Invited Article Symbiohealth – Need of the hour

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Abstract



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A symbiotic relationship between Allopathy (Modern medicine) and Ayurveda is fundamental in creating a health care system that is : (a) more effective than either system used alone, (b) less expensive, (c) less toxic and (d) more likely to create a healthier society. The fundamental basis of Allopathy is "offense thinking," corresponding to Newton's physics, which makes it an excellent disease management system; on the other hand, *Ayurveda* is based upon "defense thinking" and corresponds to Quantum physics, and is an excellent system for prevention of disease and for protection and rejuvenation of health. A judicious use of the two systems in group practice will provide better care to the masses.

Key words: Ayurveda, defense, human ecosystem, offense, symbiohelath

Introduction

Isaac Newton once asked the question, "Why does an apple fall to the ground?" Whether he knew it or not then, this simple question would revolutionize the thought processes of people all over the world. With Newton's discovery, people began solving problems by using a narrow cause-and-effect approach in which they dealt with conflict by addressing the most obvious source or sources of the problem, as opposed to looking at it more broadly. This approach has been used in almost all aspects of life: Just as Newton found the cause of the apple's fall to be gravity, economists have found the causes for economic decline, scientists have found the causes for natural disasters and doctors have found the causes for disease. Moreover, Newton's answer to this question resulted in some of the greatest transformations in the world. From industrialization, to agricultural revolution and the development of modern medicine, these innovations were unprecedented. Technology has improved the quality of life, provided abundance of food to the exploding population and created a strong system of disease management. But, unfortunately, this has had a heavy bearing on the health of humans and the planet. So what if we ask a different question?

Note: Symbiohealth is the term coined by the author after he noticed a symbiotic relationship between modern medicine and Ayurveda during his clinical practice. It is an operating system to guide the medical practitioner in using a judicious combination of the two systems to treat disease and improve the overall health of patients.

Address for correspondence: Dr. Gopal Basisht, M.B.B.S., M.D. 1300, Edgewater Dr., Orlando, USA. E-mail: gopal@symbiohealth.com Rather than just focusing on the apple's fall, what if we also focus on the time it stays on the tree? What if Newton had also asked, "What keeps the apple attached to the tree for so long?"

This question establishes an alternate means to solving a problem. Rather than looking at the issue from a narrow and direct cause-and-effect point of view, or an "offense strategy," this question addresses a problem from a broader cause and effect point of view, or a "defense strategy." What is the difference? An offense strategy finds the direct cause of the problem and eliminates it, while a defense strategy looks at the factors that prevent a problem from occurring, and puts these factors into practice. Using a defense strategy, one can find ways to prevent conflict, rather than solving it after it has already caused damage. If we can adjust the way we question our problems, we can solve our biggest conflicts through prevention. Let us also question why there are people in the world that are healthy instead of just asking what causes disease; let us also focus on why it is that natural disasters do not occur in certain environments' rather than only asking what conditions cause these disasters to take place. The answers to these questions will give us the means to defend ourselves from not only disease, but also economic decline, natural disasters as well as other conflicts. But for now, let us focus on health.

The health of a human being, both physical and mental, is the most crucial aspect of our life. It surpasses any economic, educational and social issues that we face. Moreover, the health of the planet is quickly deteriorating. What we do not realize, however, is that humans are a microcosm of the planet;^[1] and the health of humans directly correlates to the health of the planet. Therefore, if we can work together to improve our own health, the health of the planet will also improve.

Our current system of medicine

Allopathy, our current system of medicine, has made tremendous strides in improving longevity and quality of life. It works hand in hand with modern medical technology, which has helped us devise state-of-the-art diagnostic procedures, medicines with a specific point of action, sophisticated surgical procedures, transplants and vaccines. Together, these developments in modern medicine combine to make Allopathy an excellent disease management system.

Although modern medical and surgical treatments deliver prompt relief to large numbers of people with disease, many patients have partial to no improvement along with adverse effects. In spite of stringent testing before their release to the public, after decades of their use, several medications are withdrawn from the market due to toxic effects. Unfortunately, these issues have discouraged many patients from receiving treatment and have forced them to look for other alternatives.

While the health needs of the population are not being fully met, the costs are increasing. One of the biggest problems we face today is the cost of healthcare - which is escalating at a rapid pace. In the US, businesses are finding it to be increasingly difficult to provide healthcare to their employees, and the government is reforming the healthcare system to provide coverage to over 40 million uninsured Americans. People are looking for medical care that is effective, less toxic and within their means. In order to accurately develop a better healthcare system, we must first understand Modern Medicine through its fundamental approach and the core questions it asks and answers.

Modern medicine, or allopathy, is based on four fundamental questions:

- 1. What disease is causing the symptoms?
- 2. What is causing the disease?
- 3. What is the disease doing to the body's organs and systems?
- 4. What can be done to remove the disease or to control it?

Essentially, the objective behind the modern medical system is to find the disease and remove it. The preventive aspect of this offense-thinking system is limited to two methods: First, in cases where the cause of an infectious disease is known, a vaccination can be developed. The second method is to conduct periodic physical examinations to search for diseases, and if nothing is found, declare the person healthy until the next visit. However, this second method does not really prevent disease. It simply prevents the complication of disease. Clearly, allopathy utilizes an "offense strategy" of finding and removing diseases. But what if we could prevent disease from occurring and save patients from the pain that comes along with disease? Shouldn't we incorporate a "defense strategy" into our system of medicine? In order to develop a successful and effective defense strategy, we must ask ourselves a different set of questions:

- 1. Why it is that most of the time, people do not have diseases?
- 2. What is health?
- 3. How can it be preserved, enhanced and rejuvenated?

Ayurveda

Ayurveda is a system of medicine that is more than five thousand years old and works primarily by making the body or

host strong, which consequently prevents and treats disease. According to Ayurveda, the definition of health is: "One whose Doshas are in balance, appetite is good, tissues of the body and natural urges are functioning properly, and whose mind, body and spirit-or Self-are cheerful or in bliss."[2] This definition has the potential to answer the questions listed above, and ultimately develop an effective defense strategy for our system of medicine. Using the basic principles of Ayurveda in conjunction with his regular allopathic treatment, the author found a gradual, but sustained improvement in the health of his patients as well as himself. As a result of using this approach for treatments, patients required smaller doses of medicines, and after some time, some patients did not require medication at all. His results support the theory that by using a judicious combination of both Allopathy (offense strategy) and Ayurveda (defense strategy), we can provide complete and comprehensive medical care to the people who are looking for effective healthcare.

The fundamental principle of *Ayurveda* is a strong focus on the difference in body types, which can be demonstrated by a few simple observations:

- Some people relish spicy food, while others cannot tolerate it.
- Some feel comfortable in cold weather with light clothing, whereas others shiver in spite of warm clothes.
- Some people enjoy large gatherings, while others prefer to be by themselves.
- Certain individuals develop toxic effects from medicines, while others do not.

These observations illustrate the fact that our body types differ in structure, function and mental attitude; we react differently to different environments, foods and medicines.By having a clear understanding of the patient's body type, an Ayurvedic physician can plan the best defense strategy. Unfortunately, allopathic physicians are not trained to identify body types, and this is where the modern system of medicine falls short. According to Ayurveda, consciousness creates five elements: Space, air, fire, water and earth, which combined with the soul, create the Human Being.^[3] These five elements in different combinations create three physical principles, or Doshas. We are all born with a unique combination of these three Doshas, which creates the individual's nature, or constitution (Dosha Prakriti or Deha prakriti)^[4,5] Each person's predominant Dosha gives its name and characteristics to that person's nature. According to Ayurveda, the mainstay of preserving health is to keep these Doshas in balance. Just as the tridosha concept represents the body type of an individual, Sattva, Rajas and Tamas are the three characteristics, or triguna, of the mind, which formulate the personality and talents of individuals.

Six stages of disease

The Ayurvedic concept of the six stages of disease^[6,7] is one of the most important factors distinguishing Ayurveda from Allopathy. These six stages include: Accumulation, aggravation, dissemination, localization, manifestation and disruption of the *Doshas*. During the first four stages, disease symptoms may be subtle or nonexistent; they generally tend to appear during the last two stages of manifestation and disruption.

In Allopathy, when the symptoms are subtle and subjective, the

patients are usually labeled as "functional," "hypochondriac" or "neurotic" until the full manifestations of the disease develop. An Ayurvedic physician, however, can identify the imbalance through examination, especially of the pulse, and balance the Doshas, or metabolic principles, which in turn prevents the disease. These Ayurvedic assumptions are not just baseless ideologies. Modern science bears out the validity of these assumptions. A biostatistical study of large populations' has validated with 90 percent certainty the three body types or the Tridosha concept of Ayurveda.^[8] Moreover, genome research has shown people with a certain gene type to be more prone to diseases, more likely to respond to certain treatments and more prone to side effects from certain drugs,^[9] just as Ayurveda has been able to predict which people are more likely to suffer from a particular disease. Recent research has also shown that lifestyle changes can "turn off" and "turn on" certain genes, and thus, with effort, we can turn off bad genes and turn on the good ones.^[10]

Incorporating a defense strategy into our lives

Essentially, the key to preserve our health is a defense strategy. Without a strong and effective approach to prevent disease, we cannot move forward to establish a better healthcare system. We are currently off-balance, strengthening our offense strategy, without establishing a defensive one. It is crucial that we try to keep both in balance. But as it was mentioned earlier, a balance between the two different strategies is not only important for dealing with disease but it can be seen in almost all aspects of life.

Let's look at a few everyday examples:

- 1. Championship-winning coaches win games by strategizing excellent defense combined with good offense.
- During the medieval era, warriors fought with both a sword and shield. Fighting only with the sword is dangerous and risky; but we are fighting disease with only a 'sword'. We have yet to use a 'shield' for defense.
- 3. A crime-infested society is a macrocosm of a human being with a disease. In order to safeguard the people, law enforcement agencies identify the criminals and put them away, just as healthcare providers identify and remove the disease. But unless the health of the society is improved by addressing the economy, education, sports and socio cultural activities, criminals keep coming back and the health of the society does not improve.
- The phenomenon of positive deviance: Jerry and Monique 4 Sternin were invited to Vietnam to solve the problem of malnutrition in children and were given six months to show their results with very limited resources. The conventional manner of solving the problem is to ask the question, "What is the cause of malnutrition." The reasons are poverty, ignorance, poor distribution of food, lack of hygiene, etc. However, because they did not have the time and resources necessary to address these issues, they asked a different question: "Are there poor children who are well-nourished? If so, then why?" What they found was that mothers of well-nourished children were feeding them balanced food even when they had diarrhea, giving them several small feedings each day rather than one or two big ones. Additionally, despite the fact that sweet potato greens were considered a low class food, mothers would add it to their children's rice and fish. Eventually, these ideas spread and took hold, and the program measured

the change in malnutrition, posting them in the villages for everyone to see. In two years, malnutrition dropped 85 percent in 65 villages, and 2.5 million children were well nourished. This program has now been repeated in various countries, yielding the same result.

5. One of the most important examples is how business consultants are advising and encouraging the use of *Ayurveda* as they seek to boost their corporate performance in a sluggish economy. Essentially, by aligning employees' roles and responsibilities with their individual physical and mental energy patterns, business managers hope to significantly enhance the productivity and creativity of their companies. Many are setting up cross-functional innovation teams that can think outside the box and develop breakthrough products, services or even business models.^[11]

Maintaining the human ecosystem

Now that we understand the importance of the balance between offense and defense strategies, how can we put it in to practice to preserve our health?

The human body is not like a machine, but rather an ecosystem. Ensuring that the ecosystem is in balance is imperative, and it requires action at three separate levels. If you think about the shape of an ice cream cone, the idea of the three levels of the ecosystem becomes clear; there is the upper level of the cone, the intermediate level and the lower level [Figure 1].

Below are a few methods that can be used to balance the human ecosystem at the three different levels:

A. The upper level

Ashtanga Yoga as described by *Patanjali* works mainly at the macro level or widest level of the cone. The following are the three limbs of Ashtanga Yoga:

1. Meditation or connection to the source: The human body is the manifestation of consciousness. In order for it to follow

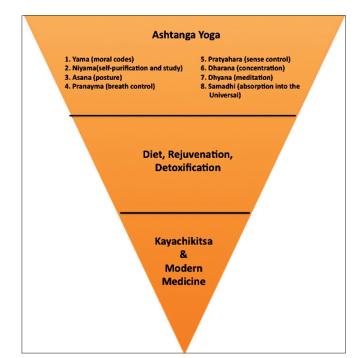


Figure 1: Three levels of human ecosystem

the natural laws, it must remain connected to the source. A person connected to the source uses "self-referral" for his needs. A break in the connection leads to the "mistake of the intellect," and the person begins using "object referral" for his needs. Regular Meditation helps to re-establish the connection to the source. Meditation serves several purposes: a) By focusing on a word, light or our breath, we remain in the present, b) By training ourselves to remain in the present, we discard the agitation of thoughts of the past and anxiety for the future. The resulting "gap," in our thoughts from meditation harnesses the power of the mind to cure the ailments of the body.

- 2. Pranayama or disciplined breathing: At the fundamental level, Prana signifies breath or the life force, and Yama is discipline. This disciplined breathing, which involves slower and deeper breathing is healthier for the body and also prolongs life. Moreover, research has shown that regular Pranayama increases the vital capacity of the lung, reduces the frequency and severity of asthma attacks, reduces lipids or cholesterol, lowers blood pressure, slows down the heart rate and increases adrenal-cortical functions, all of which increase the body's immunity to disease.^[12]
- 3. Yogic Asanas: Exercise is vital to human health. According to western experts, optimum exercise means achieving 80% of the maximum heart rate and is recommended for increasing physical endurance or losing excessive weight. Yogic Asanas on the other hand, achieve physical, mental and spiritual balance, which as a result, keep the Doshas in balance. The amount and duration of exercise depends upon one's constitution and age as well as the time of day and season.

B. The intermediate level

The intermediate level consists of diet, external treatments, detoxification and rejuvenation.

- 1. Diet: The current significance of diet is measured in terms of calories, carbohydrates, protein, fats, vitamins and minerals, while the therapeutic value or toxic effects of food are ignored. In reality, the constitution of a person determines what foods are best for him/her. Moreover, the taste of food is a guide to its nutritional value. Different foods, according to their preparatory styles, serving and the environment in which they are consumed have either pacifying or aggravating effects on the internal working of the body. The amount and type of food for a person with a "*Kapha*" constitution may not be appropriate for a person with a "*Vata*" constitution and may not digest well. Partially or undigested food creates "*Ama*" in the body and is a precursor to disease.
- 2. External treatments: For thousands of years, Ayurveda has used transdermal, inhalational, rectal, ophthalmic and otic routes for administration of medicines very effectively. Various kinds of massage, such as nasal, head and eye treatment using medicated oils, have been successful in treating and relieving insomnia, tension, pain, fatigue and in the lubrication of tissues to promote good health.
- 3. Detoxification and rejuvenation: Detoxification is the removal of toxins, mainly Ama, while rejuvenation is the process of increasing Ojas. Both Ojas and Ama are unknown to the Allopathic system of medicine. According to Ayurveda, bacteria are not the primary causative agents, but the result of an imbalance in the human ecosystem, which

results in the lack of Ojas. There are two types of Ojas that exist in Ayurveda: Para and Apara. Para ojas is present from the very first day of conception till death.^[13] Its destruction results in death. Para Ojas is the vitality of a person, while Apara Ojas can be compared well with immunity. Ama is a concept of Ayurveda that can be understood as accumulated toxic substances at different levels of physiology. At the cellular level, during functioning of the physiology, there is an accumulation of impurities and toxins. These impurities come from both inside and outside the body. From inside the body come internal metabolic waste products, such as free radical-damaged cells and tissues, and from the outside come external impurities and toxins, such as herbicides, pesticides, pollutants, and toxins that occur naturally in food. These impurities are absorbed from food supply and trigger the formation of substance collectively referred to as 'Ama' in Ayurvedic terminology.^[14] Any indisciplined dietary, physical or mental habit causes improper metabolism and gives rise to Ama or several harmful metabolic products, which are responsible for chronic inflammatory and autoimmmune diseases. The mainstay of detoxification is "Panchakarma" and various regular external treatments. "Rasayana Tantra" is a vast field of Ayurveda dealing with rejuvenation therapies or maintenance of Ojas, that is, the vitality and immunity of the body.

C. The lower level

The preceding two levels are not well addressed by modern medicine or Allopathy, but at this level, great advancements have been made in modern medicines with specific points of action, surgery, transplants, gene therapy, etc. to provide excellent management of disease. Ayurvedic herbs and preparations can provide a helping hand to modern medicine or Allopathy in the following way:

- 1. Use of Ayurvedic preparations in infectious diseases: One of the greatest advancements of last century was the discovery of antibiotics. These agents can quickly and effectively remove the bacteria or causative agents of an infectious disease; however, there are many patients of diseases with impaired immunity who do not improve, even if an appropriate antibiotic is used. Lack or disturbance of *Ojas* or immunity is the principal cause of an infectious disease, not the bacteria.Remember, bacteria are natural and we have about 100 trillion of them in our body. Therefore, when using antibiotics, an optimum immunity is necessary. Ayurvedic preparations fight bacteria by improving bodily resistance.
- 2. Use of Ayurvedic preparations in chronic inflammatory/ autoimmune diseases: With these diseases, the causative agent is not known. According to Ayurveda, Ama^[15] plays a central role in causing these conditions. Modern medicine has developed very effective pharmaceutical drugs to remove the effects of disease in the form of anti-inflammatory agents. The latest additions are biological agents, which block the pathways of inflammation. Future research will determine the causative agents and discover better ways to reverse the disease. In the mean time, removal of Ama, balancing the Doshas and treament with Allopathic medicines will better alleviate the suffering of people with chronic inflammatory and autoimmune diseases.

- Use of Rasayana and Rejuvenation: There is no organized 3 thought process in modern medicine for rejuvenation, but Ayurveda has a specialty called Rasayana Tantra. This field of knowledge helps to maintain strength, vitality and youthfulness of the body's tissues. Once a disease is cured, Rasayana or rejuvenation therapies help in the recovery of the individual. Research has shown that several Rasayana herbs like Withania somnifera, Asparagus racemosus and Tinospora cordifolia, which are mentioned in Ayurvedic classics, have had a proven effect on the recovery process. On the basis of modern knowledge, significant data has been produced to specify the effect of Ayurvedic herbs and preparations' and has been accepted globally. Although these herbs and preparations have an effect on the body as a whole, they also play specific roles on various organs. These herbs have organ specific Rasayana properties too. Convolvulus pluricaulis (Shankhapushpi), Centella asiatica (Mandukaparni), Bacopa monnieri (Brahmi) are effective for the central nervous system disorders. Adhatoda vasica (Vasa), Albizia lebbeck (Shirisha) and Glycyrrhiza glabra (Madhuyashti) are found to be beneficial for respiratory tract disorders, while for proper liver functioning Piper longum (Pippali), Andrographis panniculata (Kalamegha) and Picrorhiza kurroa (Katuki) are effective. Mucuna pruriens (Kapikacchu) and Withania somnifera (Ashwagandha) are beneficial for the male reproductive system.^[16]
- 4. As an adjuvant therapy with various drugs: Due to their synergistic action, the use of Ayurvedic herbs and preparations can also be made as adjuvant or complementary therapy. For example, cardioprotective herbs like Arjuna (Terminalia arjuna)^[17] and Pushkarmula (Inula recemosa)^[18] can be added to the regimen for cardiac disorders. In the same way, Ayurvedic preparations help to reduce the dose of Antihypertensive and hypoglycaemic drugs. Asana (Pterocarpus marsupium),^[19] Meshashringi (Gymnema sylvestre),^[20] Karavellaka (Momordica charantia), Mamejjaka (Enicostoma littorale)^[21] etc. have antidiabetic properties and can be used as an adjuvant to modern therapy.
- 5. As a preventative measure to prevent the adverse effects of modern drugs: These herbs and preparations can also be utilized to counteract various adverse effects of Allopathic Medicine. For example, hepatoprotective Ayurvedic preparations are very effective in counteracting the hepatotoxic action of certain drugs.^[22,23] E.g. Gudoochi (Tinospora cordifolia),^[24] a known immunomodulator can be used during cytotoxic therapy to take care of immunity. Moreover, Punarnava (Boerhavia diffusa),^[25] Gokshura (Tribulus terrestris),^[26] etc. have shown regenerative effects on the urinary system. Radioprotective and chemoprotective effects of certain Ayurvedic herbs are recognized in cancer treatment.^[27,28]
- 6. Use of Ayurvedic drugs for antenatal care: Pregnancy is the most crucial stage of a woman's life, and Ayurveda plays a great role in this process. During this time, several modern drugs are contraindicated. Ayurvedic preparations on the other hand provide great results without adverse effects in cases of mild gestational hypertension, urinary infections, respiratory problems and gastrointestinal diseases.

But how can we use these Ayurvedic concepts to fill the gaps in our modern system of medicine?

Symbiohealth

Symbiohealth is the concept of using both Allopathic and Ayurvedic physicians in a group practice setting, where the physicians understand their core competency and can provide care in disease management, prevention of disease, preservation, protection and rejuvenation of health. However, research is crucial to putting the concept of Symbiohealth into practice. Double blind controlled studies are the most commonly used research tool in today's world, but there seems to be a flaw in the way in which they are conducted. In several post-marketing studies, different results are obtained and many drugs have to be withdrawn due to toxicity. This can be attributed to the fact that body type or Prakriti is not taken into consideration. For this reason, it is imperative that further research be done with consideration of body type. If we can keep the concepts of Ayurveda in mind when doing research in the fields of Gastroenterology, Neurology, Rheumatology and Allergy, we can develop a more comprehensive system of medicine.^[29,30]

Modern medicine has been limping along on a single foot, but if we can incorporate another approach, we can sprint with both of our feet. Symbiohealth will help to provide the best care to every patient. With a combination of both Allopathic and Ayurvedic treatments, we can fight disease with both a sword and a shield.

Not only will we improve the health of each individual, but as a result, we can also improve the health of our planet. The earth is our home, and we must nurture it, but we can only do that if we are healthy. Symbiohealth will give us the resources we need to heal ourselves, and when we heal ourselves, we heal the earth.

If we change the way we ask questions, we can change our perspective. If Isaac Newton can revolutionize the way people think, why can't we?

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