THE AYURVEDIC HERITAGE OF KERALA

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Received: October 08, 1984

Accepted revised manuscript January 23, 1985

ABSTRACT: Ayurveda has a long history of being enriched by different types of contributions from different stages befitting their geographical, climatic and cultural situations, and based on their thinking and living patterns, especially the practical aspects. Kerala has its own great role in this preess of enrichment. It is unique and invaluable. The historical aspects the literary contributions by Kerala to the Ayurvedic system, the traditional and special treatments of Kerala etc., are discussed in this paper.

There are many families in Kerala who were specialistis in one or more types of remedies like Uzhieil (massage), Marmachikitsa (treatment for diseases of certain vital parts of the body), Balachikitsa (paediatrics), Netracikitsa (Opthalmology), Visa Cikitsa (toxicology), Bhutapasmara Pratividhi (Psychiatric treatment) and in remedis for wounds, fractures and bruises. Macropolo the famous Venitian traveller who visited Kerala during the 13th century writes that "here, in Kerala there are many good doctors and astrologers". All these people were in one way or other learned in Ayurveda. Other evidences are there to prove that a system of medicine existed in Kerala even before the advent of the Aryans. Owing to the great variations in climate and soil condition and good rainfall (nowhere less than 120 cms. Annually), Kerala had a rich and varied flora and fauna and this has definitely played a major role in the development of the medical system in Kerala.

Ottamulika and Dasapushpa

The Ottamulika (single herb treatment) prevalent among the tribes of Kerala for snake – bites, for family planning, for curing of diseases etc. form a field where more investigation has to be done. The nutritious qualities and biological value of various food were known to the people. The Ahara Pathya (restrictions and modifications in diet) by the Ayurvedists are mainly based on this knowledge. Different kinds of food for children which are easily digestible were also known. Green leafy vegetables were suffested for people suffering from anaemia. Every house wife knew a bit of folk medicine and an expert was consulted only in very serious cases. It was customary even to worship herbs in various ways on certain auspicious days. Some regular practices originally aimed at maintaining health and curing diseases at home later on became Adorning 'Dasapuspas' rituals. (ten flowers) on the head is an example. 'Dasapuspas' are: (List on the next page).

All the authors of the Ayurvedic Nighantus (Dictionaries containing Medica and Therapeutics) are unanimous that Lakshmana (7 above) cures sterility in

women. 'KATHITA PUTRADA AVASYAM LAKSMANA MUNIPUNGAVAT' (meaning, it is declared by the saints that Laksmana is Putrada – giving male baby) BHAVAPRAKASA.

Mukkuti

Similarly on the first date of Karkitaka month (4th lunar month) each member of Malayali family would have to drink a 'Mukkuti' (Pramathya in Sanskrit) prepared with Kutakappala (Kutaja – Holarrhena Antidysenterica, Wale) and 'Muttanna'

(Mustacyprus Rotundu) etc. which ahs anthelmentic. Carminative and antidysenteric actions. To prepare Mukkuti the medicinal herbs are first boiled with suitable liquids like butter-milk which is reduced by boiling to a specific quantity. The boiled herbs are then ground well into a paste and allowed to go dry divided in circular masses of definite weights and measures and spread on wooden plants, each 'circle' forming one dose of the medicine which can be preserved for a long period, if kept intact. Each dose is taken with butter milk or other suitable vehicles. 'Mukkuti' is a speciality of Kerala.

S.No.	Malayalam	Sanskrit	Botanical Name
1)	Puvamkuruntala	Sahadevi	(Vernonia Cine Ria)
2)	Muyalcevi	Sasakarni	(Emilia Sonchifolia D. C)
3)	Karuka	Durva	(Cyno Dun dactylon pers)
4)	Kannunni	Bhrngaraja	(Eclipta Alba)
5)	Nilappana	Varahi	(Curculgo orehiodes)
6)	Cerula	Adanapaki	(Aeura Lanata)
7)	Tirutali	Laksmana	(Ipomea sepiaria Koenig)
8)	Uzhinna	Sakralatha	(Cardio Sperum Helicacabrium)
9)	Mukkutti	Lajjalu	(Biophytum Sensitivum D. C)
10)	Tulasi	Tulasi	(Ocimum Basilicum)

Oil Bath

Abhyanga (Oil bath) – bath after applications of oil on the head and body was an essential itme in the daily routine of the

Malayali. The oil (coconut oil or gingelly oil) would be medicated with herbal juices and other drugs as prescribed by the

physicians according to the seasonal conditions, constitutional peculiarties of the individual etc. This oil bath is supposed to have many favourable effects on the body and mind. It prevents the degenerations of tissues and improves the texture and complexion of the skin and development of the muscles. It promotes good sleep also according to Astangahrdaya the most popular Ayurvedic text.

For removing Oil from the body while taking bath barks of 'inca' – Mal. (Acacia Intsia), Vaka-Mal. (Albizzia Magnata) etc. which are somewhat bitter and astringent in taste and disinfectants in effect, are made use of and from the head 'Tali' – (Mal.) Plants like 'Vellia' – Mal (Mussoenda frondosa) with white bracts which form a viscous fluid if squeezed well with water, and possess several medicinal properties favourable to eyes, hairs and nervous system.

Ayurvedic Literature

The literature on medicine in Kerala can be generally divided into three: (1) Commentaries of classical texts and independent works based on them. (2) The Compilations of prescriptions of medicines practical directions occassionally scribled by physicians and prevalent in the country. (3) New works incorporating modern trends in scientific knowledge.

Astanga Samgraha and Astangahrdaya by Vagbhatacarya, which are condensed forms of earlier elaborate authentic 'Samhitas' were popular in Kerala even from the early days. From the history of Ayurveda in Kerala it can be understood that Sanskrit began to flourish in Kerala between 5 – 6 centuries A. D. It is assumed that the works of Vagbhata came out between the 5th and 7th centuries. It is said that Indu and Jejjata,

the disciples of Vagbhata, settled in Kerala and had many disciples and followers. And Indu who wrote the famous 'Sasilekha' Commentary of Astanga Samgraham and Astangahrdayam, is believed to be a Keralite.

Ashtavaidyas

The servies rendered during the period of 'decadence' of Ayurveda (1560 - 1850) and in the 'revival period' by the 'Astavaidya' Brahmin families, some Izhava families and such other sects of people who studied Astangahrdayam thoroughly and practised the system of Ayurveda as a traditional vocation, should be remembered with gratitude. The 'Astavaidyas' are called so, because they were practitioners of Ayurveda having eight branches.

Veterinary Science

Kerala which stands in the fore – front in honouring elephants in temple processions has taken care to breed by selection elephants showing good signs and features. Specialist Ayurvedic Physicians in this field were not rate in Kerala. 'Matangalila' (The Elephant's play) is a book on treatment of elephants. This book with 12 Chapters contains several pieces of information regarding elephants. This is a treasure of knowledge in the field of Ayurvedic treatment of elephants (Hastyayurveda).

Vrikshayurveda (with Malayalam Commentary)

Brhat samhita of Varahamihira (4th Century A. D.) is considered the first encyclopaedia in Sanskrit. It deals with an astonishing variety of subjects of exceptional interest and value. The 55th chapter of this Book deals with Vrksayurveda. It also includes methods of plantations of various trees,

shrubs, creepers, etc. after culturing soil with various processess and treatments for preventing and curing the various ailments affecting them.

We have a book of Vrksayurveda with a Malayalam commentary by Mahopadhyaya K. Padmanabha Pillai Sasthri and with a scholarly introduction by Suranattu Kunnan The book published in 1946 by Vidvan K. Vasu Panikkar is now out of The original work is by one print. "Sarngadhara", a contemporary of Raja "Hamira" of 13th century. The book deals with various aspects of the subject like 1. Bhuminirupanam (Selection of soils), 2. Bijotpatty vidhi (Rules for sowing of seeds), Padapavivaksa, (Methods Propagation), 4. Ropanavidhanam (process of plantation), 5. Nisecanavidhi (Rules for watering of plants), 6. Posanavidhi (Rules for the nourishment of plants), Drumaraksha (Rules for the protection of trees), 8. Tarucikitsa (treatment of plants), 9. Nivasasannataru Subhasubhalaksanannal (Good and evil omens relating to residence near trees), 10. Tarumahima (Glory of trees), 11. Upavanakriya (Construction of gardens) and Vrksayurveda parisista (Botanical marvels).

Chemotherapy

There is a book called Rasavaisesika Sutra containing four Chapters and 486 Sutras. This discusses the physiological therapeutic values of the medicinal and dietic articles. and the fundamental principles of health based on Ayurvedic tenets, in so far as they expound the relations existing between the six Rasas and three 'dosas'. The book was first published in 1928 by the Trivandrum Grandhavali and again in 1976 by the Publication Division, Ayurveda College, Trivandrum). original commentator is one Narasimha (7th

century A. D.). Another work called Tantra Yukti Vicara by Vaidyanatha Nilamegha (9th Century A. D) was published in 1928 (and 1976 by the above Grandhavali and the publication Division). "Tantra Yukti" may be defined as the methodology and technique which enables one to compose and interpret scientific treatises correctly and intelligently. In other words it stands for the systematic approach to a scientific subject and this enables one to clearly elucidate the matter in hand. There is another book called RASOPANISAD (on Rasatantra – Ayurvedic chemotherapy) published by the Trivandrum Grandhavali. Vaidyamanorama contains some effective recipes, including some 'tricky treatments' for which Kerala is famous. These applications are not found in any other book. The medical folk lore available in Kerala is the basis of this book. Dhara (pouring liquid) is a special medical treatment of Kerala. A work called 'Dharakalpam' on this method of treatment is renowned. Sinduramanjari containing the refining processes of minerals like Copper, Iron, Sulphur, Mica and Mercury is an independent work of Taikkad Narayanan Musad. 'Alattur Manipravalam' believed to have been composed during the early period of Manipravalam literature (a happy and harmonious blend of Sanskrit Malayalam) is another celebrated medical 'Cikitsakramam' text. (system treatment). 'Sahasrayogam', Vaidyamanjari', Yogaratnaprakasika', 'Cikitsamanjari', 'Yogamrtam', 'Cikitsanul', 'Sannipata Cikitsa', 'Netraroga Cikitsa', Yogasaram, Vaidyamanjari etc. are books containing the collections of the 'Yogas' (Medical recipes) and methods of treatment prevalent in Kerala well-known in the ancient families of physicians in Kerala.

Kerala system

It is not surprising if 'Uzhiccil' and Marmacikitsa developed in Kerala which is the fosterhome of Kalaripayattu (a famous method of physical culture), and Kathakali, the famous dance - drama of Kerala. medicines Certain like Marmagulika, Karuttagulika and various kinds medicated oils are the product of this Marmadarpanam, a book on tradition. Marmacikitsa by Cirakkal T. Sridharan Nair, is a good contribution to this field. Kerala has a special tradition for the treatment of small pox. There are books in Kerala containing instructions for the diagnosis of the various types of the diseases and prescribing remedies for each. 'Masurimala' (small pox) is one of those texts, worthm entioning. Kerala which is full of shrubs, hills and narrowpaths in its villages, was infested by poisonous creatures including reptiles early in Fortunately, Kerala also abounds in a variety of medical herbs that are easily traceable and readily applicable. These may be the main stimulants for the development of Visacikits (treatment for poison) in Kerala. Treatment for poison also developed depending on the Ayurvedic principles of 'Tridosa' (The three irreduceable basic metabolic classifable psychosomatic constituents, or rather constituent complexes, of the living matter widely discussed in the authentic Ayurvedic treatises as late Pandit Shiv Sharma has put it) as all the other seven branches mentioned above. For cure of poison 'Mantravidya' (a method of treatment with verbal suggestions influencing the mind of the patient) was populr. But also use of medical herbs was given more importance. Visacikitsaprakarana in Astanga – Hrdaya is famous all over India. But, Narayaniyam, Uddisam. Haramekhala. Utpalam,

Kalavancanam, Laksanamrtam, (the author of this work is supposed to be one Sundarabhattacarya, teacher of Nilamekha who composed Tantrayukthi Vicara), Sarasamgraham etc. are books known to Kerala only. Narayaniyam among them contains mostly 'mantric' practices (treatment with verbal suggestion). There are many famous books based on them -'Jyotsnika' by Karattu Nambudiri and 'Prayoga Samuccayam' by Kodungallur Koccunni Tampuran being two among them. All these books are more or less based on classical Sanskrit works.

Ayurveda Nighantus (Medical Dictionaries)

Most of the so called Ayurvedic Nighantus are compliants of informations Pharmacognostic and therapeutic values of the drugs. The Dhanwantari Nighantu is generally considered to be the oldest among this group. From Dhanwantari Nighantu to Saaligrama Nighantu (19th Century) there are some more than 32 Sanskrit Nighantus mentioned in the books on the history of Ayurveda. A list of about 34 other Nighantus like Abhidhanamala (by Malli Natha) etc. which are remaining in various manuscript libraries, has also been prepared by research scholars.

Hortus Indicus Malabaricus

The Hortus Indicus Malabaricus (Garden of Malabar of India) is a book in latin on medicinal herbs of Kerala published in Amsterdam (the capital of Holland) during the 17th Century (1678 – 1703). It is one of the biggest works on the plant kingdom which runs into 12 big volumes with 794 illustrations. This work on medicinal plants of Kerala can be considered as a contribution of Kerala (even though this is written in latin), in view of the contents and

the persons participated in the works. It laid the foundation for the modern trend in preparing several books in English and various Indian languages on medicinal plants available in various parts of India mostly from the decade of this century.

Ayurvediya Ausadha Nighantu by Tayyil Kumaran Vaidyan is one of the most useful works published in Kerala in the early part of this century (1906). It contains Sanskrit and Malayalam synonyms the therapeutic values and the parts used of almost all the medicinal herbs commonly used in Kerala. The author has worked with extreme devotion for a period of 10 years from 1891 to 1901 for the preparation of the book which received a hearty welcome from eminent physicians and scholars in Kerala. The first part of second edition of the work which runs into about 1200 pages, has been published by the publication division, Ayurveday Government College, Trivandrum, 1979 with an exhaustive Bhumika (introduction) on the subject by the editor, Prof. N. E. Muttuswami. The second part of the work namely Gunadipika is under preparation and expected to come out shortly with illustrations from the same Division. Ayurveda Ausadhi Nighantu by Tamarakulam Koccu Sankaran Vaidyan (published in 1950 by S. T. Reddiar and Sons): Osadhi Nighantu by M. K. Govinda Pillai, and Ausadhi Maha Nighantu by Pandit K. K. Panikkar (published by the Vidyarambham Press, Alleppey) are the other Nighantus of Kerala available now.

The series of authoritative books namely 'Pharmacognosy of Ayurvedic drugs – Kerala' being published by the Department of pharmacognosy of the Kerala University which gives information from authentic Sanskrit books (NIGHANTUS) on the medical herbs and modern botanical descriptions and synonyms in various

languages of each herb easily available in Kerala, are also to be mentioned in this context.

The Panchakarma Therapy:

Ayurvedic treatment is broadly divided into categories (1) Samana Cikitsa consisting of a conservative type of treatment to control the diseae through the balancing of the vitiated dosas, derranged body elements, by medicines and restrictions in diet and routine and (2) Sodhana Cikitsa, a method of treatment involving the extirpation of the causes of the disease, the vitiated dosas etc. and thereby restoration of the equilibrium of the dosas. Here the intrinsic causes of the disease are expelled, the alimentary system and the body in general are purified, or rather detoxicated and chances of permanent cure appreciably increased. Snehana (literally lubrication – a course of both internal and external administrations of medicated fatty substances like ghee, oil etc.); and Swedana (A process for producing diaphoresis or profuse perspiration all over the body) and then the proper Samsodhana Kriyas, the socalled Pancakarmas (five methods) namely Vamana (emesis - the act of vomiting); Virecana (purgation – induction to free evacuation of faeces); Vasti (Enema using prescribed medicinal oils, decotions etc); Nasyam – a process of application of certain medicines through the nostrils for expelling the vitiated factors from the organs above the neck, and Raktamoksa (letting off blood from the veins employing certain prescribed techniques) - these are certain renowned classical methods of extirpation and detoxication of the body according to Here the classification of Avurveda. Pancakarmas, the last five of the above processes, is Vagbhata's view which is some what different from that of Caraka and other earlier texts. These methods are employed

individually or severally according to the nature of the case.

The Sodhana Cikitsa in general and the special techniques for it known as Pancakarma are considered characteristic of Ayurveda. These methods are prevalent in almost all parts of India. But, in the field of Snehana and Swedana there are some special techniques in Kerala which have been in existence from ancient days. They more or less cover the effects of other methods of Sodhana Cikitsa and also that of Samana Cikitsa to some extent in certain cases.

1. Pizhiccil (massage in oil trough), uzhiccil (massage after application of oil), Navarakizhi (a kind of massage with 'Navara - variety of rice made into a paste bound in cloth), Sirovasti (retaining medicated oil of prescribed warmth on head for a definite length of time), Dhara (continous pouring of medicated liquids), Paccakizhi (massage with medicinal leaves bound in cloth), Snehapanam (internal administration of medicated oil or ghee for a prescribed period with specific restrictions in diet and routine) are some of the most well known and well tried techniques of the Kerala School of Ayurveda. They are renowned as the specialities of Kerala in the methods for rejuvenation and cure. The temperate salubrious climate of evergreen Kerala, its geographical peculiarities and the culture of the people may be the causes for making it the birth place of these peculiar method of Ayurvedic treatment.

It is true that many of the above treatments for rejuvenation and cure are mentioned in the standard classical works on Indian medicine, but detailed and elaborate accounts are found wanting. It is only in the compilations of Kerala that one meets with satisfactory description of these courses of treatments.

It is to be noted that the above specialised branches of treatments yield excellent results in the treatment of paralysis, sciatica and various forms of mental disease like hysteria, insanity etc.

Principles

The principles underlying these methods of treatment is one of detoxication of the subjects. Application of warmth (swedana) and oily massage (Snehana) to the body promotes better circulation of blood in the system and free diaphoresis etc. The daily laxative usually given during the course of the treatment ensures satisfactory evacuation of the bowels and better cleansing of the ailmentary tract. The fat contents and factors in the medicinal unguents are absorbed by the skin resulting in the toning up of the subject. The soft oil massage itself has a marked soothing effect on the nervous system as a whole; it improves the working powers of the muscles and favours prompt recovery from the effects of fatigue. The stimulating effect on the cardio vascular system is appreciable. Its effects on the neuro muscular apparatus, and on the respiratory organs are conductive to a general improvement in the metabolic activity of the entire constitution. The strict regimen calculated to ensure perfect physical and methal rest gives the body mechanism the best chance to recoup its strength and functional efficiency. These measures give nature the fullest opportunity to play its own role and there is no forcing of a tired, system to work, no whipping up of a fallen horse. None of these measures act in contradiction to any of the scientific principles on modern medical science. They are rational to the core.

Massage Treatment in General

That massage of all kinds play an important role in every system of science of healing is evident from its popularity as an inevitable adjunct in Physico therapy. achieved by artificial means such as Electro Therapy, occupational Therapy etc., is achieved in Kerala by the scientific system of massaging. Modern types of massages known Effleurage, petrissage, as Tappotement, etc., cannot yield as much good results as the Kerala massages. Pressure is applied not only by the palms but also by the soles of the feet as necessitated by circumstances.

Dhara

The treatments of Dhara, Pizhiccil and Navarakkizhi are usually conducted by making the patient lie down in a long wooden trough - the wood being medicinal, eg: sandal wood; Nux Vomica, Lavangam etc. In Dhara, the patient lies in a supine posture in the trough and the prescribed medicinal liquid (medicated oils, herbal decoction, cow's milk. Brest - milk butter milk tender coconut - water etc.) suitable to the particular case is allowed to drop down on his fore - head and head from a height of about two inches through the bundle of threads through a hole in the Dhara patra (made of clay or silver or gold) into the hollow inside portion of a coconut shell placed in the vessel face downwards and with serrated ridges to regulate the flow of the medicine. The duration of the Dhara is from half an hour to one hour and a half according to the condition of the patient and the nature of the disease. This special treatment is intended for mental diseases, nervous disorders, insomnia, blood pressure, general debility, urinary diseases and

particularly in the disease of organs above the neck.

Pizhiccil

All parts of the body other than the head are subjected to this treatment. Four attendatns (two on either side) pour the varmed medicated oil (kept at the bearable warmth) on the body and massage it simultaneously. This treatment is prescribed in VATAROGAS (Paralysis, Hemoplegia and such other nervous disorders). It is very effective in Asthma and even in tuberculosis in the early stages. This is mainly a snehana (lubricating) treatment.

Navarakizhi or Pindasveda

'Navarakizhi' is mainly performed in such diseases where Pizhiccil also is prescribed. But while the main purpose of Pizhiccil is 'Snehana', that of Navarakizhi is Swedana (Diaphoresis). The patient is anointed with suitable medicated oil all over the body is managed in seven different postures such as sitting, lying (supine or prone position) etc. Navara Rice is cooked in milk and medicinal decoction and tied up in eight bundles of ('Rice - bolus bags') clean smooth cloth. The medicinal decoction and milk are kept warm throughout. bundles are got ready by dipping in the decoction while the other four are used for massaging. The bundles are interchanged when they loose their heart. The duration is from half to one hour and a half depending on the nature of the case. This treatment is useful in all kinds of rheumatism, paralysis, polio and congenital deformity of limbs and dislocation of bones and joints and so on.

Sirovasti

A cylindrical leather cap of about ten inches height and both ends open is fixed in position by means of a cloth belt two to three inches in width tied around the head and by black – gram paste used for plugging the holes and filling the gaps. Suitable medicated oil heated to a bearable degree is poured into the cap and allowed to remain there for about 1 hour or until mucoid discharge oozes out of the mouth, eyes and nostrils of the patient. Its effects are considerable in neuralgia, Hemicrania, Optic atrophy, Ostalgia, deafness, facial paralysis and all diseases effecting the cranial nerves. Generally it is not carried out for more than seven days.

Time and Period

All special treatments are usually conducted when the weather condition is normal free from excessaive rain, snowfall or extreme radiation. Such an ideal climate, as far as Kerala is concerned, are experienced during the months of mid – July / mid – August (Asadha), mid – October to mid – November (Tula) and mid – February to mid – March (Kumbha).

The treatments in general are given for 7, 14, 21, 28, 41 and 90 days and in very rare cases for longer periods also according to the nature and condition of the case. Byut the usual period is 14 or 21 days.

Pathya or Regimen

The patient is strictly advised to follow certain rules of conduct and diet during the course of these treatments and for an equal number of days thereafter and for an equal number of days thereafter. Regarding food restrictions one should have only such diet as is relishing, taking care not to consume any food items contra – indicated by the diseases. These food items should also be easily digestiable. Food must be taken at regular intervals. Chillies and tamarind

should be totally avoided, but the latter is less harmful if more than a year old. Instead of impure common salt, refined salt and rock - salt may be used. Half polished or brown rice, plantain fruits, black pepper, bitter gourd, snake gourd, yam, ashgourd and other foods containing calcium, magnasium, sodium, iron, pottasium, silica and other vital mineral salts should be used. Fruits especially ripe plantain fruits, pomegranates, grapes and Amalaka fruits oranges, (gooseberry) may be eaten not only for the mineral salts these contain, but also for the stimulating effect these fruits have upon the liver and other organs of excertion. Buttermilk must be boiled with turmeric etc. before use. Lean parts of the flesh of pegion goat and rabbit may be used. They should either be boiled, broiled or baked but not fried, as frying will sometimes cause degestive disorders. Fish is generally to be avoided. Seasame, blackgram, spirituous liquor, curds, pumpkin, brinjal, Lady's finger, drum - stick, onion, asafoetida etc., should also be avoided. Water boiled with liberal quantities of Mutsa, dried ginger, coriander, cuminseeds and green gram may be used for drinking, either warm or cold.

Taboos

Ablutions should be with warm water, never with cold water. Sexual act is to be completely abstained from; not only the act but even the very thought of it. Nothing is more detremental in the course of these various treatments, thatn the sexual act or even the urge. It, at times, the sexual desire is existed, the patients may make a short walk if strength and general conditions permit, or occupy the mind in some constructive thoughts or acts. A word to the wise may be sufficient in this respect.

Sleep and Rest

Sleep is the greatest reconstructive factor we have. Therefore un-interrupted proper sleep at night is essential with no sleep during day Exercise of all forms are strictly forbidden. Even brisk walking should be avoided. One may take a short walk in the afternoon, or before retiring, if strength and general condition permit. Such light exercises will hasten the progress of the cure by stirring the sluggish circulation and nerves. Care should be taken, however, to stop the exercise, short of the point of actual fatigue, to prevent disturbances mishaps. Sleep during day time may be checked by indulging in light reading such as simple stories or newspapers and pleasant chat with friends.

Provisions should be made for securing plenty of fresh air in the bed-rooms. But exposure to mist, sun, dust, wind, smoke, rain etc. is highly injurious. Bed sheets, pillows etc. should be smooth and pleasantly warm. Arrangements should be made for answering calls of nature, indoors.

All these restrictions to be observed not only during the period of the treatment proper, but also thereafter, for an equal number of days for convalescence during which time the patient is expected to return to the normal routine gradually.

Bala Cikitsa (Paediatrics)

There are a number of books on Balacikitsa (Paediatrics) by Kerala Physicians who have a long tradition in the field. The book namely 'Mahasara' published by the Manuscript Library, Madras, contains a lot of information's on Balacikitsa in Malayalam.

'Arogyakalpadrumam' famous paediatrics text in Sanskrit written by Kaikulannara Rama Variyar. 'Arogyacintamani' is a paediatric text written Malavalam based in on 'Arogyakalpadrumam' by Mahakavi Vallattol who had also a sound knowledge of Ayurvedic system of medicine. books are honored not only by the physicians of Kerala but also by all lovers of Malayalam literature for its high literary (poetic) style and qualities. Vallattol has also composed three other books in the field 'Garbharaksakramam', namely 'Vaidya Jiyanam' and 'Netramrtam'.

Modern Period – the era of Renaissance

There are some books in Sanskrit which have come out in various parts of India since the first decade of this century which is considered to be the era of renaissance in the Ayurvedic system giving comprehensive explanations of both eastern and western principles of medicines with comparative studies on the subject. Pratyaksa sarira and Siddhantanidana by Mahamahopadhyaya Kaviraj Gananath Sen Saraswati are outstanding works among them. The former deals with anatomy and physiology which the latter is a text book of the etiology, pathology and symptamatology of diseases. Among them, the works of some scholars of Kerala are also of equal importance. Astanga Sariram, and Brhacchariram written by Vaidyaratnam P. S. Varyar, were text books in Sanskrit on Anatomy, and Physiology, profusely illustrated: 'Sariram' by Dr. L. A. Ravivarma Anugrahamimamsa by Vadakkepattu Narayanan Nair, etc. are only examples.

In this 'foreword' to the first volume of the work BRHACCARIRAM by Vaidyaratnam P S Variyar, Dr. L. A. Ravivarma one of the illustrious authors of Kerala, wrote thus:

"The work has certain special features worth noting. This is not a mere translation of any modern work on embryology; it is a well planned adaptation of modern teachings: The author has taken pains to ensure that the imported teachings mingle freely and well with the ancient teachings so as to make a harmonious whole. wherein, the new incorporations will appear more amplifications and elaborations on the older teachings than a new and alien importation".

The 'Arya Vaidya Caritram' - History of Ayurveda – (1905) (by P. V. Krsna Varya) was the first of its kind in Malayalam. It was prescribed as text-book on the subject in all the Ayurveda Colleges in Kerala. The 'Dhanvantari' Magazine (monthly) published from Kottakkal for 23 years (1905 the 1928) under editorship Vaidyaratnam P. S. Varyar (assisted by his brother P V Krsna Varyar) has contributed much to the Ayurvedic literature in Kerala. 'Ayurveda Caritram' by Arya Vaidyan Sri N. V. Krsnankutti Varyar (published by Arya Vaidya Sala Kottakkal, in April, 1981) on the same subject also deserves special mention. The author has made reference to a number of books for the preparation of the book.

VASTHI PRADIPAM (1932) by Panavally S. Krsnan Vaidyan and 'Panca karma' are two outstanding works of the modern period on the Pancakaram therapy.

'AYURVEDIC TREATMENTS OF KERALA' (1944) by Astavaidyan M. S. Mooss is a very useful work on the so called special treatments of Kerala like PINDASVEDA, PIZHICCIL, SIROVASTI, etc.

'Adhunika Roga Bhaisajyam' in Malayalam (1977) by Ayurvedacarya K. Kunnuraman

Vaidyan provides a comprehensive picture of a number of diseases with a comparative description of the etiology, pathology etc. in the light of allopathic system and of the Ayurvedic treatments for them.

The series of 'Seminar Reports' in book form published every year from 1965 by the Vaidya Sala. Kottakal, Arya commemoration of the Founder's Day celebration of the institution, contain papers on different subjects of Ayurveda by eminent scholars of Kerala and outside. The essays which have won the first and second prizes in the competition conducted by the institution each year are also published. Almost all the above treatises are based on tenets of Ayurveda and they reflect the spirit of earnestness to absorb and assimilate every modern trend at the same time keeping the essence in tact.

The book on 'Ayurveda Clinical Research' (English) by Pandita Rajan Trkkovil Acuta Variar (1959) has two volumes and here the author has citied many examples of most of the common diseases with their history and the mode of treatment prescribed and the effects observed.

Some scholarly physicians have written books in Malavalam clarifying principles fundamental of Ayurveda. Ayurvedattinte – Adhistana Tatvannal' by Pandit C. Ramakrsnan Nair (1969) and 'Ayurveda Paricaya' (1976)Vaidyabhusan K. Raghavan Tirumulpad are only examples. Sri. Tirummulpad has authorized some more outstanding works namely (1) AYURVEDA DARSANAM (on basic principles of Ayurveda) commentary of RASAVAISESIKA (mentioned above) (3) TANTRAYUKTI VIVEKAM and (4) Commentary The ASTANGA SAMGRAHA (8 Vols.). medicines like Books on clinical

'Pratiausadha – Vidhiyum Prathama Cikitsayum' (The antidotes and first – aid) in verses and prose order by C. R. Kesavan Vaidyar 91942 – 1966 – 1972) and 'Vaidya – Tarakam' Vaidya Kalanidhi C. N. Narayanan (1976) also deserve special mention at this context.

The Sarva Vibhaga Ausadha Vijnana Kosam (First edition) running into 2000 pages in Malayalam by Vidvan C. S. Muttattumatham was published in 1981. It is unique in that it comprises references to the medicines and important aspects of all the systems of medicine practiced in Kerala Ayurveda, Siddha, Unani, Naturopathy, Allopathy, Veterinary, etc.

Ayurvedic Education:

In Kerala there are at present two Ayurveda Government Colleges, Trivandrum and Trpunitura University) and two private Ayurveda Degree Colleges, at Kottakkal Trichur (Calicut University). A uniform pattern of syllabus (for the B. A. M. S. Course) has been approved by the Central Council of Indian Medicine (C. C. I. M) for the whole of India and this has been introduced in these colleges also from the year 1980. There is also one Post-graduate Centre attached to the Government Ayurveda College, Trivandrum, C. C. I. M. has prepared a draft syllabus of uniform pattern for post-graduation also to be implemented at an early date.

Book Publication:

The Government of Kerala has started a publication division of its own for the preservation, promotion and creation of Ayurvedic literature in the Government Ayurvedic College, Trivandrum. The division started functioning from 1974. It is

the first of its kind in India. The collection and preservation of palm – leaf and hand – written manuscripts on Ayurveda, deciphering the manuscripts and keeping them for the reference of scholars, printing and publishing of Ayurvedic books, reprinting of rate books on Ayurveda, publishing of a research journal, rendering assistance to those who wish to publish books on Ayurvedic etc. are some of the objectives of the publication Division.

Commentaries etc:

The 'Sasilekha' Commentary (Sanskrit -Indu) of Astangasamgraha is famous in all parts of India. Astangahrdaya has a number Commentaries in Sanskrit Malayalam. The 'Sarvangasundari' Arunadatta and 'Sasilekha' by Indu are renowned Sanskrit Commentaries. 'Paithia' (by an unknown author) is authentic and was widely used by the students and teachers of Ayurveda in Kerala. Another work is 'Brhat Pathia'. 'Kairaly' which is also known as Pulamantol Vyakhyanam, is very comprehensive and is considered as very useful manual. But, only part of Uttarasthana, excluding Rasayana and Vajikarana are now available. commentator of Kairaly, is Pulamantool Mooss, who is considered to be the author of 'Cikitsamanjary' also. Hrdaya and 'Lalita' (by another Pulamantol Mooss) based on the above works are also renowned. 'Vakyapradipika' by Alattiyur Parameswaran Nambudiri containing commentary only up to the Cikitsasthana is very enlightening especially to the students. 'Saratha Darpanam' and 'Bhavaprakasam' different commentaries Kaikulannara Rama Variar which are adored by scholars in the field. 'Bhaskaram' by Uppottu 'Arunodayam' Kannan, Kayikkara Govindan Vaidyan, Vasudeviyam (by Vasudeva Sharma) are some of the

famous commentaries widely referred to by the modern students, teachers peactitioners. 'Ranjini' (Sutrasthanam – 6 Chapters) by v. M. Kuttikrisna Menon published in 1976 requires special mention in view of its unique style of description. It also contains a "Vrttanuvrtta Vakyanuvakya Vivartanam" meaning metre by metre, phrase by phrase translation) of the original work of Astangahrdaya.

Commentaries are there not only to Astangahrdaya but to Samhitas like Susruta and Caraka also produced by scholarly physicians in Kerala. 'Hrdayollasm' is a commentary in Malayalam to Susruta Samhita (Cikitsitam, Uttaram and Kalpam) by Vasudeva Sharma. Commentaries by M. Narayana Vaidyan, Edakkad, have come out with Susruta Samhita Sutra sthana and Caraka Samhita cikitsa sthana each in two parts – Purvarddha and Uttararddha (1979).

There is a commentary to Caraka Samhita namely "nirantara Padavyakhya" in the Trivandrum Manuscript library. It is copied from palm leaves to paper by one of the Astavaidyas, as it is understood from the manuscript. It is also noted that a mutilated

part of the 'Cikitsasthanam' of the same commentary has been published from Lahore. The commentator seems to be the same Jejjata who was a contemporary and colleagues of the famous Indu (Keralite), disciple of Vagbhata. "Madhavanidana" by Madhavacarya (7th -8^{th} century A. D.) has been commented by Paravur Kesavan Asan - 'Saracandrika'. 'Sarngadhara Samhita' (12th Century) and 'Bhavaprakasam' Century) have commentaries namely Gudharatha Candrika and Bhavarthadipika respectively, by Cheppatu Acyuta Variar.

There are some original works in Malayalam based on the subject matter and basic principles of Astangahrdaya etc. like 'Hrdayapriya' by Vaikkattu Paccumuttat on Dyavyaguna (therapeutic properties of drug), Sukhasadhaka, a summary of Hrdayapriya nad Astangasara by one Perinnallur Nambudiri who is the author of the Yogamrta mentioned above.

There are still many works remaining unpublished, in the manuscript libraries in and out of Kerala. Almost all of the printed books mentioned above are now out of print and need meaningful reproduction.

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