Inter-Culturality in Ayurvedic Clinical Practice

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Introduction

Traditional knowledge is increasingly being sought after today for addressing developmental issues of various kinds and pluralism has become a catchphrase. Current trends show that traditional medicine too is expected to play important role in a future pluralistic health system. At the same time questions are being raised about quality standards, evidence of efficacy, safety, good clinical practice and so on in the field of traditional medicine. Fields such as evidence generation through clinical studies, standardization of various sectors of ayurveda are becoming increasingly important. In earlier issues of Amruth we have highlighted the importance of an intercultural approach for research in ayurveda.

It is a fact that in every facet of traditional medicine today we are dealing with a mixture of modern and traditional knowledge. It is a known fact that ayurvedic education is also muddled in such an obscurity. Often this makes it difficult to understand the contours of traditional knowledge clearly. In this context it is essential to reflect on basic features of divergence between Ayurveda and modern medicine. This article seeks to answer the following questions: In a clinical context, what is the basis difference between these two systems? Why is it important to understand these differences? If there is an apparent divergence, what are the issues in combining such differing views? In a clinical context how can we appropriately integrate these knowledge systems? It is expected this preliminary analysis would help both clinicians as well as patients appreciate the basic differences of these knowledge systems and put these in perspective. Knowing these differences would help strengthen the clinical practice based on a sound ayurvedic foundation.

Now a bit on the history of such an exercise - Many attempts have been made to draw line between traditional knowledge and science by philosophers, anthropologists and so on. Early anthropological and sociological works were based on the division of these two knowledge systems as ‘primitive’ and ‘modern’ with arguments such as traditional knowledge is non-analytical, closed and non-dynamic. Later studies have suggested that traditional knowledge differs from scientific knowledge on substantive grounds, methodological or epistemological grounds as well as contextual grounds owing to the differences in subject matter and characteristics, different methods for investigating reality and deep rooted ness in its environment respectively. Most philosophers of science have long abandoned the hope of a satisfactory methodology for distinguishing science and other forms of knowledge (Agrawal 2003, Birks 2008). According to some scholars differences between these two systems are not sharply defined and it is our reductionist analysis that tends to exaggerate these differences (Birks 2008). Vincanne Adams (2003) in her study titled “Establishing proof – translating ‘science’ and the state of Tibetan medicine” beautifully narrates the epistemological and socio-political dilemmas reflected in the interaction of Tibetan medicine and science. However, such

academic materials are not easily accessed or read by ayurvedic practitioners due to their heavily jargonized language and limited outreach.

One might also doubt if a generalization such as 'traditional medical knowledge' is feasible for diverse field which cover wide array of practices encompassing magico-religious ones to systems with humoral ideas such as Ayurveda and Chinese medicine. There have been studies to classify indigenous or folk magico religious practices into a category such as 'personalistic' and humor based knowledge systems such as ayurveda and Chinese medicine into 'naturalistic' category from an evolutionary perspective (Foster 1976). There are also works classifying traditional medicine into 'great traditions' (codified systems) 'little traditions' (folk) and so on (Leslie 1992). Neverthless for the purpose of this article no such categorization has been attempted within traditional knowledge and the focus is on ayurveda and its comparison with modern medicine.

This article attempts to draw only clinical and practical differences and not the theoretical/epistemological which are more complex. But while engaging with these practical points one would be able to reflect on and appreciate these underlying theoretical intricacies. As the article is attempting to draw broad differences, often generalizations and dichotomies are made which are not conclusive. These categories are also not exclusive but are only indicative of the rough nature. Finally, outlining of such a dichotomy is not to say that one knowledge system is superior or the other inferior.

Differing Clinical Views

As mentioned earlier many of the points mentioned below are related to the clinical milieu. Some of descriptions are based on the classical texts and may find slightly idealistic and non existent in current day clinical practice. It is well acknowledged that knowledge is also socially and culturally constructed and there can be big gap between theory and practice based on the physicians, patients, institutions as well as the social, cultural and political contexts involved. Following is a summary of some of the major differences between modern medicine and ayurveda:

	Aspects	**Modern science**	**Ayurveda**
1	**Approach & Disease classification system**	Structural	Functional
2	**Location**	Organ Specific or Localized	Systemic
3	**Causality**	Single Causality	Multiple Causality
4	**Reasoning method**	Linear	Non-linear and Circular reasoning
5	**Causative reason**	Organism centered	Immunity centered
6	**Nature of knowledge**	Objectivity centered	Subjectivity centered
7	**Nature of assessment**	Quantitative	Qualitative
8	**Context**	Outside the context	In the context
9	**Diagnostic approach**	Universalization	Individualization
10	**Domains**	Physical (often mental), Disease centered	Physical, mental and spiritual, Illness centered

11	**Treatment focus**	Curative focus, importance given to drugs, surgery	Prevention focus, importance given to drugs, food, lifestyle
12	**Treatment strategy**	Targeted medicine	Yoga concept
13	**Line of treatment**	Treating a specific manifestation at given time	Stage wise management
14	**Outcome**	Effect is important	Effect should not lead to after effect
15	**Knowledge/practice focus**	Method/institution centered	Physician centered

Now let us begin examining in detail some of these differences:

1. Structural (Modern Medicine - MM) and Functional approach (Ayurveda - Ayur): First and most central aspect among these differences is the approach to disease and their classification system. Ayurveda takes largely a functional approach in the diagnosis and management of diseases while modern medicine focuses mainly on the physically identifiable, structural elements in the body. For example a patient of chronic headache comes to a modern physician, s/he tries to find out if there is any identifiable lesion such as trauma, stress, inflammation, intracranial pressure, tumor and so on. Few other aspects like history of alcoholism, menstrual history etc., are also considered. For the same patient when comes to ayurveda physician, the diagnosis is done based on functional aspects such as derangement of *tridosas* or *vilomata* of *apana vayu* (upward movement of one of the *vayu*) or *agnimandya* (derangement in digestive processes) etc. Though ayurveda too considers certain structural manifestations those too are also recognized in terms of derangement in *tridosa*. Due to this structure oriented method in modern medicine, diagnosis is made using imaging (x-ray, scan) or lab tests etc., which are visually appreciable whereas in ayurveda diagnosis is made by looking at the subjective experiences of the patient and comparing and relating them with the normal body functions.

This leads us to a related point. Disease classification system in modern medicine is principally structural and anatomical. For example, diseases as classified as belonging to musculo-skeletal system, neurological system, endocrine system, Ear, Nose, Throat etc. Although in the recent editions of Harrison's principles of internal medicine one can observe mention of diseases of vision, sound, hearing and so on! Whereas in ayurveda diseases are classified in a functional way, e.g. *vata vikara, pitta vikara, rasa* or *rakta vaha sroto vyadhi* and so on. Often there are attempts to correlate ayurvedic categories with the structural classification system without adequate understanding of these nuances and without a clear objective.

One is reminded that a common term used for body in ayurveda is *sarira* which comes from *siryate iti sarira* (that which degenerates). One might ask, if ayurveda does not focus on structural aspects at all? There are many conditions, for example, *asmari* (calculi), *granthi* (tumors), *vrana* (wound) or *abhighata* (injury) that (though understood on *dosa* basis) are treated completely through a structural approach (surgical management etc.) in Ayurveda as well.

2. Organ Specific or Localized (MM), Systemic (Ayur): Owing to this predominant functional method ayurveda studies disease in a systemic understanding whereas modern medicine takes an organ or location specific approach. In such an approach a derangement in a seemingly remote part of the body can still have influence on a particular condition or all over the body. To illustrate according to Ayurveda, if one prevents the urge of defecation it can result in specific symptoms such as catch in the calf muscles, running nose, headache or uneasiness in the heart region. Similarly if one blocks flatus regularly it can affect eye sight or digestion. One may wonder how these could be related? According to ayurveda blocked feces or flatus leads to *apana vaigunya* (derangement of a type of *vayu*) in turn causing certain systemic disorders relating to upper part of the body. Similarly if *pitta* increases in the body, feces, urine and eyes become yellow (*peeta vit mutra netrata)* showing how body is a complex whole. This kind of an understanding does not exist in modern medicine and these may not be verifiable through contemporary science. To highlight the organ specific approach of modern medicine, diabetes is a good case in point. Though diabetes is considered a lifestyle disease today, the line of diagnosing or treating diabetes is chiefly focused on the pancreas and insulin mechanism. Other lifestyle related factors are relatively secondary.

3. Single Causality (MM), Multiple Causality (Ayur): This leads us to the next point. Ayurveda understands diseases as caused by multiple causes. It is mentioned in classical texts of ayurveda that that "*Eko heturanekasya thathaikasya eka eva hi*.….", which means that one cause leads to many conditions and many causes lead to one condition. In ayurveda, diabetes is understood as a result of indiscriminate eating habits, lazy life style such as sleeping for long time, excess consumption of curd and similar products, village meat, meat of animals residing in water or watery land, milk and milk products, new grains, sugar and its products. Similarly descriptions for most conditions except a few like trauma (*abhighata*) are based on multiple causes. For instance, even for worm infestation ayurveda gives multiple causes that lead to derangement of internal environment in the body, allowing the organism to breed inside. Modern medicine though, recognizes many chronic conditions as lifestyle related, line of diagnosis is centered on a single major cause. For example, a patient suffering from fever is diagnosed having malaria if the blood test is positive for parasite.

4. Linear causality (MM), Non-linear and Circular reasoning (Ayur): According to Ayurveda multiple causes interacting in a complex way leads to a particular manifestation. Let us look at the description in ayurveda regarding pathogenesis in hemorrhoids (piles). According to this *arsas* is caused when digestive mechanism is dull resulting in accumulation of *mala* (waste materials) in the body, further triggered with reasons such as excessive sexual intercourse or rough and continuous travel on uneven seats and roads or injury in the anal region or repeated exposure to cold water or excessive pressure given to the anal region or holding of urges such as flatus, urine, feces or getting affected by conditions such as fever, intestinal phantom tumors (*gulma*), indigestion, diarrhea, swelling, anemia etc., as well as excess depletion procedures, abortion, pregnancy, and such other things. These factors derange *apana vayu* and *dosa* lodges in the layers of anal region thus causing piles. Ayurveda gives importance to these subtle and often remote reasons and studies their influence on *tridosa*, while modern medicine focuses on the dilatation and thinning of rectal vein. This example once again reiterates the systemic pathogenesis in ayurveda and localized or organ specific

understanding in modern medicine. This is not to say that modern medicine does not focus on habitual constipation, pregnancy, heredity, sedentary habits etc. as underlying cause in hemorrhoids.

Yet another illustration is the description of arthritic condition called *vatarakta*. Ayurvedic texts say that materials such as food which causes *vidaha* (inflammation), incompatible food, those items that vitiate blood, sleep and sex done in a unwholesome manner are major factors for *vatarakta*. Other than these, external injury or unhygienic practices which vitiate blood are also significant. These affect persons with weak physic and mind (*sukumara*) and those who travel too much. *Vata* gets vitiated and aggravated due to the above and travels in wrong directions and develops a complex interaction with blood thus causing the condition. This again shows how reasoning is multifaceted and surrounding *dosa*.

Now let us examine the circular reasoning idea. *Astanga hridaya,* (one of the major text books of ayurveda), *sutra sthana*, 12th chapter - *Dosabhediya*, mentions like this, "*Dosa ekahi sarvesam roganam ekakaranam, yatha paksi paripatan sarvata sarvamapyaha cchayamatyeti natmiya yatha va krtsnamapyada, vikarajatam vividham trigunan nati vartate"* which briefly means that 'as a flying bird cannot escape its own shadow how much ever it flies, similarly a disease cannot surpass three *dosa*s'. Thus in a clinical framework every imaginable situation is assimilated into the language of *dosas* and their balance.

5. Organism centered (MM), Immunity centered (Ayur): Particularly in infectious diseases, the approach towards a disease in modern medicine is organism centered where as in Ayurveda it is body immunity centered. To narrate this further, malaria in modern medicine is understood as a vector-parasite-host relationship and the reproduction cycle with various stages such as hepatic, blood stage and so on. Whereas according to ayurveda the description goes like this. Improper *aharavihara* (food and lifestyle) leads to *ama* in the body. Followed by this when there is *vidaha* it leads to a particular type of improper nutrients. The vitiated kapha and pitta in combination with *vidaghda anna rasa* (improperly formed nutrients) produce *visama jvara* where half the body feels hot and other half experiences cold. *visamata* (unevenness) related to fever occurrence, frequency and pattern occurs thus called *visamajvara*. This description stresses on immunity and normal functioning of digestive processes in the body. Today this description may be attributed to insufficient understanding of infection or nonexistence of modern diagnostic technologies when ayurveda developed. However one can see that in the description in classical texts relating to *krimi cikitsa* (treatment of pathogens), ayurveda focuses mainly on the body immunity. For instance the treatment methods mentioned for infestation are *nidana parivarjana* (avoiding causes), *prakrti vighata* (destabilizing internal conducive environment) and *apakarshana* (physical removal). This is basically because ayurveda supposes that primary reason for a disease is imbalance whereas in modern medicine it is an active agent or pathogen.

6. Objectivity centered (MM), Subjectivity centered (Ayu): Modern medicine spots an objectively verifiable factor and pathogenesis before a diagnosis is made. This helps to name the observed condition in their classificatory scheme. Where as ayurveda though by observing the signs, symptoms and progression of a condition, categorizes and names the condition, much more emphasize is given to understanding various subjective elements such as *dusya,*

desa, bala, kala, anala, prakriti, vayah, satva, satmya, ahara, avastha etc., or pulse, urine, feces, tongue, sound and so on of a patient for corroborating a diagnosis and treatment. Thus for example hypertension in a *vata, pitta* or *kapha* patient will be differentially understood and managed in ayurveda due to subjective differences. While objectifying a disease modern medicine is highly dependant on visual perception such as a scan image, microscope etc., ayurveda gives importance to the visual, tactile, auditory and other organoleptic parameters for diagnosis. Though historically some of the tactile and auditory (such as stethoscope or pulse) knowledge were important in modern medicine, as technology advanced these aspects are becoming of less value now.

7. Clinical Assessments are Quantitative (MM), Qualitative (Ayur): Another basic feature is that clinical assessments are primarily quantitative in modern science whereas in the latter it is qualitative. For example the intensity of diabetes is assessed by the blood sugar at various time of the day. But in ayurveda types of *prameha* or *madhumeha* are assessed based on the urine colour, frequency and consistency. Though often there are quantitative measures used in ayurveda too, the measurements are made in a very individualized manner. For instance, urine output may be measured through *anjali pramana* i.e. a measurement based on patients' own hand. Another typical case is when a physician checks pulse of a patient, in modern medicine the pulse is counted and the speed, strength and rhythm are assessed on quantitative measures, whereas in ayurveda qualitative aspects are considered. This experiential knowledge is subtle and is difficult to master without the guidance of an expert physician. For instance traditional pulse diagnosis is seldom taught in the institutionalized ayurveda today. Similarly there are other finite, qualitative signs observed (may not seem directly related to the condition) such as *arishta lakshana* which are also backed up for diagnosing a condition. For example, the dreams seen by a patient may be classified by a physician as *vata, pitta* or *kapha* category and also considered while diagnosing a condition by a traditional physician. However in present day clinical practice many of these aspects are left out.

8. Out side the context (MM), Within the context (Ayur): This is yet another vital distinction. While modern medicine relies upon objectifiable parameters which are generated outside the context of the disease and body i.e. in laboratory or through a blood pressure apparatus or a scan image, ayurveda studies a disease condition by observing signs, symptoms of the patient within through visual, tactile perception and clinical interrogation. It is mentioned that if one wants to know of *prana,* it has to be studied within the body by doing *pranayama* and it cannot be studied by measuring or checking through instruments or methods outside.

9. Universalization (MM), Individualization (Ayur): Though ayurveda generalizes and classifies symptoms into a certain diagnostic category this is not of utmost importance in a clinic. Ayurveda says, *vikaranamaakusalo najihriyad kadachana na cha sarva vikaranam namatosti*", this points to the fact that approach to disease is based on an individual's particular body, mental type, stage and subjective experiences. At the same in modern medicine, though personalized medicine is becoming popular today, clinical management is centered largely on universalizing the symptoms and classifying it under a standard category. Hence the diagnostic criteria have to be in line with the international classification of diseases (ICD).

Yet another feature of individualization is mentioned in the following lines "*Athurasyntaratmanam yonavisati jatujit jnana buddhi pradipena na sa rogan chikitsyati*" – roughly translated as a physician who does not enter into the self/soul of a patient, does not treat.

10. Physical (MM), Physical, Mental and often Spiritual (Ayur): Modern medicine centers attention on the physical aspect of the body. Even while dealing with mental disorders the focus is on biochemical changes and other physical aspects like brain lesions. While ayurveda looks at physical, mental and often spiritual aspects while diagnosing or managing a condition. According to ayurveda diseases are classified as relating to *adhibhautika, adhyatmika, adhidaivika* and outlining the three dimensions of existence of a being such as physical, mental and spiritual. Treatment is also classified correspondingly as *daivavyapasraya, satvavajaya and yuktivyapasraya*.

11. Curative focus (MM), Prevention focus (Ayur): Modern medicine's major focus is cure where as Ayurveda focuses more on preventive areas such as appropriate daily and seasonal practices, lifestyle correction, and food that are disease and patient specific.

12. Targeted medicine (MM), Yoga concept (Ayur): In modern medicine, except for health supplements or functional foods, most drugs are directly targeted to an organ or an agent. Sometimes it is specific to relieving a particular symptom. Whereas in ayurveda a *yoga* (formulation) which is a combination of multiple drugs with varied qualities and functions appropriately targets a number of features related to disease and for reestablishing health. Yoga is designed based on an individual's disease condition as well as factors such as *rasa, guna, virya, vipaka, prabhava* etc., of the drugs combined. There are rules regarding incompatibility of materials or specific processing methods, or season, measurements etc. which are also subtly observed while preparing a drug so as to form a tailor made treatment.

Apart from *yoga* (formulation) another key feature is food and lifestyle in ayurveda. While mentioning the importance of *pathya* an author says, 'if one observes *pathya* then why s/he needs treatment, but if one does not observe *pathya,* why s/he needs treatment'. This means that if you observe *pathya* there is no need of any other treatment and if one does not then even with powerful treatment one cannot be helped.

13. Treating a specific manifestation at a given time (MM), Stage wise management (Ayur): This is yet another striking feature how two systems differ in health/disease management. While modern medicine mainly focuses on treating a condition of the presenting complaints in a cross section of time of disease progression, ayurveda focuses on stage wise management. For example treatment of fever does not focus on reducing temperature and killing the causative organisms, but focuses on series of measures for reestablishing health. Accordingly even if the presenting symptoms have subsided, unless the root cause is not eliminated and the balance of the body is reestablished, it cannot be good treatment.

According to ayurveda disease goes through 6 stages such as *dosa caya* (accumulation), *prakopa* (aggravation), *prasara* (spreading), *sthana samsraya* (localization), *vyakti* (establishing identity), *and bheda* (breaking – causing related conditions). Hence disease can

be tackled at the *caya* or *prakopa* stage without allowing any manifestation. These two stages occur even in any healthy individual during the seasonal changes. e.g. *vata* aggravates in rainy season. But once the disease manifestation in a later stage called *prasara* the prodromal symptoms become evident. Early management can be done at this stage. Once it localizes and the identity becomes established it is harder to manage. According to modern medicine though different stages are recognized management is targeted to immediate manifestations. Here it is worth mentioning that with the advancement of diagnostic technology, early detection and management are becoming significant aspects in modern medicine too.

Apart from this, ayurveda also understands that one disease can lead to another. For instance if diarrhea is not treated it can lead to piles, similarly if chronic cold and cough is not treated it can lead to asthmatic problems. These descriptions point to specific understanding of body and pathogenesis.

14. Effect centered (MM), Effect should not lead to after effect (Ayur): Another feature is regarding treatment - ayurveda mentions is the following. "*Prayoga samayet vyadhim yonyamanyam udirayet, nasau visuddha sudhastu samyed yo na kopayet*". If a medicine pacifies the main complaint, yet creates another condition is not a *suddha* (pure) treatment. Ayurveda upholds that there should not be side effects while treating a condition and claims that a well designed yoga or management takes care of this. Even though this is an ideal situation, in practice one can observe that there are minimum reported side effects while using ayurvedic formulations.

15. Method/Institution centered (MM), Physician centered (Ayur): Finally in terms of organization of care modern medicine focuses on impersonal dimensions of care and knowledge and practice is centered on standard operating methods and institutions. This has a direct bearing on objectivity in treatment. At the same time in ayurveda the effectiveness of a treatment depends highly on a physician and his/her subjective experience and wisdom.

Issues in Clinical Context

A deeper analysis would bring about more such differing views. These have direct relevance in the way ayurvedic clinical practice is shaped today. While analyzing these divergences one is tempted to look at the deeper epistemological/theoretical questions involved. However instead this section will narrate a case study and discuss an appropriate integration approach.

To briefly narrate a case:

A patient comes to an ayurvedic physician with symptoms such as irregular and excessive menstrual bleeding. Physician takes the history of the patient with ayurvedic parameters right from menarche based on the ayurvedic approach narrated above. Subsequently the patient shows her scan images to inform that there is a uterine tumor which may be the reason for the condition. Physician checks these details too and arrives at a diagnosis and management.

Here, on the one hand the physician takes note of a series of above mentioned indicators in an ayurvedic way. Apart from that physician gets a scan report with the structural, organ specific

features of the tumor. How does one incorporate these two types of knowledge without an epistemological breach? Does the scan image give any indication for the physician of the *dosa, dhatu* involved, or stage of the disease etc., in his/her classification scheme? Does it facilitate a differential diagnosis according to ayurvedic classification? Does it in any way help to decide what type of medicine (e.g. *Varanadi kvatha* should be given since the tumor looks hard or it is of a particular size or *gugguluthiktaka kvatha* since it has certain other features) to be given to the patient? Can it say that the condition is dangerous and should be referred to a surgeon? Later on, after the ayurvedic management, if the patient gets healthy and a repeat scan shows the tumor remaining in the body could one call the patient as normal? How to deal with contradictory understanding emerging from two systems? A number of such questions emerge.

This is a familiar situation to any ayurvedic physician. Many such clinical situations can be narrated in every day clinical practice. These are important questions to be reflected upon when confronted with such a situation. Clearly, such objective knowledge (scan image, blood tests etc.) gives an idea of the nature of the condition and can facilitate a good referral system. Secondly, if through continuous experience of reading such reports, if the physician is able to categorize the structural aspects in the ayurvedic reasoning method and design an appropriate treatment, it will lead to a new form of knowledge both in diagnosis and management. Thirdly, this kind of evidence is essential to communicate objectively with the scientific community. Today in the learning process of ayurveda we have lost many subjective diagnostic and disease management aspects of Ayurveda like *naadi, marma* etc. So integrating such knowledge appropriately is important today.

Conclusion

These clinical dilemmas lead to certain policy relevant questions regarding standardization, research and evidence based medicine, medical insurance, physician-patient communication, scientific communication, peer reviews and so on. Some of the pertinent issues are what kind of standardization is desirable for various sectors of ayurveda? Should and could there be a system in ayurveda similar to the International Classification of Diseases? Could the management methods be standardized in the same way as in modern medicine? Could clinical research evidence be generated in ayurveda similar to that of modern medicine?

It is essential to look where the line should be drawn by ayurvedic physicians while approaching a patient based on modern understanding of the diseases. It is also imperative to see how modern knowledge as well as diagnostic technology can be utilized in an appropriate way for improving health care. Yet another interesting area is how communication takes place between physicians or patients with such a combination of knowledge without ambiguity.

There is an urgent need to debate these issues inorder to evolve a good clinic practice based on sound ayurvedic methods. From a theoretical point of view these differences have to be studied rigorously inorder to develop an appropriate intercultural framework various developments in ayurveda.

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