

## THE NEED OF MODERNISATION IN AYURVEDIC EDUCATION NEED AND LIMITATIONS

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### ABSTRACT

**Background:** Education is the best investment as it gains best returns. Ayurvedic system of education has a ten folds history from centuries Nalanda, Takshila are the ancient examples of universities imparting quality Ayurvedic education. With time the way of looking diseases have changed due to advent of new sets of micro organisms but the Principles of Ayurveda are firm and unshakable. Modernising Ayurveda in education platform is the challenge as to what and which extend modernisation will benefit the education system. This article discuss the loopholes of understanding the requirement of modernising the proud tradition of our country to the extend we don't lose our pride principles. With the discussion of the needs and limitations of modernisation, this article gives new vision to think about our traditional system with utmost respect and to understand the the potency of our medicines to fight all odds. **Aim:** To discuss need of modernisation in Ayurveda with its limitations. **Objectives:** To think about globalising Ayurveda and need for reform in current scenario for becoming full fledged educating system. **Method:** Various vedic texts, electronic articles from journals, interviews of reknowned scholars in Ayurveda helped to compile all thoughts **Conclusion:** Modernisation to the limit where Ayurvedic principles are unharmed is the requirement of Ayurvedic Education System.

**KEYWORDS:** Ayurveda education, immortal, principles, modernisation, limits, need.

### INTRODUCTION

**“It takes an endless amount of history to make even a little tradition”**

Ayurveda is a traditional system of medicines practiced since centuries the education system in Ayurvedic system has evolved from leaps and bounds. With newer reach of technology even this aged old tradition has not remained untouched. Transformation for a better tomorrow and newer understanding of the tenets of Ayurveda which need to be tested for the validation has brought varied form of modernisation in Indian system of medicines. Need of reformation in the method of understanding the immortal principles is how we can define acceptance of modernisation in Ayurvedic system of education. The debate of preserving the traditionally conserved science is partly acceptable till the time the immortal principles are not distorted. But with progress of newer way to explore these timely proven tradition will gather more followers and progress to the culturally preserved science.

**“The goal of education is the advancement of knowledge and the dissemination of truth”** and modernisation is one tool of discovering the truth Researches with all modern facilities can bring every core of explanations of Ayurvedic herbs herbomineral medicines. New cost effective time saving Panchkarma techniques can help to deal with the setbacks of older instruments. Use of technology for diagnosis, preparing of effective drugs, to know the need of hour and make available the immortal Ayurvedic science with its benefits, which will eventually help the health care system in India and to the world around. Pertaining to current situation of pandemic various clinical trials on the use of Ayurvedic compounds are yielding results This is one such example of modernisation and working hand in hand with latest current knowledge and using best knowledge of Ayurvedic principles to fight the dreadful virus. For every step in progress there may be various pros and cons. When concerned to a traditional system like Ayurveda the modernisation limits when it comes to the distortion of immortal and basic principles.

**Aim**

To study the need of Modernisation in Ayurvedic system of medicines, with its limitations.

**Objectives**

1. Promotion of global acceptance of Ayurvedic principles
2. Discussion of various points regarding modes of modernisation in education system of Ayurveda with possible pros and cons.

**Methodology**

Various Ayurvedic books, journals, electronic interviews of renowned scholars in Ayurveda were referred for the review of the concept.

**Historian background of modernisation in Ayurvedic education**

**“Tradition is tending flame not worshipping the ashes”**

Barging back the centuries and having thought of the renaissance made by the scriptures right from Charak samhita, Sushruta samhita, Ashtang Hridaya to the Madhav nidan, bhavprakash, sharangdhar, yogratnakar. Ashtang Hridaya takes the charm by making easiest understandable verses of Charak samhita and Sushruta Samhita available for sake of educating people. We can see the modernisation in concept and advent of progression of knowledge according to times. The newer compendiums came with new sets of diseases which were relevant during that time zone. Diseases like amavata which can have relative similarities of Rheumatoid Arthritis, SLE, Ankylosing spondilosis were discussed in compendiums named Madhav nidan, Bhavaprakash, Yogratnakar. This is what modernisation stands for researching the originality with evidence and accepting the validation and progress.

The use of herbs to herbomineral medicines came into advent with progress of Rasa shastra (science of metals) from time of Nagarjuna.<sup>[1]</sup> There are evidences the teaching of metals related (*dhatuvad*) education in the University of Nalanda With more disease spread and need of quick fast acting drugs of *Rasa shastra* (herbo mineral) also piled up the importance. This is how the modernisation of education is evident in old golden eras. The sages never stopped in the process modernising and hence shall the newer education system in Ayurveda. Tradition is tending flame of knowledge it wants us to progress without leaving self values which keep Ayurveda alive.

The Government of India had set up independent Department of Indian system of medicine and Homeopathy under Ministry of Health and family welfare in march 1995. This Department was renamed as AYUSH with view to enhance education and research in traditional system of medicine. This department works in upgradation of educational system, standardisation of research work standardisation in herbal drugs,

herbomineral drugs awareness domestically and internationally. For global acceptance the quality and upgradation of educational system needs reformation.<sup>[2]</sup>

**Miniature of steps in modernising the education system in Ayurveda without losing traditional value****1. Methods of Ayurvedic Education: need and limitations**

**“Education is not just the learning of many facts but training of minds to think”**

It has been said for student with right intellect all are his teacher (*guru*) as he learns from every bit and for a negligent student everyone in his path are his enemy (*shatru*) hence he will learn nothing in the journey of true education.<sup>[3]</sup> Our treaties educate us with real piece of knowledge, they advocate for obtaining discipline of knowledge one has to follow three ways of education namely *adhyana* (self reading), *adhyayapan* (lectures) and *tadvidha sambhasha* (learn from experts).<sup>[4]</sup> Right conduct of education of subject can enlighten the students in similar manner like the rays of sun encompass the darkness and brighten all visible things with its lights.<sup>[5]</sup>

**a. Adhyana (self study):** All other means to get right to educate of the immortal principles of Ayurveda are same but are now just accompanied by newer methods. Students for their self study are now availed with all well equipped library with free wifi internet so that they can search all possible newer research work and make use of newer means to reach the hidden verses of Ayurveda. This gives students an opportunity to remain in forefront of developing educating system and match the speed of developing Ayurveda. This is modernisation in the method of learning but not dissemination of any of the principles. As even Ayurvedic treaties believed, in the world of various health system one must follow the one with full explanation to valuable science. For this, one has to match the advancement in education.

**b. Adhyapan (lectures)**

**From** the days of gurus (teacher) sitting in the shades of tree with their shishyas (pupils) around has evolved to a well equipped audio visual class. Tradition will not mean that penancing in the jungles will only make things reachable. Even a teacher with a pointer on hand can make efforts to reach students with best Ayurvedic knowledge. All modern equipment by the information technology make the students reachable to million data bases at click of a button. The written compendium with good translated verses of Sanskrit in varied languages are available Audio visual aids make the understanding of concepts more clear.

**Limitations**

But what has made it lose is the students become handicapped to the easily available materials without giving a thought of reading the text and making more translations of many unresolved verses of Ayurveda which are needed to be solved. If Sanskrit, one more

traditionally old language forms base of Ayurveda. One has to dig deeper to the roots of Ayurveda then utilize the comfortably progressive modern method of education. For making a best future the past must be secured.

In Indian System of Medicine, educating students need educating our compendiums which have been written by sages of experience and which demands respect. Hence the concept of “**Samhita Vachan**”(reading text) in group to explore the golden verses are still practiced. The only need is the (teacher) educating their student the right use of every novel thought in the progress of education. This is how we can keep the old valued material intact with new package of information technology. Hence we can progress newbie brains of students with making them value our compendium.

### **c. Sambhasha vidhi (method of fruitful discussion): need**

It is versed as Implication of knowledge from the expertise in one's own field results in augmentation of knowledge and gathers immense happiness.<sup>[6]</sup> Even the newer system of education in every field has adopted this version of spread of knowledge by various gatherings CME (continuing medical education), Seminars, Conferences and recently developed Webinar discussions. The only difference is the packing is served all wrapped with the gift of information technology in field Ayurvedic science.

Why this modern concept of exchange of thought is essential? Because this give the opportunities to the students and the teachers to connect different minds, science and intellect. We always shine if we are packed with all knowledgeable verses of contemporary as well as Ayurvedic science. It Helps to explore novel horizon of thoughts so that we as an Ayurvedic science progress to every nooks and corners.

### **2. Integrating modern tools in diagnosis: need and limitation**

While studying Ayurveda there are various tenets that play a pivotal role in deciding the pattern of diagnosis of diseases. There are three main folds of knowledge which if studied in the need of modernising the concept of integrating modern science along with Ayurvedic science in the syllabus studied in Ayurvedic educating institutes. These are authentic statement of learned, perception which is seen by open eye, inference which is calculated on base of evidences available.<sup>[7]</sup>

If we talk about the concept of perception whatever which is gained by our senses and inner soul is termed as perception<sup>8</sup>. And if our science deals with the concept of acquiring knowledge by friendly knowledgeable discussion with the expertise of the field we are about to acquire all the modern concepts of physiology, anatomy, pathology, microbiology etc as whatever is sensed by our eyes, nose, skin, tongue, ears and mann (inner soul) have to

be applied. This is the need because in order to study the concept of pathophysiology of Ayurveda in contemporary world one has to fill oneself with updated version of contemporary science. And if we consider our treatise as authentic validity of knowledge from learned in the field in Ayurvedic education and modern science in contemporary era, their integration in modernising the education will lead to the betterment of Ayurvedic diagnosis and Ayurvedic treatment.

For example If we limit ourselves in knowing Hridaya (heart) as an organ connected with 10 dhamanis (arteries)<sup>[9]</sup> and needed to be protected to protect life, we will limit us in knowing the real working of heart as already proven by modern science and also limit us in knowing why our sages made it to be the prime organ of conduction. Thus exploring the modern concept will make us to explore our own treatise.

And with the world fighting to the Coronary artery diseases in name of Myocardial infarct, Angina, Ischemia, Diabetes, kidney failure, stroke, cancer we will never be in the forefront in finding newer drugs and preservation techniques unless we make us aware of the existing facts. This newer form of knowledge will help to know more of the facts of pathogenesis according to Ayurvedic science too.

### **LIMITATION**

Updating ourselves with the existing known facts should help to disseminate the knowledge offered by our Ayurvedic science. This is what the education in Ayurveda should provide to propagate its own science without disturbing its treasured principles. All modern ways of diagnosing instrument like ECG, Holter monitor, treadmills, Ct scan, MRI, Ecocardiogram, USG, blood tests Etc are the examples of **perceptive and inferitive evidences** which can be used to make confirm diagnosis but with all relating principles of Ayurveda. Because Ayurveda is known for traditions one must keep the prophecy of years to propagate with untouched values of its principles. Modernisation is necessary to keep us in run of proving values of Ayurvedic medicines but not for their distortions.

### **3. Panchkarma: modernisation in the newer form of instruments**

Panchkarma<sup>[10]</sup> (5 purification process) forms the base of procedures in Ayurvedic system of education. Elimination of *doshas* (the virtues in ayurveda classics) according to the dominance and balancing them along with protecting *agni* (digestive power) is the real way of treatment *Vaman* (emesis) to eliminate *kapha dosha* (phlegm like), *virechan* (purgation) to eliminate *pitta* (acid like) and *basti* (enema) for controlling vitiation of *vata dosha* accompanied by *purva karma* (pre procedures) of *snehan* and *swedan*, *nasya* (nasal instillation) for all *supraclavicular diseases*, and *rakta mokshan* (blood letting) for blood vitiation diseases are basic way of practicing *Panchkarma*. Few of the *kerelian* system of

*Panchkarna* includes *kati basti*, *janu basti*, *merudand basti*, *pichhinchill* (ayurvedic procedures of oiling at different parts like lumbar, knee, spine and whole body respectively).

### Need

With time again the principles to practice the purification have not changed but the instruments used in these procedures have revolutionised for a better effects. Revolution and intellect goes hand in hand, even Charak samhita (text) had discussed the relevance of intellect decision.<sup>[11]</sup> Hence invent of newer instrument had proven cost effective, increases the effectiveness of procedures, saves man power and time, relevates with standard of practice in Ayurveda Panchkarma therapies, are safer and without wastage of costlier drugs used in therapy.

Traditional system of *swedan* (hot fomentation) with *nadi sweda* has been replaced by newly designed electric heater with pressure gauge, *peti sweda* replaced by deluxe sauna cabin, infra red bath cabin, insulated portable cabin, and various eye catching high profile designs of *peti* (cabin). *Sarvang dhara* is replaced by swiss shower, *janu basti* by wooden and fibre *janu yantra*. *Kati basti* by infrared aided *kati basti*. There are varied level of modifications in *basti putak*, *basti yantra*, *shirodhara yantra*, *akshitarpan yantra* (instruments used in the procedures enema, pouring of oil over forehead, oiling over eyes resp.)

### Limitations

Newer technique surpasses the older one but when educating student the real definition and traditional practice of Ayurvedic Panchkarma should not dawn with time. As Ayurveda is science preserved by tradition. Globalising Ayurvedic education should be taught in the institute but the original form shall never get extinct. "Do as Roman do in Roman" is the phrase running for the lure of globalising Ayurveda shall not lose its essence. Panchkarma therapy shall not remain as a spa procedures for a richman relaxation. It should be taught that these procedures come with numerous health healing properties and tremendous hazardous effects if not handled with proper knowledge.

### 2. Dravya guna vgyan: improvisation techniques in ayurveda education

"A physician without a nighantu a scholar without grammar and an anchor without practice become laughing stock in the world."<sup>[12]</sup>

True knowledge of drugs with all pharmacological benefits help a physician to use it in proper manner. Ayurvedic pharmacology work according to *rasa*. A known physician will be concerned about knowing its thoroughly. Ayush Ministry has worked on making a complete data base of all possible drugs. Reformation is needed in its actual use. Researches on ethnoherbs and reverse pharmacology are paving waves. Clinical trial

have been started to know the bioactive ingredients which can be used as an replacement in the world for antibiotic resistance crisis. Herbal medicines with safety profiles are seen by the world as the best way to reform health care. New safer immunomodulators are derived from these herbal extract. The Ayurvedic education system has to regain full herbal knowledge and match it with the pace of technology to show their effects to the world. *Ashwagandha* (*Withania somnifera*), *shatavari* (*Asparagus racemosus*), *pippali* (*Piper longum*),<sup>[13]</sup> *khadir* (*Acacia catechu*), *yashtimadhu* (*Glycyrrhiza glabra*), *guduchi* (*Tinospora cordifolia*), *shunthi* (*Zingiber officinale*),<sup>[14]</sup> and innumerable herbs have proven their potency.

### Need

Recording patent of each single drug in Ayurveda is the need. For this students in Ayurvedic institution must be made aware of every possible knowledge of modern as well as our sacred Ayurvedic Pharmacological principles. Varied ways of excavations to the land of plenty herb treasure for the true identification of herbs, their variety and applicability shall be inculcated right at the institution level. As a young minds grasp the maximum and utilise the optimum by their instinct of research.

### 3. Rasa shastra: Science of metal and mineral medicines: scope in advancement of ayurvedic education

The immortal science which has its historian cover story of being bestowed by Lord Shiva is the science of mineral and metals. Apart from the effective of mineral oriented drugs these are fast acting and come with more shelf life than herbal drugs. This comes under Ayurvedic pharmaceuticals where the amalgamation of **purified mercury and sulphur**,<sup>[15]</sup> together serve as the most potent combination to assimilate in the body for their medicinal effects.

### Need

With the advancement of dreadfulness of the characteristics of various viruses we no more can rely on herbs for making a safe zone. For a fast healing effects we need furiously advance drugs that can combat these dreadful viruses. *Rasa shastra* (metallic science) has all these potent drugs yet to be explored due to the havoc of damaging liver and kidney. With advancement of nanotechnology these side effects can also be eliminated but for this our education system has to come with proven evidence based standardisation of metallic drugs and make it available globally. The ultimate aim of all sciences of medicine is to provide best of the health to all by exploring every possible direction. Educating right value of available treasure house should be the aim of educating system so that we come up with new generation of advanced researchers in future.



#### 4. Yoga and new forms

The term “yoga” has a wider meaning as compared to mere sets exercises. It is eventual event which connects mind, body and soul. It is one of the most popular trends running across the globe. Yoga is defined as settle set of mind With deeper context charak samhita,<sup>[16]</sup> defines yog as a state of mind where one fails to experience any grievances or state of happiness and reaches the pinnacle of self control by controlling all perceptive parameters of body and soul(mann). Bhagwat Geeta,<sup>[17]</sup> explains yoga as the skill to attain physical endurances. Patanjali yoga Darshan explain the holistic approach of finding peace in health.It explains the benefits of practicing yoga can make you content,will give immense sense of happiness with healthy life. The continuation in practice of yoga will make you righteous in your approach will restrain one from any greed of substance with enhance state of immunity in form of health.

#### Need

With researches paving waves of evidence based approaches yoga has not been spared too.Various interventional based studies has been carried out to prove the holistically sound yoga with scientific validations. Some of the studies concluded the positive effect of yoga on physical as well as psychological wellbeing. The most important findings were the immune dampening effects in various pathological conditions.It was found that yoga could reverse the expression of inflammatory mediators ,maintains homeostasis and physiological functions of various other system that are in relation to immune responses.It reduces **pro inflammatory cytokines**,<sup>[18]</sup> in various chronic stress induced diseases ,also maintain balance of endocrine hormones production.Thus yoga can prove one of **the influential non invasive therapy** to enhance immunity.

#### Limitations

With new forms of yoga being transformed like hot yoga,rythm yoga,bharatnyam yoga we must not forget the legacy of true yoga as its not limited to body it encroaches heart.

#### DISCUSSION AND SUMMARY

**“Start where you are, use what you have,do what you can”**

The ultimate aim of education is to start every new opportunity in progress of every learned student and make them benevolent to the society. Ayurveda is the science of life and protector of health. The stronger and neat the education system will get the more potent clinicians will be generated. The true physicians are those who have expertise in application and have experience.<sup>[19]</sup> Such people are successful as protectors of lif. They are eligible to be called as vaidyas (clinicians).So in the practice of generating true vaidyas a complete knowledge of Ayurvedic principles along with the latest knowledge the modernisation will make Ayurveda at the forefront in the traditional system of medicine.

With all pros and cons we have discussed the outcome scope,need,limitations in modernising Ayurvedic education system. Few of the points where we need to educate ourselves were, the latest tools of diagnosis techniques. The proper use of conceptualisation of principles and proving the world in the language known to them by making more of the evidence based education. Standardising drugs and making them known to students. Well established library and trained teachers with audiovideo aids are the need of hour. Setting SOP for Panchkarma practices will flourish the practice. SOP For practical knowledge by bed site examination of patients with protocol of Ayurvedic diagnosis and fair discussion on grounds of modern diagnosis will make potent vaidyas. Extending the horizon by participation in various national international educative conferences and exchange of thoughts of interdisciplinary science will keep BAMS graduates, post graduates updated and will give new waves to the intellect. Ayurveda is a tradition ,It took centuries of perseverance to become living still in the society even after the advent of British empire and Allopathy. Hence surviving with its principles intact shall be the focus of education system Using modernisation to capacity till it is able to tell relevance of magical principles. Nonetheless Ayurveda needs no power to prove if anyone tries in the distortion of its timely tested principles.

#### CONCLUSION

This article tries to discuss the scope of modernisation in Ayurvedic system of education with its limits when it comes to distortion of the immortal principles. The global acceptance of Ayurveda is the need and integrating modern techniques in exploring new viruses and researches will give an add on effects .Undergraduates, post graduates and Phd scholars shall be trained in right direction for the benefits of Ayurveda and so the health care system. For better Ayurvedic physician one has to be well versed with its own science. Teachers and educating system play pivotal role in moulding the newbie brains with right knowledge and right reformation.

#### Take away message

“Education is the passport for future for tomorrow belongs to those who prepare for it today”.Believe in the revolution in Ayurvedic education but don’t miss the charm of immortal Principles.

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