?

**BLS:** Medicines like chavanprasha are time-tested tonics which certainly help. Of course, one should make sure that they are manufactured by reputed companies.

**2001:** But is there a way to test the contents of these tonics?

**BLS:** No, we do not have such facilities.

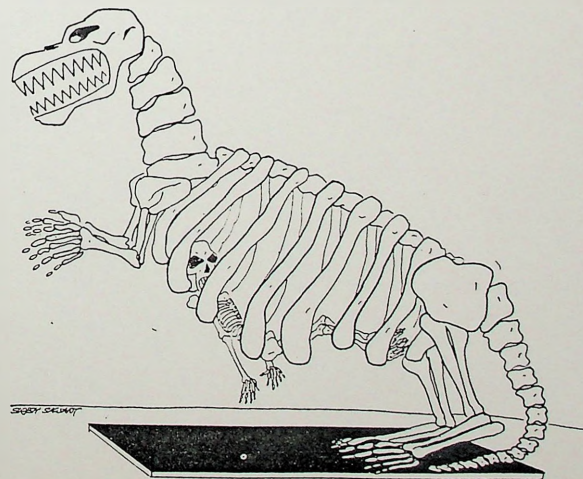
**2001:** Do you prepare any medicines?

**BLS:** I would like to. But my full-time involvement in SWACH project, makes me travel frequently to the interior villages. So I hardly get time for these activities.

**2001:** Are ayurvedic and allopathic medicines compatible? Can they be given together?

**BLS:** Yes, both the medicines are compatible and generally, there is no problem in giving them together. But giving them together doesn't make much sense because we would not know which medicine is healing the patient.

NMI



# SIDDHA DRUGS AND THE NEED TO STANDARDISE

Dr. K.K. Purushothaman and Dr. A. Saraswathi\*

The evolution of standards in the field of drug production have been confined to modern drugs alone. This industry uses only standard raw materials and standardised production procedures. An example is the preparation of acetyl salicylic acid from salicylic acid by acetylation procedures or quinine from cinchona bark. Many preparations are made from a few simple chemical components ensuring uniformity in quality from batch to batch.

Modern instrumentation techniques have helped a skilled hand to give accurate results with very little material expended for testing. These include all the available chromatographic methods, use of automatic analysers and spectroscopic instruments with only few milligrams of the sample required for a meaningful analysis. The anabolic steroids or hallucinogenic drugs like lysergic acid diethylamide (LSD) are detected and their potencies estimated by this method. Conventional analysis of many inorganic preparations can be carried out with 0.1 to 1% accuracy. In the traditional drug market, however, where the chances for adulteration and substitution are far more, few methods or techniques exist for

the evolution of standards.

A specific problem with a possible solution will exemplify this. *Myristica fragrans* is a raw drug commonly used in the drug industry. *Myristica malabarica* resembles the former very closely and is difficult to detect macroscopically or microscopically. Clever traders can therefore adulterate *M. fragrans* with *M. malabarica* as the former is ten times more expensive than the latter. Chemically *M. malabarica* is characterised by a group of aryl poly methylene ketones known as malabancones. The presence of these components can be detected by less than a milligram of the concentrated extracts by the mass spectroscopic method, which could indicate scientifically the character of the adulterant.

Another problem with medicines made under traditional systems is their lack of development in methods of classification. An example can be found in the calcium group comprising different structures such as pearl, conch, shell and coral. Therapeutically all of them are used in different conditions. They are also priced differently as the cost of pearl, coral, conch and shell vary widely. Analytically they are made up of calcium carbonate with traces of sulphate,

The Siddha medical system has been hampered by its incapacity to upgrade its knowledge through an appropriate choice of technologies required for drug standardisation. Technology, once adopted, could also create employment in rural areas through small-scale units set up for the extraction, preservation and formulation of Siddha drugs, write Dr.K.K. Purushothaman and Dr.A.Saraswathi.

phosphate and chloride. Yet no accepted method has been evolved to distinguish them and efforts to constitute them from pure chemicals have no proven therapeutic effects.

Yet another example is *Thampra centuram*, analytically an oxide of copper used in the treatment of gastric or duodenal ulcers. The preparations made by Siddha textual procedures alone have the expected biological effect. Yet a clever manufacturer can manufacture a synthetic product which might pass all the tests in an analytical laboratory but fail to give the desired clinical response. Clearly, much more work is needed to differentiate the properties of similar structures through spectroscopic examinations employing, in particular, the infra-red spectrum for solving this problem.

The Siddha system, like Ayurveda has a well documented body of literature. Nevertheless, much has been handed down as family secrets. These include a wide spectrum ranging from dog bites and snake bites to bone setting. The obstacles created in

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the uniform spread of this knowledge lie not only in the reluctance on the part of many practitioners to part with ancestral knowledge but also in the official reluctance to commit funds for research in this field of drug standardisation. Today, a large number of practitioners have, in fact, begun to feel the futility of research as the fruits of these findings do not benefit them. For an isolate from a crude drug, if ultimately proved to be an excellent remedy, can only be prescribed by an allopathic physician and not by practitioners of the traditional systems of medicine. The government alone can redress this situation through appropriate legislation especially since the institutional education imparted in Indian medicine has a sound scientific basis. Also, the criticism levelled against the Siddha system for its common use of heavy metals such as gold, silver and mercury which have proven toxic effects needs reappraisal as these very heavy metals have been found to improve immunity besides leading themselves to the treatment of diverse conditions.

In the use of plants and plant products, the Siddha system does not lag behind other traditional systems. In fact, it has several valuable alternatives and describes many plants which are not found in Ayurvedic literature.

Vengal (*Pterocarpus marsupium*) and Cirukurinja (*Gymnema sylvestre*), for example, are specific remedies in the treatment of diabetes, a disease of high incidence in India. Koduvelli (*Plumbago* sp.) was recognized as an anti-cancer drug by the Siddha practitioners. In the treatment of a variety of skin conditions, some simple Siddha remedies are available. Special mention should be made of Vetpalai (*Wrightia limotioria*) in the treatment of psoriasis, Poovarasu (*Thespesia populania*) in certain types of skin ulcers, Imbural (*Oldenlandia umbellata*) for cough, haemoptysis and tuberculosis, Thuthu valai (*Solanum trilobatum*) for respiratory diseases and cancer, and Orilai (*Desmodium gangeticum*) for inflammation and rheumatism. What it lacks, however, is a range in pain killers and sedatives so amply developed in the allopathic system.

In dealing with the chemistry and biology of medicinal plants, caution is required in the choice of technology to be adopted in the isolation and testing procedures. Unfortunately, adequate scientific methods have not been developed by traditional medical systems to meet this challenge. Investigation failures cannot be fully attributed to the drugs alone but to methodology as well. There are several examples. The conventional extraction and

fractionation of *Valerina* did not yield the expected results until a low temperature and high vacuum technology was used for extraction and fractionation causing isolation of particular derivatives which proved useful as sedatives and tranquilizers. The successful story of *Artemisia annua* from which artemisinin, the anti-malarial agent was isolated, is yet another example. The technology has since been upgraded to produce this anti-malarial agent for distribution on a global basis under the active participation of World Health Organisation.

Though the Siddha system can contribute significantly to the health care of India's population as a whole, it has a special role to play in rural India, where cheap and simple remedies are required. The health problems faced by the rural population can be identified as simple skin diseases (scabies and ulcers), intestinal worms, particularly among children, malabsorption of food, liver diseases, cuts and wounds. To this can be added the lack of milk secretion among young mothers.

Today, there are nearly three hundred plant products accepted by the modern drug industry and these plants are available in rural India. As their collection, preservation and distribution on a large-scale is an impossibility, simple glassware extraction units can be used in rural India through a technology that aims to both extract and preserve. Employment opportunities will be thus created that could extend to other small-scale units employing manual labour in the production of Siddha formulations as well.

To bring the Siddha medical system into the mainstream, modern-day advances will have to be made in the technologies required for drug standardisation. The cultivation and processing of plants for use as drugs must necessarily be rural-based where their acceptance and appropriateness will make them a naturally viable vehicle for health care. □

## Sins unknown

WHEN I learn of how willfully the Chilika lake is being ruined, the jungles of Ranthambhor are being extinguished, or the elephants of Bandipur are being wiped out, I fear for my country. There was a time when such acts of barbarity were believed to be perpetrated by thieves in the dark — poachers, criminals and the like. Today, it would appear, all veils have been lifted. It is open house on India.

How else can one explain the way in which project after project is being pushed by people who should know better. "My project is 100 per cent safe and will not adversely affect the ecology of Chilika," said Russi Mody, then with the Tatas. It harbours a biodiversity which has only just begun to be documented.

Yet, a prawn-culture project whose avowed intent is to destroy the biodiversity of the Chilika waters was claimed to be benign!

tented, they grow food organically, recycle almost every resource till it is ready to be returned to the earth and share both responsibilities and rewards with one another.

But instead of honouring these villages, protecting them as symbols of peace and democracy, we have dedicated ourselves to the proposition that they must be destroyed. Bribes nor political pressures have been able to coerce Manibelli's residents to give up their heritage for SSP.

The government of Gujarat, ignoring basic human rights issues and even common sense, pumped every last available rupee, into raising the SSP wall in the past few years. This was done to force the people into giving up their fight as the waters rose higher. Their plan failed as the Narmada battle continues, but the questions raised by the affected people remain unanswered.

"But, we will compensate you.

## GREEN TALK

Bittu Sahgal

The Chief Minister of Gujarat awards the same 'environmentally benign' certificate to his *bete noir*, the Sardar Project (SSP).

How I wish Gandhiji were alive in the troubled age when we are poised to inflict the ultimate injustice on our children — inter-generational colonisation. Devoid of forests, clean water and safe food, they will have to contend with floods, droughts and disease for no fault of theirs. After squeezing electricity from dozens of nuclear reactors for two miserable decades, we will bequeath these poison-drenched abattoirs to our children who will have to protect themselves from our toxic wastes for the next 25,000 years.

Amidst signs of despair, however, there are pinpoints of hope. If you believe in rebirth, for instance, then you can be sure that if you do something good in this lifetime, you will be born, the next time around, in Manibelli. On the banks of Narmada, Manibelli has nurtured an exemplary people. Unmindful of the threat of submergence from the SSP a few short kilometres from their peaceful abode, these Indians live out their existences practicing Gandhiji's vision for India.

Non-violent, self-reliant and con-

We will make you rich beyond your dreams. If only you will move." Such are the blatantly false promises being made by the builders of the mega-project after another to a people grown tired of exploitation.

"My grandfather died here, his spirit still resides in these hills and forests and waters. I visit with him and consult him in the quiet of my mind when I am troubled. How can you build such values into your cost-benefit ratios?" ask the simple people of India. "You wish to pay me Rs. 1 per year for my mahua tree. Ten thousand times that money is not enough to compensate for the security it offers me and will offer my daughter when she grows."

Chief Ministers and Chief Executives of large corporations are equally at a loss for words when confronted with such sentiments. Which is why they have begun to rely on extravagant public relations exercises to keep their battered images intact. History has proven time and again, however, that the sins of the fathers will not be washed clean by public relations exercises, nor by doctor-ed history.

Sanctuary Features

A SLIGHT breeze blows. The perfectly heart-shaped leaves flutter and sway on delicate stalks. But the tree that holds these leaves together has weathered umpteen storms and has still stood its ground. The tree is none other than the Peepal.

The Peepal is one of the longest-living trees in the world. It can live for hundreds, perhaps thousands, of years. One in Sri Lanka is said to be over two thousand years old.

The Peepal is venerated by both Hindus and Buddhists. Hindus plant it near their temples and associate it with the three gods Brahma, Vishnu and Shiva. Buddhists believe that Lord Buddha found enlightenment under this tree.

Interestingly, although the tree is imbued with religious significance, a mystical aura surrounds it. Most villages believe these trees are haunted or have supernatural effects. Whatever the reason people shy away from desecrating the tree.

The Peepal tree (*Ficus religiosa*) today has spread all over India. Like the Banyan and Gular, it is a member of the fig family. But unlike the Banyan which is dark and enveloping, the Peepal allows light to pass through its branches

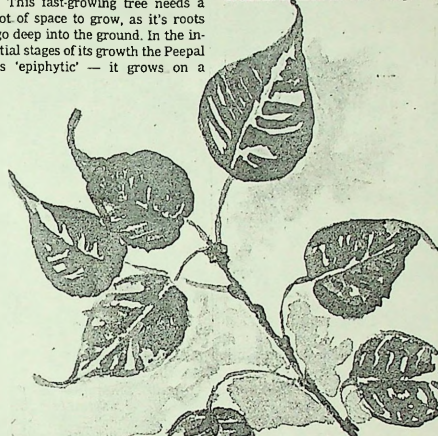
## People's tree

and appears airy. Instead of the hanging roots which grow from the Banyan's branches, the Peepal's roots are attached to the trunk. This gives an appearance of pillars supporting it.

This fast-growing tree needs a lot of space to grow, as its roots go deep into the ground. In the initial stages of its growth the Peepal is 'epiphytic' — it grows on a

neighbouring wall or tree. The strong roots may even split the wall or tree. However, the tree derives nourishment from air and water and not from the host.

The trees grow tall, to a height of about 15 metres. The outspread



branches together with the restless leaves make it an elephant tree. Since the leaf tips are pointed, water drains off the leaves immediately after a rainfall. This helps the tree remain dry and light.

The flowers of the Peepal cannot be seen as they are within its fruit — the figs. Growing in pairs, they are hunted by insects, especially the fig insect. Birds and bat devour the fruit and by dispersing the seeds help to propagate the tree. Humans do not relish Peepal figs as they are small and hard unlike the large juicy figs of the edible fig, the Anjir or Gular tree.

Many parts of the Peepal are used for medicinal purposes. Its bark contains tannin and has astringent properties. An infusion of the bark is used to cure ulcers and skin diseases; the leaves and tender shoots are used as a laxative. They make excellent fodder for cattle and elephants.

The sacred Peepal that sanctifies temple precincts graces roadsides as well. As a shade tree, it provides respite to hot and weary travellers. Like any other tree, it also enriches the soil, prevents soil erosion and refreshes the air. An out-and-out "people's tree".

Nita Colvin  
CEE-NS

AGRICULTURE and civilization are very closely intertwined and mankind has always been striving to enhance productivity to meet ever growing demands of food in addition to fodder, fibre and fuel. Sustainable practices which were central to the maintenance of regular cropping included optimal use of naturally available plant genetic bases and careful deliberate selection overtime helped to maintain mechanisms of meeting the needs of the community.

Such practices did not involve the use of techniques like monoculture that drastically alter ecosystems, or the use of chemicals which disrupt functional chains in the ecosystem. The latter is best exemplified by the use of pesticides that inadvertently eliminate along with the pests, even the natural enemies of the pests which are beneficial to man.

Though such compounds have been very successfully used initially, they were later found to disturb functional chains in the ecosystem. This resulted in a situation where one pest was eliminated along with its natural enemies, thus allowing another pest to emerge in its place which also exhibited a high degree of resistance

## Pest compliments

to the pesticide. A typical example is the recent emergence of the boll worm in cotton.

In order to avoid such unexpected problems, it is important to devise a strategy that helps not only eliminating the key pests but taking care to see that the other functional groups are not unduly disturbed. Such a strategy which includes aspects of inherent mechanisms such as plant resistance, culture methods and mechanical methods, supported by the role of plant products and biocontrol agents is termed integrated pest management.

This strategy is based on the philosophy that total eradication of pests are necessary to help maintain populations of predators and parasites which in turn are activated to keep pest populations at levels that are manageable.

Based both on indigenous knowledge and recently emerging trends in the breeding of resistant varieties of crops, it is important to rotate the use of varieties with known properties of resistance, that help to maintain pest sensi-

tivity to resistance. The development and use of TKM6 as an instance of multiple resistance in rice is a typical example of a successful resistant variety.

Rotation and proper cropping practices such as appropriate spacing is crucial, as in the case of brown plant hopper which proliferates dramatically in a densely spaced rice field. Inappropriate doses of fertilizer also influence pest populations as is well known in the case of pests like leaf hopper which are found to increase with increased nitrogen availability while an appropriate dose reduces the population of pests like leaf folder and stem borer.

The use of blue-green algae (*Azospirillum*) as a bio fertilizer was found to help reduce short fly damage of sorghum. Intercropping is another means of managing pest populations. Interspersing green gram and sunflower with cotton reduces leaf hopper populations while interspersing sorghum with cowpea reduces stem borer ones.

Behavioral approaches to management of pests include the use

of pheromones that lure the pests out of crops, along with the use of insect growth regulators. Insect growth regulators are plant-derived compounds such as sterols which inhibit the growth and feeding patterns of the pests.

Biological control by itself forms a useful and integral part of the overall strategy and the best known examples are the use of parasites against the internode borers of sugarcane and bollworms. Pupal parasites are also effective in the control of aphids on vegetables.

Integrated pest management aims at a judicious mix of all the strategies which help maintain the stability of ecosystems without disrupting any biological component. The injudicious use of pesticides can directly impact on human health by infiltrating the foodchain. Moving towards minimization of the use of inorganic and harmful pesticides will not only protect crops from pests by removing the factor of accelerating resistance in pests but also shield man from the toxic impact of high levels of pesticides.

R. Gopichandry  
CEE-NS



## RESEARCH HIGHLIGHTS

### EFFECT OF D-400 (DIABECON), A HERBOMINERAL FORMULATION ON LIVER GLYCOGEN CONTENT AND MICROSCOPIC STRUCTURE OF PANCREAS AND LIVER IN STREPTOZOTOCIN-INDUCED DIABETES IN RATS

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R & D Centre, The Himalaya Drug Co., Makali, Bangalore, India.  
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Veterinary College, Bangalore, India.

Ind J Exp Biol. [1996] ; [34], 10, 964

Streptozotocin induces severe and irreversible hyperglycaemia in experimental animals. A study was made on the effect of oral administration of D-400 (Diabecon), a herbomineral formulation, at a dose of 1 gm/kg/day, on streptozotocin-induced diabetes in rats. Liver glycogen content was assayed biochemically at 2, 4 and 8 weeks after D-400 (Diabecon) treatment. Superoxide dismutase (SOD) activity of pancreatic islet cells was assessed after 8 weeks of D-400 (Diabecon) treatment. The microscopic structure of pancreas and liver were examined in both control and treated animals. D-400 (Diabecon) treatment showed progressive and significant increase in liver glycogen at 2, 4 and 8 weeks respectively. Streptozotocin-induced a decrease in pancreatic islet cell superoxide dismutase which was reversed by D-400 (Diabecon) treatment for a period of 8 weeks. The free radical scavenging activity of D-400 (Diabecon) may be attributed to Shilajee, one of its important ingredients. Streptozotocin-induced histopathological changes in pancreas and liver were also partially reversed by D-400 (Diabecon). The findings indicate that D-400 (Diabecon) helps improve glycogen stores in the liver and prevents streptozotocin-induced damage through free radicals by increasing islet cell superoxide dismutase activity.

### ROLE OF MENTAT IN ECT-INDUCED AMNESIA: A PRELIMINARY STUDY

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G.S. Medical College and KEM Hospital, Bombay, India  
Ind Practit [1993] ; 3, 225.

Electroconvulsive therapy (ECT) is commonly used in the treatment of patients suffering from depression, mania, schizophrenia and other functional psychoses. Though this treatment is effective in relieving symptoms of these illnesses, yet it has its limitations due to certain complications. Mentat has proved its effectiveness in amnesia in experimental animals. It is known to attenuate amnesia induced by treatment with electroconvulsive shock. Forty patients requiring ECT were included in the trial. Twenty patients were suffering from schizophrenia and 20 from major depression. The double-blind technique with randomised distribution was done. Mentat or the identical-looking placebo tablets were given at a dose of 2 tablets, t.i.d. concurrently with ECT. Results of the present study show that Mentat is significantly more effective than placebo in ECT-induced memory disturbances. After ECT there was deterioration in memory function. Mentat prevented deterioration in memory function subsequently, and at the end of 6 weeks, there was significant improvement in memory function in the Mentat-treated group. On the other hand, deterioration of memory function could not be prevented by treatment with placebo. None of the patients developed any side effects which would have required a reduction of the dose or omission of the drug. The present study has confirmed that Mentat is safe and effective in preventing/minimising memory disturbances which occur in patients undergoing treatment with ECT.

## GUEST LINE

## MYTHS SURROUNDING AYURVEDA

Dr. Urmila Thotte, Associate Professor, Dept. of Pharmacology,  
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Continued from issue Apr. (16-30), 1997

One more major myth surrounding Ayurveda is that everything herbal is considered Ayurvedic. Using some form of distorted logic this has led to the belief that because herbal is natural and anything natural is always safe, hence, Ayurveda is safe. As Ayurvedic drugs are outside the purview of the Drugs and Cosmetics Act, 1940. Anyone could start up a pharmaceutical company tomorrow and sell any combination of plants without proving their efficacy or safety. One only need to show that these drugs are mentioned in the specified Ayurvedic texts and they can set up a pharmacy. Can anyone seriously accept this state of affairs?

The story of another patient is even more poignant. A 62 year old male patient was brought to the casualty in an unconscious state. A detailed history from relatives revealed that he was a known diabetic and was well controlled with the correct drugs. Five days prior to this he took a herbal preparation (labelled as Ayurvedic) for psoriasis, probably assuming that "if not effective, it will at least cause no harm". He developed giddiness following ingestion of the drug, but ignored it. Subsequently, he became unconscious. He was diagnosed to be in hypoglycaemic coma to which he ultimately succumbed. The story speaks for itself.

You will agree with me now that the name "Ayurveda" is not a synonym for "safe". You may be surprised to know that Charaka, the ancient Ayurvedic teacher has said that "A potent poison becomes the best drug on proper administration. On the contrary, even the best drug becomes a potent poison if used wrongly". Further, he says, in rather dramatic terms that a "drug not perfectly understood is (fatal) like poison, weapon, fire and thunderbolt; while a drug properly understood is like amrit".

The subject of teratogenicity also figures in Ayurveda. Thus, certain plants are to be avoided in pregnancy e.g. the well

known Harada, also known as Haritaki or *Terminalia chebula* is best not consumed during pregnancy. This is a constituent of a large number of OTC preparations. It is a powerful purgative and is therefore contraindicated in pregnancy!

Apart from plants, Ayurveda also includes metals in its formulary. Thus, several preparations containing metals like mercury, lead and copper are available readily in the market on an OTC basis. These metals have to be diligently processed before they are suitable for human consumption and there is again a long list of do's and don'ts regarding their use.

To be continued

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Makali, Bangalore 562 123, India.

**FOCUS**

**ROLE OF SEPTILIN IN CHRONIC PHARYNGITIS**

Singh, B.M.P., M.B., B.S. (Pat.), M.S. (Ent.),  
Registrar, ENT Dept., Palna Medical College Hospital, Palna, India.

*Ind. Med. J.* (1992); (86), 1, 12.

In spite of the best of treatments for both local and secondary causes, chronic pharyngitis continues to be a challenge to the otolaryngologists. Sometimes post-tonsillectomy and adenoidectomy cause hypertrophic pharyngitis and a dry irritating cough which are very resistant to all sorts of treatment ranging from chemical cauterization to antibiotics and antiallergics. Septilin is an indigenous remedy containing anti-inflammatory, antibacterial and antihistaminic properties which enhance the body's resistance against infection in the mucosa of the upper respiratory tract, but it is different chemically from antibiotics and antihistamines. In a clinical study 35 cases of chronic pharyngitis were selected. Their age, sex and symptoms were noted. A thorough clinical examination was done and routine tests were carried out. Septilin was given for 6-8 weeks in the doses of 1 tab. b.i.d. in children below 12 years of age and 1 tab. t.i.d. in those above 12 years. The response to treatment was judged by the improvement in symptoms. Patients not improving on conventional antibiotics showed improvement with this remedy. The majority of cases (28 out of 35) showed good to fair response with Septilin treatment. Its long term use was devoid of any side effects.

**JOURNAL SCAN**

**PRELIMINARY EVIDENCE OF ANTIFILARIAL EFFECT OF *Centella asiatica* ON CANINE DIROFILARIASIS**

Ethanol extract obtained from the leaves of *Centella asiatica* was administered orally at 30 mg/kg/day for 30 days on 2 stray dogs naturally infected with *Dirofilaria immitis*. Microfilarial density in the blood rose gradually following the onset of treatment, a maximum 14.5 fold increase being recorded on day 90. Thereafter, the count was reduced by more than 96% on day 240. *In vitro*, the drug did not produce any immobilizing or lethal effect on the microfilariae of *D. immitis*. It did not produce any appreciable side effects in the treated dogs. The prolonged maintenance of the reduced level of microfilarial density may be due to the sizeable reduction of adult worm loads. These results suggest that the antifilarial activity of *C. asiatica* ethanol extract may result from the biotransformation of plant constituents by the digestive enzymes of the host.

*Filoscopia* (1996) (XXVII), 2, 110.

**ACTIVE COMPOUNDS FROM *Saussurea lappa* THAT SUPPRESS HEPATITIS B VIRUS SURFACE ANTIGEN GENE EXPRESSION IN HUMAN HEPATOMA CELLS**

The antiviral activity of the crude extract prepared from the root of *Saussurea lappa*, which is widely used for many illnesses including cancer was investigated. Two active components, costunolide and dehydrocostus lactone, suppressed the HBsAg production by Hep3B cells in a dose-dependent manner. Northern blotting analysis shows that the suppression of HBsAg gene expression by both costunolide and dehydrocostus lactone were mainly at the mRNA level. Furthermore, the suppressive effect of costunolide and dehydrocostus lactone on HBsAg and hepatitis B e antigen (HBeAg), a marker for hepatitis B viral genome replication in human liver cells, was also observed in another human hepatoma cell line HepA2 which was derived from HepG2 cells by transfecting a tandemly repeat hepatitis B virus (HBV) DNA. Similarly, the mRNA of HBsAg in HepA2 cells was also suppressed by these two compounds. Our findings suggest that costunolide and dehydrocostus lactone may have potential to develop as specific anti-HBV drugs in the future.

*Antiviral Res.* (1995) 27(1-2), 99.

**POTENTIAL ANTIMUTAGENIC ACTIVITY OF *Glycyrrhiza glabra* EXTRACT**

Recently there has been considerable interest in antimutagens and anticarcinogens of plant origin, particularly in edible plants. The ability of *G. glabra* extract to exhibit activity against the genotoxic effects of a series of well-known mutagenic and carcinogenic agents was investigated. Antimutagenesis assays have been carried out by a modification of the Ames test with different strains of *Salmonella typhimurium* (TA98, TA100), in the presence and in the absence of metabolic activation (S9 mix). The results showed that the extract of *G. glabra* significantly decreased (from 40% to 90%) the mutation frequencies induced by the tested mutagens, over a range of concentrations well below the toxic level. The antimutagenic activity was a complex function of the dose of *G. glabra* extract, and it could be related to extracellular mechanisms of defence. Results obtained can lead to a further understanding of the mechanism by which cells and protect themselves from environmental pollution, the protective role of some dietary factors, especially from plants.

*Phytotherapy Res* (1996) (10), 101.

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- ✓ Stimulates uric acid excretion — treats gout

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- ✓ Removes the focus of irritation through a more complete evacuation of the seminal vesicles

**STYPLON**  
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- ✓ Effectively controls bleeding when blood loss is not an emergency
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- ✓ Useful in bleeding gums, piles, epistaxis, intra-uterine bleeding etc.

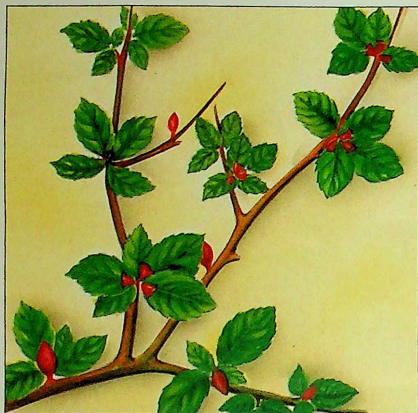
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## HERBAL INSIGHT

**Commiphora mukul** (Guggulu)

*Commiphora mukul* (*C. mukul*) is a small tree or shrub with spinescent branches is found in the arid rocky tracts of Rajasthan, Khandesh, Mysore, Sind, and Baluchistan. *C. mukul* is the source of Indian Bdellium, a gum resin obtained by incision of the bark. Each plant yields about 1.5-2 lb. of the product which is collected during the cold season. The resin is pale yellow, brown, or dull-green in colour with a bitter taste and balsamic odour. It is mainly used to prepare incense sticks, as a fixative in perfumery and also in medicine.

Guggulu has a wide range of uses in indigenous medicine. It acts as an astringent and antiseptic. When taken orally it acts as a bitter, stomachic and carminative. It also stimulates appetite and improves digestion. Like all oleo-resins it causes an increase of leucocytes in the blood and stimulates phagocytosis. It acts as a diaphoretic, expectorant and diuretic, and is said to be a uterine stimulant and emmenagogue. The resin is used in the form of a lotion for indolent ulcers and also as an ingredient of ointments for ulcers. It is used as a mouth gargle in dental caries, weak and spongy gums, pyorrhoea alveolaris, chronic tonsillitis and pharyngitis. Inhalation of the fumes from burnt guggulu is recommended in hay fever, acute and chronic nasal catarrh, chronic laryngitis, chronic bronchitis and phthisis.

The commercial product

contains about 4.65% foreign matter and about 1.45% of an aromatic essential oil besides gum and resin.

Guggulu or the gum resin from the bark contains the octanordammarane terpenes manusbombic acid and manusbombione. The former shows anti-inflammatory activity. The oleo-resin portion of the plant was found to be a highly potent anti-inflammatory agent, as compared to hydrocortisone and butazolidin against Brownlee's formaldehyde-induced arthritis in albino rats. The crude aqueous extract of the oleo-gum resin was found to suppress acute rat-paw oedema induced by carrageenin. It had also a suppressive action against the granuloma pouch test. In arthritis, the extract suppressed the secondary lesions very effectively without having any significant action on the primary phase. Side effects such as gastric ulceration, loss of weight and mortality were negligible in animals treated with the extract as compared to those treated with betamethasone.

Guggulu is reported to reduce cholesterol and triglyceride levels in hypercholesterolaemic subjects. It is reported to be more effective than Clofibrate as a hypolipidaemic. When ethyl acetate soluble portion of the resin was fractionated into acidic and neutral portions, the neutral portion showed hypocholesterolaemic activity while the acidic portion showed anti-inflammatory activity.

Guggulu is used to control simple and diffuse goitre very effectively. During the treatment there was an increase in T4 and T8 cells in the patients serum.

Another composite formulation with guggulu as one of the ingredients and *Inula racemosa* is used in controlling hyperlipidaemia and as an anti-anginal. It is reported to show activity equal to lovastatin and colestipol. Guggulu has also been reported to control the Entamoeba histolytica in intestinal and hepatic amoebiasis.

Preliminary clinical studies were carried out on 22 patients of hypercholesterolaemia associated with obesity, ischaemic heart disease, hypertension, diabetes etc. Crude guggulu was administered orally in a dose of 6-12 g, in 3 divided doses for 15 days to one month. A fall in the total serum cholesterol and serum lipid-phosphorus was noted in all the cases treated with guggulu. The body weight also revealed a significant decline in 10 patients of obesity. This long-term study indicated that the hypolipidaemic effect of fraction A of guggulu could be attributed to: (a) increase in the rate of removal / excretion of cholesterol, via the gut, (b) decrease in the input / synthesis of cholesterol, and (c) mobilization of cholesterol from tissues.

Guggulu is one of the constituents of the well known Ayurvedic preparation 'Rumalaya' which is used to treat and control rheumatoid arthritis. It is effective in reducing pain and inflammation.

**Dear Readers,**

We welcome your contributions and suggestions for Ayurveda News. Please rush them to:

Dr. S.K. Mitra  
R & D Centre  
The Himalaya Drug Co.,  
Makali, Bangalore 562 123

Thank You,  
Medileam, R & D Centre

## FLASHES

**BROCCOLI (Cauliflower)**

Eating is not just for pleasure—the right food can replenish your body with nutrients to fight illness, prevent ageing and help your body perform at its best. Broccoli has one of the highest concentrations of sulphoraphane, one of the most powerful phytochemicals discovered

to date. It has been shown to boost the production of anti-cancer enzymes. Experts also believe that broccoli is one of the top three foods that could prolong your life. The vegetable is a helpful food supplement for women. It is rich in calcium, which protects the postmenopausal women

against osteoporosis. Besides, it contains iron and folic acid which are beneficial for pregnant and lactating mothers. Researchers have also reported that, the more cruciferous vegetables (of which broccoli is one) you eat, the lower your chances of developing cancer of the colon.

**Congratulations !**

Winners of Mar. '97 Caption Contest



You will be receiving your prizes shortly.

"Doc", hope you wouldn't mind this costume, this is my last wish before my operation."

Dr. K.L. Ramchandani, D.M. (Card.)

\*\*\*

"This would make you take due interest while operating me."

Dr. B.N. Upendra, Bangalore.

\*\*\*

"I changed, Doctor. Do I look alright now?"

Dr. Vinoda Rajeev, Meerut.

\*\*\*

"I am ready for the next 'operation' sir."

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\*\*\*

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13/5  
23/3/19

# Swasthavritta

According to Ayurveda a person bearing a complete equilibrium of Dosha, Agni, Dhātu, Mala and Physical and Psychosomatic functions along with happy mind and spirit is the only healthy person. For achieving this healthy manhood Ayurveda has laid stress to adopt certain principles subjected to specific Ahār, Vihār and Achārs based on Hetu (Material cause), kāla (Season) and Desha (Habitat). These principles are defined as Charyas (Routine or life style.)

## Dincharya

This comprises of the do's and don't's during the day time i.e. starting from the time of getting up from bed to the time of going to bed.

### Time to getting up :

It is advisable to get up early in the morning before sunrise in Bhṛhma Muhūrta. It helps in avoiding dreams as well as in providing a time when mind is clear and body losses are repaired.

### Drinking water :

A draught of water taken at the time of getting up, cause a free passage of motion and urine.

### Excretion :

It is very necessary to inculcate the habit of easing in the morning.

### Cleaning of Teeth and Mouth :

Cleaning the teeth, tongue and mouth every morning should be ensured. Teeth may be cleaned by Bābbulā, Nēem or Dhāka stick. This helps in removing the accumulation of dirt, tartar etc. from the teeth & tongue as well as applies massage on gums and mind gets cheered.

### Oil Massage :

It is necessary to massage whole body with oil. For massaging, Tīlā Tailā (Gingelly Oil), Sarsapa Tailā (Mustard Oil) or Nārikelā (Coconut oil) can be used. But generally speaking Sarsapa Tailā is the best one. Medicated Oils may also be used.

Oil massgae ensures (I) softness and unctuousness of skin there by eliminating chances of infection, (II) Free movement of joints and muscles, (III) Increased circulation of blood (IV) speedy removal of metabolic waste products through skin, and (v) maintenance of perfect health. In some measure, it also serves as an exercise.

### **Exercise :**

Regular exercise is essential for perfect health. It brings up stamina and resistance against disease, clears the channels of body (Srotas), and increases the blood circulation and efficiency of lungs.

### **Bath :**

After that one should take bath with warm water at the place protected from draught. Bath increase Jatharagni, Clears the pores of the skin and the skin becomes clear.

### **Diet :**

Diet should be regulated taking into account the Desa, Kala (season) and habit. Diet should be planned to include

all six Rasa (taste )i.e. sweet, saltish, acid, bitter, acrid and astringent. Diet should be balanced and the quantity should be according to one's digestive capacity.

### **Tips on diet :**

- 1 Fresh ginger with a small amount of salt should be taken 10 to 15 minutes before food.
- 2 The diet, specially hard substances should be properly chewed.
- 3 Wherever possible intake of curd or butter milk should follow food.
- 4 The food should be tasty, fresh and good in appearance.
- 5 It should neither be very hot nor absolutely cold.
- 6 Water should be avoided at least 15 minutes before food. The quantity of water after food should be small. Let it be drunk often.
- 7 Heavy (Guru) food should be taken in a limited quantity.
- 8 Heavy food should not be taken at night. The proper time for night meal is two to three hours before going to bed. After night food, it is better to go for a short walk, of say hundred steps.

warned against coitus interruptus i.e. withdrawal without emission. This is a very annoying procedure to both the parties who may become neurotic finally. It is condemned by sexologists even today. On the other hand, they have recommended sex enjoyment of suitable couples, as follows :

In Vasant - Sharad - Twice weekly  
in Varshu - Greeshma - Fortnightly  
In Hemant - Shishir- According to  
capacity and  
inclination.

### **Panch Karma :**

Panchkarma therapy is the bed-rock of Ayurvedic approach to the treatment of both the diseases of acute & chronic nature. In addition this therapy appears to be also meant for being utilized in measures calculated to the preservation, maintenance and conservation of health and the promotion of longevity. It plays an important role in the regimen of Swasthivritta. Panchkarma has been indicated as prophylactic measure in the context of epidemics and pandemics.

Significance of this therapy is characterised by its approach through (1) Sansodhan (2) Sanshaman (3) Prevention and (4) removal of etiological factors.

Snehana, Swedan (Poorvakarma) Vaman, Virechan, Vasti (Anuvasan & Asthapan), Nasya and Shirovasti (Mukhya karma) are the parameters practiced in Panchkarma therapy.

### **Rejuvenation & Longevity :**

Approach of Ayurveda did not end when patient recovered from diseased or kept healthy. There are number of tonics prescribed in Ayurvedic literature to maintain the maximum physical and mental vigour as long as possible and the prolonging the life span. The observance of health, dietetic and hygienic rules are essential for the success of treatment prescribed for longevity or rejuvenation.

The number of drugs and dietary materials are advocated to be used viz. Vidanga, Yastimadhu, Bhallataka, Amalaki, Guduchi, Atibala, Nagbala, Vidari, Satavari, Bijaka, Chitraka, Agnimantha, Varahi, Pulses of Mudga and masa, sali rice, thickened milk, honeys, clarified butter.

**Table showing the specific Rasayanas used In specific conditions**

Age in years	Bhava which is removed	Rasayan used
1-10	Balya	Vacha, Swarna, Kashmari
11-20	Vridddhi	Kashmari, Bala, Ashwagandha
21-30	Chhavi	Amalaka, Lauha Rasayan
31-40	Medha	Shankhapushpi, Ashwagandha
41-50	Twak	Bhringaraja, Somaraji, Priyal
51-60	Drishhti	Triphalaghrita Sapramrit Lauha, Shatavari
61-70	Shukra	Kewanch Beeja, Ghrit etc.
71-80	Vikrama	This age group is not fit
81-90	Buddhi	for Rasayana Karma
91-100	Karmendriya	(Poorve vayasi Madhya va)

**Adharaniya Vega (Non-Suppressible Urges)**

There are thirteen natural urges. These urges should never be suppressed because suppression of natural urges leads to many diseases as given below :

Suppression of urine leads to difficulty in passing urine, urinary stone, atony of bladder and inflammation of urinary tract.

Suppression of stool leads to pain in abdomen, tympanites indigestion, gas in abdomen, headache and ulcers.

Suppression of wind leads to pain in abdomen, tympanitis, indigestion, heart diseases, constipation or diarrhoea and gas.

Suppression of semen may produce a stone(Spermolith), pain in testis and difficulty in intercourse.

Suppression of vomiting produces different types of diseases like urticaria, giddiness, anaemia, hyperacidity, skin diseases and fever.



Suppression of sneezing may produce rhinitis and chronic cold, headache, sinusitis and diseases of respiratory system.

Suppression of eructation leads to hiccough, pain in chest, cough, anorexia and loss of appetite.

Suppression of Yawning leads to diseases of the eyes, throat, ear and nose.

Suppression of hunger and thirst may lead to nutritional disorders and debility. The body resistance and immunity against infections are lowered, there by susceptibility to diseases increases. In the same way hunger pain, dehydration etc. are produced.

Suppression of tears leads to mental disorders, pain in chest, giddiness and digestive disorders.

Suppression of respiration may cause suffocation, respiratory disorders, heart disease and even death.

Suppression of sleep by keeping forcefully awaking, the diseases like insomnia, mental disorders, digestive disorders and diseases of sense organs are caused.

## Social Hygiene

Man is a social animal and so one has to work in the society in a manner which is conducive to better hygiene and sanitation of his community. This can only be achieved by individual's own efforts as well as his cooperation with the concerned authorities of the state e.g. (I) the house refuse should not be thrown at random, it should be consigned to its proper place, (II) the gutters of drainage system should not be blocked, (III) latrins and the urinals should be kept properly cleaned, (IV) water and water - pots be properly cleaned.

The most important point to be kept in mind is that as soon as a case of infectious diseases is seen, the same should be reported to the proper authorities, so that they can take proper steps to check the spread of the disease and we may take such steps so as to help the authorities in their efforts.

## Ritu Charya

Not only the behaviour of a person is responsible for causation of disease but seasonal changes also bring about disease. Our vast country from Kanya - Kumari to Kashmir and from Kutch to Bengal possesses variety of seasons. The seasons are classified mainly by the movement of the sun, i.e. Dakshinayana and Uttarayana, and

according to cold, heat and rains. But the main classification is that there are six seasons viz. Sisira, Vasanta, Grisma, Varsa, Sarada and Hemanta.

Hemanta and Sisira are cold seasons, Grisma is a hot season, Varsa is a season of rains. Sarada and Vasanta are moderate that is to say the days are moderately hot and nights are cold and pleasant.

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## Seasonal Variations of the Dosa

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Season	Sanchaya	Prakopa	Prasama
Hemanta	-	-	Pitta
Sisira	Kapha	-	-
Vasanta	-	Kapha	-
Grisma	Vata	-	Kapha
Varsa	Pitta	Vata	-
Sarada	-	Pitta	Vata

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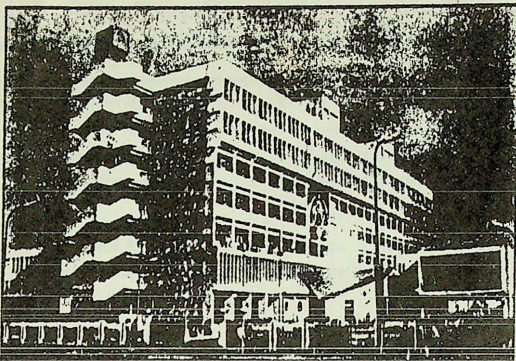
## Ahara Vihara and Sodhana according to the Season

Season	Ahara (Diet)	Vihara	Purificatory Measure
Hemant & Sisira	Madhura, Amla and Lavana Ras, nutritious diet	Massage, Exercise woollen blankets, protection against cold	—
Vasanta	Laghu and Ruksa Abara specially Laja, Canaka (Bengal grams)	Massage, Exercise, fomentations	Vamana
Grisma	Madhura, Laghu & Snigdha Dravya, light in digestion	Sita and seasonal fruits like Amra (mango), Jambu (Jamun), cold air and wherever possible air passing through Usira (Khasa)	---
Varsa	Kasaya and Madhura Rasa Amla, Lavana Snehayukta Dravya, digestive substances light diet, boiled and clean curd, whey, lemon, ksara and Ksara preparations	Avoid sleeping on the ground, clear the dirty monsoon water from the area around	Basti
Sarada	Madhura, Kasaya Snigdha Dravyas specially ghee and milk, sweets, rice and its preparations, acrid	To sit in moon light in the first quarter of night, exercise, avoid curd and diet etc.	Virecana & Blood-letting

The principles laid down in the Svasthavritta Dincharya Ritu Charya etc. have been described here in brief. These measured are for preventing the diseases as well as for promoting the

health. Proper following of these principles leads to the perfect bodily and mental health, and one can live longer without any disease.



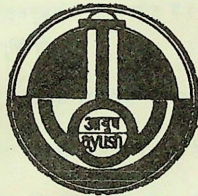


**Jawahar Lal Nehru Bhartiya Chikitsa Avam Homoeopathy  
Anusandhan Bhawan**

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# स्वस्थवृत्त

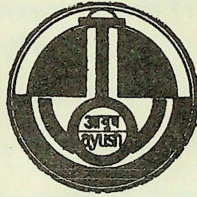
स्वास्थ्य रक्षा की आयुर्वेदीय विधि



केन्द्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद्  
(स्वास्थ्य एवं परिवार कल्याण मन्त्रालय भारत सरकार)  
६१-६५ शैक्षणिक क्षेत्र, जनकपुरी डी-ब्लॉक के सामने  
नई दिल्ली-११० ०५८

# स्वस्थवृत्त

स्वास्थ्य रक्षा की आयुर्वेदीय विधि



केन्द्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद्

(स्वास्थ्य एवं परिवार कल्याण मन्त्रालय भारत सरकार)

६१-६५ शैक्षणिक क्षेत्र, जनकपुरी डी-ब्लॉक के सामने

नई दिल्ली-११० ०५८

# स्वस्थ वृत्त

सम दोषः समाग्निश्च समधातुमलक्रियः ।

प्रसन्नात्मेन्द्रिय मनः स्वस्थ इत्यभिधीयते ।। सुश्रुत संहिता

आयुर्वेद मतानुसार सम दोष, सम अग्नि, समधातु, सम मल, सम क्रियाओं (शारीरिक एवं मानसिक) एवं प्रसन्न आत्मा व मन वाला पुरुष ही स्वस्थ पुरुष है ।

● इस स्वस्थ पुरुषत्व की प्राप्ति के लिये हेतु काल व देश के आधार पर विभिन्न आहार, विहा-  
आचार का प्रयोग एवं परिपालन आवश्यक है । इन्हें चर्या नाम दिया गया है ।

## दिनचर्या

उठने का समय : प्रातः ब्राह्ममुहूर्त में ज़ीया छोड़ दें । इससे मनुष्य स्वप्न देखने से बचता है तथा मस्तिष्क एवं शरीर की क्षतिपूर्ति होती है ।

उषः पान : प्रातः उठकर सर्वप्रथम समशीतोष्ण जल पीये ।

मलमूत्र त्याग : तदोपरान्त मलत्याग की क्रिया पूर्ण करें ।

दन्त एवं मुख प्रक्षालन : दांत, जिह्वा एवं मुख की सफाई नित्य प्रति करें । इसके लिए बबूल, नी-  
ढाक आदि की दातौन करें । इस क्रिया से दांत एवं जिह्वा पर कभी मंदागी साफ हो जाती है । साथ ही मसूढ़ की हल्की मालिश भी हो जाती है एवं मन प्रसन्न होता है ।

तैलाभ्यंग : स्नान किया से पूर्व तिल तैल, सरसों के तैल अथवा नारियल तैल से पूरे शरीर व मालिश करें । अभ्यंग से निम्न लाभ होते हैं ।

क - त्वचा नरम एवं चिकनी होती है । साथ ही पूरे शरीर का त्वचागत रक्त संचार बढ़ता है, जिससे रो नहीं होते ।

ख - मांस - पेशियों एवं संधियों की शिथिलता दूर होती है ।

ग शरीर के लिए अनुपयोगी उत्पादों का शीघ्रता से निर्हरण होता है।

घ उत्तम स्वास्थ्य का संरक्षण होता है।

### व्यायाम :

अभ्यंग के उपरांत हल्का व्यायाम करना स्वास्थ्य प्रद है। इससे व्याधि के विरुद्ध प्रतिरोध प्राप्त होता है। व्यायाम से रक्त संचार एवं फुफुसों की कार्यक्षमता में वृद्धि होती है।

### स्नान :

उष्ण अथवा समशीतोष्ण जल से निर्वात स्थान में स्नान करें। स्नान से क्षुधा की वृद्धि होती है; तथा पसीने से बंद हुए त्वचा के रोम छिद्र खुल जाते हैं।

### आहार :

देश, काल (ऋतु) एवं अभ्यास को ध्यान में रखकर आहार को नियमित करना चाहिए। भोजन के नियोजन में सभी छः रसों- मधुर, लवण, अम्ल, कटु, तिक्त एवं कषाय, का समावेश करना चाहिए। आहार संतुलित होना चाहिए एवं मात्रा पाचन क्षमता के अनुसार होनी चाहिए।

### आहार पर निर्देश

1. भोजन के १०-१५ मिनट पूर्व ताजा अदरक थोड़े से नमक के साथ खाएं।
2. आहार को विशेषकर कड़ी वस्तुओं को अच्छी तरह चबाना चाहिए।
3. यथा - संभव भोजन के बाद मट्ठे का प्रयोग करना चाहिए।
4. भोजन ताजा, स्वादिष्ट एवं देखने में अच्छा लगना चाहिए।
5. यह बहुत गरम या अत्यंत ठंडा नहीं होना चाहिए।
6. भोजन से कम से कम १५ मिनट पूर्व तक पानी नहीं पीना चाहिए। भोजन के समय पानी की मात्रा अल्प होनी चाहिए। इसे थोड़ी - थोड़ी मात्रा में बार-बार पिएं।



- ७ भारी (गुरु) आहार सीमित मात्रा में लेना चाहिए।
- ८ भारी आहार रात में नहीं लेना चाहिए। रात्रि भोजन का उचित समय सोने के २-३ घण्टे पहले होना चाहिए। रात्रि भोजन के बाद थोड़ा टहलना, करीब १०० कदम टहलना उपयुक्त है।
- ९ भोजन के बाद भारी कार्य या व्यायाम करने से बचना चाहिए।
- १० भोजन के बाद भारी शारीरिक या मानसिक कार्य करने से बचना चाहिए। भोजन के उचित पाचन के लिए कुछ आराम वांछनीय है।

### निद्रा :

मनुष्य मात्र के स्वास्थ्य, संरक्षण एवं दीर्घ जीवन के लिए निद्रा अत्यंत महत्वपूर्ण है। इसे जगद्दात्री उचित ही कहा गया है, क्योंकि इसकी प्रक्रिया द्वारा शारीरिक श्रम एवं मानसिक तनाव तथा धातुक्षय जनित शरीर की क्षति की पूर्ति में सहायता मिलती है।

### निद्रा पर निर्देश :

१. पूर्व या उत्तर दिशा में सिर रख कर सोना चाहिए।
२. शयन कक्ष अत्यंत स्वच्छ, हवादार एवं शोर तथा उपद्रव से दूर होना चाहिए।
३. झीया व्यवस्थित, स्वच्छ एवं खटमल रहित होना चाहिए।
४. शयन कक्ष वायु के आवेगों से मुक्त होना चाहिए।
५. मस्तिष्क की उत्तेजना की अवस्था में यथा पढ़ने, विचार करने या मद्यपान के बाद, शयन वज्रित करना चाहिए।
६. सोने के समय मन सांसारिक गतिविधियों एवं चिन्ताओं से मुक्त रहना चाहिए।
७. रात में देर से सोने से स्वास्थ्य खराब होता है।
८. शरीर की क्षति पूर्ति के लिए २४ घण्टे में कम से कम छः घण्टे सोना अत्यावश्यक है।

९. यथा संभव दिन में सोने से बचना चाहिए। तथापि यदि कोई रात में जागता है तो दिन में कुछ समय के लिए सो सकता है। गर्मी के दिनों में दिन में सोना वर्जित नहीं है। परन्तु जाड़ो के दिनों में सोने से कफ बढ़ता है जिससे श्वसन एवं पाचन विकार होते हैं।
१०. सिर, तलवों एवं हथेली पर सोने के पूर्व मालिश करना वांछनीय है। मालिश से सपने नियंत्रित हो सकते हैं।

### गृहस्थ जीवन एवं ब्रह्मचर्य :

पुरातन काल से ही भोजन की तरह सहवास की इच्छा एवं आवश्यकता को किंचित बुरी दृष्टि से स्वीकार किया गया है। अतः आचार्यों ने रजोकाल, गर्भावस्था, सद्यःप्रसूतावस्था, वृद्धा स्त्री के साथ एवं दिन के समय सहवास को स्वोत्कर्ष नहीं माना है। अपूर्ण सहवास को भी मानसिक कुंठा को उत्पन्न करने वाला होने के कारण मान्यता नहीं दी गई है। आचार्यों ने विभिन्न ऋतुओं के अनुसार निम्नानुसार सहवास की अनुमति दी है :-

वसन्त- शरद ऋतु में सप्ताह में दो बार।

वर्षा- ग्रीष्म ऋतु में पन्द्रह दिन में एक बार।

हेमन्त- शिशिर ऋतु में सामर्थ्य एवं अनुकूलता के अनुसार।

सहवास केवल अपनी गतनी के साथ, नियमित स्वरूप में करना चाहिए।

### पंचकर्म :

आत्ययिक एवं दीर्घकालिक रोगों की चिकित्सा व्यवस्था में पंचकर्म चिकित्सा आयुर्वेद का आधार है। इसके साथ ही यह चिकित्सा; दीर्घायु हेतु स्वास्थ्य के बचाव, स्थायित्व एवं रखरखाव के लिए प्रयोग में लाई जाती है। देशव्यापी या विश्वव्यापी महामारी की रोकथाम हेतु पंचकर्म चिकित्सा का उपयोग पूर्वकर्म चिकित्सा के रूप में भी किया जाता है।

इस चिकित्सा की विशिष्टता दोषों के (१) संशोधन (२) संशमन (३) निदान (रोगकारक कारण) से बचाव एवं (४) उनको समाप्त करने में निहित है। पंचकर्म चिकित्सा के अंतर्गत स्नेहन, स्वेदन (पूर्वकर्म) एवं वमन विरेचन, वस्ति (अनुवासन व आस्थापन), नस्य, शिरोवस्ति (मुख्यकर्म) प्रक्रियाओं का प्रयोग किया जाता है।

## रसायन एवं दीर्घायु :

आयुर्वेद की मान्यता केवल रोगी को व्याधि से मुक्ति दिलाना तथा मनुष्य को स्वस्थ रखने की ही नहीं है बल्कि शास्त्रों में शारीरिक एवं मानसिक शक्ति को लम्बे समय तक बनाये रखने तथा दीर्घ जीवन प्राप्त हेतु बहुत से जीवनीय द्रव्य/औषध भी आयुर्वेद शास्त्रों में वर्णित हैं। स्वास्थ्य के नियम भोजन एवं स्वच्छता के संबंध में वर्णित आवश्यक दिशा निर्देशों का पालन दीर्घायु एवं स्वस्थ जीवन के लिए आवश्यक है।

इस संबंध में बहुत सी औषधियां एवं भोजन द्रव्य वर्णित है जैसे :-

विडंग, यष्टिमधु, भल्लाहक, आमलकी, गुडूची, अतिबता, नागबला, विदारी, शतावरी, बीजक, चित्रक, अग्निमंथ, बाराही, उडद, मूग, शालांचावल, दुग्ध, मधु, मक्खन।

## विशेष अवस्थाओं में विशेष रसायनों का प्रयोग संबंधी तालिका :

आयु (वर्ष)	किस भाव का नाश होता है	कौन-सा रसायन सेवन करें
१-१०	बाल्य	वचा, स्वर्ण, काश्मरी
११-२०	वृद्धि	काश्मरी, बला, अश्वगंधा
२१-३०	छवि	आमलक व लोहरसायन
३१-४०	मेघा	शंखपुष्पी, अश्वगंधा
४१-५०	त्वक्	भृंगराज, सोमराजी, प्रियाल
५१-६०	दृष्टि	त्रिफला, सपमृतलीह, शतावरी
६१-७०	शुक	केवांच बीज, घृत आदि
७१-८०	विक्रम	शरीर रसायन सेवन के सक्षम नहीं रहता (पूर्व वयसि मध्ये वा)
८१-९०	बुद्धि	
९१-१००	कर्मन्दिद्य	

## अधारणीय वेग (न रोके जाने योग्य वेग) :

स्वभाविक वेग १३ हैं। इन्हें कभी भी दबाना नहीं चाहिए, क्योंकि इन्हें रोकने से निम्न रोग हो जाते हैं :-

मूत्र रोकने से-मूत्र कष्ट, पथरी, मूत्राशय क्रियाहीनता एवं शोथ।

पुरीष रोकने से-उदरशूल, अफारा, अर्जीण, पेट में वायु, सिर दर्द, पेट में द्रवण।

अपानवायु रोकने से-उदरशूल, अफारा, अर्जीण, हृद्दोग, कब्ज या अतिसार।

शुक्रधरण रोकने से- पथरी, अण्डकोष में पीड़ा एवं मैथुन में कष्ट।

वमन रोकने से-शीतपित्त, चक्कर आना, रक्ताल्पता, अम्लपित्त, त्वक् रोग एवं ज्वर।

छींक को रोकने से- नासा शोथ, जीर्ण प्रतिश्याय, शिरःशूल, पीनत एवं श्वसन संस्थान के विकार।

उद्गार (डकार) रोकने से- हिचकी, वक्षशूल, कास, अरुचि एवं मंदाग्नि।

जम्हाई रोकने से- जम्हाई, के वेग को रोकने से आंख, कान, गला एवं नाक के रोग होते हैं।

भूख एवं प्यास रोकने से- पोषण विकार एवं दुर्बलता, शरीर की प्रतिरोध एवं व्याधि क्षमता का हास, क्षुधा, शूल एवं शोथ।

आंसू रोकने से-मानसरोग, छातीमें दर्द, चक्कर एवं पाचन विकार।

श्वास रोकने से-घुटन, श्वसन विकार, हृद्दोग एवं मृत्यु।

निद्रा रोकने से-अग्निदा, नानश्चिद्रोग, पाचन विकार एवं ज्ञानेन्द्रियों के रोग।

## सामाजिक स्वास्थ्य :

मनुष्य एक सामाजिक प्राणी है एवं समाज में इस प्रकार कार्य करना चाहिए जो समुदाय के स्वास्थ्य एवं स्वच्छता में सहायक हो। इसे व्यक्ति के स्वयं के प्रयासों एवं संबंधित अधिकारियों से उनके सहयोग द्वारा प्राप्त किया जा सकता है। यथा-१-घर का कूड़ा अन्यत्र न फेंक कर उचित निर्धारित स्थान पर ही डालें, २. निकास प्रणाली की नालियां बंद न करें, ३. मूत्रालय एवं शौचालय भलीभांति साफ रखें, ४. जल एवं जल पात्र उचित ढंग से साफ करें।

सबसे महत्वपूर्ण बात ध्यान में रखने की है कि यदि संक्रामक रोग से पीड़ित रोगी दिखे तो उसकी सूचना तत्काल उचित अधिकारियों को दें, जिससे की वे लोग व्याधि के प्रसार को रोकने की उचित व्यवस्था कर सकें एवं हमें भी इस प्रकार के कदम उठाने चाहिए कि अधिकारियों के प्रयासों में सहायक हों।

## ऋतुचर्या :

केवल व्यक्ति के मिथ्या आहार एवं व्यवहार से ही व्याधियां उत्पन्न नहीं होती, अपितु ऋतु के परिवर्तन भी व्याधियां उत्पन्न करते हैं। हमारे विशाल देश में कन्याकुमारी से कश्मीर तक एवं कच्छ से बंगाल तक अनेकों ऋतुएं मिलती हैं। मुख्यतः सूर्य की गति से दक्षिणायन एवं उत्तरायण तथा शीत, उष्णता, एवं वर्षा के आधार पर विभाजित है। परन्तु मुख्य वर्गीकरण के आधार पर छः ऋतुएं हैं। यथा-शिशिर बसंत, ग्रीष्म, वर्षा, एवं शरद एवं हेमन्त।

हेमन्त एवं शिशिर, शीत ऋतुएं हैं, ग्रीष्म उष्ण ऋतु हैं, वर्षा बरसात का मौसम है। शरद एवं बसंत मध्यम ऋतुएं हैं। इसका तात्पर्य है कि दिन मध्यम उष्ण रहता है तथा रातें मध्यम शीत एवं आनन्ददायी होती है।

## दोषों का ऋतुओं के अनुसार परिवर्तन :

दोषों में तीन परिवर्तन होते हैं, यथा- १. संचय (एकत्रीकरण), २. प्रकोप (प्रसार या उत्तेजना) एवं ३. प्रशम (सामान्यावस्था) शरीर के दोषों में ये परिवर्तन ऋतुओं में परिवर्तन के कारण होते हैं जिस पर मनुष्य का कोई नियंत्रण नहीं है, परन्तु दोषों में इन परिवर्तनों को, रहने की विधि में परिवर्तन करके सीमित किया जा सकता है। दोषों में ऋतुओं के अनुसार परिवर्तन तालिका में देखें :-

## तालिका १. दोषों में ऋतुओं के अनुसार परिवर्तन

ऋतु	संचय	प्रकोप	प्रशम
हेमन्त	कफ	-	पित्त
शिशिर	कफ	-	-
बसंत	-	कफ	-
ग्रीष्म	वात	-	कफ
वर्षा	पित्त	वात	-
शरद	-	पित्त	वात

मौसम में अकस्मात् परिवर्तन के कारण कतिपय व्याधियों, यथा- विषमज्वर एवं विस्फुचिका आदि का प्रकोप बढ़ जाता है। विभिन्न ऋतुओं में प्रयोग के लिए आहार-विहार एवं पंचकर्म विधियां तालिका-२ में दी गई हैं :-

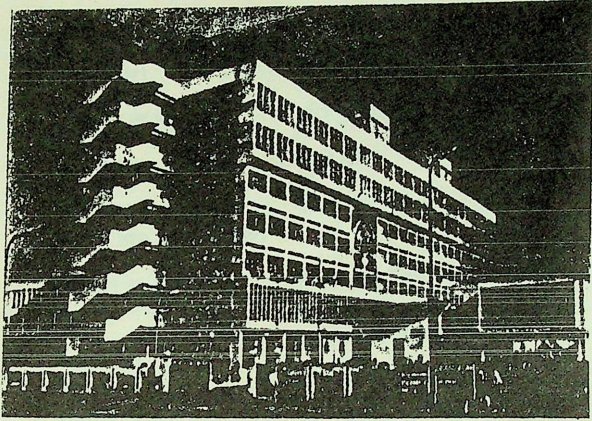
## तालिका २

### ऋतुओं के अनुसार आहार-विहार एवं शोधन

ऋतु	आहार(भोजन)	विहार	शोधन-विधि
हेमन्त एवं	मधुर, अम्ल एवं लवण रस,	मालिश, व्यायाम, ऊनी कम्बल	-
शिशिर	पोषक आहार।	शीत से बचाव	
बसंत	लघु एवं रूक्ष आहार विशेषकर लाजा एवं चणक (चना)	मालिश, व्यायाम, सेक	वभन
ग्रीष्म	मधुर, लघु एवं स्निग्ध द्रव्य, पाचन में लघु आहार।	शीत तथा मौसमी फल यथा- आम, जामुन, शीतल-वायु एवं जहां तक संभव हो खस से गुजरती हुई हवा।	-
वर्षा	कषाय एवं मधु रस, अम्ल, लवण, स्नेहयुक्त, द्रव्य, उबला हुआ साफ पानी, दही मट्ठा, नींबू, क्षार एवं क्षार के योग।	जमीन पर सोने से बचें आसपास के क्षेत्र से बरसाती पानी साफ कर दें।	वस्ति
शरद	मधुर, कषाय रस, स्निग्ध द्रव्य विशेषकर घी, दूध मीठा, चावल एवं उसके वर्जन।	रात्रि के प्रथम प्रहर में चौदनी में बैठें, व्यायाम, दही एवं खट्टे आहार वर्जित हैं।	विरेचन एवं रक्तमोक्षण

यहां स्वस्थ-वृत्त में वर्णित दिनचर्या, रात्रिचर्या एवं ऋतुचर्या के सिद्धान्त संक्षिप्त रूप में वर्णित हैं। ये उपाय रोगों के निषेध एवं स्वास्थ्य संवर्धन के लिए हैं। इन सिद्धांतों का उचित रूप से अनुसरण करने से संपूर्ण शारीरिक एवं मानसिक स्वास्थ्य उपलब्ध होता है एवं व्याधि रहित दीर्घजीवन प्राप्त होता है।





जवाहरलाल नेहरू भारतीय चिकित्सा एवं होम्योपैथी अनुसंधान भवन

केन्द्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद  
61-65 इन्स्टीटयुशनल एरिया, जनकपुरी, नई दिल्ली - 110058  
दूरभाष: 5528748, 5614970, 5614971, 5614972

मुद्रक : मुद्रण अनुभाग, प्रलेख एवं प्रकाशन विभाग  
नई दिल्ली-110058



# परिषद समाचार

## केन्द्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद

Vol. XXI, No.11-12 Nov.-Dec., 1998 New Delhi Chief Editor : Dr. Prem Kishore

### Central Council for Research in Ayurveda and Siddha

#### रसोषधियों के अनुसंधान एवं विकास पर बैठक

श्रीमती शांता शास्त्री, सचिव, भारतीय चिकित्सा पद्धति एवं होम्योपैथी, की अध्यक्षता में दिनांक 5.12.98 को क्षेत्रीय अनुसंधान केन्द्र, हरितानापुर में रसोषधियों के अनुसंधान एवं विकास पर



श्रीमती शांता शास्त्री सचिव गा.चि.प. एवं होम्यो. द्वारा रसोषधियों की निर्माण प्रक्रिया का अवलोकन

एक बैठक आयोजित हुई। इस बैठक में श्री प्रदीप भार्गव, संयुक्त सचिव, भारतीय चिकित्सा पद्धति एवं होम्योपैथी, वैद्य बृहस्पतिदेव त्रिगुणा, वैद्य शिवकुमार मिश्र, वैद्य जी. एल. चानना, डॉ. मायासाम उनयाल, वैद्य बालेन्दु प्रकाश, डॉ. पी. वी. वी. प्रसाद, वैद्य जी द्विवेदी, वैद्य ए. फे. मिश्र, डॉ. बाजवा, डॉ. कृष्णदत्त शर्मा, डॉ.

#### Meeting on Research and Development of Rasaushadhis.

A meeting on research and development of Rasaushadhis was held at Regional Research Centre, Hastinapur on 5.12.98 under the Chairmanship of Smt. Shanta Shastri, Secretary, ISM&H. Sh. Pradeep Bhargave, Joint Secretary, ISM&H, Vd. B.D. Triguna, Vd. S.K. Mishra, Vd. G.L. Chanana, Dr. M.R. Uniyal, Vd. Balendu Prakash, Dr. P.V.V. Prasad, Vd. G.Dwivedi Vd. A.K. Mishra, Dr. Bajwa, Dr. K.D. Sharma, Dr. B.N. Sharma and Dr. Prem Kishore, Director were present. At the outset all the members



Smt. Shanta Shastri Secretary, ISM & H. in meeting on research and development of Rasaushadhis

NEWS LETTER

13/12  
23/12/98



बी.एन. शर्मा एवं डॉ. प्रेम किशोर, परिषद निदेशक भी उपस्थित थे। सर्वप्रथम सदस्यों ने केन्द्र का दौरा किया। सदस्यों ने आयुर्वेद चिकित्सा में विशेष रूप से आकस्मिक चिकित्सा की स्थिति में रसौषधियों की उपयोगिता पर प्रकाश डाला। रसौषधि तैयार करने की क्रिया-विधि, कच्चे पदार्थों की पहचान एवं मानकीकरण, निर्माण क्रिया का मानकीकरण और औषधि की बचाव क्षमता का अनुमोदन किया गया। इसके लिए परिषद द्वारा स्थापित किसी प्रयोगशाला में अथवा पी.एल.आई.एम. और एच.पी.एल. गाजियाबाद में औषधि की गुणवत्ता नियंत्रण की जांच की जा सकती है। साथ ही स्टॉक और लागत ब्यय हेतु स्तुति भी की गई।

### अस्पताल प्रशासन में प्रशिक्षण-परिषद अधिकारियों की सहभागिता

राष्ट्रीय स्वास्थ्य एवं परिवार कल्याण संस्थान, मुनिरका, नई दिल्ली में 9 से 20 नवम्बर, 1998 तक आयोजित अस्पताल प्रशासन में प्रशिक्षण के लिए भारतीय चिकित्सा पद्धति एवं होम्योपैथी विभाग, स्वास्थ्य एवं परिवार कल्याण मंत्रालय, भारत सरकार द्वारा परिषद अधिकारियों-डॉ. अपरानाथन, अनुसंधान अधिकारी, केन्द्रीय अनुसंधान संस्थान (सिद्ध), चेन्नई, डॉ. पी. के. एस. नायर, सहायक अनुसंधान अधिकारी (आयु.), भारतीय पंचकर्म संस्थान, चेन्नई, डॉ. डी. सुधाकर, अनुसंधान अधिकारी (आयु.) भारतीय काय चिकित्सा संस्थान, पटियाला, डॉ. भारती, अनुसंधान अधिकारी (आयु.), केन्द्रीय आयुर्वेद अनुसंधान संस्थान, नई दिल्ली, एवं डॉ. जी. नन्दा, अनुसंधान अधिकारी (आयु.), केन्द्रीय आयुर्वेद अनुसंधान संस्थान, भुवनेश्वर को भाग लेने की स्वीकृति प्रदान की।

### महामारी नियंत्रण पर होने वाले सम्मेलन/संगोष्ठी के लिए प्रारम्भिक बैठक

डॉ. प्रेमकिशोर, निदेशक, केन्द्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद, नई दिल्ली की अध्यक्षता में दिनांक 17.12.98 को केन्द्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद के मुख्य कार्यालय में महामारी नियंत्रण के क्षेत्र में विशेषज्ञों की एक प्रारम्भिक बैठक हुई जिसमें वैद्य शिवकुमार मिश्र, डॉ. बी. एन. सिन्हा, तिब्बिया कॉलेज, नई दिल्ली, श्री श्याम सुन्दर, समुक्त निदेशक, सी बी एच आई, नई दिल्ली, डॉ. मीना बलेचा, सहायक निदेशक, आई.सी.एम.आर., नई दिल्ली, डॉ. उमा चावला, समुक्त निदेशक, एन.आई.सी.डी., नई दिल्ली के साथ परिषद के वरिष्ठ अधिकारी भी उपस्थित थे।

बैठक में उपस्थित सदस्यों का स्वागत करने के पश्चात् डॉ. प्रेम किशोर ने उक्त बैठक के विषय में संक्षिप्त विवरण प्रस्तुत

made a visit of the Centre. The participants highlighted the need for application of Rasaushadhis in Ayurvedic therapy specially in management of emergent clinical conditions. The procedure for the preparation of Rasaushadhis, identification & standardisation of raw material, standardisation of manufacturing procedure and studying safety & efficacy of oral drugs were approved. The quality control may be taken up at any established laboratory of the Council, PLIM and HPL Ghaziabad. The staff and expenditure were also recommended.

### Training in Hospital Administration-Participation by Council's Officers

The Department of ISM&H, Ministry of Health and Family Welfare, Govt. of India has given its approval for participation of Dr. Aparanathan, R.O., CRI(S), Chennai, Dr. P.K. S. Nair, ARO (Ay.) IIP, Cheruthuruthy, Dr. D.Sudhakar, R.O.,(Ay.), IIK, Patiala, Dr. (Mrs.) Bharti, R.O. (Ay), CRIA, New Delhi and Dr. G.Nanda, R.O. (Ay.), CRIA, Bhubneshwar in training in Hospital Administration held at National Institute of Health and Family Welfare, Munirka, New Delhi from 9th to 20th November, 1998.

### Preparatory meeting for epidemic control on forthcoming Conference/Seminar

A preparatory meeting of the experts in the field of epidemic control was held on 17.12.1998 in the CCRAS's Hqrs. office under the Chairmanship of Dr. Prem Kishore, Director, CCRAS. Vd. S.K. Mishra, Dr. B.N. Sinha, Tibbia College, New Delhi, Shri Shyam Sunder, JID, CBHI, New Delhi, Dr. Neena Valecha, Asstt. Director, ICMR, New Delhi and Dr. Uma Chawla, JID, NICD, New Delhi along with Sr. Officers of the Council participated in the meeting.

After welcoming the members present in the meeting, Dr. Prem Kishore gave brief account of having a such meeting and invited suggestions for holding a Seminar/Conference on Epidemic Control

किया तथा आयुर्वेद के माध्यम से महामारी नियंत्रण पर सगोष्ठी/सम्मेलन आयोजित करने के लिए सुझाव आमंत्रित किये। डॉ. कृष्णदत्त शर्मा, उप-निदेशक (तक.) ने परिषद द्वारा देश के विभिन्न स्थानों पर आयुर्वेद औषधि द्वारा महामारी नियंत्रण पर पूर्व में किए गए कार्यों का विवरण प्रस्तुत किया।

सदस्यों का दृष्टिकोण था कि इसके लिए एक समिति बनाई जाय तथा महामारी वाले रोगों की ऋतुओं/समय के अनुसार सूची बनाई जाय, साथ ही ऋतु अनुसार प्रत्येक महामारी के लिए निर्धारित औषधि की भी सूची एवं प्रलेख तथा प्रपत्र तैयार किया जाय। इसके लिए स्थानीय प्रशासन का भी सहयोग लिया जाय। इस प्रकार के कार्यक्रम के लिए एलोपैथी एवं आयुर्वेद चिकित्सा पद्धति के बीच समन्वय स्थापित किया जाय। डॉ. चावला ने प्रस्तावित सम्मेलन/सगोष्ठी में भाग लेने के लिए कुछ विशेषज्ञों के नाम का सुझाव दिया।

### मंत्र चिकित्सा पर एक बैठक

वैद्य बृहस्पतिदेव त्रिगुणा की अध्यक्षता में मंत्र चिकित्सा पर एक बैठक दिनांक 14.12.98 को परिषद मुख्यालय के सम्मेलन कक्ष में हुई। इस बैठक में तपस्वी जनक शाही, वैद्य शिवकुमार मिश्र, वैद्य नानकचन्द शर्मा, डॉ. प्रेम किशोर, डॉ. के.डी. शर्मा, श्री अमृतलाल बछेर, डॉ. डी.के. मिश्र एवं डॉ. बी.एन. शर्मा उपस्थित थे।

डॉ. शाही ने भारत और विदेशों में मंत्र चिकित्सा से असाध्य बीमारियों का उपचार पर आधारित अपना पूर्व का अनुभव बतलाया। वह कई वर्षों से विभिन्न प्रकार के रोगों, जैसे; राधिवात, वृक्क रोग, हृदय रोग, कटिदन्तम्भ/ग्रीवारतम्भ, कैंसर एवं मासपेशीय रावधी आदि अन्य विविध प्रकार के रोगों का उपचार करते रहे हैं। मंत्र के माध्यम से स्वरथ करना ईश्वरीय शक्ति है जिसको तपस्वी जी रोगी के हाथ को स्पर्श करके प्रेषित करते हैं। ऋषिकेश में एक महात्मा के द्वारा उन्हें यह ईश्वरीय शक्ति प्राप्त हुई।

केन्द्रीय आयुर्वेद अनुसंधान संस्थान, नई दिल्ली में श्री जनकशाही जी को मंत्र चिकित्सा करने के लिए संरतुति प्रदान की गई।

by Ayurvedic approach. Dr. K.D. Sharma, Dy. Director (Tech.) explained the work done in the past by the Council on the epidemic control by Ayurvedic medicines at various places of the country.

Members are of the view that a Committee may be constituted, a list of diseases may be prepared along with season/time of outbreak of epidemics, medicines to be prescribed for each epidemic be listed and protocol and proforma may be prepared and also local administration at the district level may be associated. Coordination may be established between Allopathic and Ayurvedic System of Medicine for such a programme. Dr. Chawla has suggested a few names of experts for their participation in the proposed conference/seminar.

### Meeting on Mantra Chikitsa

A meeting for implementation of Mantra Chikitsa was held on 14.12.1998 in the Conference Hall of the CCRAS's Hqrs. Office under the Chairmanship of Vd. B.D. Triguna. Tapasvi Janak Shahi, Vd. S.K. Mishra, Vd. Nanak Chand Sharma, Dr. Prem Kishore, Dr. K.D.Sharma, Shri A.L. Vachher, Dr. D.K. Mishra, Dr. B.N. Sharma, participated in the meeting.

Tapasvi Shahi, at the outset, narrated his past experience on the treatment of incurable diseases with "Mantras" in India as well as abroad. He treated the cases over the years include Osteoarthritis, Renal failure, Cardiac ailments, Spondylitis, Cancer, Frozen shoulder, Muscular dystrophy, Migraine and other ailments of various kinds. Healing through mantra is the divine power, which Tapasvijii transmits into the patients through the touch of his hands. This divine power was showered on him by a Saint in Rishikesh.

It was recommended that the Mantra therapy may be carried out by Shri Shahi at CRIA, New Delhi.

**भारतीय पंचकर्म संस्थान, चेरुतुरुति में श्रीलंका के आयुर्वेद चिकित्सकों के लिए पंचकर्म प्रशिक्षण कार्यक्रम**

भारतीय पंचकर्म संस्थान, चेरुतुरुति (केरल) में श्रीलंका सरकार द्वारा प्रतिनियुक्त 10 आयुर्वेद चिकित्सकों के लिए पंचकर्म चिकित्सा में एक माह का प्रशिक्षण कार्यक्रम दिनांक 2.11.98 से दिनांक 1.12.98 तक सम्पन्न किया गया। श्री एस. अजयकुमार, एम. पी. (अट्टापपला) ने इसका उद्घाटन किया। इन चिकित्सकों को पंचकर्म की विविध प्रणालियों यथा—स्नेहन, स्वेदन, वमन, बरती, नस्य, नवराकीझी एवं पिछेहिल आदि में प्रशिक्षण दिया गया। पंचकर्म चिकित्सा के विभिन्न शीर्षकों पर व्याख्यान के साथ-साथ विशेषज्ञों द्वारा प्रयोगात्मक प्रदर्शन भी किए गए। इसके अतिरिक्त सैद्धांतिक कक्षा के साथ नियमित प्रायोगिक प्रशिक्षण तथा संकाय के चिकित्सकों के साथ विचार-विमर्श की भी व्यवस्था की गई। प्रशिक्षण पूर्ण होने के पश्चात् डॉ. पी.के.एन. नम्बूदरी, प्रभारी सहायक निदेशक द्वारा चिकित्सकों को प्रमाण-पत्र भी दिया गया। प्रशिक्षण कार्यक्रम का उपसंहार डॉ. पी.के. वैरियर, सदस्य, परिषद शासी निकाय तथा ट्रस्टी एवं मुख्य चिकित्सक, आर्य वैद्यशाला, कोट्टकल द्वारा "आयुर्वेद इन इट्स परस्पेक्टिव" पर उद्बोधन के साथ हुआ।

**श्रीलंका के आयुर्वेद चिकित्सकों के शिष्टमंडलों का परिषद् मुख्यालय एवं केंद्रीय आयुर्वेद अनुसंधान, नई दिल्ली में अभ्यागमन।**

श्रीलंका के दो अलग-अलग आयुर्वेद चिकित्सकों के शिष्टमंडलों का केंद्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद, मुख्यालय में तथा केंद्रीय आयुर्वेद अनुसंधान संस्थान, नई दिल्ली में 2-3 नवम्बर एवं 24-25 नवम्बर, 1998 को अभ्यागमन हुआ। उन्होंने परिषद संग्रहालय एवं उद्भिदालय का अवलोकन किया तथा उन्हें औषधि नमूने, उद्भिदालय विस्तार, औषधि पादपों के छायाचित्र, क्षार सूत्र एवं पंचकर्म चिकित्सा से संबंधित चार्ट्स



श्रीलंका के आयुर्वेदीय शिष्टमंडल का अभ्यागमन

**Panchkarma training programme for Ayurvedic Physicians from Sri Lanka at IIP Cheruturthy.**

One month training programme in Panchkarma treatment for 10 Ayurvedic Physicians deputed by the Govt. of Sri Lanka was started on 2.11.98 and completed on 1/12/98 at Indian Institute of Panchkarma, Cheruturthy, Kerala. It was inaugurated by Sh. S. Ajay Kumar, M.P., (Ottappala). These doctors were given the training in various Panchkarma procedures like Snehana, Swedana, Vamana, Basti, Nasya and Kerala specialties like Navarakizhi, Pizhchil etc. Twelve guest lectures on various topics of Panchkarma treatment were also arranged alongwith practical demonstration by the experts. Besides, the daily routine practical training with theory classes alongwith discussion with the doctors from the faculty were also arranged. The doctors were awarded certificates on completion of the course at the end of the training by Dr. P.K.N. Namboodri, A.D. Incharge. The training programme was concluded with a talk on "Ayurveda in its perspective" by Dr. P.K. Warriar, Member, G.B. of CCRAS and Manager, Trustee & Chief Physician, Aryavaidyasala, Kottaikal.

**Visit of Delegation of Sri Lankan Ayurvedic Physicians to HQrs Office and CRI New Delhi**

Two separate delegations of Ayurvedic Physicians led by senior officers of Ministry of Health and Indigenous medicines of Sri Lanka visited the Council's HQrs and CRI, New Delhi on 2-3 Nov., and 24-25 Nov., 1998. They were taken around the museum and herbarium of the HQrs office. They were shown the drugs samples, herbarium sheets and photographs of medicinal plants and charts on Ksharsutra technique, Panchkarma chikitsa. The physicians were interested in Shankhapushpi, Kumkum, Haridra etc. They were introduced with senior officers of the Council in the Conference Hall. The programme officers gave brief account of the research work being looked after by them. A video film "Resurgence" was also shown to them.

दिखाये गये। चिकित्सकों ने शंखपुष्पी, कुमकुम एवं हरिद्रा आदि में अभिरूचि दिखाई। संगोष्ठी कक्ष में उपस्थित परिषद के अधिकारियों से उनका परिचय कराया गया। अनुसंधान कार्यों के विषय में परिषद के कार्यक्रम अधिकारियों ने उनकी विस्तार से जानकारी दी। एक विडियो फिल्म "पुनरुत्थान" भी उन्हें दिखाई गई।

शिष्ट मंडल के सदस्यों द्वारा दिनांक 25.11.98 को केन्द्रीय अनुसंधान संस्थान, नई दिल्ली में भी अभ्यागमन हुआ। उन्हें संस्थान के क्षार-सूत्र, पंचकर्म, नेत्र-क्लिनिक के साथ रसायन, जैव-रसायन तथा पेश्चलाजी प्रयोगशालाएँ भी दिखाई गईं। उन्हें पंचकर्म चिकित्सा पर आधारित एक विडियो फिल्म भी दिखाई गयी।

### एड्स निरोध के लिए सावधानियाँ

विश्व में 1 दिसम्बर को प्रतिवर्ष "विश्व एड्स दिवस" के रूप में मनाया जाता है। इसी परिप्रेक्ष्य में दिनांक 12.12.1998 को परिषद द्वारा एड्स निरोध के लिए सावधानियों पर एक समारोह का आयोजन किया गया। डॉ. प्रेम किशोर, निदेशक एवं डॉ. कृष्णदत्त शर्मा, उप-निदेशक (तक.) ने केन्द्रीय आयुर्वेद एवं रिद्ध अनुसंधान परिषद तथा अन्य परिषदों के कर्मचारियों को एड्स निरोध के विविध उपायों के विषय में जानकारी प्रदान की। डॉ. वी.पी. सिंह, सहायक निदेशक (होम्यो.) केन्द्रीय होम्योपैथी



परिषद समागार में "विश्व एड्स दिवस" मनाया गया। डॉ. वी.पी. सिंह अभिभाषण करते हुए।

अनुसंधान परिषद ने इस रोग की गम्भीरता पर प्रकाश डालते हुए युवा पीढ़ी में आसन्न इस रोग के निषेध पर बल दिया। उन्होंने एच.आई.वी./एड्स से प्रभावित रोगियों एवं उनके उपचार के विषय में प्राप्त अनुभवों से सबधित कुछ उदाहरण भी प्रस्तुत किये। साथ ही इस रोग के नियंत्रण एवं अवरोध के लिए जन समुदाय में एच.आई.वी./एड्स की जानकारी प्रदान करने तथा इसके प्रसार के कारणों, यथा असुरक्षित यौन सम्बन्धों, एच.आई.वी. प्रभावित रक्त प्रवेश में, प्रभावित नीडिल एवं अन्य उपकरण से तथा एच.आई.वी. प्रभावित माता से बच्चे में प्रवेश के प्रचार-प्रसार पर बल दिया।

On 25.11.98, the members of the delegation also visited CRI, New Delhi. They were taken around the various speciality clinics of Ksharsutra, eye clinic and Panchkarma therapy apart from visiting the laboratories of Pathology, Biochemistry, Chemistry etc. They were also shown the video film on Panchkarma therapy.

### Awareness for prevention of AIDS

World AIDS Day is observed on 1st December every year all over the world. A function on awareness for prevention of AIDS was organised by the Council on 1.12.1998 Dr. Prem Kishore, Director and Dr. K.D. Sharma, Dy. Director (Tech.) addressed the staff of the CCRAS and other Councils and explained the preventive measures for spreading of AIDS. Dr. V.P. Singh, Asstt. Director (Homoeopathy), CCRH delivered a lecture explaining the gravity of the problems particularly among the younger generation and the preventive measures, since there is no vaccine for prevention and drugs for cure. He also gave few examples of his experience of coming across with HIV/AIDS affected patients and their treatment by him. He stressed the need to create HIV/AIDS awareness in the community for prevention and control of this disease which spreads through un-protected multiple sex, transfusion of infected blood, by using unsterilized needles and syringes and other equipments and from infected mother to child mainly.

"AIDS programme" was also held at RRAPCRRIA, Mumbai on 26.10.1998 to provide a basic knowledge



Dr. D.D. Chaturvedi, Director C.R.I. (Ay), Mumbai giving his views on HIV infection

राजा राम आनन्दीलाल पोदार केन्द्रीय आयुर्वेद अनुराधान संस्थान मुम्बई में एक 'एड्स-कार्यक्रम' एच. आई. वी. संक्रमण के बारे में कर्मचारियों के ज्ञानवर्धन हेतु दिनांक 26.10.98 को आयोजित किया गया। डॉ. डी.डी. चतुर्वेदी निदेशक तथा संस्थान के वरिष्ठ अधिकारियों ने एड्स पर अपने व्याख्यान दिये। डॉ. चतुर्वेदी ने 'कार्तआफकी रकल' के बारे में जानकारी दी जो रोगियों की चिकित्सा संक्रमण का कारण, नैदानिक स्थिति आदि के बारे में बताता है। डॉ. जरावीर कौर स.नि. (जीव-विज्ञान), डॉ. एन. के. मालवीय, डॉ. एच. डी. जाधव, श्री एच.एच. टुमाने, डॉ. वीना उपाध्याय और श्री पी. जे. मेहता ने भी अपने विचार व्यक्त किए।

### परिषदीय कार्यकारिणी समिति की तीसरी बैठक

परिषद मुख्य कार्यालय में दिनांक 21.12.98 को कार्यकारिणी समिति की तीसरी बैठक वैद्य वृहस्पति त्रिगुणा की अध्यक्षता में हुई। श्री प्रदीप भार्गव, सयुक्त सचिव (भा. चि. प.) एवं होम्योपैथी



परिषद कार्यकारिणी समिति की तीसरी बैठक

विभाग, डॉ. जे. आर. कृष्णामूर्ति एवं श्री रामलाल, डेस्क अधिकारी (वित्त), ने सयुक्त सचिव (वित्त) के प्रतिनिधि के रूप में तथा डॉ. प्रेम किशोर निदेशक ने सदस्य-सचिव के रूप में इस बैठक में भाग लिया। समिति द्वारा क्रमशः दिनांक 26.8.98 को संपन्न वैज्ञानिक परामर्शदात्री समिति (आयु.) की 32 वीं बैठक, दिनांक 17.8.98 को सम्पन्न वैज्ञानिक परामर्शदात्री समिति (सिद्ध) की 26वीं बैठक तथा दिनांक 30.9.98 को संपन्न स्थाई वित्त समिति की 32वीं बैठक की सस्तुतियों पर विचार-विमर्श किया गया साथ ही दिनांक 5.12.98 को हरितनापुर में सचिव (भा. चि. प. एवं हो.) की अध्यक्षता में सम्पन्न बैठक में लिए गए निर्णय के अनुसार, 'क्षेत्रीय अनुसंधान केन्द्र (आयु.) हरितनापुर के लिए "स्वीकृतियों पर अनुसंधान एवं विकास" की भी समिति ने स्वीकृति प्रदान की तथा वर्ष 1997-98 के लिए परिषद के वार्षिक प्रतिवेदन की स्वीकृति प्रदान की गई।

about HIV infection to the staff of the Institute. On this occasion, Dr. D.D. Chaturvedi, Director CRI Mumbai and other senior officers of Institute gave their lecture on AIDS related subjects. Dr. Chaturvedi discussed karnsky scale used to measure the progress in the treatment of the patient, cause of infection, clinical feature etc. Dr. Jasbir Kaur AD (Bio-chem.) described the history of HIV and laboratory diagnosis. Dr. N.K. Malviya, Dr. A.D. Jadhav, Mr. H.H. Tumane, Dr. Veena Upadhyay and Mr. P.J. Metha also spoke about AIDS.

### 3rd Meeting of the Executive Committee of the Council

3rd Meeting of the Executive Committee of the Council was held on 21.12.1998 at Hqrs. office under the Chairmanship of Vd. B.D. Triguna. Shri Pradip Bhargava, Joint Secretary, Department of ISM&H, Dr. J.R. Krishnamoorthy, Shri Ram Lal, Desk Officer (Finance), representing Joint Secretary (Finance) attended the meeting as members and Dr. Prem Kishore, Director as Member-Secretary. The Committee discussed the recommendations of 32nd meeting of SAC held on 26.8.1998, 26th meeting of SAC (Siddha) held on 17.8.1998 and 32nd meeting of SFC held on 30.9.1998. The Committee also approved the Research and Development of Rasausadhis at RRC (Ay.), Hastinapur, as per the decisions taken in the meeting chaired by Secretary (ISM&H) on 5.12.1998 at Hastinapur. It also approved the draft Annual Report of the Council for the year 1997-98.

### Meeting of Heads of the Institutes/Centres of South Zone for Monitoring of Research Programme.

A meeting of the Head of the Institutes/Centres of South Zone for monitoring the Research Programmes was held on 27.12.1998 at National Institute of Mental Health and Neurosciences, Bangalore under the Chairmanship of Dr. Prem Kishore, Director. At the beginning the Director explained the aim and purpose of the meeting. The meeting was called to review the work done by the Institutes/Centres and to plan the

## अनुसंधान कार्यक्रमों की समीक्षा के लिए दक्षिणी क्षेत्र के संस्थानों/केन्द्रों के प्रमुखों की बैठक

नेशनल इंस्टिट्यूट ऑफ मेंटल हेल्थ एवं न्यूरोसाइज, बंगलौर में डॉ. प्रेम किशोर, निदेशक, नई दिल्ली की अध्यक्षता में अनुसंधान कार्यक्रमों की मानीटरिंग के लिए दक्षिणी क्षेत्र के संस्थानों/केन्द्रों के प्रमुखों की एक बैठक दिनांक 27.12.98 को सम्पन्न हुई। निदेशक ने बैठक के लक्ष्य एवं उद्देश्य के विषय में विस्तार से जानकारी दी। यह बैठक संस्थानों/केन्द्रों के लिए किए गए कार्यों की समीक्षा तथा अगले पांच वर्षों की योजना के लिए बुलाई गई थी। डॉ. कृष्णादत्त, शर्मा, उप-निदेशक (तकनीकी) ने अपने उद्बोधन में बताया कि किए गए अनुसंधान कार्यों को यथाशीघ्र प्रकाशन के लिए अनुसंधान पत्र, बुकलेट्स, मोनोग्राफ के रूप में प्रस्तुत किया जाय।

डॉ. पी.सी. शर्मा, पुणे, डॉ. पी.के.एन. नम्बूदरी, चेन्नुरथुरथि, डॉ. पी.पी.एन. भट्टाथीरी, विजयवाड़ा, डॉ. मोमिल अली, भारतीय आयुर्विज्ञान इतिहास संस्थान, हैदराबाद, डॉ. ए. सरस्वती, कैंपन श्रीनिवास मूर्ति आयुर्वेद औषध अनुसंधान संस्थान, चेन्नई, डॉ. के. कुमुाराजन, ए. लक्ष्मीपति आयुर्वेद अनुसंधान केन्द्र, चेन्नई, डॉ. बी.एस. बेंकटराम, बंगलौर, डॉ. टी. भिक्षापति, क्षेत्रीय अनुसंधान केन्द्र, बंगलौर तथा डॉ. एन.जी.के. पिल्लै, त्रिवेन्द्रम ने अपने-अपने संस्थानों/केन्द्रों के कार्यों को प्रस्तुत किया। श्री अमृतलाल बठेरे, उप-निदेशक (प्रशासन) ने संस्थानों/केन्द्रों को प्रशासनिक एवं वित्तीय समस्याओं के विषय में विचार-विमर्श किया।

### वैज्ञानिक परामर्शदात्री समिति (आयु.) की उपसमितियों की बैठक

वैद्य जयप्रकाश नारायण की अध्यक्षता में वैज्ञानिक परामर्शदात्री (आयु.) की उपसमिति की एक बैठक प्रोटोकाल को अन्तिम रूप देने के बारे में राष्ट्रीय मानसिक स्वास्थ्य संस्थान और तंत्रिका विज्ञान, बंगलौर में 28 और 29 दिसम्बर, 1998 को सम्पन्न हुई।

बैठक में भाग लेने वाले सदस्यों ने एक मिनट का मौन रखकर स्वर्गीय प्रो. नामजोशी, सदस्य, वैज्ञानिक परामर्शदात्री समिति (आयु.) को श्रद्धांजलि अर्पित की। आधुनिक यंत्रों के



Senior Officers Meeting at Bangalore

work for the next five years. Dr. K.D. Sharma, Deputy Director (Technical) in his address emphasised that the research work done so far may be compiled in the form of research papers, booklets, monographs for their publication as early as possible.

Dr. P.C. Sharma, Pune; Dr. P.K.N. Namboodari, Cheruthuruthy; Dr. P. P.N. Bhattathiri, Vijayawada; Dr. Momin Ali, IHM, Hyderabad; Dr. A. Saraswathi, CSMARIA, Chennai; Dr. K.Kuppurajan, ALRCA, Chennai; Dr. B.S. Venkataram, Bangalore; Dr. T. Bikshapathi, RRC, Bangalore; Dr. N.G.K. Pillai, Trivandrum presented the work of their respective Institute/Centre. Shri A.L. Vachher, Dy. Director (Admn.), discussed the administrative and financial problems of the Institutes/Centres.

### Meeting of the Sub-Committee of SAC (Ay)

A meeting of sub-committee SAC(Ay.) for finalisation of protocol was held under the Chairmanship of Dr. Jayprakash Narayan at National Institute of Mental Health & Neurosciences, Bangalore on 28th and 29th December, 1998.

At the outset, the participants observed one minute silence to pay homage to late Prof. Namjoshi, Member, SAC(Ay.), CCRAS.



वैज्ञानिक परामर्शदात्री उपसमिति की बैठक का दृश्य

अपनाने से एच नाडी के माध्यम से निदान में हुए विकारा के विषय में अध्यक्ष ने सदस्यों को सूचित किया। डॉ. प्रमोदशंकर, निदेशक ने कार्य सूची के विषय में जानकारी दी। सदस्यों ने परिषद में चल रहे अनुसंधान कार्यों से सम्बन्धित विभिन्न विषयों पर अपने विचार व्यक्त किए। उनका दृष्टिकोण था कि परिषद में जो कार्य हो चुका है उसको प्रकाशित किया जाना चाहिए। वैद्य शिवकुमार मिश्र ने साहित्यिक अनुसंधान पर एक संस्थान स्थापित करने और एककों द्वारा किए गए साहित्यिक अनुसंधान कार्यों के प्रकाशन की आवश्यकता पर जोर दिया। डॉ. नारायण ने सुझाव दिया कि कार्यसूची को तीन विशेष वर्गों में निदान चिकित्सा/परिचार कल्याण, औषधि अनुसंधान और साहित्यिक अनुसंधान में विभाजित कर विस्तार से विचार-विमर्श किया जाना चाहिए। तदनुसार इन समितियों की संस्तुतियों पर दिनांक 29.12.98 को सम्मन्धन हुई बैठक में विचार-विमर्श किया गया और यथाचित संस्तुतियों की गई।

### रूस के एक शिष्टमंडल का अम्यागमन

डॉ. स्वेतलाना मयरकाय, महानिदेशक, एन.ए.ए.एम. आई. मेडिकल सेंटर, मास्को की अध्यक्षता में 6 सदस्यों के एक शिष्टमंडल का दिनांक 22.12.98 को परिषद् मुख्य कार्यालय तथा केन्द्रीय आयुर्वेद अनुसंधान संस्थान, नई दिल्ली में अम्यागमन हुआ। परिषद की कार्यकारिणी समिति के अध्यक्ष वैद्य बृहस्पति देव त्रिगुणाजी से शिष्ट मंडल की आयुर्वेद से संबंधित विभिन्न विषयों पर चर्चा हुई। वैद्य त्रिगुणाजी ने कहा कि रूस की संस्कृति तथा आचार-विचार भारत से काफी मेल खाते हैं अतः आयुर्वेद चिकित्सा उनके लिए विशेष उपयुक्त होगी।

The Chairman informed the members about the latest development in the diagnosis through pulse by adopting modern electronic equipments. Dr. Prem Kishore, Director outlined the agenda and the members gave their opinion on the various issues concerning research work in the Council. They were of the view that the work done by the Council should be published. Vd. S.K. Mishra stressed the need to set up a Instn. on Literary Research and publication of literary research work done by the units of the Council.

Dr. Narayan suggested that Agenda Items may be discussed in detail in three separate groups viz. Clinical/Family Welfare, Drug Reseach and Literary Research. The Recommendations of these groups were considered in the meeting held on 29.12.98 and suitable recommendations were made after thorough discussion.

### Visit of Russian delegation

A six members delegation headed by Dr. Svetlana Mayskaya, General Director, NAAMI Medical Centre, Moscow has visited the Hqrs. Office and Central Research Institute for Ayurveda, New Delhi on 22.12.1998. On different aspects of Ay. The delegation did discussions with Vd. B.D. Triguna, Chairman



Raj Vd. Padma Bhusan B.D. Trigunaji discussing with Russian delegation

शिष्ट मंडल में परिषद मुख्यालय में स्थित औषध संग्रहालय का भी अवलोकन किया। चिकित्सा विशेषज्ञों के इस शिष्टमंडल



रूसी शिष्टमंडल की परिषद निदेशक एवं अधिकारियों से चर्चा

में प्रो. व्याचेस्लार गप्टर, कुलपति, इंस्टीच्यूट ऑफ मेडिको-शोसल रिहैबिलिटोलोजी, मारस्को, मिस्टर एलेक्सी कार्स्की, विभागाध्यक्ष, चिकित्सा सहायता संगठन, रसियन फेडरेशन स्वास्थ्य मंत्रालय, डॉ. टटियाना किसेलेवा, अध्यक्ष, इंटरनेशनल मेडिकल कमीशन, रसियन फेडरेशन स्वास्थ्य मंत्रालय, कु. मरियम सालगनिक, इंडोलॉजिस्ट एव कु. श्वेतलाना टीरटीकोवा, निदेशक, एन. ए ए एम आई मेडिकल सेंटर, मारस्को उपस्थित थे। उन्हें संस्थान के विभिन्न विभागों को दिखाया गया तथा



केन्द्रीय आयुर्वेद अनुसंधान संस्थान पंजाबी बाग में रूसी शिष्ट मंडल का अभ्यागमन एवं अनुसंधानात्मक गतिविधियों की वीडियो फिल्म का अवलोकन

Executive Committee of the Council. Vd. Trigonaji said that the culture and customs of Russia are very much similar with India and Ayurveda system of Medicine would be more suitable to them.

The delegation also visited Drug Museum of Council's Hq. The delegation consists of experts and specialists on medicine, Prof. Vyacheslar Gaptor, Chancellor, Institute of Medico-Social Rehabilitalogy,



Russian delegation visiting Drug museum of Council's Hq.

Moscow, Mr. Alexei Kaspeev, Head, Deptt. of Organising Medical Help, Ministry of Health of the Russian Federation. Dr. Tatiana Kisseleva, Chairperson, International Medical Commission, Ministry of Health of the Russian Federation, Ms. Mariam Salaganik indologist and Ms. Svetlana Tchistiakova, Director, NAAMI Medical Centre, Moscow. They were shown various departments of the Institute and discussed research problems. They were shown a video film on research activities of the Council.

#### WHO Study tour from Myanmar

Under the WHO Study tour, two groups from Myanmar visited CRIA and H.Q. Office. Dr. Myat Moe



उनसे अनुसंधान समस्याओं पर चर्चा हुई। साथ ही केंद्रीय आयुर्वेद एव सिद्ध अनुसंधान परिषद के अनुसंधानात्मक कार्यक्रमों की विडियो फिल्म भी दिखाई गई।

### विश्व-स्वास्थ्य संगठन अध्ययन दल, म्यांगार का अभ्यागमन

विश्व-स्वास्थ्य संगठन अध्ययन दल, म्यांगार के दो समूहों का केंद्रीय आयुर्वेद अनुसंधान संस्थान, नई दिल्ली तथा परिषद मुख्य कार्यालय में अभ्यागमन हुआ। डॉ. म्यात मो एव डॉ. यू खिन जा (प्रथम समूह) का दिनांक 7.12.98 को परिषद, मुख्य कार्यालय में अभ्यागमन हुआ। उन्होंने उप-निदेशक (तक.) एवं कार्यक्रम अधिकारियों से विभिन्न अनुसंधान कार्यक्रमों के विषय में विचार-विमर्श किया। उन्होंने उप-निदेशक एवं प्रकाशन प्रभाग के पुरतकालय एवं उद्दिनालय/संग्रहालय, औषध पादपों एवं औषध नमूनों का अवलोकन किया। उन्होंने दिनांक 8.12.98 से 10.12.98 तक केन्द्रीय आयुर्वेद अनुसंधान संस्थान, नई दिल्ली के पंचकर्म चिकित्सा के विविध तकनीकों एवं क्षार-सूत्र चिकित्सा का अवलोकन किया। साथ ही आयुर्वेदिक औषधि से 'मायोपिक' बच्चों की चिकित्सा के लिए नेत्र क्लिनिक भी देखा। डॉ. थेन क्याव एवं डॉ. यू. थेन्वन (दूसरे समूह) का दिनांक 11.12.98 को केन्द्रीय आयुर्वेद अनुसंधान संस्थान, नई दिल्ली, में अभ्यागमन हुआ। डॉ. प्रेम किशोर, निदेशक, ने संस्थान के वैदानिक कार्यक्रमों की महत्वपूर्ण उपलब्धियों के विषय में उन्हें जानकारी प्रदान की। आगन्तुकों को निदान चिकित्सात्मक अनुसंधान के महत्वपूर्ण क्षेत्रों, यथा-पंचकर्म, क्षार-सूत्र तकनीक, नेत्र क्लिनिक-मायोपिया आदि को दिखाया गया। "पुनरुत्थान" वीडियो फिल्म के माध्यम से अन्य कार्यक्रमों के विषय में उन्हें जानकारी दी गई।

and Dr. U. Khin Zaw (1st group) visited the H.Q. Office on 7.12.98 and discussed the various research programmes with Deputy Director (Tech.) and programme officers. They also visited DPD Library



Myanmar delegation at CCRAS Hq.

and Herbarium/Museum and saw the Medicinal Plants and Drug Samples. They visited the Central Research Institute for Ayurveda from 8.12.98 to 10.12.98 and seen the various techniques of Pancakarma cikitsa and Kshar-sutra treatment besides eye clinic for treatment of Myopic children with Ayurvedic drug. Dr. Thein Kyaw and Dr. U. Theinwon (2nd Group) visited CRIA, New Delhi on 11.12.98. The delegation was given a brief account of important achievements of the clinical programmes of the Institute by Dr. Prem Kishore. The visitors were shown important areas of clinical research such as Pancakarma, Ksharsutra techniques, Eye Clinic-Myopia etc. The other details of ongoing Programme were shown to them through the Video film "Resurgence".

## आगामी सम्मेलनों का आयोजन

क्र. सं.	विषय	अनुमानित तिथि
1.	वांगमय अनुसंधान पर संगोष्ठी, काशी हिन्दू विश्वविद्यालय, वाराणसी	22 एवं 23 फरवरी, 1999, अन्तिम तिथि-सारांश 22.1.1999 एवं पूर्णलेख-1.2.99
2.	रसायन पर राष्ट्रीय संगोष्ठी,	8 से 10 मार्च, 1999 अंतिम तिथि-सारांश-27.1.99 एवं पूर्णलेख- 6.2.99

## नियुक्तियों/पदोन्नति/सेवा-निवृत्ति

क्र.सं.	नाम	पद	तिथि
(अ)	नियुक्तियाँ		
	श्री सुरेश बाबू	चपरासी भा.प.स. चेरुतुरुथि	7.12.98 (प्रतिपूरक)
(ब)	पदोन्नति		
	श्री के. नटराजन उच्च-श्रेणी-लिपिक	प्रधान लिपिक आई.आई.एच.एम. हैदराबाद	4.12.98
(स)	सेवा-निवृत्ति		
	श्रीमति सोनम त्सेरिंग	परिचारक आयु.अनु.ए., बंगलूर	30.11.98
	श्री बी.बी.एल. यादव	अनुसंधान सहायक (वनस्पति) क्षे. अनु. स., जयपुर	31.12.98
	श्री आर.डी. पाटकर	अनुसंधान अधिकारी (भेषज अ.) भे.अनु.ए., पूर्ण	31.12.98

## Forthcoming Seminars

S.No.	Title	Proposed Date
1.	Seminar on Literary Research, B.H.U. Varanasi.	Feb. 22- 23, 1999. Last Date for abstract 22.1.99 and for full paper 1.2.99
2.	National Seminar on Rasayana at New Delhi.	8th to 10th March, 1999. Last Date for abstract 27.1.99 and for full paper - 6.2.99

## List of Appointment/Promotion/Retirements

S.No.	Name	Designation	Date
<b>A. Appointment</b>			
	Shri Suresh Basu	Peon IIP, Cheruthuruthy (Compe-nsatory)	7.12.98
<b>B. Promotion</b>			
	Shri K. Natarajan U.D.C.	Head Clerk IIHM, Hyderabad	4.12.98
<b>C. Retirements</b>			
	Smt. Sonam Tsering	Attendant A.R.U., Bangalore	30.11.98
	Shri B.B.L. Yadava	R.A. (Bot.) RRI (Ay.), Jaipur	31.12.98
	Shri R.D. Pataskar	R.O. (P'cognosy) PRU, Pune	31.12.98

## भारत अंतर्राष्ट्रीय व्यापार मेला-1998 में परिषद की सहभागिता

परिषद ने भारत अंतर्राष्ट्रीय व्यापार मेला में जो दिनांक 14 से 27 नवम्बर, 1998 तक आयोजित किया गया, में भाग लिया और इसमें मातृ एवं शिशु स्वास्थ्य रक्षा कार्यक्रम से संबंधित क्रिया-कलापों को दर्शाया।



### गर्भिणी परिचर्या-एवं शिशु स्वास्थ्य रक्षा की प्रदर्शनी

इस अवसर पर परिषद की गतिविधियों एवं उपलब्धियों, स्वास्थ्य-वृत्त, पंचकर्म, गुद रोग, जो दुग्ध एवं पिप्पल्यादि योग से संबंधित निःशुल्क पाम्फलेट दर्शकों को दिया गया। परिषद के प्रकाशनों का एक स्टाल भी लगाया गया। कुल 2000 रुपये से अधिक की परिषद प्रकाशनों की विक्री की गई। मुख्य रूप से मातृ एवं शिशु रक्षा पर विशेष ध्यान दिया गया तथा आयुर्वेद में प्रसूति, गर्भावस्था में पथ्या-पथ्य-निगम, प्रसवपूर्व सुरक्षा, गर्भावस्था में पीड़ा एवं निवारण, शिशु परिचर्या, गर्भिणी परिचर्या, पंचकर्म चिकित्सा द्वारा पोलियो निवारण आदि से संबंधित सामग्री भी प्रदर्शित की गयी। इस अवसर पर रोगियों को निःशुल्क चिकित्सा परामर्श विशेषज्ञों द्वारा दिया गया।

यह प्रदर्शनी स्वास्थ्य एवं परिवार कल्याण मंत्रालय के भारतीय चिकित्सा पद्धति एवं होम्योपैथी विभाग के नियंत्रण में प्रदर्शित की गयी।

### परफेक्ट स्वास्थ्य मेला में परिषद की सहभागिता

परिषद ने परफेक्ट स्वास्थ्य मेला में दिनांक 18-12-98 से 27-12-98 तक भाग लिया और वनौषधियों एवं औषधि नमूनों की एक प्रदर्शनी लगाई। आगन्तुकों की निःशुल्क स्वास्थ्य जांच, स्वास्थ्य जीवन और विभिन्न रोगों से बचाव की जानकारी देने के लिए डॉ. सोवरन सिंह, सहायक अनुसंधान अधिकारी (आयुर्वेद) और डॉ. मरीला मणि, अनुसंधान अधिकारी (सिद्ध) को प्रतिनियुक्त किया गया। परिषद द्वारा गाय दूध, क्षार-सूत्र, पंचकर्म चिकित्सा, गर्भिणीरोग पर आधारित पाम्फलेट भी आगन्तुकों में वितरित किए गए। परिषद प्रकाशनों की विक्री के लिए एक स्टाल भी लगाया था। इस मेले में परिषद प्रकाशनों की कुल 4040/- रुपये की विक्री हुई। परिषद को आयुर्वेद के क्षेत्र में प्रगति के लिए पदक द्वारा पुरस्कृत किया गया।

## India International Trade Fair-1998-Council's Participation

The Council has participated in the India International Trade Fair 1998 from 14th to 27th November, 1998 and put up display of activities relating to Mother and Child Health Care Programme.

The Pamphlets and folders on activities and achievements of the Council-Swasthya vritta, Panchkarma, ano-rectal diseases, cow milk, Pippalayadi yoga, were distributed to the visitors free of cost. A CCRAS-publications sale counter was also put up there. The total amount of sale proceeds were over Rs. 2000/-. Main emphasis was laid on mother and child care and charts on Maternity in Ayurveda, regimens during pregnancy, post natal care, minor ailments during pregnancy and preventive measures, Sishu paricharya, Garbhani paricharya, rehabilitation of post-polio paralysis with Panchkarma therapy were displayed in the exhibition. The specialist consultancy for the patients was also organised on this occasion.

The display was put up in the pavilion of Deptt. of Family Welfare, Ministry of Health & Family Welfare under the overall control of Deptt. of ISM&H, Min, of Health & Family Welfare.

### Perfect Health Mela-Council's Participation

The Council participated in Perfect Health Mela from 18.12.98 to 29.12.98 and put an exhibition on medicinal plants and drug samples. Dr. S. Singh, ARO (Ay.) and Dr. Masila Mani. R.O. (Siddha) deputed for free medical check up, besides educating the visitors with the principles of healthy livings and preventive aspects of various diseases. Pamphlets on cow-milk, Kshar-sutra, Pancakarma therapy, contraceptive were also distributed. The Council also put up a stall for sale of Council's publications. A total sale of publications comes to Rs. 4040/-. The Council was awarded a medal for best promotion of Ayurveda.

# पिप्पल्यादि योग

आयुर्वेदिक गर्भनिरोधक औषधि

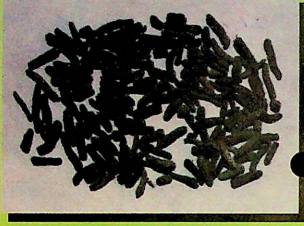
## PIPPALYADI YOGA

AYURVEDIC CONTRACEPTIVE





**Pippali**  
(*Piper longum* Linn.)



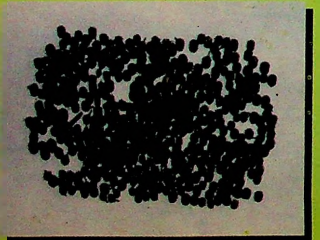
पिप्पली फल



**Borax (टंकण)**



**Vidanga**  
(*Embelia ribes* Burm.f.)



विडंग फल

### पृष्ठभूमि

गर्भनिरोधक उपायों एवं इसको प्रभावित करने वाले पहलुओं तथा गर्भ के निष्कासन का उल्लेख प्राचीन भारतीय आयुर्वेद ग्रंथों में किया गया है। उसमें बड़े परिवारों की कमियों का भी उल्लेख किया गया है। 13वीं शताब्दी पूर्व ही भाव प्रकाश में गर्भनिरोध हेतु विशेष योगों का उल्लेख किया जा चुका है। उनमें से पिप्पली, विडंग एवं टंकण के संमिश्रित योग-पिप्पल्यादि योग-पर विगत चर्षों में विस्तार से अध्ययन किया गया है।

### औषध योग एवं अनुपान

पिप्पल्यादि योग में निम्न औषधियों के बराबर अवयव सम्मिलित किए गए हैं-

1. पिप्पली फल
2. विडंग फल
3. टंकण (शोधित)

उपर्युक्त औषधियों को बराबर अनुपात में मिलाकर 500 मि. ग्रा. को टैबलेट तैयार की गई। इस औषधि का निम्न अनुपान से नैदानिक अध्ययन किया गया-

- (क) 1 टैब. (500 मि. ग्रा.) दिन में एक बार - 5 वें दिन से पूर्ण चक्र तक  
 (ख) 1 टैब. (500 मि. ग्रा.) दिन में दो बार - 5 वें दिन से पूर्ण चक्र तक  
 (ग) 1 टैब. (500 मि. ग्रा.) दिन में दो बार - पहले दिन से पूर्ण चक्र तक

### प्रदान चिकित्सात्मक अध्ययन

प्रारंभ में 500 मि. ग्रा. को एक टैबलेट का अनुपान 5 वें दिन से चक्र के अंतिम दिन तक निरंतर तीन मासिक चक्रों तक दिया गया, परंतु वांछित प्रभाव परिलक्षित नहीं हुआ।

क्रमशः औषधि की मात्रा को परिवर्तित करके 500 मि.ग्रा. को टैबलेट का दिन में दो बार पांचवे दिन से चक्र के अंतिम दिन तक निरंतर तीन चक्रों तक अनुपान कराया गया। संशोधन के फलस्वरूप परीक्षणोपरान्त अनुकूल परिणाम प्राप्त हुए। इस प्रकार पहले दिन से चक्र के अंतिम दिन तक निरंतर तीन चक्रों तक 500 मि.ग्रा. की मात्रा का अनुपान करने पर औषधि की शतप्रतिशत प्रभावकारिता दिखाई दी। अध्ययन में औषधि की असफलता एवं गर्भधारण के परिणाम प्रदर्शित नहीं हुए। इस औषधि को विभिन्न मात्राओं को अनुपान का प्रभाव निम्नलिखित सारणी में दर्शाया गया है-

### पिप्पल्यादि योग - विभिन्न मात्राओं का परीक्षण परिणाम

क्र.सं.	श्रेणी क्रम/ पर्ल सूची	500 मि.ग्रा. की एक मात्रा का अनुपान पांचवें दिन से अंतिम दिन तक	मात्रा 2 (अ) 500 मि.ग्रा./दिन में दो बार पांचवें दिन से अंतिम दिन तक	मात्रा 2 (ब) 500 मि.ग्रा. दिन में दो बार, प्रथम दिन से अंतिम दिन तक
1.	चक्रानुसार अध्ययन	850	4001	1117
2.	पर्ल सूची (प्रति सौ महिला वर्ष के अनुसार औषधि की प्रभावकारिता)			
	औषधि की असफलता	7.06	1.20	0
	औषधि परित्याग	28.24	6.60	5.37
	-योग	35.29	7.80	5.37

यह परीक्षण 20-34 वर्ष के बीच की महिला सेवियों पर 26-30 दिनों के बीच मासिक धर्म से 3-5 दिनों के अन्तर्गत पूर्ण चक्रानुसार अनुपान के रूप में प्रदान किया गया। पिप्पल्यादि योग द्वारा गर्भनिरोधक परीक्षण कार्य 13-24 महीनों के मध्य गर्भावस्था के दौरान किया गया। प्रथम दिन से 500 मि.ग्रा. की मात्रा का दिन में दो बार अनुपान करके अध्ययन करने पर पिप्पल्यादि योग से गर्भधारण नहीं हुआ।

लम्बी अवधि तक इस औषधि के सेवन से कोई प्रतिकूल प्रभाव परिलक्षित नहीं हुए। उक्त आशय का उल्लेख स्त्रीरोग मानक ग्रंथों में भी किया गया है।

### DRUG PREPARATION AND DOSAGE

Devices for fertility regulation and elimination of foetus are recorded in the Ancient Classics of Ayurveda. The demerits of the big family are also indicated. The specific formulations for contraceptive have been putforth in 13th Century A.D. by Bhava Prakash. Among them the *Pippalyadi Yoga* a combination of *Pippali*, *Vidanga* and *Tankana*, has been extensively studied by Council in fertile female volunteers for more than a decade.

### DRUG PREPARATION AND DOSAGE

The formulation *Pippalyadi Yoga* consists of equal parts of following drugs with excipients etc:

1. *Pippali* (*Piper longum* Linn.) fruits
2. *Vidanga* (*Embelia ribes* Burm.f.) fruits
3. *Tankana* (*Borax*) purified. (*Chankia Sohaga*)

The fine powder of these drugs in mixed together in equal proportions and tablets of 500 mg. each are prepared with excipients. The drug has been studied in following dose schedule in a series of clinical trials:

- A) 1 tab. 500 mg./Once a day D5 to full cycle, B) 1 tab. 500 mg./twice a day D5 to full cycle and C) 1 tab. 500 mg./twice a day D1 to full cycle.

### CLINICAL STUDIES

Initially the drug has been tried in the dose of 500 mg./ once daily from 5th day till last day of the cycle consecutively for three menstrual cycles but it did not showed desired level of efficacy.

Subsequently, the dose schedule was changed to 500 mg/BD from 5th day to last day of the cycle consecutively for three cycles. Significant improvement in efficacy of the drug was observed with successive modifications. Further study of this drug with the dose of 500 mg/BD from day one to last day of cycle consecutively for three cycles had shown 100% efficacy of the drug since no pregnancy was reported due to drug failure in this study. Efficacy of this drug with different doses is shown in the table.

### Efficacy of Pippalyadi Yoga with different doses

S.No.Cycles/Pearl Index	Dose 1 500mg./OD D5 to last day	Dose 2 (a) 500 mg./BD D5 to last day	Dose 2 (b) 500 mg./BD D1 to last day.
1. Cycles studied	850	4001	1117
2. Pearl index (Efficacy of drug calculated per Hundred Women years)			
Pregnancy due to failure	7.06	1.20	0
-do- Omission	28.24	6.60	5.37
Total	35.29	7.80	5.37

These trials were conducted on fertile female volunteers in age range of 20-34 years having a menstrual cycle between 26-30 days (with 3-5 days menstruation period) and with inter pregnancy period between 13-24 months. The study with the dose of 500mg/BD from day one had established the efficacy of *Pippalyadi Yoga* in prevention of child birth.

The prolonged administration of this drug was not shown any significant side effect or toxic effects. Findings of this study has also been recorded in standard text books on Ayurveda.



विस्तृत जानकारी हेतु सम्पर्क करें :

निदेशक,

केन्द्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद,  
जवाहर लाल नेहरू भारतीय चिकित्सा एवं हाय्योपैथी  
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For Further Details Contact :

Director

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छोटा परिवार - सुखी परिवार



गो दुग्धा

## गो दुग्ध

पूर्व वैदिक काल से ही भारतवासियों ने दुध के महत्व को पहचान लिया था। यजुर्वेद के सूत्र 189 काण्ड 20 में दुध की नदियों वाला देश का प्रमाण मिलता है।

आयुर्वेद के मत से संसार में समस्त पौष्टिक या जीवनीय पदार्थों एवं औषधियों की तुलना में दुध सर्वोत्कृष्ट माना गया है—

### क्षीरं जीवनीयामामुश्रेष्ठतम्।

चरक सूत्र-25

शरीर में तत्काल जीवन शक्ति का संचार करने वाला पदार्थ दुध ही है। दुध का सेवन किसी भी आयु में किसी भी अवस्था में किया जा सकता है। यह स्वास्थ्य के लिए हमेशा हितकारी होता है। बालक के लिए माता का दुध अमूल बताया गया है तथा माता के दुध के बाद यदि कोई उसे नया जीवन और नयी चेतना दे सकता है तो वह गाय का दुध है। इसके निरंतर सेवन से शारीरिक एवं बौद्धिक क्षमता का पर्याप्त संचार होता है।

### दुध के संस्कृत नाम

दुध, क्षीर, पयः, फ्यसू, स्तन्य तथा जीवन।

### दुध के सामान्य गुण

यह मधुर रसयुक्त, स्निग्ध, वायु तथा पित्त को दूर करने वाला, सारक, तत्काल वीर्य की वृद्धि करने वाला शीतल सभी प्राणियों के लिए अनुकूल (साम्य), जीवनीय शक्ति प्रदान करने वाला, धातुओं की पुष्टि करनेवाला, बल कारक, मेधा शक्ति के लिए हितकारक, अत्यंत वाजीकर, अवस्था को स्थिर रखने वाला, आयु को बढ़ाने वाला, ट्यूटी कोशिकाओं एवं अस्थि संधियों का संधान करने वाला, पुष्टिदायक, कातिदायक, प्रज्ञादायक, जरानाशक, स्तन्यकारक तथा रसायनगुण वाला होता है। दुध में शरीर में स्थित ओज के समान समस्त गुण विद्यमान हैं। अतः यह हर परिस्थिति में लाभकारी तथा पथ्य माना गया है।

### दुध के विभिन्न प्रकार

औषध में गो, महिषी, बकरी, भेड़ी, घोड़ी, हथिनी, चैटनी और नारी इन आठ प्रकार के दुध का प्रयोग होता है। इसे क्षीराष्टक कहते हैं। इन में गो दुध सबसे उत्कृष्ट तथा भेड़ी का दुध निकृष्ट माना गया है।

### दुध की विभिन्न अवस्थाएं

पीयूष (खीस)

किलाटक (मावा)

क्षीर शाक (कच्चा ही फटा हुआ)

तक्र पिण्ड (दधि अथवा छोट के संयोग से फटे दुध का पिण्ड भाग (पनीर)

मोरट - (फटे हुए दुध का जल भाग)

### दुध से बने आहार द्रव्य

दधि

छाछ

मक्खन

ये सभी वीर्यवर्धक, बल्य, पोषक, तृप्तिकारक, अग्निदीपक होते हैं।

### गो दुग्ध ही सर्वोत्तम

अनन्तकाल से भारत में गो का धार्मिक आस्था की प्रतीक एवं पूज्य माना गया है। गो प्रदत्त दुग्ध, दधि, घी, मूत्र एवं गोबर अपने विभिन्न गुणों के आधार पर पवित्र माने गये हैं। इनमें भी गोदुग्ध अपने विशिष्ट गुणों द्वारा सर्वोत्तम माना गया है। देश, काल, अवस्था भेद से गोदुग्ध विभिन्न रोगों को नष्ट करता है। इसके विभिन्न गुणों के कारण गोदुग्ध को अमृत माना गया है।

### दुध से बने आहार द्रव्य

#### वर्ण (रंग) भेद से

काले रंग की गाय का दुध दूसरी गायों की अपेक्षा अधिक गुणकारी होता है। यह विशेष रूप से वायु नाशक होता है, इसलिए वात व्याधियों के लिए विशेष रूप से गुणकारी होता है। अतः काली गाय के दुध का सेवन करना इसमें उत्तम है। वृद्धावस्था में जब वायु का प्रकोप शरीर में अधिक होता है तब इसके सेवन से विशेष लाभ होता है। इसी प्रकार लाल तथा चितकबरी गाय का दुध भी वायु विकारों में अधिक लाभकारी होता है। सफेद गाय का दुध कफ-कारक तथा गुह होता है। इसलिए इसका सेवन स्वस्थ एवं युवा व्यक्तियों के लिए उत्तम होता है। पीली गाय का दुध पित्त तथा वायु नाशक होता है। अतः पित्त तथा रक्त के विकारों में पथ्य के रूप में इसका सेवन करने से विशेष लाभ होता है।



## अवस्था के भेद से

जिस गाय को कुछ समय पूर्व ही बच्चा हुआ हो या जिस गाय का बच्चा मर गया हो ऐसी गाय का दूध त्रिदोष कारक माना गया है। इसका सेवन स्वास्थ्य के लिए उपयुक्त नहीं है। इसके अतिरिक्त जो गाय अधिक दिन की ब्याई हुई हो उसका दूध त्रिदोष नाशक, तृप्तिकारक तथा बलकारक होता है।

वर्तमान में विभिन्न वैज्ञानिक अनुसंधानों से इस बात की पुष्टि हुई है कि गाय का दूध माता के दूध के समकक्ष गुण वाला होता है। यह एक संपूर्ण आहार है तथा भैंस के दूध की अपेक्षा अधिक गुणकारी होता है। इसमें फ़ैट, प्रोटीन, एस. एन. एफ., लेक्टोज तथा कैल्सियम की मात्रा भैंस के दूध की अपेक्षा कम होती है, जिससे इसका पाचन आसानी से हो जाता है। इसमें कोलेस्ट्रॉल की मात्रा भी कम होती है। 100 मि० ली० गाय के दूध में 17.6 मि० ग्रा० कोलेस्ट्रॉल पाया जाता है जब कि भैंस के दूध में यह 24.2 मि० ग्रा० होता है। इसी प्रकार गाय के घी में भी कोलेस्ट्रॉल की मात्रा कम पायी जाती है, जिससे मानसिक एवं हृदय रोगी इसका सेवन आसानी से कर सकते हैं।

## देश भेद से

जांगल देश में चरने वाली गायों का दूध हल्का होता है तथा आनुप देश जहां पेड़-पौधे और जलाशयों की अधिकता है वहां गाय का दूध अपेक्षाकृत भारी होता है और पर्वतीय क्षेत्रों में चरने वाली गाय का दूध उससे भी भारी होता है, अर्थात् जिस दूध में स्नेह भाग अधिक होगा वह उतना ही गुरु होता जाएगा और इसका तारतम्य देश की जलवायु पर निर्भर करता है।

## आहार भेद से

जो गाय चारे के साथ ही साथ थोड़ा अन्न भी खाती है उसका दूध भारी, कफकारक, बलदायक तथा अत्यंत वीर्यवर्धक होता है। इसलिए वह स्वस्थ व्यक्तियों के लिए अधिक लाभदायक होता है। इसके अतिरिक्त जो गाय भूसा, घास, कपास आदि के बीजों का विशेष रूप से सेवन करती है, उसका दूध रोगियों के लिए गुणकारी होता है।

## गो दुग्ध एवं दुग्ध की अन्य अवस्थाओं की रोग नाशक क्षमता

रोग विशेष में पंचकर्म चिकित्सा के पश्चात् जहां वमन, विरेचन और बस्ति का प्रयोग किया गया हो तो ऐसे व्यक्तियों को पथ्य के रूप में दूध का सेवन कराने से उनके ओज तथा शक्ति को बढ़ाने वाला होता है।

जोर्णज्वर (पुराना बुखार), मानसिक रोग, शोष (शरीर का सूखना), मूर्च्छा, भ्रम, संग्रहणी, पांडु रोग, दाह, तृष्णा, हृदय रोग, शूल, उदावर्त, बस्ति, मूत्रकृच्छ्र, गुल्म, अर्श, रक्त-पित्त, अतिसार, धातुक्षय, श्रम, क्लार्ति एवं गर्भप्राव इन सभी अवस्थाओं में दूध पीना सर्वदा हितकारी माना गया है। इसके अतिरिक्त बालक, वृद्ध, क्षत-क्षीण, भूख और प्यास से पीड़ित, नारी प्रसंग से जो बहुत कृश हो गये हैं ऐसे व्यक्तियों को दूध का सेवन अत्यंत हितकारी होता है।

## कतिपय क्षीर पाकों का निर्दिष्ट व्याधि सहित विवरण

क्र.सं.	क्षीरपाक	व्याधि
1.	शातावरी	परिणाम शूल, स्तन्यजननार्थ
2.	पिप्लीवर्धमान	आमवात, तमकरवास, रसायन
3.	रसोन	वातव्याधि, उदररोग, गुल्म
4.	भल्लातक	आमवात, गृध्रसी, वातव्याधि
5.	त्रिकण्टकादि	जोर्णज्वर
6.	एरण्डमूल	जोर्णज्वर
7.	पंचमूली	जोर्णज्वर
8.	वृश्च्रीरादि	जोर्णज्वर

## विशिष्ट क्षीर चिकित्सा

कुछ व्याधियों यथा-जलोदर, शोथ, ग्रहणी रोग, मदात्यय, दाह आदि में विशिष्ट क्षीर चिकित्सा का प्रयोग किया जाता है।

## क्षीरबला तैल

वातव्याधि, वातिक शिरःशूल, पंगु आदि की चिकित्सा में अभ्यंग, नस्य, शिरोधारा एवं आभ्यन्तर रूप में प्रयोज्य हैं। पंचकर्म चिकित्सा में इसका अभ्यंग रूप में विशिष्ट उपयोग होता है।

## तक्र

भारतीय परम्परा में तक्र अत्यंत उपयोगी माना जाता है। इसकी तुलना देवलोको में विद्यमान अमृत से करते हुए कहा गया है कि तक्र का सेवन करने वाला कभी रोगों से पीड़ित नहीं होता तथा तक्र द्वारा चिकित्सक रोगों का पुनः आगमन नहीं होता।

## तक्र के भेद एवं गुण

प्रकार	विधि	गुण-कर्म
घोल	पूर्णस्नेहयुक्त बिना जल के	वात-पित्तशामक आह्लादादकारी शर्करा के साथ रसाला के समान
मथित	स्नेह हीन बिना जल के	कफपित्तशामक
तक्र	चतुर्थांश जलयुक्त	लघु, रुक्ष, विकासीगुण, अम्ल, कषाय, मधुर रस, मधुरविपाक एवं उष्णवीर्य, वातशामक, ग्राही, तुपित्तकारी एवं ग्रहणीरोग में उपयोगी
उदस्वित	अर्धांश जलयुक्त	कफ एवं बलवर्धक, आमनाशक
छच्छिका	पर्याप्त जलयुक्त	लघु, शीत, पित्त-वात शामक, कफवर्धक, श्रम एवं तृषा निवारक सैध्बयुक्त, दीपन

## स्नेह मात्रा के अनुसार तक्र के गुण

सार ( स्नेह ) मात्रा	गुण-कर्म
निस्सार	लघु, पथ्य (रुणों के लिए)
अल्पसार	किंचित गुरु, वीर्य एवं कफवर्धक
सारयुक्त	गुरु, कफवर्धक एवं पोषक

## अनुपात भेद से तक्र की उपयोगिता

अनुपात	प्रभाव/उपयोग
शुण्ठी, सैन्धव	वातरोग
शर्करा, मधुर द्रव्य	पित्त रोग
त्रिकटु, क्षार	कफ रोग
हिंगु, जीरक, सैन्धव	प्रबल वातशामक, बलवर्धक, रुच्य, पोषक, अर्श, अतिसार तथा वस्तिशूल की चिकित्सा में उपयोगी
गुड़	मूत्रकृच्छ्र
चित्रक	पाण्डु

तक्र का उपयोग अग्निमांद्र, अरुचि, अर्श, अतिसार, ग्रहणीरोग, गुल्म, पाण्डु, विष, भगन्दर, कृमि, तृषा, वमन, उदर रोग, शूल, प्लीहा, प्रसेक, वातव्याधि, शोथ, शिवत्र, कुष्ठ, स्रोतरोध, प्रमेह, ग्रह, विषमज्वर एवं मेदोरोग आदि रोगों में तथा शीतकाल में प्रशस्त है।

तक्र क्षय, मूर्च्छा, दाह, भ्रम, रक्त पित्त एवं दौर्बल्य आदि विकारों में तथा ग्रीष्म ऋतु में निषिद्ध है।

## तक्रकारिष्ट का ग्रहणी दोष ( जियार्डियाजन्य ) में परीक्षण

तक्र से निर्मित एक विशेष औषध योग तक्रारिष्ट का कृमिजन्य ग्रहणी दोष के 46 रुणों पर परीक्षण किया गया। 32 भाग तक्र में थवानी, आमलकी, हरीतकी, मरिच एवं चित्रक प्रत्येक एक-एक भाग तथा 2 भाग पंच लवण डाल कर चीनी मिट्टी के पात्र में संघन करके तक्रारिष्ट का निर्माण किया गया। चार सप्ताह के परीक्षण से जियार्डिया कृमि का निराकरण प्रायः प्रथम सप्ताह में ही होने लगा तथा रोगी के शरीरभार, हीमोग्लोबिन, प्रोटीन बाउन्ड आयोडीन एवं डी. जायलोज शोषण में वृद्धि पाई गई।

## घृत

विष, विस्पर्, क्षय, उदावर्त, ज्वर, शूल, उन्माद, आनाह, व्रण एवं रक्तविकारों की चिकित्सा में निर्दिष्ट है।

आयुर्वेद में रोगानुसार विभिन्न औषध घृतों का उपयोग निर्दिष्ट है, यथा-त्रिफलाघृत तिभिर रोगों में, महातिक्तक एवं इन्दुकान्त घृत परिणामशूल में लाभकारी है।

उपर्युक्त सभी महत्ताओं को ध्यान में रखकर भारत के ऋषि-मुनियों ने गाय को माता के रूप में स्वीकार किया है तथा समय-समय पर पर्वों और त्यौहारों के दिनों में गो माता की पूजा की जाती है। साथ ही गाय के दूध, दही, मलाई का सेवन नियमित रूप से किया जाता है। इससे शारीरिक और मानसिक स्वास्थ्य की विलक्षण क्षमता उत्पन्न होती है। गाय के दूध से शारीरिक बल बढ़ता है जिससे विभिन्न प्रकार के रोगों के प्रति प्रतिरोधक क्षमता की वृद्धि होती है।





विस्तृत जानकारी हेतु सम्पर्क करें :

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# आयुर्वेद एवं सिद्ध



केन्द्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद  
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नई दिल्ली

## आयुर्वेद एवं सिद्ध

### प्रस्तावना

- आयुर्वेद केवल एक चिकित्सा पद्धति ही नहीं बल्कि स्वस्थ जीवन जीने की भी पद्धति है। आयुर्वेद शब्द दो शब्दों से बना है 'आयुष' अर्थात् 'जीवन' तथा 'वेद' अर्थात् 'ज्ञान' या 'विज्ञान'। इस प्रकार आयुर्वेद का अर्थ है 'जीवन विज्ञान'।

- आयुर्वेद वेदों की एक शाखा है। ऋग्वेद तथा अथर्ववेद में चिकित्सा विज्ञान के विभिन्न शाखाओं की जानकारी प्राप्त मिलती है।

- प्राचीन भारतीय विचार धारा के अनुसार पांच मूल तत्वों—पृथ्वी, जल, तेज, वायु, तथा आकाश आदि पंचमहभूतों से ब्रह्माण्ड बना है। मानव शरीर भी इन्हीं से बना है। अतः ब्रह्माण्ड तथा मानव पिण्ड में एक मूलभूत सादृश्य है तथा सूक्ष्म ब्रह्माण्ड और स्थूल ब्रह्माण्ड में एक संतुलन बना हुआ है।

- आयुर्वेद त्रिदोष सिद्धान्त पर आधारित है। ये त्रिदोष हैं—वात, पित्त, और कफ। वात-आकाश और वायु, पित्त-पृथ्वी और तेज तथा कफ-वायु और जल दो तत्वों से बनते हैं। इस सिद्धान्त के अनुसार स्वस्थ मनुष्य के शरीर में त्रिदोष संतुलित रूप में होते हैं तथा जब यह संतुलन बिगड़ जाता है तो परिणाम स्वरूप रोग होता है।

- आयुर्वेद चिकित्सक प्रत्येक रोगी को कोई भी औषधि देने से पूर्व उसकी शारीरिक प्रकृति पर विचार करते हैं क्योंकि रत्नेषु प्रकृति के रोगी को वातिय प्रकृति वाले रोगी जैसी दवा देने से लाभ नहीं होगा।

- आयुर्वेद के अनुसार सही औषधि यही है जो रोगी को बिना कोई प्रतिकूल प्रभाव पहुँचाए रोग को दूर करे। यही कारण है कि आधुनिक एलैगैथिक औषधियाँ के बदले आयुर्वेदिक औषधियाँ अधिक लाभकारी सिद्ध हो रही हैं।

- आयुर्वेद के अनुसार शरीर, मन, आत्मा और इन्द्रियों, की प्राकृतिक प्रसन्न अवस्था को ही स्वस्थ कहा जाता है। जब प्राकृतिक अवस्था अप्रसन्नता या दुःख के समर्क में आती है तो रोग उत्पन्न होते हैं। रोग के समय रोगी के दोष संतुलन को ठीक करना और स्वस्थ जीवन के लिए संतुलन बनाए रखना ही आयुर्वेदिक चिकित्सक का मुख्य उद्देश्य है। अतः विभिन्न रोगों की चिकित्सा में औषधियों की तरह पथ्य आहार का भी विशेष महत्व है।

- औषधियों के साथ नियमित आहार भी बताया जाता है। रोगियों को यह बताया जाता है कि कौन सा आहार स्वास्थ्य लाभ में सहायक होगा और कौन सा हानिकारक हो सकता है या रोग को जटिल बना सकता है। आहार का पथ्यापथ्य उत्तना ही महत्वपूर्ण है जितना कि दवा, जो पहले तथा बाद में भी संतुलन बनाए रखने में सहायक होता है।

- आयुर्वेद की आठ शाखाएँ हैं, १ - काय चिकित्सा, २- शल्य चिकित्सा, ३- शालाक्य चिकित्सा (कान, नाक, गला, आंख तथा मुख के रोग), ४- मनोरोग, ५- प्रसूति तंत्र तथा कौमार, भूय (पित्त-रोग), ६- विश्वविज्ञान, ७- रसायन विज्ञान और ८- वाजीकरण इन आठ शाखाओं के कारण ही आयुर्वेद को अष्टांग आयुर्वेद के नाम से भी जाना जाता है।

- आयुर्वेदिक चिकित्सक कुशल परीक्षण करते हैं। वे शरीर के रस, रक्त, मांस, रसा, अरिश्च, मज्जा, पीय तथा जैव सत्व या आजस को भी अध्ययन करते हैं जिसे प्राकृतिक चिकित्सा में जीवनी शक्ति के रूप में जाना जाता है।

- आयुर्वेद पाचन शक्ति को अवस्था पर भी ध्यान देता है। आमाराधन-रस की स्थिति चिकित्सक को यह बताती है कि रोगी किस दशा में है। विभिन्न वाहिकाओं की दशा पर भी ध्यान दिया जाता है क्योंकि स्त्रोतरोध के कारण ही रोग उत्पन्न होते हैं।

- आयुर्वेदिक चिकित्सक रोग के विकरण को जानने के पश्चात् ही चिकित्सा प्रारम्भ करते हैं और जब रोग का सही पता चल जाता है तो औषधि प्रभावकारी सिद्ध होती है।

### परिषद की गतिविधियाँ एवं उपलब्धियाँ

- केन्द्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद, आयुर्वेद एवं सिद्ध चिकित्सा पद्धति में वैज्ञानिक विधि से शोध कार्य प्रतिपादित करने, उसमें समन्वय स्थापित करने तथा उसका विकसित एवं सम्मुन्नत करने से सम्बन्धित एक शीर्ष संस्था है।

- परिषद के अनुसंधान कार्यों में निम्न चिकित्सात्मक अनुसंधान एवं मौलिक अनुसंधान, औषध अनुसंधान, वाग्मय अनुसंधान, परिवार कल्याण अनुसंधान - मातृ-शिशु सुरक्षा एवं संरक्षण कार्यक्रम सामिलित हैं।

- परिषद आयुर्वेद, सिद्ध एवं सन्च्युद्ध विज्ञान के अनेकों अनुसंधान एकांको को आर्थिक सहायता भी प्रदान करती है। अनेक रोगों की

चिकित्सा हेतु कम लागत की आयुर्वेद एवं सिद्ध की औषधियों के घन पर भी बल दिया जाता है।

के० आ० एवं सि० परिषद ने पिछले तीन दशकों में कई औषधियों/योगों को तैयार किया है जिनमें आयुष-६४ (मलेरिया), आयुष-५६ (अपस्मार), आयुष-८२ (मधुमेह), ७७७ तैल (सोरियेसिस), मुख्य गमन निरोधक अभिकर्ता के रूप में पिपल्ल्यादि योग तथा परिषद की प्रयोगशालाओं द्वारा विकसित प्रक्रियाओं द्वारा लगभग १८ पेटेन्ट तैयार किए गए हैं जो व्यवसायीकरण हेतु उपलब्ध हैं।

इनके अतिरिक्त गुग्गुलु का मेदोरोग पर, मण्डूकपर्णी का मानसिक मंदता पर, कटुकी का यकृत विकार तथा क्षार सूत्र प्रक्रिया का बवासीर, मगन्दर पर एवं आमाशयीय व्रण में आमाशय शोधन तथा पंचकर्म चिकित्सा का पक्षाघात में सफलता पूर्वक प्रयोग किया जा रहा है।

परिषद द्वारा स्वास्थ्य रक्षा अनुसंधान कार्यक्रम के अंतर्गत सेवापरक एवं सन्निरीक्षण कार्यक्रम तथा सामुदायिक स्वास्थ्य रक्षा अनुसंधान कार्यक्रम सम्पादित किया जाता है।

चिकित्सक ग्रामीणों/आदिवासियों को स्वस्थ रहने के तौर-तरीकों के विषय में शिक्षित करने का भी प्रयास करते हैं तथा आस-पास उपलब्ध औषध पादपों की उपयोगिता को भी समझाते हैं। अब तक ७५ लाख से भी अधिक जनसंख्या वाले लगभग ५०० गाँवों तथा १५५ आदिवासी क्षेत्रों का अध्ययन किया जा चुका है। आस-पास के गाँवों, आदिवासी क्षेत्रों सहित ३.०० लाख से भी अधिक लोगों को आकस्मिक चिकित्सा सुविधा दी गई है।

अब तक ४०० वन क्षेत्रों का सर्वेक्षण किया जा चुका है तथा विभिन्न पादपजाति का प्रतिनिधित्व करने वाले एक लाख बीस हजार से अधिक पादप नमूनों को एकत्रित किया जा चुका है। लगभग ३००० औषध पादप, खनिज एवं ज्ञान्त्व नमूनों का भी संग्रह किया गया है। औषधि पादपों के सर्वेक्षण के द्वारा ३.८०० लोकप्रचलित औषध पादपों का भी संग्रह किया गया तथा २,६०० लोक प्रचलित चिकित्सा में प्रयुक्त औषध पादपों को लेकर एक मोनोग्राफ तैयार किया गया है।

परिषद द्वारा झॉंसी (उ० प्र०), मांगलियावास (राजरथान), पुणे (महाराष्ट्र), ईटानगर (अरूणाचल प्रदेश) तथा रानीखेत (उ० प्र०) में औषध पादप उद्यान/फार्म के विकास का कार्य किया जा रहा है तथा प्रयोगात्मक एवं छोटे पैमाने पर ऐसे औषध पादपों की कृषि का कार्य किया जा रहा है जो कि आयुर्वेद एवं सिद्ध चिकित्सा पद्धति के लिए उपयोगी हैं।

अब तक आयुर्वेदिक फार्मलरी भाग-१ में वर्णित १७५ महत्वपूर्ण आयुर्वेदिक औषध पादपों/औषधियों, ११ सिद्ध औषधियों का भेषज अभिज्ञानीय परीक्षण किया जा चुका है।

आयुर्वेद एवं सिद्ध में प्रयुक्त २६० औषध पादपों का रासायनिक अध्ययन किया जा चुका है। आयुर्वेद में प्रयुक्त औषधियों का पादप रासायनिक परीक्षण नामक विनिबंध जिसमें २०५ औषधियों का विवरण दिया गया है, प्रकाशित किया जा चुका है।

आयुर्वेद एवं सिद्ध चिकित्सा में प्रयोग में आने वाली ३४० औषधियों, मिश्रित योगों तथा कूट भेषजों का अंतः शारीरिक एवं बाह्य प्रयोगशालीय भेषजगुण विज्ञानीय परीक्षण किया जा चुका है। २४६ औषधियों पर 'आयुर्वेद एवं सिद्ध की कतिपय वनस्पतियों एवं औषध योगों पर भेषजगुण विज्ञानीय परीक्षण' नामक विनिबंध भी प्रकाशित किया जा चुका है।

भारत सरकार द्वारा प्रकाशित भारतीय आयुर्वेद योग संग्रह भाग-१ एवं दो तथा ग्रामीण स्वास्थ्य योजना औषध मंजूषा एवं विश्व स्वास्थ्य संगठन के स्वास्थ्य रक्षा कार्यक्रम में सम्मिलित लगभग ५०० एकौषधियों का भौतिक रासायनिक मूल्यांकन/आंकड़ें, तथा लगभग ५० योगों का विस्तृत मानकीकरण एवं लगभग ६७५ योगों का तात्कालिक विश्लेषण किया जा चुका है। परिषद ने 'आयुर्वेदीय औषध योगों के भेषज मानक' नामक विनिबंध का नवीन संस्करण भी प्रकाशित किया है।

परिषद का महरुरी, धर्मगढ़ (उ० प्र०) में कस्तूरी मृग प्रजनन फार्म है। जिसमें कस्तूरी मृगों का पालन किया जाता है। इस फार्म में वर्तमान में २१ मृग पाले जा रहे हैं।

आयुर्वेदीय प्राचीन एवं दुर्लभ साहित्य का अनुवाद, सम्पादन एवं प्रकाशन कार्य के क्रियान्वयन के साथ-साथ पुरातन पांडुलिपियों/पुस्तकों की भाइक्रोफिल्म निर्माण करना तथा उपलब्ध शास्त्रीय सूचनाओं एवं पत्रिकाओं से निर्मित संदर्भ-सूची द्वारा औषधियों एवं रोगों पर संदर्भ का संकलन किया जाता है।

सिद्ध चिकित्सा पद्धति में, निदान चिकित्सात्मक परीक्षण किए गए हैं जिनमें बलीगुन्म (आमाशयिक व्रण) की चिकित्सा में थम्बीर चन्द्रम्, मन्जलकामलाई (विसर्गी यकृत शोथ) में किञ्जानेल्लि एवं करिसलाई कश्चिचल (प्रवाहिका विकार) में, पेडिकालिंगयुअर और अमायोदुबर्षम, वेतुपुनोई (पाण्डु) में अन्वदेदीचेन्द्रम्, कलजगापादाई (सोरियासिस) में 777 तैल और करप्पन (त्वचा विकार) में शिवनारमिथम् और आकाशकरुडन किशंगुचूर्णम का प्रयोग, पुत्रनोई (कैन्सर) में

आर०जी०एस०/बी०के०/एस०के०एस० इत्यादि का प्रयोग प्रभावकारी सिद्ध हुआ है। अन्य अध्ययनों में नीरझीबु, (मधुमह) की चिकित्सा में, कोइयुया/अवराई, कक्काईवेलियु (अपस्मार) में पत्थोथीयुटर तैलम्, सधिवत्तुलाई (संधिगतवात) में गोरीशितामणि एवं लिंगचेन्दूरम् पर भी परीक्षण किया गया है।

सिद्ध चिकित्सा के वायव्य अनुसंधान के अंतर्गत १० पुस्तकों का प्रकाशन, ३१८ कुडजन पत्रों तथा २३ प्राचीन पुस्तकों का संग्रह किया गया है।

परिषद द्वारा लगभग ४० पुस्तकों/प्रबन्धों एवं कार्यवाहियों का प्रकाशन किया गया है। इसके अतिरिक्त त्रैमासिक पत्रिका 'जर्नल आफ रिसर्च इन आयुर्वेद एवं सिद्ध' तथा 'बुलेटिन आफ इथनो मेडीको बोटैनीकल रिसर्च' एवं 'बुलेटिन आफ डीप्टिडियन इंस्टीच्युट आफ हिस्ट्री आफ मेडिसिन' नामक अर्धवार्षिक पत्रिका का भी प्रकाशन किया जाता है। साथ ही परिषद द्वारा मासिक परिषद समाचार पत्रिका भी प्रकाशित की जाती है जिसके माध्यम से परिषद की गतिविधियों एवं उपलब्धियों की जानकारी प्रदान की जाती है।

परिषद कल्याण अनुसंधान कार्यक्रम के अंतर्गत मुखीय गर्भ-निरोधक अभिक्रम की निदान चिकित्सा जांच तथा भेषजगुण विज्ञानीय अध्ययन किया जाता है। इस कार्यक्रम के अंतर्गत अब तक किये गये शोध कार्य का संकलन तथा विश्लेषण कर लिया गया है एवं इन सूचनाओं के आधार पर एक शोध विनिबंध (मोनोग्राफ) तैयार करने का प्रयास किया जा रहा है।

- कतिपय चुनी हुई व्याधियां एवं उनकी आयुर्वेद एवं सिद्ध की अनुसंधान परक चिकित्सा

### आयुर्वेद

रोग	एकाकी औषध	साधारण औषधयोग	औषधयोग/विधियां	कुल भेषज विद्युत
आमवात	गट्टिमधु भल्लातक	शुण्ठी-गुडूची	योगराज गुग्गुलु शुण्ठी-गुग्गुलु निगुडूची-गुग्गुलु बालुकासंघ	—
अल्पपित्त	शतावरी आमलकी	शतावरी योग	अविषतिकर चूर्ण सूतशेखर रस	—
परिणाम-शूल	शतावरी आमलकी	शतावरी योग	सूतशेखर रस महातिक्तक घृत इन्दुकात घृत आमाशय शोधन करुण, अपामर्ग	निम्बतिक्तक

रोग	एकाकी औषध	साधारण औषधयोग	औषधयोग/विधियां	कुल भेषज विद्युत
शवास	हरिदा शिरीष कण्टकारी	शवास केसरी	शवास कुठार रस नारदीय लक्ष्मीविलासरस तालिसादि चूर्ण	—
मधुमेह	विन्धी बिल्व	धात्री निशा	—	आयुष-८२ सीआर आईए-८
हृदोग	मानजक पुष्करमूल करवीर	पुष्कर गुग्गुलु	रुण पंचमूल क्वाथ	—
मूत्रकृच्छ्र अक्षरो	करुण कुलथ गांधुर	चन्द्रप्रभातटी	—	—
श्लीमद	शखोटक	—	निवानंद रस सुतशेखर वटी पुनर्नवारिष्ट	आयुष-६४
मानस मंदता	मण्डूकपर्णी बाहो	—	—	—
त्वक रोग	आरवध निम्ब तुवरक	—	पटोल त्रिफलादि क्वाथ निम्बति- पंचतिकत क्वाथ केशोर गुग्गुलु (सोरिएसिस) आयुष-५७ अपेर्यवर्धनी (हिंवे)	—
पक्षाघात	—	हिंगु त्रिगुण तैल	गंध करुण भद्र बाली तैल क्षीर बला तैल स्नेहन, स्वदेन शिरो बस्ति	—
गृधरी	निगुडूची प्रसारिणी	हिंगु त्रिगुण तैल	योगराज गुग्गुलु महारास्तनादि क्वाथ	—
मेदोरोग	गुग्गुलु	—	—	आयुष-५५ आयुष-५६
अपस्मार उन्माद	विषम ज्वर	ब्राह्म्या योग	—	आयुष-६४
कामला	कटुकी	—	—	—
शग्वर	—	—	आरोग्यवर्धनी	—
तिमिर	—	नेत्र किन्दु तैल	धार सूत्र सत्तामृत लोह	—
शुकक शोथ पुनर्नवा	शुकक शोथ पुनर्नवा	त्रिणपचमूल	—	—
<b>सिद्ध</b>	बलिगुग्मम	—	—	पी०६ के० ३
मजला-मलाई	मजला-मलाई	—	—	—
कलजगा	कलजगा	—	—	—
पाढई	पाढई	—	—	१७७ तैल
संधिवात	संधिवात	—	गोरी शित्तामणि	—
शुलई	शुलई	—	लिंग चेन्दूरम्	—
पुनर्नोई	पुनर्नोई	—	—	आरजीएस/वीके२,एसकेएस



जवाहरलाल नेहरू भारतीय चिकित्सा एवं होम्योपैथी अनुसंधान भवन

### परिषद के कुछ प्रमुख प्रकाशन

- | क्र. सं० | शीर्षक  |
|----------|---|
| 1.       | रसायन औषधियों एवं पंचकर्म चिकित्सा पर निदान चिकित्सापरक एवं प्रयोगिक अध्ययन                           |
| 2.       | परिणामशूल में आयुर्वेदीय औषधियों तथा पंचकर्म विधि से चिकित्सा   |
| 3.       | आयुर्वेद में जठराग्नि तथा घात्वाग्नि की संकल्पना  |
| 4.       | आयुर्वेद औषधियों द्वारा मूत्राश्रमरी की चिकित्सा  |
| 5.       | आयुर्वेदीय औषध योग भेषज मानक  |
| 6.       | आयुष-64 एक नवीन आयुर्वेदीय मलेरिया नाशक. वानस्पतिक योग  |
| 7.       | कामला एवं यकृत रोगों पर आतुरीय अध्ययन   |
| 8.       | पौरुषग्रन्थि वृद्धि जन्य मूत्र विकारों में वरुण का प्रभाव   |
| 9.       | क्षार सूत्र से भगन्दर की चिकित्सा   |
| 10.      | गुग्गुलु का मेद के चयापचय एवं मेदस्विता में भेषजगुण विज्ञानीय एवं निदान चिकित्सात्मक अध्ययन           |
| 11.      | कलंजगपादाई (सोरिएसिस) की चिकित्सा में सिद्ध योग '777' तैल का निदान चिकित्सात्मक एवं प्रायोगिक परीक्षण |
| 12.      | मेदोरोग पर गुग्गुलु का निदान चिकित्सात्मक एवं प्रायोगिक अध्ययन  |
| 13.      | तमकश्वास - एक चिकित्सात्मक अध्ययन।  |
| 14.      | आयुष -56 अपस्मार प्रतिरोधी आयुर्वेदीय योग।  |

केन्द्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद

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**पंचकर्म चिकित्सा**  
**PANCHAKARMA**  
**Therapy**  
**way to**  
**Perfect Health**

# PANCHAKARMA

Purvakarma		Pradhanakarma					Paschatkarma
Snehana	Swedana	Vamana	Virechana	Anuvasana	Asthapana	Nasya	Samsarjanakarma

**Panchakarma** is one of the unique therapeutic procedure in Ayurveda advocated for the radical elimination of disease causing factors and to maintain the equilibrium of *dosas*. The five fold measures comprehended by this therapy for internal purification of body system are *Vamana* (Emesis), *Virechana* (Purgation), *Anuvasana* (Oil enema), *Asthapana* (Decoction enema) and *Nasya* (Nasal insufflation). The chances of recurrence of the disease are very rare in patients undergone *Panchakarma* therapy as it also promotes positive health by rejuvenating the vital body systems. It prevents ageing process and improves memory and functions of sense organs. *Panchakarma* therapy is very effective in the management of auto-immune disorders, chronic ailments like rheumatic arthritis, bronchial asthma, G.I.T. disorders and mental diseases. *Panchakarma* requires some preparatory measures i.e. *snehana* and *swedana* and *samsarjana karma* as post *Panchakarma* measure.

**Snehana** (Oleation) - is of two types internal and external. Internal administration of *sneha* (*snehapana*) is again classified into (1) *Acchasnehapana* - in take of ghee, oil, muscle fat, bone marrow in high doses and (ii) *Vicharana*, intake of *snehadravya* in small doses as preparatory measure (*purvakarma*) of *sodhana* therapy. External oleation is known as ABHYANGA.

**Swedana** (Sudation) - Procedure used to induce sweating with or without use of heat (*Agneya* and *Anagneya*).

**Vamana** (Emesis) - Elimination of morbid *dosas* in the body through the mouth.

**Virechana** (Purgation) - Elimination of *dosas* by inducing controlled purgation.

**Basti** (Enema therapy) - The method of treatment by which medicines in suspension are administered through anorectal, urethral and vaginal route with an instrument called *Bastiyanttra*. This process is of two types; *Anuvasana* (Oil enema) and *Asthapana* (Decoction enema)

**Nasya** (Nasal insufflation) - Administration of medicine through nostrils.

**Samsarjana karma** - is special post *panchakarma* dietary regimen and particular *Dincharya* for a specified period of convalescence.

## Kerala specialities in Panchakarma

**Pindasweda** - is the process by which certain medicinal puddings, especially the cooked *navara* type of rice in the form of boluses tied up in cotton cloth is applied the whole body or a specific part of the body, for a period of 7 or 14 days. It is used in the treatment of neuromuscular disorders, hemiplegia, chronic rheumatic disorders, for rejuvenation, geriatric problems etc.

**Pizhichil** - is the process by which warm medicated oil is poured on the whole body in a specific manner with simultaneous gentle massage. It is used in the treatment of various neurological diseases, rheumatic disorders, for rejuvenation, preventing ageing process etc.

**Sirobasti** - is the process of keeping certain amount of medicated lukewarm oil on the head for a prescribed period of time by using a special type of cap without top, fixed properly on the head for the treatment of various neurological disorders, diseases of head, facial palsy etc.

**Sirodhara** - is the process by which medicated oil, milk, buttermilk etc. is poured in a continuous stream on the head, especially forehead in a specific manner. It is in indicated mental disorders, insomnia and certain skin diseases. Duration of treatment : 7 to 14 days.

**Sirolepana** - is a procedure in which paste of medicinal herbs/drugs is applied on the scalp for a specified period. It is an effective method of treatment for neurological disorders and mental diseases.

## DISEASES IN WHICH PANCHAKARMA THERAPY HAS BEEN SUCCESSFULLY APPLIED.

VATAVYADHIS	TREATMENT
Pakshaghat/ Pangu	Snehana, Svedana, Abhyanga, Vamana, Sastikasali Pinda Sveda, Virechana, Basti.
Gridhrasi	Abhyanga, Snehana, Basti
Saisaviyavata	Sastikasali Pinda Sveda, Abhyanga
Tamak Swas	Vaman
Parinamsula	Snehan with Ghrityogas
Amvata	Basti Chikitsa, Rukshasveda

## पंचकर्म

पूर्व कर्म		प्रधान कर्म					पश्चात् कर्म
स्नेहन	स्वेदन	वमन	विरंचन	अनुवासन	अस्थापन	नस्य	संसर्जन कर्म

**पंचकर्म**—रोग के कारणों का समूल विनाश तथा दोषों की समरूपता स्थापित करने के लिए पंचकर्म, एक उत्कृष्ट चिकित्सा पद्धति है। शरीर की आंतरिक शुद्धता के लिए उस चिकित्सा पद्धति की पांच विधियाँ इस प्रकार हैं—वमन, विरंचन, अनुवासन, अस्थापन तथा नस्य। पंचकर्म चिकित्सा पद्धति द्वारा उपचार के पश्चात् रोग की पुनरावृत्ति की संभावना बहुत कम होती है इसके द्वारा शरीर की जीवनीय क्षमता का संवर्द्धन होकर स्वास्थ्य संवर्द्धन होता है। इसके द्वारा वृद्धावस्था का नियंत्रण होता है एवं इद्रियों की कार्यक्षमता की कमी के कारण उत्पन्न रोगों, जीर्ण व्याधियों तथा मानसिक रोगों के उपचार में पंचकर्म चिकित्सा अत्यंत प्रभावकारी है। पंचकर्म चिकित्सा से पहले स्नेहन एवं स्वेदन आदि पूर्व कर्म आवश्यक है तथा पंचकर्म के पश्चात् संसर्जन कर्म किया जाता है।

**स्नेहन**— स्नेहन दो प्रकार का होता है—आंतरिक एवं बाह्य। आंतरिक स्नेह (स्नेहपान) को पुनः दो श्रेणियों में बांटा गया है (1) अच्छे स्नेहपान—घृत, तैल, वसा, मज्जा का प्रचुर मात्रा में सेवन करना (2) शोधन विधि के पूर्व कर्म के रूप में स्नेह द्रव्य का अल्पमात्रा में सेवन करना। बाह्य स्नेहन अभ्यंग के नाम से जाना जाता है।

**स्वेदन**— शरीर में स्वेद उत्पन्न करने वाली प्रक्रिया स्वेदन कहलाती है। इसमें आवश्यकतानुसार अग्नयेय एवं अग्नयेय विधियों का प्रयोग किया जाता है।

**वमन**— शरीर में दूषित दोषों को मुख मार्ग द्वारा वमन कराकर बाहर निकालना।

**विरंचन**—दूषित दोषों को नियंत्रित स्वरूप में मल मार्ग से बाहर निकालना।

**बस्ति**— इस चिकित्सा विधि में बस्ति यंत्र द्वारा औषधियों का क्वाथ अथवा द्रव गुदमार्ग से दिया जाता है। यह विधि दो प्रकार की होती है—अनुवासन एवं आस्थापन। मूत्र मार्ग एवं योनि मार्ग से दी जाने वाली बस्ति को उत्तर बस्ति कहा जाता है।

**नस्य**— इस विधि में औषधियों का नासा द्वारा अंतःक्षेपण किया जाता है।

**संसर्जनकर्म**—यह पंचकर्म चिकित्सा के पश्चात् प्रयोग की जाने वाली विशिष्ट विधि है। जिसमें एक निश्चित अवधि तक पथ्य व्यवस्था एवं विशिष्ट दिनचर्या अपनाई जाती है।

## पंचकर्म चिकित्सा की केंद्रीय परम्परा

**पिण्ड स्वेद**—इस विधि में कतिपय औषधियों का पिण्ड विशेष रूप से पकाए हुए पष्टिक चावलों का पिण्ड सूती वस्त्र में पोटली के रूप में शरीर के संपूर्ण अथवा विशिष्ट भाग पर घुमाते हुए 7 से 14 दिन तक सेक किया जाता है। इसका प्रयोग मांसपेशियों एवं नाड़ी संस्थान की व्याधियों की चिकित्सा जैसे पक्षाघात, जीर्ण आमवातज अवस्थाएं, उदर विकार आदि के उपचार एवं शरीर में नवीनता स्थापित करने के लिए किया जाता है।

**पिण्डिचिल**—इस उपचार विधि में गुनगुने औषधीय तैल का संपूर्ण शरीर पर विशेष तरीके से धारा के रूप में निरंतर प्रयोग किया जाता है। विभिन्न नाड़ी संस्थानीय रोगों, आमवातज विकारों के उपचार, शरीर में नूतनता स्थापित करने एवं वृद्धावस्था के प्रतिबंधन आदि में प्रयोग किया जाता है।

**शिरोवस्ति**— इस विधि में औषधीय तैल को गुनगुना करके मस्तक पर विशेष प्रकार की ऊपर से खुली टोपी (जो सिर पर पूरी तरह स्थिर हो जाए और तैल बाहर न निकले) में एक निश्चित समय तक भर दिया जाता है। इससे विभिन्न नाड़ी संस्थानज रोगों, मस्तक के रोगों, अर्द्ध रोग आदि का उपचार किया जाता है।

**शिरोधारा**— इस विधि में औषधीय तैल, दुग्ध, तक्र आदि को मस्तक पर निरंतर धारा विशेष प्रक्रिया द्वारा प्रवाहित की जाती है। इससे विभिन्न त्वक रोगों का उपचार किया जाता है। इस उपचार की सामान्यतः अवधि 7 से 14 दिन की होती है।

**शिरोलेपन**— इस विधि में औषधीय पादपों के कल्क का लेप मस्तक पर निश्चित अवधि तक लगाया जाता है। यह विधि नाड़ी संस्थानाज्य व्याधियों एवं मानसिक रोगों के उपचार में प्रभावकारी सिद्ध हुई है।

प्रमुख व्याधियाँ जिनमें पंचकर्म चिकित्सा का सफलतापूर्वक प्रयोग किया गया।

वात व्याधियाँ	चिकित्सा
पक्षाघात/पंगु	स्नेहन, स्वेदन, अभ्यंग, वमन, पष्टिक शालि पिण्ड स्वेद, विरंचन, वस्ति
गुध्रसी	अभ्यंग, स्नेहन, वस्ति
तमक श्वास	वमन
परिणामशूल	घृतयोगों द्वारा स्नेहन
आमवात	वस्ति चिकित्सा, रुक्षस्वेद

## Pangu

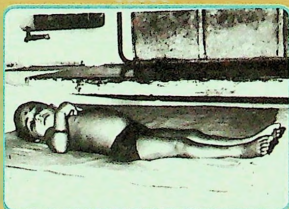


(Before Treatment)



(After Treatment)

## Saisaviya Vata



Saisaviya Vata



(After 3 months of Treatment)



(After complete Treatment)

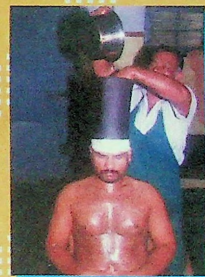
## KERALA SPECIALITIES IN PANCHAKARAMA



PIZHICHIL



PINDA SWEDA



SIRO BASTI



VAMANA



SIRODHARA



विस्तृत जानकारी हेतु सम्पर्क करें :

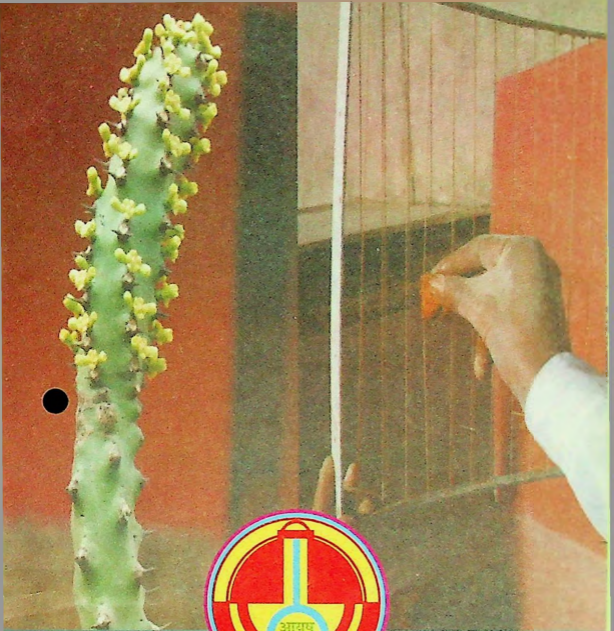
निदेशक,

केन्द्रीय आयुर्वेद एवं सिद्ध अनुसंधान परिषद,  
जवाहर लाल नेहरु भारतीय चिकित्सा एवं हाम्योपैथी  
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# गुद् रोग

( भगान्दर, अर्श परिकर्तिका )

## ANO RECTAL DISEASES

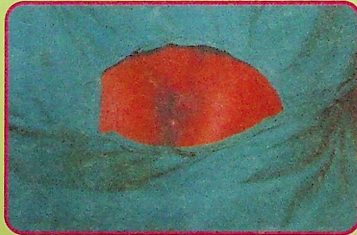
(ANAL FISTULA, HAEMORRHOIDS, ANAL FISSURE)

## Ano-rectal diseases-Ayurvedic Management

The rapid changes in the living habits due to increased urbanisation has resulted in incidence of many uncommon diseases. The main concern is focussed on the acute diseases like Heart disease, Cancer, AIDS etc. Nevertheless, some of the chronic painful disorders like ano-rectal diseases are also causing a lot of suffering to the people. Excessive physical and mental strain and irregular dietary habits lead to abnormal bowel movement which if persists, causes ano-rectal diseases like *Arsha* (Haemorrhoids), *Bhagandara* (Fistula-in-ano) and *Parikartika* (Fissure-in-ano). The Ayurvedic management of these conditions have been widely practiced successfully. The introduction of the ancient *Kshar Sutra* therapy has given a new impetus to the Ayurvedic management of the diseases. The details of these conditions are briefly discussed.

### Fistula-in-ano

Appearance of boil within two finger breadth around anus with fever and pain is known as *Bhagandara Pidika* (Ano rectal abscess). The bursting of this boil through perenium or anus results in *Bhagandara* (anal fistula).



Low and fistula-in-ano

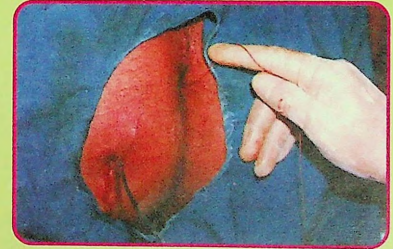
Itching, pain, oozing of reddish frothy discharge are the main symptoms. According to involvement of seat and deepness of the track it may be classified as subcutaneous, low anal, high anal and ano-rectal. Modern surgical management involves surgery and prolonged hospitalisation (with high recurrence rate). On the other hand with the Ayurvedic management with *Kshar Sutra* therapy the patient does not require hospitalisation and remains ambulatory. The recurrence rate is negligible. The management with *Kshar Sutra* is quite effective in high anal and ano-rectal variety too which otherwise requires major surgery including colostomy sometimes.

## गुद रोगों की आयुर्वेदीय चिकित्सा

बढ़ते नगरीकरण के कारण रहन-सहन की आदतों में निरन्तर बदलाव के परिणाम स्वरूप कई असामान्य रोग उत्पन्न हो रहे हैं। हृदयरोग, कैंसर, एड्स आदि जैसे उग्र रोग मुख्य महत्व का केंद्र बने हुए हैं किन्तु कुछ पीड़ादायक जीर्ण विकारों यथा-गुदरोग से भी बहुत से लोग पीडाग्रस्त हैं। अत्यधिक शारीरिक और मानसिक दबाव तथा अनियमित आहार-विहार के कारण असामान्य मल प्रवृत्ति होती है जिसके कारण अर्श, भगन्दर तथा परिकर्तिका आदि गुद रोग हो जाते हैं। इन व्याधियों में सफलतापूर्वक आयुर्वेदीय चिकित्सा बृहद रूप से प्रयोग में लाई गई है। इन रोगों की चिकित्सा के लिए प्राचीन क्षार-सूत्र चिकित्सा की पुनःस्थापना से आयुर्वेदिक चिकित्सा को एक नया प्रोत्साहन मिला है। इन व्याधियों के विवरण की संक्षिप्त रूप से चर्चा की गई है।

### भगन्दर

गुदा के पास से दो अंगुलि की परिधि में ज्वर-वेदनायुक्त विद्रधि को भगन्दर पीडिका कहा जाता है। इस विद्रधि का गुह्य प्रदेश अथवा गुदा में फट जाने से भगन्दर रोग होता है। कण्डू (खुजली), वेदना एवं पूयस्त्राव मुख्य लक्षण हैं। विद्रधि मुख की स्थिति एक नाडीत्रण की गहराई के अनुसार इसकी स्थिति को अधस्त्वक्, अधोगुदीय, उर्ध्व गुदीय, गुदान्त्रीय में वर्गीकृत किया जा सकता है। आधुनिक शल्य चिकित्सा में शल्यक्रिया और लम्बे समय तक



उर्ध्वगुदीय ( हाई रेक्टल ) भगन्दर में क्षार-सूत्र का प्रयोग

अस्पताल में रहना सम्मिलित हैं (रोग की पुनरावृत्ति भी प्रायः हो जाती है)। इसके विपरीत क्षार सूत्र विधि द्वारा आयुर्वेदीय चिकित्सा में रोगी को अस्पताल में रहने की आवश्यकता नहीं है तथा वह चल-फिर सकता है। रोग की पुनरावृत्ति भी नगण्य है। उर्ध्व गुदीय तथा गुदान्त्रीय प्रकार में भी क्षार सूत्र द्वारा चिकित्सा काफी प्रभावकारी है अन्यथा इसके लिए कभी-कभी बृहदान्त्रछेदन सहित गहन शल्य चिकित्सा की आवश्यकता होती है।

## Techniques

After fixing the patient in lithotomy position, the part is properly cleaned. A specially designed probe is inserted through the external opening inside the fistulous track, then the index finger of opposite hand is put inside the anal canal and probe is touched with the tip of the finger and brought out through the anal canal directed by the finger. After bringing out the probe through anal canal *Kshar Sutra* is put inside the eye of the probe and probe is pulled back and taken out of the external opening of the track. Thus the *Kshar Sutra* is passed through the fistulous track forming a loop and tied. This *Kshar*

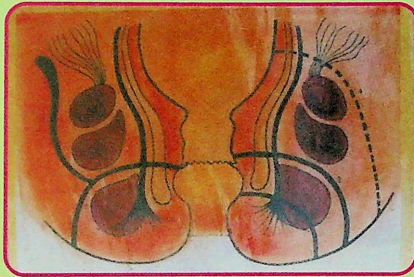


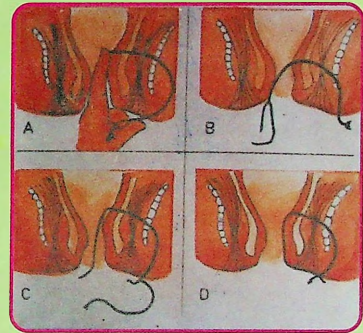
Diagram showing different types of  
Fistula-in-ano

*Sutra* is changed every week till the whole track is cut through and healed. Other post operative procedures such as local fomentation, medicated oiling and using laxatives are also followed.

This technique has been very well accepted/adopted by the practitioners of Ayurveda as well as modern medicine. This technique is presently practiced in many centres in the country. The efficacy of this approach has also been proved by studies conducted by ICMR. The facilities for the application and research on the techniques of *Kshar Sutra* are further developed at Central Research Institutes for Ayurveda of the Council at New Delhi and Mumbai. The Institutes have also arranged for training programmes on the *Kshar Sutra* techniques and workshops. Further steps are proposed for its extension in other centres under the Council.

## विधि

रोगी को उत्तान स्थिति में लिटाकर गुद भाग को अच्छी तरह से साफ किया जाता है। एक विशेष रूप से बनाई गई शलाका को भगन्दर व्रण के बाहरी मुख से अन्दर तक पहुँचाया जाता है एवं दूसरे हाथ की बीच वाली अंगुली को गुदा के अंदर रखा जाता है। शलाका को अंगुली के ऊपरी भाग द्वारा सहारा देते हुए बाहर निकाल लिया जाता है। शलाका के छिद्र में क्षार-सूत्र फंसा कर शलाका को वापिस खींच लिया जाता है। इस प्रकार क्षार-सूत्र भगन्दर नाड़ी से बाह्य भाग से होते हुए एक फन्दा (लूप) बनाकर बांध दिया जाता है। प्रत्येक सप्ताह नया क्षार-सूत्र बदल दिया जाता है, जब तक कि भगन्दर नाड़ी व्रण पूरी तरह कटकर व्रण ठीक नहीं हो जाता है। अन्य पश्चात् कर्म यथ-स्थानीय सेक, औषधीयुक्त तैल का प्रयोग एवं मृदु विरेचन का भी चिकित्सा काल में सेवन कराया जाता है।



(भगन्दर में क्षार सूत्र बाँधने की विधि)

यह प्रणाली आयुर्वेद के चिकित्सकों के साथ-साथ आधुनिक पद्धति के चिकित्सकों में भी भली-भाँति स्वीकृत एवं प्रयुक्त हो रही है। वर्तमान में इस प्रणाली का अभ्यास देश के अनेकों केन्द्रों पर किया जा रहा है। इसके प्रभाव को भारतीय चिकित्सा अनुसंधान परिषद द्वारा भी अध्ययनों के द्वारा सिद्ध किया गया है। क्षार-सूत्र तकनीक के प्रयोग एवं अनुसंधान को परिषद के केन्द्रीय आयुर्वेद अनुसंधान संस्थानों, नई दिल्ली एवं मुम्बई में विकसित किया गया है। संस्थानों द्वारा क्षार-सूत्र तकनीक पर प्रशिक्षण कार्यक्रम एवं कार्यशालाओं के आयोजन भी किये गये हैं। आगे परिषदाधीन अन्य केन्द्रों में भी इसके विस्तार हेतु प्रस्ताव किया गया है।



## Haemorrhoids

Haemorrhoids or bleeding piles is another common anorectal problem with or without prolapsible mass. Often



Haemorrhoids with prolapsible mass

there is profuse painless bleeding, sometimes blood coming in streams and occurring before or after defaecation. Constipation and straining are believed to be the cause. Ayurveda attributes it to weak digestive *Agni*. Sometimes congested haemorrhoidal veins get infected and thrombosed, protruding outside the anus which is very uncomfortable and painful.

## Fissure-in-ano

Fissure-in-ano is a vertical tear of anal canal, a sort of injury caused due to foreign body, hard stool, excessive straining and improper co-ordination of sphincteric muscles during defaecation, it may occur in diarrhoea and dysentery also. Recurrent episodes of Fissure-in-ano cause lipping of the anal skin gradually developing into sentinal tag. It is a very painful condition although bleeding is absent or very little. Modern management advocate dilatation under anaesthesia or sphincterotomy. Ano rectal clinic has achieved success in the medicinal management of Fissure-in-ano on Ayurvedic lines which aims at giving relief in pain, smooth passage of soft and non-irritant motion and prompt healing of the fissure.

## अर्श

रक्तार्श एक अन्य सामान्य गुद रोग है जिसमें अर्श के मस्से भ्रंश युक्त अथवा भ्रंश रहित हो सकते हैं। प्रायः शौच के पश्चात या पहले वेदनारहित अत्यधिक रक्तस्राव होता है। कभी कभी तो रक्तस्राव धारा का रूप ले लेता है। कोष्ठ बद्धता एवं मल त्याग में अत्यधिक बल प्रयोग इस रोग का कारण माना जाता है।

आयुर्वेदीय मान्यता है कि अर्श का प्रमुख कारण अग्निमांद्य हांता है। कभी-कभी तो जीवाणु उपसंक्रमण से अर्श के मस्सों में सूजन तथा घाव भी हो जाता है (पित्तार्श अथवा ग्राम्बोज्ड हेमोरायड्स) तथा ये मस्से मल द्वार के बाहर की ओर निकल जाते हैं जो कि बहुत ही कष्टप्रद होता है।



(पिचार्श)

## परिकर्तिका

परिकर्तिका में गुदा मार्ग में एक लम्बवत चीरा (व्रण) बन जाता है, यह एक प्रकार का अभिघातज व्रण है जो मलकाठिन्य, अत्यधिक बलपूर्वक मल त्याग (प्रबाहण) अथवा गुदा के निकट कौं संकोचक पेशियों के मलत्स्राव के समय अनियमित सामंजस्य के कारण होता है। यह अतिसार एवं प्रवाहिका में भी हो सकता है। बार बार परिकर्तिका होने पर व्रणोष्ठ बढ़ कर शुष्कार्श अर्थात् 'सेन्टिनल टैग' का रूप धारण कर लेते हैं। यह एक अत्यंत वेदना पूर्ण व्याधि है। यद्यपि रक्तस्राव अत्यल्प होता है। आधुनिक चिकित्सा में बेहोशी की दवा देकर गुदा को विस्फारण अथवा गुदा की संकोचक पेशियों पर शस्त्र कर्म किया जाता है। गुद रोग चिकित्सा में मात्र आयुर्वेदीय औषधियों से ही इसकी चिकित्सा में सफलता प्राप्त की है जिसका उद्देश्य वेदना को कम करना, मल त्याग सुख पूर्वक काठिन्य एवं दाह रहित करना एवं व्रण का शीघ्र रोपण करना है।



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AYURVEDIC DRUG FORMULATION : ARE THEY RATIONAL ?

(Wishvas Rane)

Theoretically yes, practically difficult to say. Ayurveda is a way of life and the treatment is individualised depending on the "prakriti" of a patient. It encompasses preventive as well as curative aspect of a disease. Initially only herbal medicines were used, but with the advent of Persians the metals were included. This goes to prove that Ayurveda was willing to grasp newer concepts that could relieve the sufferings of the patient. The various "grantha"(textbooks) give different "patha"(processes) of manufacturing the same medicine. This was obvious because the preparation of a medicine depended mainly on the availability of the medicinal substance.

Depending on the region, various different plants were suggested as substitutes. Actually these were not substitutes for them, because each vaidya prepared his own medicines suitable for a particular patient and then wrote it down for his students. when we study all these pathas-processes together, we call them substitutes. But this was also a process of standardisation depending on the availability.

Many processes are given for achieving a standardisation. The plants and parts thereof were collected at a particular season so that probably maximum alkaloids were saturated in the plant at that time. Who does it now? Elaborate procedures of collection of a plant are given in text books and we feel that these procedures evolved right collection, cleaning and storage of the plants. Then the plants grown in a given region were sufficient for that region. Today the situations have changed and indiscriminate felling of trees and collection of plants and monoculture of some plants is changing the plant pathology and plant ecology.

I will give a few examples. Depending upon intensity of temperature required, Bori-Babhali-Khair wood was used for the process of heating. "Chausastha-Pimpali" was a process of pulverising pimpali for 64 hours, probably to help release the active alkaloid. Purification of mercury as advised in garlic juice or aloe juice. Cooking bhallatak in milk, vardhaman pimpali a process of gradually increasing the dose for enhancing metabolism and to prevent "apunarbhav" meaning strengthen the system and prevent recurrence. Tricatu a combination of sunths, pimpali and miri or kajjali a combination of mercury and sulphur for making the drug reach the target organ. Many such examples could be given. Formally vaidyas specially prepared medicines for each individual patient depending on the prakriti. There was no generalisation as we find today. In a way even in modern medicine, initially the medicine or the mixture were prepared individually. But with the advent of manufacturing drug companies, the doctor had to toe the line of the drug companies. The same is happening in Ayurveda. Each medicine was then prepared strictly according to the rituals given in text-books and most of the processes were evolved to increase the potency of a medicine. They knew their limitations and were mentioned that way. Take for example a powder or a

churna. It is said that churna is effective maximum for six months depending on temperature, humidity and exposure to light. Then this was not a problem, because churnas were freshly prepared. But today with the commercialisation things have changed and ayurveda has not remained a way of healthy life, but has become a way of exploitation for the drug manufacturers, including the multinationals. No DPCO, excise facility, no controls has not promoted ayurveda.

Fortunately the new budget measures have removed the fiscal benefits on branded products, but other shortcomings continue. With this short history now we come to the main subject of rationality of ayurvedic formulations. There are not many generic single drug formulations in ayurveda. But all the formulations mentioned in the text-books and strictly manufactured according to the processes given in the patha can be called as generic products. These products are rational, but they are theoretically rational. I say theoretically because majority of these products are not prepared strictly according to text-book pathas. In short we can say that commercialisation of ayurveda has virtually taken ayurveda to irrationality and even the so called generic products are not very rational.

Shabnam Minwala has already reported how even every day products are substandard and how some of the raw materials are just not available. Pushpa Girimaji has reported in 1991 that in last five years (86 to 91), the number of ayurvedic companies has doubled from 2,500 to over 5000. In fact, the Rs 600 crore industry now constitutes over 15 % of the total pharmaceutical market and is estimated to be growing at the rate of 30 % annually. Now in 1994 these figures must have changed to a great extent.

Dr. P.V. Unnikrishnan of VHAI says a time-tested traditional system has been commercialised, negatively affecting students of this discipline and rendering valuable plant species extinct. Instead of bringing people closure to their own time tested practises and cures, it succeeded in commercializing the system to such an extent that it came to resemble any other commercial channel accessible to any counter. Once lucrative sales were assured, everyone jumped on to the ayurvedic bandwagon. Every day hundreds of products are dumped onto the market, all carrying an ayurvedic label. Their range vary from toffees with a high sugar content labelled 'Ayurvedic digestive drops' (vis Swad which is 97% sugar) to high alcohol containing products e.g., Mrith sanjeevani. The marketing baits were plentiful covering body builders and vitalisers like special Chyawan-prash, relicensed or reclassified product designed to elude price control such as Vicks Vaporub, hair oils and shampoos. The list goes on increasing. Recurringly, the noble theme proffered is "a search for safer natural alternatives." The modus operandi : adulteration, exaggerated claims, false classification and reclassification and reclassification. How then do you expect rationality in Ayurvedic medicines ?

Now let us have a look at the existing drug rules for ayurvedic

products. The drug are classified as 1) granthokta (according to text-book and 2) Patent or proprietary. The definitions given in the 'Drugs and Cosmetics Act, 1940) are as follows :

GRANTHOKTA: ... includes all medicines intended for internal or external use, for or in the diagnosis, treatment, mitigation or prevention of (disease or disorder in human beings or animals, and manufactured) exclusively in accordance with the formulae described in, the authoritative books of ayurveda (56 books specified in first schedule).

Patent or proprietary medicine means : in relation to ayurvedic system of medicine all formulations containing only such ingredients mentioned in the formulae described in the authoritative books of ayurveda - specified in first schedule but does not include a medicine which is administered by parenteral route and also a formulation included in the authoritative books as specified and 11) in relation to any other system of medicine, a drug which is a remedy or prescription presented in a form ready for internal or external administration of human beings or animals and which is not included in the edition of Indian Pharmacopoeia for the time being or any other Pharmacopoeia authorised in this behalf by the central government after consultation with the DTAB. From these definitions one can find that anything can taken as an ayurvedic drug. There is one technical officer stationed at Bombay to screen all these applications. It seems for last two years this post is vacant and the applications are sent to Podar Medical College for disposal. No wonder there is a big rise in irrational ayurvedic preparations.

There are no set standards for examining the end products. CCRIM&H has evolved pharmacopieal standards for Ayurvedic formulations, and persons like Dr. Sharidini Dahanukar and others are trying to find a way out. Today the drug inspector does the examination by the way of Rasa-qandha-sparsha i.e. smell, colour and touch. In the absence of standards, today checking of the end product is done by checking of manufactures records of purchases of the raw materials. There too one cannot insist on a bill because some times the raw material is collected from villagers. A mere entry in the purchase register is good enough to prove that the said ingredient is included in the end product.

Many different forms of Ayurved or homeopathic systems have emerged and these do not need any license for manufacture of any drug that they desire- rational or irrational. Sukshma Ayurved, Sanjeevan Chikitsa, Electro homeopathy are some of these. I learn that Bihar or U.P. state government has already allowed and Ayurvedic injectible medicine (though it is prohibited in the definition of a drug). It is strange that there is no compulsion of using sterile water for ophthalmic preparations and likewise this injectible also does not need sterile water. According to Ayurveda wax, ghee or oil is used for preparing ointments. Today jelly or vasseline is used, gelatine capsules are used, but there is no compulsion of adhering to the minimum standards of these materials as stated for modern medicine.

DPCO (Drug Price Controls Order) is not applicable to ayurvedic drugs. With the result an ointment like 'Kailash Jeevan' basically 'rala' i.e. Italian Millet or Setaria Italica powder mix in ghee and washed in water for 100 times (shat dhrut) costs as much as Rs. 91/- for 240 gm ointment. Another example is MP produced "Healthy drink" widely advertised in news papers, being sold at Rs 150/- for 120 ml syrup and 45 tablets (to be taken together). Take another example of Chyawanprash being sold for Rs 70/- to Rs 300/- per kg. If Chyawanprash is prepared strictly according to the text books, it should not cost anything less than Rs 150/- to Rs 200/- per kg.

The main ingredient of Chyawanprash is 'amla' (phyllanthus emblica). This is a seasonal fruit. How then is Chyawanprash prepared throughout the year? Either it is prepared season from fresh fruits and sold the year round or 'mava' a preservative form of amla extract is prepared and throughout the year or avalkathi i.e. dried amla is used. Obviously these will differ in property and prices as well. Ashtavargayukta Chyawanprasha contains over 30 medicines that are available in Himayas. With the ever increasing prices of gold, is really gold used for Suvarna bhasma? There is no compulsion for the manufacturers of bhasma to estimate the percentage of the parent material in the bhasma. Fortunately Maharashtra FDA has developed atomic absorption test for costly metal and pearls ect., How then can you expect genuinity and rational prices? In the absence of DPCO the retailers can change the printed prices on the label and the FDA cannot take any action, probably action should be taken under Weights and Measures Act.

Clinical trials are mandatory for substantiating new claims or for getting proprietary formulations sanctioned, but no schedule of clinical trials is prescribed. Prosecution is possible if steroid like drug is found in Ayurvedic preparations but if the manufacturer proves that the steroid is the inherent component of the Ayurvedic ingredients, no action can be taken. Tobacco paste (for local application) has been banned in Maharashtra, but one firm sales it as snuff (used for the same purpose of application to teeth) and no action can be taken. Take the example of self-generated alcohol from the fermentation of 'dhayati' flowers. But today everyone uses yeast of some directly add alcohol.

Under Magic Remedies Act action cannot be taken against very misleading advertisements of Ayurvedic products. Such advertisements are creating all sorts of misunderstandings and in a way they are prospering at the cost of frankness of the modern medicine. Ginseng imported at great cost is being sold in many combinations and there is no price control as one can see from the prices of

Ambroas-AFD-	10 capsules	Rs 40.65
Biovital-Micro Labs	-do-	Rs 38.00
Ginsec-Duphar-Interfran	6 capsules	Rs 42.00
Ginsoma-Alembic-	10 capsules	Rs 40.67
Gintona-Lyka labs-	-do-	Rs 43.80
Jensheng-Biological Evans	-do-	Rs 44.00

when doctors have forgotten to use generic Arogya Vardhini for hepatitis but every one wants to use Liv-52 and similar branded preparations. Everyday product, which are often spurious, adulterated, irrational and hazardous varying from toffees, shampoos, vitalisers to high alcohol products are dumped into the market under ayurvedic garb. Getting an ayurvedic licence and affixing a herbal label is a sure passport to big profits. Look at the way in which 'Ginseng' products have become top selling products. Ever though scientific studies point out the serious health hazards of ginseng like 'Ginseng Abuse Syndrome' (similar to corticosteroids poisoning) and questions have been raised about the doubtful therapeutic value of ginseng, and even after some countries like USA and Pakistan banned it, ginseng has become one of the top seller in India. This is not promotion of true Ayurveda.

Drug companies like Dabur has an annual turnover of Rs 200 crores, growing at a tremendous pace of rise of 25% annually, collects 80% of its turnover from just 24 products, including toffees, hair oils, ect., which are non-essentials. A rational drug policy for traditional systems of medicines, through and active participation of health activists, professionals, social scientists, consumers and people working at grass root level, which will look into the identification, development and production of those medicines which truly meet the health needs of the people under an essential drug list needed for primary health care and other national health programmes is the need of the hour. There is an urgent need to screen all the existing ayurvedic and other traditional system of medicine drugs available in the market and ban such irrational and hazardous products. There must be strict monitoring and curtailment of advertisements that misguide the entice people. Medicinal plants are becoming extinct and endangered due to irresponsible commercial exploitation and export. This has to be cheked. In the end i will only say that ayurveda, with all its limitations, is a good and has to be encouraged. Its commercial exploitation has to be checked and checked severely.

## APPENDIX 4

## USE OF AYURVEDIC MEDICINES FOR THE TREATMENT OF MINOR AILMENTS

## 4.1 INTRODUCTION TO AYURVEDA

Ayurveda is a system of medicine which has been prevalent in this country since time immemorial. Even now, knowingly or unknowingly, people in our villages follow the principles of Ayurveda in their daily regimens, food and drink. Several of the rituals, social functions and customs of most Indian communities are based on the Ayurvedic principles. When somebody falls ill the old lady of the house always makes an attempt to treat the patient with home remedies available in the kitchen and with available herbs.

Most of these Ayurvedic medicines are prepared out of herbs. Minerals and animal products are also used in Ayurveda. Before adding them to the medicine, minerals are processed several times and made into a non-toxic absorbable form. Therefore, almost all Ayurvedic medicines do not produce any injurious effect on the body even when they are used for a prolonged period. Most of the Ayurvedic medicines work simultaneously as tonics. This is a unique feature of Ayurvedic treatment.

Ayurveda places a great deal of emphasis on the correct diet, for example if a person is suffering from a cold and cough, he should not take curds and other sour foods.

According to Ayurveda the functions of the organs of the body are interrelated. Therefore, during treatment the patient is treated as a whole even though some emphasis is given on the treatment of the affected part. According to Ayurveda if either the body or the mind of the patient is affected, the other will be affected sooner or later. Therefore, all the therapies used in Ayurveda simultaneously act both on the body and the mind. The psychosomatic concept of disease is given much emphasis while treating chronic cases. There is no contraindication to the use of allopathic drugs while the patient is under Ayurvedic treatment. For instance, if a patient has an ulcer or abscess, along with triple-sulpha tablets given by mouth, the ulcer can be washed with water boiled with neem leaves.

For complete examination of the patient certain detailed techniques such as urine examination and pulse examination are necessary. These require specialized knowledge and thorough study by the practitioners of Ayurvedic medicine. The Ayurvedic medicines provided for the use of the Health Workers are of a general nature and can be given without any specialized examination. In case of acute or serious illness, the local Ayurvedic physician may be consulted.

## 4.2 LIST OF AYURVEDIC MEDICINES TO BE CARRIED BY THE HEALTH WORKERS (MALE AND FEMALE)

A. *Asava Eye Drops and Taila*

1. Mrigamadasava
2. Netra bindu
3. Nirgundi taila

B. *Churnas and Anjana*

1. Dasahanga lepa
2. Isafagul Chilka
3. Jatiphaladi churna
4. Krishanjana
5. Pravala pishti
6. Triphala churna



C. *Malham*

1. Gandhaka malham
2. Paradadi malham
3. Sudhakara malham

D. *Tablets*

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. Arogyavardhini</li> <li>2. Chandramsu rasa</li> <li>3. Chandraprabha vati</li> <li>4. Eladi gutika</li> <li>5. Gandhakamishrana</li> <li>6. Godantimishrana</li> <li>7. Gorochnadi vati</li> <li>8. Kamadudhamishrana</li> <li>9. Karpura rasa</li> <li>10. Kasturibhairava rasa</li> <li>11. Kasturyadi vati</li> <li>12. Khadiradi vati</li> <li>13. Kutaja parpati</li> <li>14. Lakshadi guggulu</li> <li>15. Lasunadi vati</li> <li>16. Maha shanka vati</li> </ol> | <ol style="list-style-type: none"> <li>17. Mahayogaraja guggulu</li> <li>18. Nagarjunabhra</li> <li>19. Naradiya laxmivilasa</li> <li>20. Navayasa lauha</li> <li>21. Prabhakaramishrana</li> <li>22. Punarnavamandura</li> <li>23. Saptamrita lauha</li> <li>24. Saptavimsatika guggulu</li> <li>25. Sarivadi vati</li> <li>26. Shringarabhra rasa</li> <li>27. Simhanada guggulu</li> <li>28. Shulavajrini</li> <li>29. Sutashekhamishrana</li> <li>30. Tribhuvanamishrana</li> <li>31. Vangeshwara vati</li> </ol> |
|---|---|

## 4.3 GUIDE FOR THE USE AND ADMINISTRATION OF AYURVEDIC MEDICINES TO ADULTS (15 YEARS AND OVER)

Sr. No.	Condition	Name of medicine	Dose	Duration	Remarks
<b>1. CONDITIONS AFFECTING THE SKIN</b>					
1.1	ITCHING :	1. Gandhakamalham			To be applied externally. The affected part should be washed with water boiled with neem leaves before this application.
		2. Gandhakamishrana	1 tablet	twice daily	—
1.2	SKIN RASHES :	1. Gandhaka malham			To be applied externally. The affected part should be washed with water boiled with neem leaves before this application.
		2. Gandhakamishrana	1 tablet	twice daily	—

<i>Sr. No.</i>	<i>Condition</i>	<i>Name of medicine</i>	<i>Dose</i>	<i>Duration</i>	<i>Remarks</i>
1.3	PATCHES ON THE SKIN :	1. Paradadi malham			To be applied externally. The affected part should be washed with water boiled with neem leaves before this application.
		2. Arogyavardhini	2 tablets	thrice daily with hot water	
1.4	SKIN SWELLINGS : (Boil, Abscess, etc.)	1. Sudhakara malham			To be applied externally. Fomentation of the part with hot water boiled with neem leaves.
		2. Saptavimsatika guggulu	1 tablet	thrice daily with hot water	—
1.5	ULCERS :	1. Paradadi malham			To be applied externally. Advised to wash with triphala churna mixed with hot water.
1.6	ABRASIONS AND WOUNDS :	—do—			—do—
1.7	BURNS AND SCALDS :	1. Sudhakara malham			To be applied externally. Advised to wash with triphala churna mixed with hot water.
1.8	SCORPION STING :	1. Dasahanga lepa			For external application in the form of a paste by mixing with warm oil.
<b>2. CONDITIONS AFFECTING THE MUSCLES AND JOINTS</b>					
2.1	PAIN IN JOINTS :	1. Mahayogaraja guggulu	2 tablets	thrice daily with warm water	Light fomentation with hot water mixed with salt to be applied to the joints.

Sr. No.	Condition	Name of medicine	Dose	Duration	Remarks
2.2	SWELLING OF JOINTS :	—do—	—do—	—do—	—do—
2.3	BACKACHE :	1. Simhanada guggulu	1 tablet	twice daily	Fomentation with hot water to be applied to the back.
2.4	SPRAINS AND DISLOCATIONS :	1. Lakshadi guggulu	2 tablets	thrice daily	Refer to Primary Health Centre.
2.5	FRACTURES :	—do—	—do—	—do—	—do—

### 3. CONDITIONS AFFECTING THE RESPIRATORY SYSTEM

3.1	SORE THROAT :	1. Shringarabhara rasa	2 tablets	thrice daily with honey	Gargle with salt water or with triphala churna mixed with hot water.
3.2	COUGH :	1. Naradiya laxmivilasa	2 tablets	thrice daily with honey	To be kept in the mouth and sucked.
		2. Khadiradi vati	1 tablet	six times per day	
3.3	PAIN IN CHEST :	1. Prabhakara-mishrana	2 tablets	thrice daily with water	Fomentation with vasapatra to be applied to the chest.
		2. Nagarjunabhra	—do—	—do—	Fomentation with vasapatra to be applied to the chest.
		3. Shulavajrini	—do—	thrice daily with warm water	
3.4	ELECTRIC SHOCK :	1. Mrigamadasava	1 tea-spoonful	at intervals of one hour for 6 doses	This treatment is carried out only in mild cases.
		2. Kasturibhairava rasa	1 tablet mixed with honey or water	at intervals of one hour for 6 doses	

### 4. CONDITIONS AFFECTING THE CIRCULATORY SYSTEM

4.1	SHOCK :	1. Mrigamadasava	1 tea-spoonful	at intervals of one hour for 6 doses
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<i>Sr. No.</i>	<i>Condition</i>	<i>Name of medicine</i>	<i>Dose</i>	<i>Duration</i>	<i>Remarks</i>
		2. Kasturibhairava rasa	1 tablet mixed with honey or water	at intervals of one hour for 6 doses	
4.2	HAEMORRHAGE :	1. Kamadudha-mishrana	2 tablets	thrice daily with water	
		2. Pravala pishti	1 tablet	thrice daily with honey	
4.3	SWOLLEN LEGS :	1. Punarnavamandura	2 tablets	thrice daily with warm water	Light fomentation with salt water to be applied.
4.4	ANAEMIA :	1. Navayasa lauha	2 tablets	thrice daily with warm water	
5. CONDITIONS AFFECTING THE DIGESTIVE SYSTEM					
5.1	DIARRHOEA :	1. Kutaja parpati	2 tablets	thrice daily with water	Milk, butter, oil, fried foods are prohibited. The patient should be given curd, rice, and buttermilk.
		2. Jatiphaladi churna	1 tea-spoonful	thrice daily with buttermilk	
		3. Karpura rasa	1 tablet	twice daily with water	
5.2	VOMITING :	1. Sutashekhara-mishrana	1 tablet	at intervals of one hour with water	The patient should be given a little quantity of diluted nimbu juice or pineapple juice at intervals of 15 minutes.
		2. Eladi gutika	—do—	—do—	
5.3	CONSTIPATION :	1. Triphala churna	1 tea-spoonful	at bed time with warm water	The patient should drink plenty of warm water.
		2. Isafagul chilka	—do—	—do—	

Sr. No.	Condition	Name of medicine	Dose	Duration	Remarks
5.4	ABDOMINAL PAIN :	1. Lasunadi vati	2 tablets	four times daily with warm water	Two teaspoons ginger juice or one teaspoon garlic juice is also to be given.
		2. Maha shanka vati	—do—	—do—	
6. CONDITIONS AFFECTING THE NERVOUS SYSTEM					
6.1	HEADACHE :	1. Godantimishrana	1 tea-spoon	thrice daily with warm water	
6.2	CONCUSSION OF THE BRAIN :	1. Kasturyadi vati	2 tablets	thrice daily with honey	Refer to Primary Health Centre.
7. CONDITIONS AFFECTING THE EYE					
7.1	SORE EYES :	1. Netra bindu			To be dropped in the eye thrice daily.
7.2	DISTURBANCES OF VISION :	1. Saptamrita lauha	2 tablets	twice daily with milk	Two teaspoons triphala churna with milk is to be given at bed time.
7.3	DRY EYES :	1. Krishnanjana			For use as eye drops.
7.4	YELLOW EYES :	1. Arogyavardhini	2 tablets	thrice daily with warm water	Sugar cane juice is to be given twice daily after meals.
7.5	EYE INJURY :	1. Netra bindu			To be dropped in the eye thrice daily Eye should not be exposed to light, dust and smoke.
7.6	STYE :	—do—			—do—

<i>Sr. No.</i>	<i>Condition</i>	<i>Name of medicine</i>	<i>Dose</i>	<i>Duration</i>	<i>Remarks</i>
<b>8. CONDITIONS AFFECTING THE EAR</b>					
8.1	EARACHE :	1. Nirgundi taila		twice daily	For ear drops. No head bath to be taken.
8.2	EAR DISCHARGE :	1. Sarivadi vati	2 tablets	twice daily with water	No head bath to be taken.
<b>9. CONDITIONS AFFECTING THE REPRODUCTIVE SYSTEM</b>					
9.1	URETHRAL DISCHARGE :	1. Vangeshwara vati	2 tablets	thrice daily with milk	
		2. Chandraprabha vati	—do—	—do—	
9.2	SORE ON THE GENITALS :	1. Paradadi malham			For application over the sore. The affected part should be washed with water boiled with neem leaves before the application.
9.3	VAGINAL BLEEDING :	1. Chandramsu rasa	2 tablets	thrice daily with water	
		2. Kamadudhamishrana	—do—	—do—	
10.	FEVERS	1. Tribhuvana-mishrana	1 tablet	four times daily with honey	
		2. Naradiya laxmivilasa	1 tablet	thrice daily with honey	
		3. Gorochnadi vati	1 tablet	four times daily with honey.	

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# AYURVEDA & SIDDHA



**CENTRAL COUNCIL FOR RESEARCH IN AYURVEDA & SIDDHA**  
**DEPARTMENT OF INDIAN SYSTEM OF MEDICINE & HOMOEOPATHY**  
**MINISTRY OF HEALTH & FAMILY WELFARE, (GOVT. OF INDIA)**  
**NEW DELHI**

## AYURVEDA & SIDDHA

### Ayurveda

- Ayurveda is not only a system of medicine but also represents a way of healthy living. Ayurveda is formed by the combination of two words viz., 'Ayus' meaning life and 'Veda' meaning knowledge of science. In effect, it means the "Science of Life".
- Ayurveda is a branch of the Vedas. The Rigveda and the Atharveda are replete with information on various aspects of medical science.
- The universe, according to ancient Indian thinking, is composed of five basic elements, the *Panca Mahabhootas*, namely : *Prithvi* (earth), *Apya* (water), *Teja* (fire), *Vayu* (air) and *Aka* (ether). As the human body is similarly constituted, there is a fundamental harmony between universe and man, a healthy balance between the microcosm and the macrocosm.
- Ayurveda believes in the theory of *Tridosha* : *Vata*, *Pitta* and *Kapha*. *Vata* is a combination of two elements of the universe, namely, air and ether, *Pitta* an amalgam of fire and earth and *Kapha* the combination of ether and water. According to this theory, the *Tridoshas* remain in a balanced state in the human body and when this balance is disturbed it results in a disease.
- Ayurvedic practitioners take into consideration the body constitution of a patient before prescribing any medicine because the medicine which suits a *Vatya* constitution will not help a patient having *Shleshmic* constitution.
- True medicine, according to Ayurveda, is one which cures the disease without causing any side effect. It is in this aspect that Ayurveda enjoys an advantage over the modern system of medicine.
- Health, according to Ayurveda, is the natural state of all the three aspects of human being i.e. body, mind and the soul (*Indriyas*, *Manas* and *Atma*). When the natural state comes in contact with unhappiness (*Dukhasamayoga*) diseases result.
- A regulated diet is prescribed alongwith the medicine. The regimen of diet is as important as the remedies since the former helps to restore the balance as much as the latter.
- Ayurveda has eight distinct - branches (1) general medicine, (2) surgery, (3) ear, nose, throat, eye and mouth diseases, (4)

psychiatry, (5) midwifery and pediatrics, (6) toxicology, (7) rejuvenation and tonics and (8) aphrodisiacs. It is because of these eight branches that Ayurveda is known as the *Astanga - ayurveda*.

- Practitioners of Ayurveda are keen observers. They also study the state of the body fluids, blood, flesh, fat, bone marrow, semen and vital essence or *Ojas* (which incidentally, is known as the vital force in the naturopathic system of medicine).
- Ayurveda pays attention to the state of the digestion. The condition of the gastric juices tells the physician about the state of the patient. Attention is also paid to the condition of various channels (*Srotas*) because *Srotarodha* (blockade of the channels) gives rise to disease.
- It is only when a detailed diagnosis has been made that the Ayurvedic practitioner ventures to start the treatment. And when the diagnosis is correct, the remedy would invariably be effective.

### Siddha

- Siddha medicine, which dates back to around 2000 B.C., originated in Southern India. The word Siddha is derived from "Siddha" meaning "an object to be attained", "perfection" or "heavenly bliss".
- According to Siddha system, the human body is composed of 96 *Tatwas*, 72000 blood vessels and 1300 nerves. Besides these there are 10 *Nadi* (main arteries), 10 *Vayu* (vital *pranas*) and 14 *Vegangal* (natural functions). All of them play important roles in different functions of the body.
- The Siddha medicine also recognises the role of three humours, called *Mukkuthram* (*Vatham*, *Pittam* and *Kapam*). These humours remain in a balanced state in normal healthy person and disturbance in their equilibrium leads to ill health.
- The diagnosis is done by the Siddha physician on the basis of *Mukkuthram* and *Ennavagal Theru* (eight entities) i.e. *Nadi* (pulse), *Na* (tongue), *Nirma* (colour), *Moozhi* (voice), *Kan* (eyes), *Sparsham* (touch), *Malam* (faeces) and *Muthiram* (urine).
- The treatment is mainly directed towards restoration of equilibrium of the three humours (*Vatham*, *Pittam* and *Kapam*) and for the purpose one or more of the following cleansing procedures are adopted.



(a) *Vanthi* (vomiting), (b) *Bedhi* (purgation), (c) *Peccu* (enema) and (d) *Nasyam* (nasal drops). After above procedures, the patient becomes suitable for receiving drugs for the treatment.

- For *Vatharogagal* (neuro-muscular disorders) a specialized treatment called *Tokkanam* is applied which is similar to *Pancakarma* therapy of Ayurveda. In this treatment, Siddha physician makes use of 12 types of medicated oils and five methods of application.
- Siddha texts like 'Varma Kannadi' and 'Varma Suthiram' have described 108 vital points which are located on vital junctions of arteries and veins, nerves, joints etc. and are called *Varmanilaigal*. For the purpose of treatment, Siddha physicians give pressure by specialized technique on these points to cure ailments.

#### Activities and Achievements of CCRAS

- The Central Council for Research in Ayurveda and Siddha is an apex body for the formation, coordination, development and promotion of research on scientific lines in Ayurveda and Siddha.
- Research activities of the Council include Clinical and Fundamental Research, Drug Research, Literary Research, Family Welfare Research and Child Survival and Surveillance of Mother programme.
- The Council is also financing a number of research units located in various institutions of Ayurveda, Siddha and allied sciences. The emphasis is on finding effective and low cost remedies for various disease.
- The research activities of the Council, for the past three decades, have resulted in the evolution of drugs/formulations like Ayush-64 for malaria, Ayush-56 for epilepsy, Ayush-82 for diabetes mellitus, 777 oil for psoriasis, *Pippalyadi yoga* as an oral contraceptive and about 18 patents on processes developed in the Council's laboratories, which are poised for commercial exploitation.
- In addition to this, other drugs like *Guggulu* for *Medoroga*, *Mandookaparni* for mental retardation, *Katuki* for liver disorders and treatment procedures like *Ksarasutra* in piles, fistula-in ano, fissure, *Amasaya Shodhan* in peptic disorders

and *Pancakarma* techniques in para/hemiplegia, have been successfully demonstrated.

- Health care research studies being carried out by the Council include service oriented Survey and Surveillance Research Programme, Community Health Care Research Programme and Tribal Health Care Research Programme.
- Under these programmes the physicians also try to educate the rural/tribal folk about the ways and means of healthy living and the therapeutic usefulness of the herbs available. About 500 villages and 155 tribal pockets consisting of a total population of more than 7.5 lakhs have been covered so far. Incidental medical aid has been extended to more than 3.0 lakh patients including patients from neighbouring villages/tribal pockets.
- Medico botanical survey mainly includes identification, collection and supply of medicinal plants besides locating the zones of the distribution of particular drugs. So far, 400 forest areas have been explored and more than one lakh twenty thousand plant specimens representing a large number of different families, genera and species have been collected. About 3000 drug samples of plant, mineral and animal origins have been collected. Information on 3,800 folklores have also been collected and a monograph covering about 2,900 folklores has been compiled.
- The Council has initiated steps for developing medicinal plants gardens/farms at Jhansi (U.P.), Mangaliawas (Rajasthan), Pune (Maharashtra), Itanagar (Arunachal Pradesh) and Ranikhet (U.P) for experimental as well as small scale cultivation of medicinal plants.
- The Pharmacognostical investigations on about 175 important Ayurvedic medicinal plant/drugs mentioned in Ayurvedic Formulary Part-I and 11 Siddha drugs have been completed so far.
- Chemical studies of 290 drugs used in the Ayurvedic and Siddha systems of medicine have been carried out. A monograph entitled "Phytochemical Investigation of Medicinal Plants used in Ayurveda" covering 205 drugs has been published.
- So far, more than 340 drugs used in Ayurveda and Siddha including single drugs, compound formulations and coded drugs have been investigated in-vivo and in-vitro experimental models

for routine pharmacological screening as well as for specific effects. A monograph entitled "Pharmacological Investigations of certain Ayurvedic and Siddha plants" covering 246 drugs has been published.

- Physico-chemical values/data for about 500 single drugs and detailed standardization values for about 50 formulations and rapid analytical values for about 675 formulations of Volume I and II of Ayurvedic Formulary of Government of India, Rural Health Scheme Kit Medicine and the medicines included in WHO medicare programme have been laid down.
- The Council is maintaining a Musk Deer Breeding Farm at Maharuri where musk deer is kept in captivity. At present there are 21 animals.
- Efforts have also been made to translate/scrutinise, edit, publish and get the old and rare literatures microfilmed, collection of references on drugs and diseases by preparing bibliographical journals.
- The clinical therapeutic trials in Siddha medicines have demonstrated efficacy of Thambirachendooram in Vali Gunman (Peptic ulcer); Keezhaneeli and Karisalai in Manjal Kamalal (Infective hepatitis); Pediga linga thuvar and Amaiduparpam in Kazhichal (Dysenteric disorders); Annabedi chendooram in Veluppunoi (Anaemia), 777 oil in Kalanjaga padai (Psoriasis); Sivanaramirtham, Akasakarudan Kishanuga Churnam, in Karappan (Skin disorders); RGXVK2/SKX etc. in Putrunoi (Cancer). Other studies such as Koiyya/Avarai in Neerazhivu (Diabetes mellitus); Panchondhisudar Thailam in Kakkai Valippu (Epilepsy); Gowri Chintamani and Linga Chenduram in Sanchi Vata Soolai (Rheumatoid arthritis) have also been conducted.
- Literary research in Siddha include publication of 10 books collection of 318 cudjan leaves and 23 old books.
- The Council has published about 50 books/monographs and proceedings. It is also publishing quarterly "Journal of Research in Ayurveda and Siddha" and "Bulletin of Ethnomedicobotanical Research" besides a half yearly "Bulletin of Indian Institute of History of Medicine." The Council is also publishing monthly/bimonthly News Letter to apprise the scientific community with the activities of the Council.

- Clinical screening and pharmacological studies of the oral contraceptive agents are being carried out under Family Welfare Research Programme. So far 12 recipes at clinical level and about 25 drugs through pharmacological studies have been attempted.
- The Council has obtained 18 patents for the process/preparations arising out of the research studies.
- Some of The Selected Clinical Disorders and Their Treatment in Ayurveda and Siddha are as under :

### Ayurveda

Diseases	Single Herbal Drugs	Simple combinations	Formulations/ Procedures	Coded Drugs/Isolates
Rheumatoid arthritis	-Yastimadhu -Bhallataka	-Sunthi-Guduci, -Sunthi-Guggulu, -Nirgundi-Guggulu	-Yogareja Guggulu -Maha Rasnadi -Kwatha and -Balukasveda	
Hyperacidity	-Satavari -Amalaki	-Satavari-Yoga	-Avipattikara-Curna, -Suta Sekhara Rasa	
Peptic ulcer	-Satavari -Amalaki	-Pippali-Haritaki -Satavari Yoga	-Suta Sekhara Rasa -Snehana-with -Mahatiktak Ghrta, -Indukanta Ghrta -Amasaya Sodhana, Varuna, Apamarga	Nimbatiktam
Bronchial asthma	-Haridra -Sirisa -Kantakari	-Swasa Kesari	-Swasa Kuthara Rasa, -Naradiya Lakshmi- vilasa Rasa Talisadi Curna	
Diabetes mellitus	-Bimbi -Bilva -Mamajaka	-Dhatri Nisa		Ayush-82 CRIA-8
Heart disease	-Karavira -Puskaramula	-Puskara-Guggulu	-	
Dysurea	-Varuna		-	
Urinary calculi	-Varuna -Kulatha -Goksuru		-Trinapanamula Kwatha -Candra Prabhavati	
Filariasis	-Sakhotaka		-Nityananda Rasa -Sundarsana Ghanavati -Punaravarista	-Ayush-64
Mental retardation	-Mandukaparni -Brahmi			

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# AYURVEDA & SIDDHA



**CENTRAL COUNCIL FOR RESEARCH IN AYURVEDA & SIDDHA**  
**DEPARTMENT OF INDIAN SYSTEM OF MEDICINE & HOMOEOPATHY**  
**MINISTRY OF HEALTH & FAMILY WELFARE, (GOVT. OF INDIA)**  
**NEW DELHI**



Vol. II

# THE DRUG ACTION NETWORK

NEWSLETTER

November 1985



## THE NEW PHARMACEUTICAL ORDER

This nation's drug policy will ensure:

- Availability of essential and life saving drugs...
- Withdrawal of hazardous and irrational drugs...
- Availability of unbiased drug information...
- Adequate quality control and drug control...
- Drug legislation reform...

November 1985



**VHAI**

Low cost Drugs and Rational Therapeutics Cell Voluntary Health Association of India-New Delhi.

## Introduction

This is a special Drug Action Network Newsletter number - in view of the National Drug Policy being round the corner and in view of several new Drug Action Networkers wanting to be updated about the activities.

Drug Action initiatives are increasing, they are autonomous, taken up by individuals and groups who feel the strong need to respond to the deteriorating drug scene.

The ever increasing and often unnecessary chemicalization of body and the environment is becoming a health hazard in itself.

The increasing drug shortages and the continued sales of irrational drugs cannot and should not be tolerated in a country with a fairly well developed drug industry.

The drug scene cannot be improved in isolation, changes in the health, economic and political scene have to take place.

A section on Pesticide has been added in the newsletter since several pharmaceutical companies are also involved in the pesticide business, and since several All India Drug Action Network (AIDAN) members are involved in pesticide action.

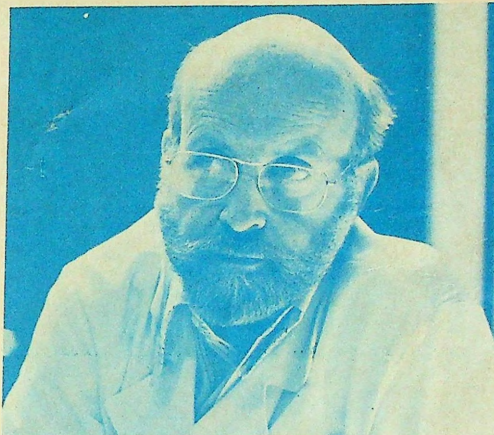
India has championed the cause of the New Economic Order, and has been a signatory to the Alma Ata Charter, which commits it to ensuring a rational drug policy for its people. VHAI AND AIDAN stand committed to making efforts towards a new Pharmaceutical Order, as part of our efforts in ensuring social justice (at least in health care).

This issue is a team effort of :

Taposh Ranjan Roy, Padam Khanna,  
Gloria David, John Bhatia and  
Dr. Mira Shiva  
Coordinator  
Low Cost Drugs & Rational  
Therapeutics;  
and  
Convener  
All India Drug Action Network  
C-14, COMMUNITY CENTRE,  
SAFDARJUNG DEVELOPMENT AREA  
NEW DELHI-110016 INDIA

## Obituary

Dr. Olle Hansson



VHAI's dear friend and courageous health campaigner, who fought for over 3 decades for a New Pharmaceutical Order and for the patients' right to unbiased information, passed away on 23.5.85 in Stockholm.

Dr. Olle Hansson after his testimony in the Tokyo District Court in 1976, where he fought on behalf of several thousand SMON\* victims for compensation, had commented on this preventable drug induced suffering - in the following words:

"From humanitarian point of view it is a tragedy.  
From the medical point of view it is a scandal.  
From the moral point of view it is shameful."

These words pertain to all needless drug induced suffering even today.

\*(subacute myelo optic neuropathy is the syndrome of blindness, crippling and pain in the limbs caused by clioquinols (i.e. mexaform like drugs) which affected over 11,000 Japanese.

ALL INDIA DRUG ACTION NETWORK MEETINGS - An Update

- (1) 30 - 31st August, 1984, Wardha, focussed on three main areas:

- AIDAN's (All India Drug Action Network) stand on the Rational Drug Policy.
- AIDAN's organizational structure.
- Identification of priority areas of work.

A. Propagation of the concept of Essential Drugs and the need to draw the graded essential drug list was seen as the top priority.

B. Voluntary boycott of hazardous, irrational drugs by member institutions would be initiated side by side.

- anti-diarrheals sp. lomotil for children chloramphenicol combinations e.g. chloramphenicol+streptomycin.
- over the counter drugs (OTC) mainly haemetenics, tonics, painkillers sp. Oxyphenbutazone.
- combination of steroids including anabolic steroids.
- high dose EP drugs. (Estrogen Progesteron combination) would be given special attention.

Efforts to evolve alternative channels of unbiased drug and health information was seen as the 3rd priority.

Seriousness of the existing:

- shortages of drugs e.g. Anti-T.B., Anti-Leperosy & Vitamin 'A' etc. needed to be documented and highlighted.

- (2) 31st January 1985: Bangalore - The All India Drug Action Network meeting focussed on obtaining consensus on AIDAN's Rational Drug Policy statement.

-discussed the need for production of Banned&bannable drug list

- Role of AIDAN members in Bhopal issue.

For details contact: Coordinator, AIDAN, VHAI.

- (3) 18th, 19th, 20th August, 1985 - All India Drug Action Network Coordinating Committee met in VHAI (Voluntary Health Association of India), Delhi.

The agenda was to review the changes regarding:

- drug policy situation

- formalization of AIDAN's Rational Drug Policy statement
- Discussion on : NETEN (Injectable contraceptive)

Patent Act & Paris Convention

Impact of liberalization

EP Drugs

Bhopal etc.

An effort to keep all the networkers informed about the drug education material being produced by different groups would be made, to avoid duplication of efforts and to ensure support towards each others' efforts.

Organizational Structure

All India Drug Action Network (AIDAN) would continue to function, as a loose informal network of groups and individuals, concerned and active in health and drug issues.

AIDAN's Coordinating Committee would constitute of organizations deeply involved in this work for some time and these are:

- (1) Arogya Dakshata Mandal, Pune
- (2) Catholic Hospital Association of India, Delhi
- (3) Consumer Education & Research Centre, Ahmedabad
- (4) Consumer Guidance Society of India, Bombay
- (5) Drug Action Forum West Bengal, Calcutta
- (6) Delhi Science Forum, Delhi
- (7) Kerala Sastra Sahitya Parishad, Kerala
- (8) Locost, Baroda
- (9) Lok Vigyan Sangathan
- (10) Medico Friends Circle, Pune
- (11) Voluntary Health Association of India, Delhi.

Dr. Mira Shiva was asked to function as the formal Coordinator as she had been doing the defacto coordination for the past few years.

The five main demands for a Rational Drug Policy identified by AIDAN and its individual members were:

Ensuring of:

- \* availability of essential and life saving drugs (i.e. production and streamlined distribution) to the peripheral areas.
- \* withdrawal of hazardous and irrational drugs.
- \* availability of unbiased drug information to health personnel and consumers.

(This would include updating of our National Drug

Formulary which has not been done since 1977 and provision of therapeutic guidelines as in British National Formulary. Provision of Consumer Caution in regional languages - for problem drugs).

\* Adequate Quality Control and Drug Control

(so that every 5th drug in the market is not substandard as it is at present according to Government's own figures, and an improvement in the existing drug control mechanism has to be ensured.)

\* Drug legislation reforms need to prevent drug companies from misusing legalistic loopholes against the people.

# DOUBLE STANDARDS

"For the growing child who lacks appetite, for the growing child who is underweight..."  
(Worck, Sharp and Cobbe's claim for cyproheptadine (PERIACTIN) sold as an appetite stimulant in Pakistan and other developing countries.)

PERIACTIN has not been promoted as an appetite stimulant in the US since 1971 because the US Food and Drug Administration considers that there is inadequate information to support this claim.

## Indian Academy of Paediatrics Leads the Way

In Self Reliance      Congratulations to the All India Association of Paediatrics!

AIAP held its annual conference recently in Trivandrum. Like last time it managed to meet the hospitality expenses with the registration fees of the participants. It was able to maintain the academic standard and the quality of the annual convention. It has proved that annual conventions can be held without the assistance and sponsorship from the pharmaceutical industry. AIDAN and its coordinator appreciate and welcome this. Let this courageous and pioneering effort inspire and influence other professional and academic bodies.

In Expressing Concern About the National Drug Policy      Indian Academy of Paediatrics organized a workshop on "Protection of the Child Consumer" at Gorakhpur. 15th - 17th September.

Discussions on Rational Drug use and Rational Drug Policy formed important aspect of the meeting.

Dr. Andrew Herxheimer of Health Action International (HAI), Dr. Rane of Arogya Dakshata Mandal, Dr. Mira Shiva of Voluntary Health Association of India (VHAI) contributed.

Dr. Raj Anand of ACASH and Dr. Pawan Surekha of C.G.S.I. and both of them also of IAP helped in organizing.

Dr. Mathur coordinated the workshop. For more information contact :

Dr. G.P. Mathur,  
Prof. & Head of the Dept. of Pediatrics  
B R D Medical College, Gorakhpur-273013.

NATIONAL MEETING ON DIARRHEAL DISEASES CONTROL PROGRAMME  
ON 17-18 DECEMBER 1984, WHO, NEW DELHI

A two day national meeting was held at the Health Ministry to obtain the views of the representatives of various organisations and to draw up an action plan.

VHAI STRONGLY RECOMMENDED THE FOLLOWING

screening of the anti-diarrheals in the market.

- withdrawal of irrational anti-diarrheals
- consumer caution and consumer information in regional languages.
- easy availability of low cost ORS packets to complement the home made ORS.
- inclusion of need based health education in the school curriculum eg. home management of diarrhoea.
- involvement of other mass organisations eg. peoples science movements, environment action groups, non-formal education etc.
- ensuring water supply.
- curtailment of development and agricultural policies that interfere with the availability of water, or lead to the contamination and pollution of water.

#### Some Meetings of Importance

##### NATIONAL INSTITUTE OF SCIENCE TECHNOLOGY AND DEVELOPMENT SCIENCE (NISTADS)

NISTADS held a two day workshop on "Research and development in the production of essential drugs" at Gurgaon on 29-30th October, 84. The workshop was inaugurated by Mr. Vasant Sathe, Minister for Chemicals and Fertilizers. Dr. Gathoskar, Drug Controller of India, Mr. Das Gupta, Deputy Drug Controller, representatives of various drug companies, Planning Commission, BICP and CSIR were present.

Dr. D. Banerjee-JNU, Dr. Narendra Mehrotra-NISTADS, Mr. Srinivasan-LOCOST, Dr. Mira Shiva-VHAI were in different panels, namely Research and Development on the concept of essential drugs, Research and Development on the production and availability of essential drugs.

For a detailed report contact: Mr. Narendra Mehrotra,  
NISTADS,  
Hillside Road,  
New Delhi-110 012.

MEETING OF NGOS WITH THE HEALTH MINISTRY  
AT VIGYAN BHAWAN, NEW DELHI  
25TH FEBRUARY, 1985.

#### A SPIRIT OF PARTNERSHIP WAS REAFFIRMED

Over 40 Non-Governmental organisations from all over India especially those involved in health and development programmes participated in this one day meeting.

Mrs. Sarla Grewal, Secretary to the Health Ministry in her introductory words expressed the need to involve the non-health sector in the national health activities. She stressed the need for a consultative body to look into the problems of NGO's.

"We are partakers in the health work". We should work hand in hand. We shall together think, discuss, plan and evolve a new way of working.

Dr. Mutalik from WHO stated that governments have come to a conclusion all over the world that the helping hand of the NGO's is not merely a necessity but an indispensable one. VHAI was invited to this to present its view. Many of the participants shared their views, problems, needs and suggestions. Some of them are given below:-

- (1) Involving NGO's in areas of a) health education b) Monitoring and evaluation of health activities c) Research and pilot studies d) Self help promotion.
- (2) Making available Vaccines free of charge and minimal service charges be allowed.
- (3) Coordination between health, labour and social welfare ministries.
- (4) Setting up of loans and grants to NGO's.
- (5) Production of essential drugs and making them easily available all over the country.
- (6) Introducing health insurance scheme.
- (7) Integrating health education with agriculture and adult education.
- (8) Updating the family folders with health information.
- (9) Selection of community health workers in consultation with local NGO's.
- (10) Giving credibility and respectability to the NGO's.

#### NGO - Government collaboration

The Executive Director of VHAI, Dr. James Tong, was invited to be part of the working group on "Scope & Role of Non-Govt. organizations in implementation of national strategies for achievement of the objective of Health for all by 2000 AD" as a drafting Committee Member, he represented VHAI in preparing the NGO & Govt. collaboration report for the World Health Assembly 1985.



## Meetings With Policy Makers

### Meeting with Mr. Veerendra Patil, Minister for Chemicals on 21.9.1985.

The Coordinator of All India Drug Action Network (AIDAN) met Mr. Veerendra Patil, Minister for Chemicals and Fertilizers on 21st September, 1985. The minister stated very clearly that his Ministry was looking at the drug pricing and production only. In the New Drug Policy, and all questions raised by us were pertaining to Health Ministry.

The coordination role of Chemicals Ministry in ensuring a rational, comprehensive people oriented drug policy was pointed out. Need for a joint meeting between the Health Ministry, Chemicals Ministry and the Health & Consumer Groups involved with the drug issues was recognised by the Minister. For details, contact the Coordinator (VHAI).

### Meeting with Mr. Jaichandra Singh, the new Minister for Chemicals on 4.11.1985.

A meeting with Dr. Jaichandra Singh, Chemicals Minister and Dr. Mira Shiva alongwith Mrs. Purabi Pandey, Head of the Government Liaison Section in Voluntary Health Association of India was held on 4.11.1985.

Our main concerns about the drug policy were shared and the figures of decreasing Vit. 'A' production provided. Mr. Jaichandra Singh stated that his Ministry would welcome comments and views regarding the new drug policy. What we found shocking was the failure of the Health Ministry to submit any document with regard to the New Drug Policy from the health point of view. Whether or not the Health Ministry was asked to do so is not known. Non-governmental organisations have felt the responsibility of attempting to ensure a Rational Drug Policy on their own. The Health Ministry cannot be absolved of its responsibility, and the formulation of the National Drug Policy must consider the views of all those involved with the drug policy issues like Academic Bodies Non-governmental Organisations, World Health Organization etc. etc.

## Food first, never anabolic steroids

Some are born ill, some acquire illness and some have illness thrust upon them. In the last group are some undernourished children of the Third World who have suffered the side-effects of anabolic steroids. Promoted as an answer for malnutrition and underweight in children, these male hormone drugs produce grotesque side-effects like irreversible sex changes in girls and atrophy of the testicles in boys.

## Network News

### Arogya Dakshata Mandal, Pune

A.D.M. has been very active in keeping the issue of Rational Drug Policy alive in Maharashtra.

Pune Journal of Continuing Medical Education has been covering several important health and drug issues.

Dr. Patwardhan in his internal communication to All India Drug Action Network (AIDAN) members had informed us of some pertinent questions raised by him during his meeting with Dr. Timmer who on behalf of Hoechst was on a tour to convince the health personnel here of the alleged safety of analgin.

Dr. B.C. Mehta of Bombay has recently reported deaths due to Baralgin which little known to several doctors contains analgin.

For details contact: Dr. V.V. Rane  
Arogya Dakshata Mandal  
2115 Sadashiv Peth  
Pune.

### Catholic Hospital Association of India, Delhi

had for its annual convention last year the theme "Towards a people Oriented Drug Policy". This was followed up at this year's convention with a 1½ day workshop on the same theme in Lucknow. CHAI's monthly medical service last year dealt with drugs in its Oct-Nov'84 Special Convention issue and this year a special issue on 'A People on Drug Policy' has been brought out in Oct-Nov'85 issue.

Rationalization in selection and prescription of drugs is already beginning in several health institutes linked with CHAI. We look forward to their production of a book on home remedies for trivial health problems.

Contact : Fr. John Vattamattom  
CHAI  
1, Ashok Road,  
CBCI Centre,  
NEW DELHI - 110 001.

### Consumer Guidance Society of India, (C.G.S.I) Bombay.

C.G.S.I. studied the Bombay market for continued availability of banned drugs as their contribution to AIDAN.

C.G.S.I. has brought out two educational pamphlets on 'diarrhoea care' and breast feeding.

C.G.S.I.  
Hutment J,  
Mahapalika Marg,  
BOMBAY - 400 001.

\* Consumer Education Research Centre, Ahmedabad

organized in Delhi along with two other organizations a seminar on Patents and Trade Monopolies. CERC has also just released its booklet 'INADEQUATE INFORMATION' on OTC Analgesic Drugs by Kishore Jain and Pramod Kulkarni, 1983.

For details contact: Manubhai Shah  
CERC  
3 Suleman Chambers  
4 Battery Street  
BOMBAY - 400 039.

\* Drug Action Forum, West Bengal

has been very active in Bhopal medical work. Several meetings and seminars with local groups have been organized. DAFWB's Bengali booklet 'has been translated into Hindi and Posters on the same theme i.e. "Drugs for the People or People for the Drugs" is available for Re.1/- . Dr. P.K. Sarkar's weekly contribution to Telegraph on drugs (every Saturday) is very helpful to the lay public and even health personnel.

Contact : Dr. Sujit K. Das  
FC Block, Flat No.S/3/5  
Sector III, Salt Lake  
CALCUTTA - 700 064  
WEST BENGAL.

If you are interested to subscribe to DAFWB's journal, then please send your subscription by Bank Draft or Money Order in the name of DRUG ACTION FORUM, WEST BENGAL. Please don't forget to write your name and postal address in the communication coupon (at the lower end) of the M.C. form.



Annual Subscription  
( Four issues ) : Rs. 12.00

Communication Address

Dr. P. K. Sarkar  
Journal Office  
Drug Action Forum, W.B.  
254, Block-B  
Lake Towra  
Calcutta : 700 089  
Ph: 57 48 78

Dr. Sarkar's writings in the lay press have not been appreciated by those interested in 'peoples continued ignorance'. The President of the West Bengal Drug Producers Guild has indulged in character assassination of Dr. Pijus Sarkar of Drug Action Forum W.B. (which is a coordinating committee member of AIDAN). He has been falsely accused of "taking heavy bribes from a number of Pharmaceutical Concerns outside West Bengal. This has been done in a memorandum to Chief Minister of West Bengal (Ref. No. BDPG/PR/763/85-86; dated 1.11.1985, Sub: Protection to growing drug industries in West Bengal).

Voluntary Health Association of India (VHAI) and the entire All India Drug Action Network (AIDAN) expresses anguish at such underhand efforts at trying to silence the health & drug activists - who believe in peoples right to information and work towards it.

Networkers are requested to respond appropriately to this matter and write to :

Mr. N.K. Sarkar,  
President  
West Bengal Drug Producers Guild &  
P-3, India Exchange Place  
Calcutta - 700 001.

Shri Jyoti Basu  
Hon'ble Chief Minister  
West Bengal  
Writers' Buildings  
Calcutta - 700 001.

\* \* \*

Alkaloid Research Laboratories Ex-Employees'  
Co-operative Industrial Society Limited, Calcutra.

The Ist workers Co-operative Drug factory has finalised its list of products to be manufactured according to the 'List of Essential Drugs' of WHO. It will manufacture in four sections injectables, tablets, oral liquids and capsules. The co-operative will also produce oral rehydrant salts. It has a plan to manufacture ORS tablets without glucose. Each tablet can dissolve in 200 ml of water (a glass) and sugar or molasses (gur) has to be added. This tablet will be much cheaper than the pouch of rackets available in the market. The co-operative invites suggestions/opinions in respect of rationality of such tablets.

The Co-operative hopes to start its manufacturing from January, 1986.

Contact: Amitava Guha  
Alkaloid Research Laboratories  
Ex-Employees' Co-operative  
Industrial Society Limited  
Behala Industrial Estate  
Block No. III 620,  
Diamond Harbour Road,  
Calcutta-700034.

\* Kerala Sastra Sahitya Parishad (K S S P)

KSSP organized its annual jatha last year, where some of the plays focussed on the drugs issue, role of multinationals, and Bhopal. The plays done in the style of street theatre, very powerfully communicated their message to the masses as the troupe travelled from village to village - as part of the People Science Movement.



**SCIENCE FOR SOCIAL REVOLUTION**

KSSP was also involved in raising public awareness about the Bhopal issue.

The annual Jatha this year has just started - 7th Nov - 7th Dec. 1985.

\* LOCOST (Lowcost Standard Therapeutics)

LOCOST is ensuring provision of quality, reasonably priced essential drugs under generic names.

LOCOST's services to the members included provision of drug information, prescription auditing and help in getting drugs checked for quality control.

For price list & further information contact:



**Locost**

Srinivasan  
Coordinator LOCOST  
GPO Post Box 40134  
Vadodara 390001  
GUJARAT  
INDIA

\* Lok Vigyan Sangathna, Bombay

focussed on "Over the Counter Drugs" in its 2 week Jatha last year in Maharashtra. Street plays, discussions and mobile exhibitions were organized.

For details contact :

Padma Prakash  
11 June Blossom Society  
60-A Pali Road, Bandra,  
Bombay - 400 050.

\* Medico Friends Circle, H.Q. Bangalore

has been involved in Bhopal health impact study the report of which has just been released.

The Bhopal Disaster Aftermath : an epidemiological and socio medical survey.

The Book is available from Dr. Ravi Narayana

326-V Main 1, Block  
Koramangala,  
Bangalore - 560 034.

Analytic studies of the anti-diarrhoeals and analgesics sold in the market are available at Rs.5/- each from:

Dr. Anant Phadke  
50 LIC Quarters,  
Pune (Maharashtra)

Results of the Pregnancy impact study of Bhopal gas tragedy undertaken by MFC alongwith Kishore Bharti and Eklavya will be out soon. For information on this contact:

Dr. C. Sathyamala  
C-152, DDA Flats,  
Saket,  
New Delhi - 110 017.

State VHA's

A.P. - VHA, Hyderabad - Following the A.P. Voluntary Health Association Annual Convention General Body Meeting on 'misuse of drugs' to which the Health Secretary and State Drug Controller had been invited a DAF A.P. was formed. Between 16 - 20th November '84 a five day "Rational Drug Therapy Workshop" was organized.

G.VHA, Gujarat - On 1st, 2nd Dec '84 last year organized a meeting on "Rational Drug Use".

A one month training programme on Rational Therapeutics has recently been completed.

G. VHA is extending its full support to Locost.

K. VHA, Kerala - Organized a meeting on "Rational Therapeutics, Low Cost - Cost Effective Health Care".

O.VHA, Orissa - On 2nd, 3rd October '85 organized a workshop on "Rational Drug Use" at the end of which Orissa Drug Action forum was launched. Dr. Santra, Secretary O. VHA was elected the Chairman.

WB. VHA CENTRAL DRUG PURCHASE UNIT IS NOW CALLED  
COMMUNITY DEVELOPMENT MEDICINAL UNIT, INDIA

It has been involved in trying to build alternative drug distribution channels for voluntary health institutions so as to provide quality, essential and generic drugs at reasonable price - through a bulk purchase initiative since 1984.

The price list, and their new publication on drugs in Bengali available from:

D.P. Poddar  
8 Rawdon Street  
Calcutta - 700017  
West Bengal

\* Delhi Science Forum

Investigated the cause of leak in Bhopal, the health impact etc. and brought out one of the earliest scientific reports "Bhopal Gas Tragedy" - cost Rs.3/- . DSF has been involved in a rehabilitation study and has put together a pictorial exhibition on Bhopal.

\* VHAI (Voluntary Health Association of India)

- VHAI's main role has been monitoring the changes in the Drug Policy keeping the network informed and in dialoguing with policy makers and parliamentarians about the Rational Drug Policy.

Organizing Public Meetings

A public talk by Dr. Andrew Herxheimer, Editor Drugs & Therapeutics Bulletin, HAI Campaigner and WHO Consultant on Essential drugs, in Vishva Yuvak Kendra on 12th Sept. was organized by Voluntary Health Association of India. A press conference, exhibition of drug education material, video recording of his interview by Praful Bidwai was also arranged. The video recording was done by Sanjay Acharya and after editing will be available for networkers wanting to use it.

Building and Strengthening the Drug Action Network (DAN)

LCD & RT team helped the Orissa VHA in conducting its 1st "People Drugs Workshop" initiate the formation of Orissa Drug Forum in Puri.

Mira Shiva on behalf of VHAI contributed to the Indian Academy of Paediatrics and highlighted the issue of Vitamin 'A' shortages and iodized salt was brought out at the workshop on protecting the child consumer" in Gorakhpur, U.P. in mid August.

Helped CHAI in planning and participate in CHAI's workshop on "People Oriented Rational Drug Policy" and spoke on Rational Drug Policy and Primary Health Care.

As a part of Joint VHAI-CHAI training program on Health Care training in Jabalpur, Catriona Robertson dealt with Rational Drug use.

Dr. Mira Shiva was invited to the WHO's informal meeting on: "Preparation of drug education material for the patients" - Delhi Oct '85.

Dag Hammarskjald Foundation invited Mira Shiva for a discussion meeting on "Another Development of Pharmaceutical" in April '85 to contribute a paper on Rational Drug use. A special issue of Development Dialogue on "Another Development of Pharmaceuticals" will be shortly available from the Dag Hammarskjald:

SVEN HAMRELL  
DAG HAMMARSKJALD FOUNDATION  
DAG HAMMARSKJALD CENTRE  
OVRE SLOTTSGATAN 2, S-752  
20 UPPASALA  
SWEDEN

o Preparation of Drug Education Material

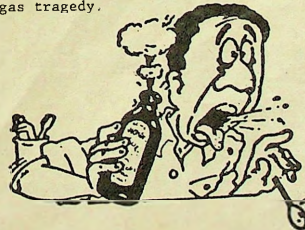
Drug Action Alerts - On Oxyphenbutazone  
- On UN consolidated list - Hatch Bill  
- New Drug Policy.

Obituary, on passing away of a Health Campaigner, a friend of the third world Dr. Olle Hansson.

Handouts prepared - Drug needs of a national priority TR  
- Hatch Bill  
- Patent Act and the Paris Convention  
- Banned and Bannable Drug List  
- VHAI's Health Action Series II

Gloria David of the LCD team helped in HAI's international EP drug marketing study, IOCU's tobacco marketing study, IOCU's international anabolic steroid.

Taposh Roy & Mira Shiva helped in the Health impact study of Bhopal gas tragedy.



## Diarrhoea Campaign

### 1) VHAI ORT PROJECT

Relevant information on oral rehydration therapy and the diarrhoea management was mass mailed to 200,000 doctors and health personnel. The purpose of this VHAI-UNICEF joint project is to assess the existing diarrhoea care practices and to promote rational diarrhoea care. For details contact:

Ms. Minaxi Saxena  
ORT PROJECT, VHAI

### 2) VOLUNTARY HEALTH ASSOCIATION OF INDIA (VHAI)

Besides several handouts on diarrhoea care, VHAI has brought out :

(a) Better Care during diarrhoea	Rs. 3.20
(b) The Taste of Tears	Rs. 6.00
(c) An education slide set on Diarrhoea Care	Rs.56.00

### 3) ANTI-DIARRHEALS - Study

A very comprehensive analysis of anti-diarrheals available in the market, was done by Dr. Sirish Madhok on behalf of MFC. For copies, write to Dr. Anant Phadke, MFC, 50 LIC Quarters, University Road, Pune-400016. Printed copies are also available from KSSP at the cost of Rs.2/-.

### 4) ORT AND THE CREDIBILITY GAP

Counterfact No.8 from the Centre for Educational Development is a very well done feature on the subject, prepared by Vimal Balasubramanian, Subscribe to counterfact. Write to:

Anjum Rajabali - CEF  
3, Suleman Chambers,  
4, Battery Street,  
Bombay - 400039.

### 5) CHILD IN NEED INSTITUTE

CINI has brought out:

- Diarrhoea management flash cards in Bengali.
- T-shirts (carrying the ORT symbol of scoop and pinch).

For details write to:

Dr. Sameer Chowdhry, CINI (Child in Need Institute)  
Via Daularpur, PO Amgachi,  
Via Joka, Dist. 24 Parganas, West Bengal.

### 6) PUNE JOURNAL OF CONTINUING MEDICAL EDUCATION

Journal - Issue No.64, November, 1983 is on ORT and several other have been on diarrhea care contact:

Dr. W.V. Rane  
Arogya Dakshata Mandal,  
2115 Sadashiv Peth  
Pune.

- 7) WB-VHA which worked very closely with CINI and the Government during the last W. Bengal Dysentery Epidemic has produced diarrhoea Care stickers.

### 8) HEALTH ACTION INTERNATIONAL

Various drug action groups who are the members of the Health Action International, decided to join the Diarrhoea Campaign.

This decision was taken at the IOCU Congress. HAI's Diarrhoea pack is almost ready and will be available soon.

Note: If your group has produced any educational material on diarrhoea care and you would like to share the information with others - just drop a line.



## E.P. Drugs

### DAGEROUS DRUGS - E.P. DRUGS

The Rational Therapeutics division of the VOLUNTARY HEALTH ASSOCIATION OF INDIA (VHAI) has urged health and consumer groups to popularise the urine pregnancy test as an alternative to the widely misused Estrogen-Progesterone (EP) hormonal pregnancy test which can result in birth defects. The alternative kit, which is safe and accurate is available from Hi-dustan Antibiotics Ltd. for Rs.62/- (10 tests). A VHAI circular has called for active propagation of this safe test along with the education of the public on the hazards of the EP pregnancy test.

VHAI's latest update titled "The unfinished EP Campaign" recalls how a countrywide campaign against the combination hormone drugs was launched in early 1982, followed by a ban order issued by the Drugs Controller in June, 1982. Subsequently Unichem, Nicholas and Organon obtained a stay order on the ban from the Bombay and Calcutta High Courts. Until the case is finally decided manufacture and sale of EP drugs will continue.

## Will This Stay Order Stay Till After 2000 A.D. ???

Several lakhs of women are estimated to undergo hormonal pregnancy tests every year despite the recommendation of the ICMR for its withdrawal and despite its recent media publicity on dangers. The VHAI, therefore has appealed to concerned individuals and groups to document evidences of the continued misuse. It has requested to inform the people about the availability of a safe alternative test. It has also urged the monitoring groups to look out for babies born in the last few years with birth defects and specifically check for use of any hormonal pregnancy test or hormones during pregnancy.

Vimal Balasubramanian,  
Secunderabad.

Alerted by the action of the Indian Groups, Health Action International's 'Women's network for Pharmaceuticals has taken up the issue of EP drugs as a worldwide campaign.

The misuse of EP drugs in Latin America and Africa has been observed. WEMOS, the Dutch drug action group has taken the responsibility to conduct an international study about the use of EP drugs.

### NOTE :

The Stay Order obtained by Organon, Unichem and Nicholas against the ban of EP drugs issued by Drug Controller of India has not been challenged by Chemicals or Health Ministry todate, inspite of various reminders by Voluntary Health Association of India (VHAI) and All India Drug Action Network (AIDAN).

The following EP drugs are still being sold:

Disecron Forte	Nicholas
EP Forte	Unichem
Gestaplon	Khandelwal
Lutestron Forte	Mac
Menstrogen	Infar (Organon)
Orasecron Forte	Nicholas
Orgualutin	Infar (Organon)
Osterone	Lyka

### HINDUSTAN ANTIBIOTICS LIMITED'S (HAL) - NANCY KIT

HAL's Nancy kit is now commercially available at the cost of Rs.65/-. The kit has ten sets. It is offered at a subsidized cost to voluntary health institutions. Nancy kit is an alternative to hormonal pregnancy test. A slide set has been produced to popularise its use among the consumers health and women's groups. This slide set shows the method of testing step by step. The slide set is available with VHAI and HAL (Hindustan Antibiotics Ltd.)

For details, contact: Mr. P.L. Savara, Market Research and Development Associates, Hindustan Antibiotics Ltd., Pimpri, Pune-411018.

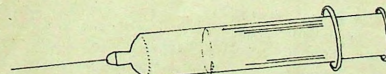
(Note: HAL is a public sector company)

VHAI & AIDAN EXPRESS THEIR SHOCK AND DISMAY AT THE LEGAL SANCTIONS PROVIDED FOR THE CONTINUED SALES OF DRUGS KNOWN TO BE HAZARDOUS AND DRUGS BASICALLY BANNED BY THE DRUG CONTROLLER OF INDIA - SPECIALLY WHEN ORGANON (CALLING ITSELF INFAR) IS NOT ALLOWED TO PRODUCE OR SELL THE PRODUCT IN ITS OWN PARENT COUNTRY - NETHERLAND.

CONTINUED SALES OF SUCH PRODUCT REFLECTS POORLY ON THE LEGAL STRUCTURE OF A COUNTRY, ITS HEALTH MINISTRY, ON INTERNATIONAL AGENCIES LIKE WHO AND, THE NATIONAL GOVTS OF PARENT COUNTRIES OF SUCH COMPANIES.

### INJECTABLE CONTRACEPTIVES

1. Serious concern has been expressed by various women's groups and AIDAN members regarding the official plans to launch injectable contraceptives. ICMR's NETEN study is at the last stage of the field trials. (Norethisterone Emanthate) German Remedies is already trying to procure orders from prospective Prescribers.
2. Over use of these hormonal preparations for women specially those having poor nutritional status, can have its own associated problems. Discontinuation 50% of women in the ICMR study has been because of associated menstrual problems specially secondary amenorrhea. According to some who are familiar with Family Planning Programme of India, if the injectable contraceptives fail, it will not be because of us but due to lack of incentives given to the Family Planning Workers for this - unlike what is done for I.U.D.'s and tubectomies.
3. Depoprovera, the long acting injectable contraceptive has not been cleared for use in US by FDA nor by the Govt. of India.
4. Dr. Jhaveri, a leading gynecologist from Bombay has filed a writ petition at the Bombay High Court so as to be allowed to import Depo Provera. If this petition is accepted, then obtaining permission to produce the injectable contraceptives could logically follow.



## CIBA GEIGY'S Maxaform Withdrawal Worldwide at Last

In October, 1982, Ciba Geigy had published a new policy on control of diarrhoeal diseases. This policy included the announcement of the worldwide gradual phasing out of all oral Clloquinol containing products over a period of three to five years. The drugs in consideration here, ENTEROVIOFORM, MEXAFORM and others, are ones which have been used for the control of diarrhoeal disease for decades. However, in connection with a series of SMON cases in Japan, these drugs became the object of discussion, controversy and public concern.

In keeping with the announced policy, SALES OF THE PRODUCTS CONCERNED have been DISCONTINUED SINCE OCTOBER '82 IN SOME 90 COUNTRIES. THE GRADUAL PHASING OUT OF THESE DRUGS HAS TAKEN PLACE WITH THE APPROVAL OF THE NATIONAL HEALTH AUTHORITIES. The World Health Organization in Geneva was regularly informed of the present state of developments. TODAY, THE METHOD OF ORAL REHYDRATION OFFERS A SIGNIFICANT ALTERNATIVE THERAPY IN THE CONTROL OF DIARRHEAL DISEASES, PARTICULARLY IN THE FIELD OF INFANT DIARRHEAL DISEASES. CIBA-GEIGY HAS DECIDED TO ACCOUNT THE PRESENT CONCEPTS AND DEVELOPMENTS IN THIS FIELD INTO A NEW POLICY, ABANDONING THE USE OF CLIOQUINOL CONTAINING AND RELATED DRUGS.

Consequently, Ciba Geigy will accelerate its original policy on controlling diarrhoeal diseases whereby the supply of the anti-diarrhoeal products will be stopped by the end of the first quarter of 1985.

EVEN THOUGH THE CONTINUED AVAILABILITY OF THE PRODUCTS HAS OCCURRED WITH THE FULL KNOWLEDGE OF THE NATIONAL HEALTH AUTHORITIES, THIS HAS BEEN GREATLY CRITICIZED BY VARIOUS CONSUMER ORGANISATIONS. WITH THE SPEEDED-UP PHASING OUT OF CLIOQUINOL-CONTAINING DRUGS, CIBA-GEIGY HOPES TO ADDRESS THE CONCERNS OF THESE CONSUMER GROUPS.  
\* (Remember the Swedish Boycott).

To help create an all-around better climate between consumers and Ciba Geigy, Dr. Von Planta met with Dr. Olle Hansson in Gothenburg, Sweden. At the meeting, BOTH PARTIES AGREED THAT INDUSTRY AND CONSUMERS HAVE MANY PARALLEL INTERESTS AND SHOULD ESTABLISH AN OPEN DIALOGUE. The discussion covered a broad spectrum of topics of mutual interest. Also discussed was Ciba-Geigy's policy concerning drugs which contain clloquinol.

The meeting between Dr. Hansson and Dr. Von Planta confirmed the importance of continued dialogue which began in Gothenburg. (Press Release by Ciba Geigy, November 26, 1984).

Source : Noriaki Mizuma, Secretary General, ICADIS.

The withdrawal of CIBA GEIGY'S Maxaform and Enterovioform is effective from 31.3.1985.

## Note:

The gap created by Ciba Geigy's withdrawal of Maxaform and Enterovioform will be filled up by over 90 brands of hydroxyquinolines available in the Indian market. Our health and drug control authorities can of course choose to follow the examples of our third world neighbours of Malaysia, Sri-Lanka, Nepal, Bangladesh and Pakistan in Banning the hydroxyquinolines. A point to note is that no drug house, specially a well known and power wielding one like Ciba Geigy would have ever withdrawn a well selling item like Maxaform or enterovioform-had enough implicating evidence not become widely available. TO GET HAZARDOUS AND IRRATIONAL DRUGS OUT OF OUR MARKETS IS OUR RESPONSIBILITY. WE OWE IT TO OUR PEOPLE, TO THE SMON VICTIMS WHO HAVE SET ASIDE THEIR COMPENSATION FOR PREVENTION OF DRUG INDUCED SUFFERING, AND INDIVIDUALS LIKE DR. OLLE HANSSON WHO HAVE FOUGHT A LONG AND LONELY BATTLE AGAINST DRUG MISUSE AND DRUG DISINFORMATION.

Such battles against power and influence yielding corporations have never been easy. They are based on the principles that INJUSTICE of any kind should not be tolerated and a CONVICTION that something needs to be done by each one of us.

An ICMR expert committee which met in 1977 had recommended that periodic evaluation of the situation regarding role of hydroxyquinolines should be done.

It also recommended that a prospective study to monitor SMON cases in India from recognized neurological centres be undertaken.

In 1980 THE DRUG CONSULTATIVE COMMITTEE HAD RECOMMENDED WITHDRAWAL OF HYDROXYQUINOLINES. BAN OF FIXED DOSE COMBINATIONS OF PHENACETIN AND HALOGENATED HYDROXYQUINOLINE WAS TO BE EFFECTIVE FROM 1.11.82. The date of the ban of fixed dose combination of amidopyrine, phenacetin and halogenated hydroxyquinolines was extended to 31.3.83 through DO No.X19013/8/81-D dated 13.8.82.

In spite of the repeated demands from consumers' organisations, those involved in drug and health action, and socially conscious health personnel regrettably the ban has not been made effective.

VHAI's Banned & bannable drug list contains the other brands of hydroxyquinolines.

## Unwanted Drugs

### IOCU LAUNCHES CAMPAIGN AGAINST UNDESIRABLE COMBINATION DRUGS.

A new consumer campaign to curb undesirable combination drug marketing was launched at IOCU's 11th World Congress.

#### ONE DRUG AT A TIME

To mark its beginning, IOCU has published 'ONE DRUG AT A TIME - a report on the limitations of fixed ratio combination medicines'. It was written by Charles Medawar, Director of the UK action research group Social Audit.

ONE DRUG AT A TIME targets more than 120 undesirable drug combination, and backs up its case against them with the latest scientific evidences. The report will give consumer groups round the world the ammunition they need to campaign against expensive drug mixtures which make no sense therapeutically.

In some countries 70% of all medicines prescribed are combinations. New mixtures are introduced all the time. 30% of all new medicines are combinations. They tend to cost much more than equivalent single-ingredient products, and can contain irrational ingredients that needlessly expose users to side-effects. Neither can their dosages be adjusted to meet individual needs.

#### The Olle Hansson Award

IOCU is confident that 'ONE DRUG AT A TIME' will inspire consumer groups to campaign vigorously against irrational drugs marketed in their countries - and to work for drug policies that will put people's health before company profits. To encourage groups to participate, IOCU is inaugurating "THE OLLE HANSSON AWARD" which will be given to the consumer group which mounts the most effective and creative campaign against undesirable combination medicines in 1985. This is named to honour Swedish paediatrician Dr. Olle Hansson's pioneering work against unethical drugs marketing. The award will include travel grant and a period of attachment at either IOCU's Hague or Penang office for a representative of the group concerned.

For details, contact: Virginia Beardshaw,  
HAI's European Coordinator,  
IOCU, Emmastraat 9,  
2595 EG The Hague,  
NETHERLAND.

## Anabolic Steroids

Drugs and Therapeutics Bulletin (UK) says:

"ANABOLIC STEROIDS HAVE A NUMBER OF SERIOUS AND DANGEROUS SIDE-EFFECTS. THESE RISKS FAR OUTWEIGHT ANY POSSIBLE SLIGHT BENEFIT THE DRUGS MAY CONFER IN STIMULATING GROWTH. They are of value in the treatment of anaemia during hemodialysis, but their use in aplastic anaemia requires further study. Clinical benefit has not been shown in patients with osteoporosis, renal failure or general debility".  
For this reason, anabolic steroids are rarely used in Holland.

According to Dr. Van der Meer, "WEMOS is a Dutch consumer action group, working amongst others on pharmaceuticals. As such, we complained about the Dutch company Organon for selling anabolic steroids in several developing countries - also India - for indications not allowed in, for instance, the Netherlands. These indications included convalescence, weakness, stimulating of growth and height. The complaint was presented to the Disciplinary Court of the Netherlands Association of Pharmaceutical Manufacturers (NEFARMA). The case was based on the Code of Pharmaceutical Marketing Practices of the International Federation of Pharmaceutical Manufacturers Associations (IFPMA), a voluntary industry code."

The NEFARMA disciplinary court condemned Organon for the unethical sales of anabolic steroids, also in India. Organon has put consumers, especially children at risk, says the court. According to the court from now on, Organon should label its drugs with the same medical information as given in its home country, because of the dangers when not properly used. (The full text of this verdict is available at : IFPMA, 67, rue de St - Jean, Geneva Switzerland).

For more information on the above, contact:

Dr. J.B.W. Van der Meer  
POSTBOX 4098  
MINAHASSASTRAAT  
020 653115 Amsterdam  
Netherland.

Worldwide protest against such double standards in the sales of anabolic steroids led to withdrawal by Organon of its product 'Fertabolin'. This in no way has decreased the prescription by doctors of other brands of anabolic steroids, the list of which is available in WHAT's (Voluntary Health Association of India) Banned, Bannable Drug List.



## On Baralgan - an analgin product

"Take the instance of Baralgan, a very well known drug. This is a fixed dose combination of two drugs - Analgin and an atropine-like substance. Analgin (a very harmful painkiller) is effective for muscle pain, joint pain, fever, etc. having no action on abdominal colicky pains. On the other hand atropine-like drugs are effective in relieving spasmodic pains like abdominal colic, gall bladder or renal colic etc. and atropine has no action on joint, muscle, bone pains. Therefore, if one takes Baralgan for colicky pains there will be relief due to the atropinic substance present in it but one will also be taking analgin unnecessarily and may have to suffer from all sorts of hazards due to it (this will be discussed later). It is rational to take atropine-like anticolicky drugs in colicky pains and simple pain killers like aspirin Paracetamol etc. to relieve joint and muscle pain, headache, etc."

Source : Dr. Piyush Sarkar  
in The Telegraph  
12.10.1985

## Health Education Messages

WB-VHA has been able to approach West Bengal Government to print health education messages in Bengali at the back of school children's exercise-books. The messages were prepared by WB-VHA.

In Kerala - the back of the ration cards will carry 10 important health education messages. The effort was made by Augustine Veliath of VHAI on behalf of UNICEF.

## Prevention of Blindness Education

For a free booklet on the prevention of blindness, write to the following address indicating the language of your choice:

Voluntary Health Association of India,  
C-14, Community Centre,  
Safdarjung Development Area,  
New Delhi - 110016.

Ask your friends and neighbours to make use of this opportunity and learn more about the care of eyes.

## Reaching out to the PHCs and ANM Schools

10 copies each of VHAI's Better Care during diarrhoea, Better Eye Care and Better Ear Care are being sent to each of the 6000 Primary health centres all over India. Each and every ANM school are receiving 100 copies each of the above three booklets. This is sponsored by UNICEF through VHAI. We hope that some day soon, we will be able to send the WHO's Essential Drugs list to all Primary Health Centres.

## Sharp Decline in Drug Production

The DGTD, which monitors the output of select drugs, has reported a 42.8 per cent decline in penicillin production during January-June, 1985 at 94.9 mmu against 165.9 mmu for the same period of 1984. Similarly, streptomycin has dropped by 12.4 per cent to 100 tonnes from 114.2, chloramphenicol to 31.9 tonnes from 34.4 tonnes and vitamin A to 29.2 mmu against 32.7 in the same period last year.

The production of antibiotics like erythromycin and chloramphenicol powder has declined to 19.11 tonnes in 1984-85 against 31.51 tonnes in 1983-84 and to 88.53 tonnes against 96.94 tonnes respectively. There have been marginal rises in items like insulin, with output in 1984-85 being placed at 2,541 mmu against 2,394 mmu. However, the overall picture is dismal and current trends could mean that the seventh plan targets have not been achieved.

## Vitamin 'A' Shortages

WHO's "POINT OF FACT" on Vit. 'A' deficiency and nutritional blindness states the role of Vit. 'A' in human growth and immunological responses, besides Vit. 'A' deficiency is known to be the "single most" frequent cause of blindness among pre-school children in developing countries.

It is not merely a question of blindness with Vit. 'A' deficiency, but the recognized association of increased morbidity and mortality due to respiratory and gastro intestinal infection. "Children with mild Vit. 'A' deficiency are at 2-3 times greater risk of infection and at 4-12 times greater risk of dying than children with normal Vit. 'A' status.

Xerophthalmia Nutritional blindness and death are associated with usual disasters and we have had our share of disasters, draughts, Bhopals, floods etc.

Children who are being weaned, and are not on breast milk, and unable to obtain their quota of Vit. 'A' from extra milk or food, are the worst sufferers.

## Vit. 'A' Deficiency

As a response to Sri Jaganath Patnaik's unstarred Loksabha question 6371, Mr. Veerendra Patil said that Vit. 'A' is a centralized item and main item is marketed as Vit. 'A' Palmitate (oily) and Vit. 'A' Acetate (dry powder).

M/s Roche and Glaxo are the major producers of Vit. 'A'; and the entire production of Vit. 'A' in the country during 1982-83 and 1983-84 was from these two companies.

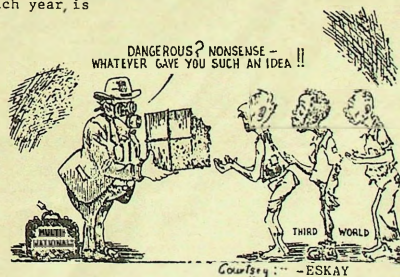
S.No.	Name of the Co.	Name of Formulation	Composition	Pack Size	Nos. of the units produced during the year ended December -		
					1982	1983	1984
1.	M/s Roche Products	Arovit Tabs	Vit 'A' 50,000 10 per tab.	8's	22,37,336	21,77,927	21,25,428
2.	-do-	Arovit Drugs	1,50,000 10 per amp.	7.5 amp	20,233	11,195	6,686
3.	-do-	Arovit Inj.	1 lakh 10 per amp.	3 amp	2,67,250	2,35,308	1,79,199
4.	-do-	Arovit Forte	3 lakh 10 per amp.	3 amp	1,93,164	1,46,686	1,42,119
5.	-do-	Rovigon Tab	Each tab. contains Vit 'A' 10,000 10 Vit 'A' 25 inj	8's	17,68,533	14,52,019	13,34,547
6.	M/s Glaxo Lab.	Prepaline Caps.	24,000 IV	100's	64,148	42,525	42,965
7.	-do-	Prepaline Inj.		1 ml.	23,790	19,364	4,014
8.	-do-	Prepaline Inj. (Forte)		1 ml.	4,34,651	3,80,806	28,956

It is not known that out of the above production figures which is the amount of Vit. 'A' that is used for POULTRY FEED and for addition in edible oil and, how much remains for the children that are getting blinded every day for want of Vit. 'A'. Shortages of Vit 'A', such a large undernourished child population and with 40,000 children becoming blind each year, is CRIMINAL.

#### Aspirin Shortage Price Shoots Up To Rs.100/-

BOMBAY: There is an acute shortage of aspirin - that uncommon pain reliever drug in the country and the black market price for the commodity has shot up to Rs.100/- per kg as compared to the controlled price of Rs.54/- . The drug is not available in enough quantity even at high price level reports 'Prandev' in 'Indian Express'.

\* Source : The Eastern Pharmacist  
Vol. XXVII No. 335 dt. Nov. 1985



## Drug Utilisation Studies

### \* DRUG UTILISATION STUDIES

Dr. Trisha Greenlaugh, a young British Doctor and an Oxfam contact, did her three months study research in India. She also participated in the AIDAN meeting at Wardha. Her major findings are:

#### o SELF PRESCRIPTION

- 64% of all patients bought medicines over the counter without prescription.
- 13% of them bought antimicrobial.
- 34% of the medicines they bought were for less than one day's use.

#### o DOCTOR'S PRESCRIPTION

- 55% of all patients who approached private general practitioners were prescribed antibiotics. Of these, 23% received two or more.
- 42% took anti-microbials for less than a day.
- 11% took anti-microbials in correct dosage. Hospitals gave correct dosage in 87% cases, Primary Health Centres in 50% cases and general practitioners in 25% cases.

#### o THE USE OF CHLORAMPHENICOL

77% of all the Oral Penicillin was given in combination with Streptomycin. 69% of all Streptomycin was given in a fixed dosage combining with penicillin or chloramphenicol.

Chloramphenicol was given by General Practitioners alongwith 10 trimoxazole 30%, Cephalosporins - 8%, Streptomycin 12% and Ampicillin-10%. Only in 40% chloramphenicol was given without another antibiotics.

In half the cases, Chloramphenicol was given with chloroquin. The most popular self medication with an antibiotic was chloramphenicol. 71% patients bought this for less than a day supply. 28% of all the sales of chloramphenicol and streptomycin combinations.

Note : To know more about this, read the chapter - Antidiarrheals in VHA1's Health Action Series book - "A TASTE OF TEARS".

#### o MANAGEMENT OF ASTHMA

Injections were given to 75% patients and 40% received Intravenous injections. Most of those patients were not in acute distress. They were either able to walk or cycle to the clinic. Salbutamol was prescribed mainly in hospitals and that also only rarely.

#### o SYSTEMIC STEROIDS

5% medications included steroids. Steroids were combined with Antihistamine or Bronchodilators. In 40% cases of self medication, steroids were used unknowingly. Steroids were very widely used by general practitioners for infections, fevers, sore throats and to relieve from apparent symptoms.

### Protest Against the U.S. Bill No. 52878

Last year the U.S. Bill No.52878 was presented to the U.S. Senate. Luckily it was not passed. If passed, this would allow export of hazardous and irrational drugs which were not marketed in U.S. Many members have participated in this protest by sending protest letters. These protest letters have been duly forwarded to the concerned U.S. authorities with a copy to Dr. Sidney Wolfe of Health Research Group.

It seems that the 'HATCH BILL' is being brought into US Senate. There is a move to get Senator Edward Kennedy to co-sponsor the BILL, which if he does, the chances of this BILL becoming law are very bright.

The BILL will allow export of pharmaceuticals not APPROVED FOR USE IN USA to countries with regulatory and drug enforcement procedures considered adequate by F.D.A.  
The problem for the Third World countries will be that re-export of these products from the above mentioned countries cannot be regulated.

Please send your views by cable or letter immediately to:

1. Sen, Edward Kennedy  
US Senate  
113 Russel Senate  
Office Buildings  
Washington DC 20510  
U.S.A.
2. Mr Joe Goffman  
Public Citizen  
Congress Watch  
215 Pennsylvania Ave  
Washington DC 20003

and if possible a copy to: With a copy to AIDAN Coordinator

## UK Will Put Bar on Brand Name Drug

A WIDE RANGE OF EXPENSIVE "BRAND NAME" DRUGS ARE NO LONGER AVAILABLE ON PRESCRIPTION WHERE THERE ARE CHEAPER ALTERNATIVES AVAILABLE AS ANNOUNCED LAST YEAR BY THE UK GOVERNMENT.

In an attempt to cut the nations £ 1400 million annual drugs bill, doctors have been told only to prescribe the cheapest drug on the National Health Service.

The move, announced by the SOCIAL SERVICES SECRETARY, Mr. Norman Fowler in the Commons, would apply to sedatives, tranquillisers, sleeping pills and common remedies now available over the chemist's counter.

He said: "THE PATIENT CAN STILL OBTAIN THESE KIND OF MEDICINES ON PRESCRIPTION FROM HIS DOCTOR UNDER THE HEALTH SERVICES, BUT THEY WILL BE THE CHEAPER GENERIC ALTERNATIVE. IF THE PATIENT STILL WISHES TO GO FOR A PARTICULAR BRAND NAME THEN HE WILL HAVE THE ALTERNATIVE OF BUYING IT OVER THE COUNTER FROM HIS LOCAL CHEMIST OR ELSE ASKING HIS DOCTOR TO PRESCRIBE IT PRIVATELY."

Mr. Fowler said that this wide range of medicines was prescribed for "minor conditions"

"In most cases these conditions will remedy themselves without medical intervention and the medicines are prescribed for relieving the symptoms. By any standards these are the important drugs. Most of them can be bought over the counter from the local chemist without the need to consult a doctor or obtain a prescription".

He told MPs that the measure could save "in the region of 100 million a year". The over-use of such drugs had expanded dramatically in recent years. - Guardian (U.K.)

According to TIME MAGAZINE, SEPTEMBER 17, 1984 A BILL WAS UNANIMOUSLY PASSED IN THE HOUSE and that would speed up approvals of generic drugs by FDA. Because of this change to generic, copies of (Perhaps 150) the leading brands will disappear. IT IS ESTIMATED THAT BY 1987 IN USA 25% OF ALL PRESCRIPTIONS WILL BE FILLED WITH GENERIC DRUGS AS AGAINST 15% IN 1983. ACCORDING TO FDA, THE TREND WOULD PRODUCE DRAMATIC SAVINGS FOR CONSUMERS. POTENTIALLY, ONE BILLION DOLLAR OVER THE NEXT TWELVE YEARS.

According to Time 'Glossy brochures, free samples, visits by drug detail men are being made to ensure 'brand loyalty. Trip to Greece, Gifts such as jewellery, trip to China and Crystal can be won by pharmacists placing orders with Searle'.

"AMERICAN HOME PRODUCTS WHICH LOSES ITS PATENT THIS YEAR

ON THREE TOP SELLING DRUG IS SPONSORING A LECTURE TOUR BY AN ASSOCIATE PROFESSOR OF PHARMACY TO DECRY GENERIC NAMED DRUGS AT PUBLIC MEETINGS AND TV APPEARANCES".

"Skepticism amongst doctors and pharmacists about quality of some generic product is being encouraged

"Dr. Peter Rheinstein, FDA's director, of standard maintains that 'THERE ARE NO MORE SAFETY PROBLEMS WITH FDA APPROVED GENERIC DRUGS THAN WITH BRAND NAME MEDICATIONS'. About 50 states have passed laws to substitute a generic equivalent for a brand name prescription unless a doctor specifically forbids it. Medic aid programmes and several insurance companies provide 100% reimbursement only for generic drugs and 80% for brand names".

A pharmacist of Walgreen which has 947 outlets in States and Puerto Rico on receiving a prescription marked 'no substitution' calls up the prescribing doctor in front of the patient to tell the physician the extra COST TO BE PAID FOR THE BRAND DRUG AS COMPARED TO GENERIC DRUG.

However extra patent protection to new Drugs and added financial incentive is given to research oriented firms.

### Note:

(We recognise that 'generic prescribing' has to go along with EFFICIENT QUALITY CONTROL and drug control systems. One in every five drugs in the Indian market is substandard according to official sources themselves. FOR INEFFICIENT QUALITY CONTROL, SOLUTION IS NOT MORE BRANDS BUT BETTER CONTROLS).

The purpose of giving the two newsbits on Generic drug policies in UK & USA, is to merely point out that, the argument that the concept of ESSENTIAL DRUG & GENERIC NAMES are relevant only for the starvling least Developed Countries is utterly FALSE and that the Pharmaceutical reforms are needed and are taking place the world over.

CONSOLIDATED LIST OF PRODUCTS WHOSE CONSUMPTION AND/OR SALE HAVE BEEN BANNED, WITHDRAWN, SEVERELY RESTRICTED OR NOT APPROVED BY GOVERNMENTS.

Consolidated list of products whose consumption and/or sale have been banned, withdrawn, severely restricted or not approved by governments. (Prepared by the United Nations Secretariat in accordance with General Assembly Resolution 37/137). This very useful document gives a list of the restricted and banned drugs - in other words drugs, chemicals and pesticides requiring great caution or withdrawal. For copy of the document, updated in 1984, write to:-

Mr. Peter Hansen, Asst. Sec. Gen.,  
DIESA, UN DC11 1820, NY New York 10017, U.S.A.

We have recently gathered that there is a move to EXCLUDE the brand name and the manufacturing data and also to exclude drugs that were recommended for being weeded out because of their therapeutic uselessness.

For countries with poor drug controls and gross lack of availability of unbiased drug information any such dilution of information related to hazardous chemicals and pharmaceuticals is unacceptable.'

We are aware these changes are being contemplated because of pressure from certain sources. Please write immediately to the following and express your concern:

1. Mr. Luis Gomes  
Asstt. Secretary General  
UNITED NATIONS  
DIESA - Programme Planning & Coordination Office  
DC 2, 18th Floor  
New York, NY 10017, U.S.A.
2. Mr Peter Hansen  
Executive Director  
UNITED NATIONS  
Centre on Transnational Corporations  
DC 2, 12th Floor  
New York, NY 10017, U.S.A.

It seems that World Health Organization and United Nation Environment Program (UNEP) will be playing a major role in compilation of the 1986 consolidated list.

It is important that the above organizations are kept informed of NGO's concern and demand for a comprehensive updated consolidated list. You could communicate your views to :

- 1) Mrs Inger Brugemann  
Director of External Coordination  
WORLD HEALTH ORGANIZATION  
20 Avenue Appia  
1211 Geneva 10, Switzerland
- 2) Mr Jan Huisman  
Director  
IRPTC/UNEP  
Palais des Nations  
1211 Geneva 10, Switzerland.

o o o

#### We Want Consumer Action in India

We hope that our Indian health authorities would ensure that consumer caution, is available in all regional languages. The absence of such caution should be treated as a criminal offence - which it is.

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#### The Magasaysay Prize

#### Dr. Zafrullah Chowdhury



For spearheading the formulation of the Bangladesh's courageous people oriented drug policy, a policy which in his own words found inspiration from India's report of the Hathi Committee.

VHAI & AIDAN congratulate Dr. Zafrullah and note with appreciation the recognition given to the formulation of the people oriented drug policy, besides the recognition given to one of the chief formulators.

#### VHAI's Past links with Dr. Zafrullah

VHAI was the first non-governmental organisation in India to give whole-hearted support to the Bangladesh drug policy in its earliest troubled days in August 1982. It had galvanized the support for the drug policy amongst other socially conscious individuals and organisations.

It organized a nation-wide tour of Dr. Zafrullah in January 1983 to meet the key drug action groups.

For more information on Dr. Zafrullah's work on Gonosasthya Kendra and Bangladesh Drug Policy - contact VHAI or Dr. Zafrullah Chowdhury

Project Coordinator  
Gonoshosthaya Kendra  
PO Nayarhat Via Dhamrai  
Dharia-13.

#### Bangladesh Drug Policy

1. In support of Bangladesh's Drug Policy - VHAI.
2. Drug Control Ordinance promulgated - VHAI.
3. The Bangladesh ban on hazardous and irrational drugs, its review and present status - VHAI.

4. National Drug policy for Bangladesh from expert committee report - Reproduced.
5. Bangladesh War - Part I and Part II - VHAI & RUSTIC.
6. Criteria for recommended withdrawal of products from Bangladesh market.
7. Bangladesh: Finding the right prescription-War On Want.
8. Gonoshosthya Kendra - Peoples' Health Centre - VHAI.
9. Essential Drugs for the poor-a myth or reality-Dr. Zafrullah.
10. Bangladesh Drug Policy (Special issue of Health for the Millions) - VHAI.
11. Pills, Policies and Profits (reactions to the Bangladesh Drug Policy) - Francis Rolf, War On Want.

#### Nobel Prize 1985 (Physicians)

International Physicians for the Prevention of Nuclear Wars, Boston, U.S.A.

For the first time Noble Prize has been awarded for social action of this kind to Physicians.

It indicates that the seriousness of the contemporary health challenges dealing with the basic issue of survival are being increasingly recognized. Never before in history has the mankind known such an epidemic of the nuclear war germs and ironically it is those that are diseased most, who possess the greatest power of destruction today.

For Physicians to have shown such deep concern and galvanized such support is indeed praise worthy.

#### Alternative Nobel Prize of 1985 - Lokayan, Delhi

Lokayan has been awarded the "Right Livelihood Prize" popularly known in Europe as the "Alternative Nobel Prize" alongwith Peter Vargas, a well known Hungarian environmentalist of the Danube Circle and Pat Mooney and Cary Fowler of the International Genetic Resources Group in Canada for their pioneering work on the destruction of seeds and transnational agro-business.

#### Past links

In 1983 VHAI - Lokayan jointly organized a workshop for field activists on 'Politics of Health' at Deenbandhu, T.N. Coordinated by Dr. Mira Shiva & David Werner, author of "Where There is No Doctor", had been invited to act as a chief resource person.

#### Resolutions of the IOCU World Congress

Some of the resolutions that are relevant to us are given below:

##### RESOLUTION - 1 - BHOPAL TRAGEDY

BHOPAL RESOLUTION WAS PASSED BY THE GENERAL ASSEMBLY OF THE 11TH IOCU WORLD CONGRESS AT ITS OPENING SESSION ON 9.12.84.

Recognising the devastating toll of human life and suffering taken by the worst chemical disaster the world has yet known, the General Assembly deplores the gas leakage tragedy in Bhopal, India, as the latest evidence of gross lack of care to ensure consumer safety by multinational corporations in Third World countries; and CALLS UPON the appropriate authorities to impose and enforce stronger environmental and safety regulations, penalties for all who transgress them; and redress and compensation for all who suffer.

##### RESOLUTION - 5 PHARMACEUTICALS

RECOGNISING the unique power of pharmaceutical products to help or harm consumer health and RECALLING earlier General Assembly resolutions on the need to put people's health before any consideration of economic gain; this General ASSEMBLY REAFFIRMS IOCU's commitment to work for rational and economic drug policies worldwide and URGES IOCU to work to ensure that all medicines have significant therapeutic value; meet real medical need; are acceptably safe and offer satisfactory value for money. Further, recognising that full and accurate information on drugs is essential for their safe and effective use, this General Assembly urges IOCU to do everything possible to ensure that the supply of drug information to prescribers, dispensers and consumers is improved in both quality and quantity.

##### RESOLUTION - 20 - INDIAN DRUG POLICY

In view of the fact that changes to the Indian National Drug policy are envisaged for the near future, this General Assembly strongly RECOMMENDS that these changes should be essentially in keeping with the concept of a Rational Drug Policy.

Further, the General Assembly RECOMMENDS that the interest of the people, and their health needs, guide the drafting of this policy - ensuring easy availability of essential drugs at reasonable cost and withdrawal of known hazardous and irrational drugs.

For further information please contact:

HAI's European Coordinator	HAI Clearinghouse
IOCU	IOCU
Emmastraat 9	P O Box 1045
2595 EG The Hague	Penang
The Netherlands.	Malaysia.

## Essential Drug programmes

### Kenya

In less than three years, essential drugs have been made available to the whole rural population (85% of Kenya's inhabitants), even those who live in the most remote areas.

Project staff have designed, developed and put into operation systems of procurement, storage, packing and distribution, training and information. All government rural health facilities (dispensaries and health centres) now receive a regular supply of a limited number of good-quality essential drugs at low prices.

The Kenya system uses drugs packed in "ration kits." In these kits, the range of drugs is in accordance with WHO's Model List of Essential Drugs; the quantities supplied match rural epidemiology (the disease pattern) and the attendance rate at each facility.

Ration-kit packaging and distribution have reduced wastage and diversion of stocks. The cost per treated patient is estimated at US\$ 0.16 (Rs.1.97 approx.) at health centres and US\$ 0.19 (Rs. 2.34 approx.) at dispensaries. The per capita cost per year for the whole rural population is estimated at US\$ 0.29 (Rs.3.57 approx.)

For further improvements, the evaluation mission has recommended strengthening the training, health education and community participation components of the project. It also proposed a cost recovery scheme which will initially divert resources to the rural health services, and later contribute to direct financing of the drug supply system.

At a later stage, the Ministry of Health plans to turn its attention to essential drug distribution, ordering and prescribing at the large district hospitals.

Source : WHO's Essential Drug Monitor  
No.1 - 1985.

### Drug Information in Urdu for Pakistan

THE PAKISTANI FEDERAL MINISTRY OF HEALTH HAS DECIDED THAT THE LEAFLETS ENCLOSED IN BOTTLES OF DRUGS AND MEDICINES SHOULD ALSO BE PRINTED IN THE NATIONAL LANGUAGE, URDU, FOR THE BENEFIT OF CONSUMERS. Complaints had been received that the majority of the Pakistani population did not know English and so could not read the important instructions accompanying their medicines.

Medical News, Pakistan, 14.8.84.

### Responding to the hard reality

Price's medical Text book latest edition is available under a new name 'Oxford Text book of medicine'. Its first two chapters are on

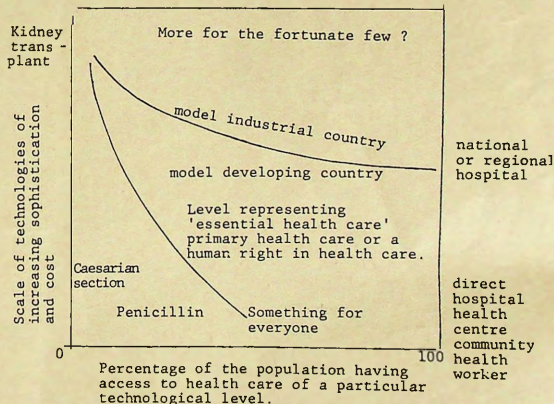
- Community Health
- Medicines in an unjust world

The latter written by Maurice King highlights the limited role of drugs in Health Care, the shooting medical care costs.

In	One week hospitalisation cost in USA.
1968	\$ 469
1978	\$ 1543
1983	\$ 2872

According to Maurice King, "medicine has often failed to reach the poor but this is the first time that it has been able to bankrupt the middle classes in significant numbers.

Key questions are asked regarding modern medical technology as to how effective they are and at what cost? and whether there should be something for everyone, or more for the fortunate few?



Choices have to be made in favour of the poor and the large majority. India's new drug policy will reflect the level of its concern for its people.

# THE GOVERNMENT'S VERSION

## Fowler's Brand Drugs Ban To Save 100 Million Pounds

By

DAVID HENCKE  
ANDREW VELTCH

Source: Guardian (U.K.) - 1-9-84

# THE DRUG INDUSTRY'S VERSION

## You don't get poor treatment from your doctor...

Of course you don't get poor treatment from your doctor. Family doctor care under the NHS is the envy of the world.

## ...don't take it from the government.

From April 1, 1985 why should you take anything less than the best?

The government is set to divide the NHS into a two-class system... one for those who can pay for the most appropriate medicines and the other for those who can't - the elderly, the poor, the unemployed.

You know who will be getting the poor treatment from this proposal. Don't you?

Fill in the form for your M.P. and send it to us. We'll do the rest.

Don't get sick  
...get angry.



The Association of the British Pharmaceutical Industry

I think the government's proposal is not as good as it could be and I would like to see the government's proposal for the NHS divided into two classes of service. I would like to see the government's proposal for the NHS divided into two classes of service. I would like to see the government's proposal for the NHS divided into two classes of service.

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 Postcode: \_\_\_\_\_  
 Telephone: \_\_\_\_\_  
 Date: \_\_\_\_\_

I would like to see the government's proposal for the NHS divided into two classes of service. I would like to see the government's proposal for the NHS divided into two classes of service. I would like to see the government's proposal for the NHS divided into two classes of service.



The Bangladesh New Drug Policy, introduced in 1982, has been "very successful" writes Dr N Islam of the Institute of Postgraduate Medicine and Research, Dacca, in a recent letter to The Lancet (May 4th, 1985).

There is no shortage of 150 essential drugs; prices have remained static or have fallen; production by national companies has risen; multinational companies are now producing more essential products and no company has suffered any loss; the price of imported raw materials has declined dramatically; and the price of finished products has also fallen, says Dr Islam.

Dr Islam provides the following list of prices of certain raw materials before and after the Ordinance (in \$/kg):

<u>Raw material</u>	<u>Price before Ordinance</u>	<u>Price after Ordinance</u>
Tetracycline HCl	75	28
Oxytetracycline HCl	80	30
Ampicillin	120	60
Amoxicillin trihydrate	140	66
Cloxacillin sodium	115	72
Doxycycline HCl	1,250	250
Trimethoprim	150	46
Glibenclamide	2,350	150
Hyoscine N-butylbromide	1,358	830

Dr Islam also gives the maximum retail prices of a number of essential drugs before and after the Ordinance (in Taka per capsule or tablet):

	<u>Price before Ordinance</u>	<u>Price after Ordinance</u>
Ampicillin 250mg	2.00	1.50
Tetracycline 250mg	1.04	0.70
Co-trimoxazole	2.30	1.15
Amoxicillin	3.50	2.35
Metronidazole 400mg	1.42	0.85

According to Dr Islam, some drugs which were banned under the new policy are still available and are prescribed, but this is uncommon, and he is "optimistic about the eventual outcome". The best example is nikhethamide (Goramin) which, says Dr Islam, used to be included in almost every prescription for "immediate cure of anything from indigestion to infarction". "This drug has now almost vanished from prescriptions... the awareness of physicians has resulted in the elimination of this drug from the market, and the same will happen with other popular yet useless drugs", according to Dr Islam.

COMPUTERISED INFORMATION SYSTEM (CIS)

CIS aims at providing a wide spectrum of services.

Creation of data bases is on the process for the following topics.

- Drug industry
- Drug policy and planning
- Research and development on drugs and pharmaceutical patents
- Indigenous system of medicine
- Folklore medicine
- Ongoing research projects in India
- Union catalogue of periodicals
- Data generated at CDRI
- Synthetic compounds
- Natural products
- Library automation
- Management information
- International data based linkage

For more details, write to:

Scientist-in-charge,  
National Information Centre  
for Drugs and Pharmaceuticals,  
Central Drug Research Institute,  
Post Box No 173,  
Lucknow - 226 001.  
India.

Dr. Andrew Herxheimer

A public lecture by Dr. Andrew Herxheimer on "DRUG POLICY-PEOPLES HEALTH" was organised by Voluntary Health Association of India on 13.9.1985. \*Dr. Herxheimer said that the Indian market was full of useless drugs, the enforcement of the drug policy was weak, the staff was not well paid and the medical scientific and human consideration in the drug policy were not properly taken care of.

The drug policy, he said, must ensure that essential drugs were available together with good and sufficient up to date information about them. The claims made by manufacturers must be strictly controlled.

He said an up to date printed national formulary which gives unbiased non commercial information was essential.

Besides Dr. Herxheimer said, all health professionals need more education on the proper use of drugs.

\*Dr. Andrew Herxheimer - is the Founder Editor of the fortnightly, Drugs and Therapeutics Bulletin, U.K.

- Consultant to World Health Organisation on various subjects
- Chairman of the Health Working Group of IOCU since 1981
- Founder Member of HEALTH ACTION INTERNATIONAL
- Joint Editor of Book "PHARMACEUTICALS & HEALTH POLICY

For details contact: LCD & RT,  
VHAI, New Delhi.

#### BENGARPET

Tablet Mission Industries

- remains the oldest initiative at cutting down costs and provision of essential drugs for details contact:

All India Mission Tablet Industry  
Bangarpet - 563114  
(Karnataka)

#### NEW DRUG POLICY

Economic & Political Weekly  
Sept 7, 1985.

#### ON THE WRONG TRACK

The new drug policy was to have seen the light of the day during the monsoon session of Parliament. But the government has apparently, yet again, decided to postpone the announcement. The policy has been on the anvil for over two years now, ever since the ministry of chemicals and fertilisers had set up the National Drug and Pharmaceuticals Development Council (NDPDC) for the purpose of reviewing the working of the drug policy of 1978 and to suggest necessary changes towards formulating a new policy. The NDPDC had set up three working groups and their respective recommendations were reviewed and collated by the steering committee last year. The final draft of the drug policy produced by the Council was mostly based on the steering committee's recommendations. This draft was however severely criticised by the parliamentary consultative committee attached to the ministry, which advised the Centre against accepting the draft. Since then there have been extensive discussions and the final version of the drug policy is reported to be at last ready.

Although the policy statement has not been released officially, the documents leading upto the final draft give ample indication of the direction of the new policy. Last fortnight a delegation of the All India Drug Action Network (AIDAN), a forum and co-ordinating body of organisations and individuals working towards the implementation of a people-oriented rational drug policy, presented a memorandum to the minister for chemicals and fertiliser, Veerendra Patil, voicing their criticism of the proposed new policy.

The AIDAN memorandum points out that the aim of a national drug policy should be to cater to the drug needs of the people and not "to decide on the selectivity of price regulations" as stated by the steering committee. The recommendations in the proposed new policy are seen as a retrograde step after the "progressive" directions set by the Hathi Committee. AIDAN has drawn attention to the fact that the constitution, methodology and the terms of reference of the NDPDC are vastly different from those adopted by the Hathi Committee. The Council has no real representation from people's and consumer groups. In consequence the drug consumers have had no say in the formulation of a policy which will affect their health and their lives.

The memorandum further demands that an essential drug list be prepared on the basis of health needs alone and not by extrapolating the current sales statistics. AIDAN's rational drug policy statement submitted to the ministry late last year, has pointed out that the demand pattern computed by the steering committee had no relation whatsoever to the existing disease patterns. This has led the committee to make such ridiculous projections as an escalating demand for oxyphenbutazone when the drug is in fact being banned in most countries and at least one manufacturer, Ciba Geigy, has withdrawn its product from the world market. On the other hand there has been a gross underestimation of requirements for such necessary drugs and rifampicin and INH for leprosy and tuberculosis which account for such large-scale morbidity. There is no reference in the committee's recommendations to the WHO's essential drugs list which has now been universally accepted.

AIDAN has urged the government to withdraw all formulations which have been consistently proven to be hazardous and irrational, or useless. These constitute a majority of the drugs available in the market and unless they are withdrawn resources will not be available for the production of life-saving and other essential drugs. The delegation urged the minister to implement immediately the government's ban order with reference to 22 categories of drugs issued in 1983.

The memorandum has also emphasised the need for continuing education of doctors especially on rational drug use to counter the promotional information disseminated by drug companies. AIDAN is of the opinion that India should not

be a party to the Paris Convention on Patent Laws since this would jeopardise the goal of self-reliance. It has expressed concern at the introduction of Met-En, an injectable contraceptive, into the family planning programme even though its safety has not been conclusively proven.

In reply, the minister is reported to have said that most of the issues raised were outside the purview of his ministry. For instance, the ministry had no authority to implement the drug ban order which was the responsibility of the health ministry. Apparently, while the areas of production and price control of drugs lie with the ministry of chemicals and fertilisers, the estimation of drug requirement, the banning of hazardous drugs, etc., are the responsibility of the health ministry. This long-standing state of confusion has no doubt been very convenient for both the ministries which have consistently shifted blame for the ills of the situation. This has also resulted in consolidating the skewed production patterns and unscrupulous irrational market practices. The minister suggested that a joint meeting of the two ministries be called to review the memorandum.

In view of the fact that the meetings with officials and ministers have not yielded results, AIDAN has decided to launch a people's movement. Its various member organisations have already been active on this front. They have published brand name lists of banned and bannable drugs and are distributing them among doctors, consumers and retailers. All drugs under two categories - anti-diarrhoeals and analgesics - have been reviewed with a view to speeding out irrational drug combinations. A prioritised drug list has been finalised and studies have been launched to assess drug requirements of certain essential drugs including vaccines and vitamins based on actual need. Member groups such as the Kerala Sastra Sahitya Parishad, the Medico Friend Circle, West Bengal Drug Action Forum and Voluntary Health Association of India have already been doing consistent work both in terms of research and critical reviews of existing therapies as well as dissemination. It remains to be seen if the government will take any note of the people-oriented and medically sound comments and suggestions of groups such as these.

## **Plea to withdraw needless drug combinations**

By Our Special Correspondent

NEW DELHI, August 30

The All India Drug Action Society, which has been active in the field of drug control, has presented a memorandum to the Chemicals and Fertilisers Minister, Mr. Verma, pointing out that unless unscientific drug combinations are withdrawn from the market, enough resources would not be avail-

able for production of life-saving and other essential drugs.

The AIDAN has formulated an outline of a rational drug policy, which was submitted to the ministry in November 1984. This emphasises the need for proper continuing education of doctors, other medical personnel and consumers, stoppage of misleading promotional literature of drug companies, the necessity to adopt the international code for ethical marketing of pharmaceuticals as detailed by the Health Action International and proper distribution of drugs to the poor. It has also pointed out that measures cannot be planned unless the government is keen on a rational drug policy and not a drug pricing policy

and unless profit making ceases to be the primary criterion for the drug industry.

The AIDAN has decided to take this issue to the people. Member organisations are publishing lists of banned and bannable hazardous drugs. Two pilot studies have been completed to assess how many drugs in different categories are irrational. Prioritised essential drug list is also being finalised and studies launched to assess drug needs based on incidence of diseases.

Economic Times  
Delhi ed/31.8.85

## **AIDAN - Rational Drug Policy Statement Delhi August 1985**

### **OBJECTIVES OF THE RATIONAL DRUG POLICY**

We feel that the Rational Drug Policy objectives should include the following:

#### **A. ASSESSING THE DRUG-NEEDS**

- 1) to identify the drug needs in consonance with the health needs of the people, particularly those required for primary health care; to prepare a graded essential and priority list of drugs for different levels of health expertise in keeping with actual health needs of the people.
- 2) to eliminate irrational, useless and hazardous drugs.

#### **B. PRODUCTION, PRICE AND QUALITY CONTROL**

- 1) To make all drugs available at low prices to the people, particularly the essential and priority drugs.
- 2) To ensure quality control of all drugs.

#### **C. DRUG DISTRIBUTION**

To establish a national corporation for the distribution of drugs; retailing of drugs through fair price shops and government's health infrastructures.

#### **D. DRUG INFORMATION AND ETHICAL MARKETING**

- 1) To ensure a drug information system for health personnel and consumers
- 2) To ensure ethical marketing.
- 3) To abolish brand names and introduce generic names for all drugs.

#### **E. SELF - RELIANCE**

- 1) To develop self reliance in drug technology.
- 2) To foster and encourage the growth of the Indian Sector and to provide a leadership role to the public sector.
- 3) To aim at quick self sufficiency in the output of drugs with a view to reducing the quantum of imports.

F. RESEARCH AND DEVELOPMENT

To promote research and development for self-reliance and in accordance with the needs of the Indian people.

G. LEGISLATION AND ADMINISTRATION

- 1) To provide comprehensive drug legislation and administrative support to deal effectively with and implement all the above aims and objectives.
- 2) To ensure smooth Centre-State relations and inter-departmental coordination for effective and relevant drug production, drug control and drug supply.

H. HUMANPOWER DEVELOPMENT

To fulfill the needs of the above Rational Drug Policy, different type of technical personnel (e.g. druggists, paramedics, etc) need to be adequately and appropriately trained in adequate numbers.

The reasons why the National Drug & Pharmaceutical Development Council (NDPDC's) recommendations should not form the basis of our new drug policy.

1. The aim of the NDPDC's Steering Committee in its own words was "to decide on the selectivity of price regulation" the entire document consists of discussions regarding the profitability and viability of the drug industry - and the bargaining by the different sectors in the industry.

2. Representation in the NDPDC

While the need to have around 50% representation from the industry was felt, representation from the voluntary health sector, consumer bodies involved in drugs issue, was conspicuous by its TOTAL ABSENCE.

3. Total Perspective

While Hathi Committee had looked into the entire drug scenario, the NDPDC's National Drug Policy recommendations are limited to "drug pricing and drug production" from the industry's point of view, the absence of peoples perspective is tragic.

4. Groundwork, study and analysis of existing drug situation

While Hathi Committee members had taken great pains to study the drug situation, get different points of view, analyze and give recommendations as a Committee, the NDPDC report seems totally garbled, since it has failed to synthesize the facts and come

to clear cut conclusions in the interest of the people.

5. No Independent Review of the Impact of DPCO 1979 has been done the NCAER (National Council of Advanced Economic Research) Report sponsored by OPPI which has been heavily quoted cannot be considered independent. The nation would like to know as to how the various drug companies are responding to the nation's drug needs? What percentage of the drugs produced by each are essential drugs? What is their production trend eg. steady decrease of Vit. 'A', Penicillin production & the action taken by the Government.

The drug policy is not in keeping with the National Health policy priorities.

The very basis of setting production demand is unacceptable. Past warped production patterns cannot be extra polated to form the basis of future demands nor can poor production growth rates.

The difference between the need of the people and the market demand based on the purchasing power has to be recognized.

Projected production figures of known controversial and hazardous drugs indicates the low priority given to rational therapeutics e.g. hydroxyquinolines, Oxyphen butazone, analgin etc.

Great concern for Export than Better Drug Distribution within India.

While great pains have been taken to provide subsidies for drug production for exports, similar efforts for drug production of essential drugs, and their distribution within India has not been made.

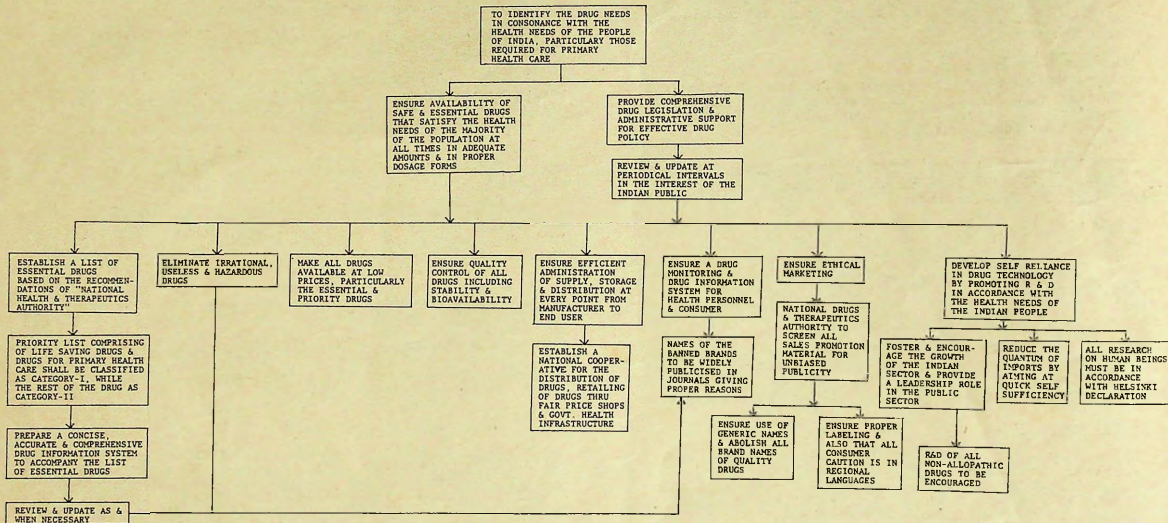
Need to plug legal bottlenecks

No recommendations have been made to present drug companies from using legalistic loop holes to sabotage the few progressive decisions taken by the Govt. have been made Govt.'s past experience with the cases in the court of gross over pricing by the drug industry, the resistance to switch over to generic names for new drugs, continued sales of drugs banned by Drug Controller, should have been a warning enough.

What is totally unacceptable are the four major omissions in the formulation of the National Drug Policy. There has been:

- (1) No effort in identifying and weeding out of

**AIMS & OBJECTIVES OF A RATIONAL DRUG POLICY**



medically accepted hazardous and irrational drugs/drug combinations.

- (ii) No effort to make available unbiased drug information to health personnel and people.
- (iii) No effort to evolve distribution schemes for drugs for the people.
- (iv) No effort to ensure ethical marketing and trade practices, & quality control.

The concerns felt by VHAI and the various groups constituting the All India Drug Action Network (AIDAN) as regards the Rational Drug Policy was submitted on 29th October '84 at the Expert Committee called by the Chemicals Ministry.

The concerns have separately been expressed to the appropriate authorities in Chemicals and Health Ministry.

We wait the formulation of a people oriented Rational Drug Policy.



#### WHO's Action Programme for Essential Drugs

- 1977 : WHO produced the technical report series 615 on 'Selection of Essential Drugs'.
- 1981 : Action Program for Essential drugs was launched.
- 1981 : WHO's Technical Report series 641 on 'Selection of Essential Drugs' was produced.
- 1983 : WHO's Technical Report series 683 was produced on
- 1985 : WHO's Technical Report an updated issue 722 on Use of Essential Drugs is the latest (4th ed.)

Since the Action Programme was launched in 1981, more than 80 countries have either drawn up essential drugs lists or started projects in support of primary health care, providing safe and reliable essential drugs and vaccines which:-

- meet real medical needs
- have significant therapeutic value
- are acceptably safe
- offer satisfactory value for money

WHO has helped Kenya with SIDA help to implement its R.D.P. by helping in the distribution of Ration Kit system.

#### \* WORLD HEALTH

July'84 issue magazine of WHO focussed on World Health Essential Drugs of the World. It deals with the concept of Essential Drugs.

At the World Health Assembly

NORDIC RESOLUTION, and after

- \* In May'84 at the World Health Assembly session, NORDIC countries proposed a resolution in favour of WHO's rational use of drugs and the essential drugs action programme. 116 countries voted for it. Japan and West Germany abstained and U.S. voted against it.
- \* At WHA 1985 - where national NGO representatives from various countries were invited for the first time, the issue of Rational Drug Policies was brought up again.
- \* In November 1985 - a very critical meeting between WHO, Drug Industry representatives and consumer and health activists will take place in Nairobi between 25 - 29th.

WHO's role and seriousness in ensuring international codes for ethical marketing practices and international controls will become clear after this meeting.

At its rational best, can WHO whose funding comes mainly from those countries, who happen to be the biggest pharmaceutical exporters dictate terms to them? Is it not the right of the third world governments to demand such codes from the UN system since it is their interest, that UN system is supposed to safeguard?

Have the efforts of the national governments in rationalizing their own country's drug policy been sincere or have they too been a party to people's exploitation?

Rational Drug policies, international codes will not be handed down to the people passively, out of any benevolence. A critical understanding of the issues involved and role of international agencies like WHO, UNCTAD, UNIDO, national governments is needed by more and more health professionals, academicians, scientists, those involves in development and organizational work and the people themselves to ensure the safeguarding of their interest.

#### A new pharmaceutical order is an imperative.

The expectation from the national governments and UN agencies like WHO is their help in this process.

The expectation from the drug industry, national or multinational is that while they look after their own interests they do not do so at the cost of the people's health and people's scarce resources.

- \* WHO'S ESSENTIAL DRUGS MONITOR has just been started to provide an information channel of what is happening regarding Rational Drug Policies and Rational Drug use.

For a copy write to:

The Editor  
Essential Drugs Monitor  
W H O  
CH-1211, Geneva 27  
Switzerland.

OR  
Voluntary Health Association  
of India  
C-14, Community Centre,  
Safdarjung Development Area  
New Delhi-110016.

The IDRC Reports, Volume 14, Number 1 - April 1985 on  
'Drugs: Essential and harmful' is available from:

International Development Research Centre  
11 Jorbagh, New Delhi - 110003.

## BHOPAL

Voluntary Health Association of India's response to the tragedy had been to help voluntary groups doing health related relief work among the gas affected victims of Bhopal. From the 16th - 21st March 1985, VHAI in collaboration with 'Nagarik Rahat Aur Punarvas Committee' (NRPC) and with the supportive help of doctors from KEM Hospital, Bombay had conducted a thorough Medical Survey of the gas affected population of Bhopal.

### Specific activities undertaken by VHAI

1. Digging up and distribution of relevant need based materials needed for health and rehabilitation of victims.
2. Creating public awareness : Screening of film and video on Bhopal -
  - a) 'World without tomorrow' a film by Tapan Bose
  - b) Video film by B.B.C. and Granada T.V.
  - c) Delhi Science Forum's Bhopal exhibits.
3. Organising meetings : A meeting was called on behalf of 'All India Drug Action Network', specifically to bring together voluntary groups doing relief work and to discuss long term health relief measures.
4. Supporting Social Action groups on health related issues.

26

5. Monitoring and disseminating information on Bhopal.
6. Supportive help to 'Jana Swasthya Kendra', Bhopal.
7. Influencing policy makers to recognise the gravity of the health situation in Bhopal and to ensure long term relief measures.



Source: IOCU Congress Currents

### PESTICIDE ACTION

Pesticide information action will be an important aspect of PEHA section's activities alongwith drug action.

- the special issue of VHAI's bi-monthly on pesticide would be brought out by January
  - alongwith drugs information, VHAI will act as a clearing house for pesticide information, specially the health related aspects
  - VHAI joins the Dirty Dozen Campaign against the misuse of the following hazardous pesticide
- CIRCLE OF POISON : PESTICIDES & PEOPLE IN A HUNGRY WORLD
- DAVID WEIR
  - M. SCHAPIRO  
(I.F.D.P. San Francisco)  
1980  
Deals with International Sales





Some other important and useful books on Drugs:

"ROCHE Versus ADAMS" - by Stanley Adams, Fontana/Collins,  
1985 (236 pages) Price : US \$ 3.60 Sea Mail  
US \$ 6.00 Air Mail

Available : Third World Network  
87 Contonment Road  
Penang, Malaysia.

CORPORATE CRIME IN THE PHARMACEUTICAL INDUSTRY by John  
Braithwaite, 1984 Price : 25

Available : Routledge & Kegan Paul  
London

"DRUGS & WORLD HEALTH" \* An International Consumer Perspective  
by Charles Medawar, 1984 Price : 2.95 \$ 4.00

Available : I.O.C.U.  
Emmarstraat 9,  
2595, EG The Hague  
Netherlands.

ESSENTIAL DRUGS FOR THE WORLD, 1984

Available : WHO  
Geneva  
Switzerland

GETTING ESSENTIAL DRUGS TO THE PEOPLE \*

Contact No.63/73

Available : VHAI

"PHARMACEUTICALS & HEALTH POLICY" \* International Perspectives  
on Provision and Control of Medicines.  
Edited : Herxheimer, Stenzl & Woodcock, 1981  
Price : 3.95

Available : I.O.C.U. Penang  
P.O. Box 1045 Malaysia

PILLS POLICIES AND PROFITS - Reactions to the Bangladesh  
Drug Policy - by Francis Rolt

Available : War on Want  
Three Castles House  
1 London Bridge Street  
London SE1 9SG

"ROCHE Versus ADAMS" by Stanley Adams Fontana/Collins 1985  
(236 Pages) Price US \$ 3.60 Sea Mail  
US \$ 6.00 Air Mail

Available: Third World Network  
87 Contonment Road  
Penang, Malaysia.

"BITTER PILLS" \* Medicines & The Third World Poor (1982)  
- by Dianna Melrose, Price : 4.95

Available : OXFAM  
274 Banbury Road  
Oxford OX 27D2  
London (UK)

THE USE OF ESSENTIAL DRUGS - Report of a WHO Export  
Committee - Technical Report Series No.685 : 1983

Available : WHO  
Action Program for Essential Drugs  
Geneva  
Switzerland

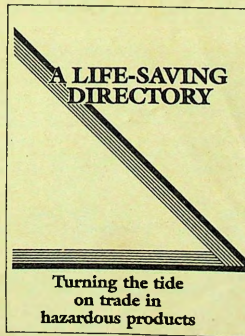
THE WRONG KIND OF MEDICINE \* by Charles Medawa, 1984

Available Social Audit  
9 Poland Street  
PO Box 111  
London NW1 8XG

Recommended Reading for Anabolic Steroids

Report of the International Study on Anabolic Steroids

by IOCU (Eva Lachovich)  
Study Coordinator  
Box 1045  
Penang  
MALAYSIA



\* A few copies are available at VHAI.

# FIVE PILLARS OF THE CONSUMER MOVEMENT

1



## CARING PEOPLE

The consumer movement is people who care about others and about themselves. It's about value for money of goods. But more importantly it's about value for people.

2



## PROTECTING THE EARTH

Consumers must be conservers, protecting and preserving the earth. We must be aware of the consequences of our actions so the earth's resources are not squandered by the few at the expense of the many.

3



## KNOWING YOUR RIGHTS

Human rights are central to the consumer movement, especially the right of people to have their basic needs met.

4



## FIGHTING FOR JUSTICE

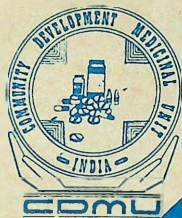
Political and economic systems often discriminate against the powerless. Consumers can help to build fair, rational and just societies.

5



## DISCOVERING YOUR POWER

Acting together ordinary people can make a difference. Consumers can use their joint power to protect their interests and to fight those forces that threaten them.



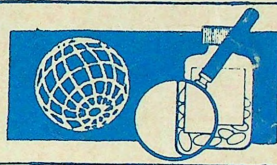
**WAR  
ON  
WANT**

**HEALTH  
FOR ALL  
by the year  
2000**



กลุ่มศึกษาปฏิกิริยา

DRUG STUDY GROUP



The  
**Rational  
Health**  
Campaign