UNIT 1 : CONCEPT AND ETIOLOGY OF DISEASE

UNIT STRUCTURE

1.1 Learning Objectives

1.2 Introduction

1.3 The Concept of Disease

1.4 Etiology of Disease

1.5 Yogic Concept of Disease

1.6 Let Us Sum Up

1.7 Further Reading

1.8 Answers to Check Your Progress

1.9 Model Questions

1.1 LEARNING OBJECTIVES

After going through this unit you will be able to –

- state the concept of Disease
- explain the etiology of Disease
- discuss the Yogic concept of Disease.

1.2 INTRODUCTION

This is the first unit of the theory course Yoga Therapy in Practice. In this unit, we are going to discuss the concept and etiology of Disease. We will also discuss the concept of disease.

According to World Health Organization (**WHO**), health does not mean merely an absence of disease but a jubilant feeling of well being at physical, mental and social level.

According to Ayurveda, Health is defined as:

"Sama dosha sama agnischa sama dhatu mala kriyaaha

Prasanna atma indriya manaha swastha iti abhidheeyate"- **Sushruta Samhita**

Meaning- One is in perfect health when the Three doshas (vata, pitta and kapha), Digestive fire (digestion, assimilation and metabolism),

Dhatus (all the body tissues and components), all the excretory functions (the physiological functions of urination and defecation) are in perfect order with a pleasantly disposed and contented mind, senses and spirit.

Yoga is generally supposed to deal with only the mind and spirit. But, in actual, it treats the body and mind as a whole. Yoga is a spiritual science for the holistic development of our physical, mental and moral-spiritual aspects. The Yogic practices are intended to stabilize the psycho-physiological mechanism so that there is less and less tendency towards an imbalance in the face of external and internal stimuli.

When there is no balance between desire and need, one feels dissatisfied. Out of dissatisfaction, frustration and dejection is produced. When there is negative interaction between the self-projection and the surrounding environment, stress is produced. The self projection is influenced by our likes, dislikes, attitudes, ambitions, beliefs, carvings, desires, negative emotions etc. Our life-style is also affected due to these factors. Yogic attitudes described by Maharshi Patanjali, especially, *Yamas* and *Niyamas* are very much important and needful to overcome these challenges. Yamas are five- Ahimsa (abstention from any thoughts of hatred or wish to harm others), Satya (truthfullness), Asteya (abstention from any tendency to steal), Brahmacarya (control of sex activities, continence) and Aparigraha (abstention from hoarding one's own or coveting other's wealth and possessions). Niyamas are also five- Shaucha (cleanliness or purity), Santosha (contentment), tapas (self-discipline, austerities), Swadhyaya (engagement in study of such literature and / or in such other mental activities as would help self-realization) and Isvara-Pranidhana (surrender to God's will).

The Bhagavad Gita defines Yoga as-

"Yogasthah kurukarmani sangam tyaktva dhananjaya
Sidhiasidhyoh samobhutva samatvam yoga uchyate"

– Bhagavad Gita II-48

Here, Yoga is defined as *samatvam* meaning, Yoga is equanimity at all levels. This may also be understood as a perfect state of health wherein physical homeostasis and mental equanimity occur in a balanced and healthy harmony.

1.3 THE CONCEPT OF DISEASE

First, we will discuss the meaning of disease. The word 'disease' is made up of two words- 'dis' and 'ease'. Ease is the normal condition of the person. So, disease is any state in which person is not in its easy state. According to modern view, disease is a particular abnormal condition that negatively affects the structure or functions part or all of an organism. In general, the term disease is used to refer to any condition that causes pain, dysfunction, distress, social problems, or death to the person afflicted. So, disease is any condition that impairs the normal functioning of the body and mind. The study of disease is called pathology, which includes the study of etiology, or cause.

Yogic view of disease is different from modern view. Sage Patanjali has described the concept of disease as "*vyadhi*" (Patanjala Yoga Sutra I-30). According to him, *vyadhi* is considered as one such psycho-physiological disturbances. The word '*Yoga*' signifies '*integration*' and '*vyadhi*' is just opposite i.e. dis-integration. It contributes to a feeling of being 'ill' at ease and hence it a dis-ease producing process.

There are four main types of diseases- infectious diseases, deficiency diseases, hereditary diseases and physiological diseases. Apart from this, diseases are classified in various ways. It can also be classified as communicable diseases and non- communicable diseases.

Generally diseases are classified as- Acute, Chronic, Genetic, Hereditary etc. It may be classified by cause, pathogenesis or by syndrome. Also, it can be classifies according to the organ system involved. Today, it is preferred to classify them by their cause if it is known. The most known and used classification of diseases is the World Health Organization's ICD (International Classification of Diseases). Currently last publication is the ICD-10.

Acute Disease:

Acute disease is one of a short-term nature. An acute disease lasts for just a short time but can begin rapidly and have intense symptoms. Also, it develops in a short time.

Examples are- Cold, Influenza, Cholera, Typhoid, Cough etc.

Chronic Disease:

A chronic disease is one that persists over time. It is often characterized six months or more. It lasts for a long time and might recur. It develops over time instead of having a sudden onset.

Examples are- Cancer, Heart disease, Kidney disease, Diabetes, Arthritis, Tuberculosis, etc.

Genetic Disease:

A genetic disease or disorder is caused by one or more genetic mutations.

Most common types are- Down syndrome, Cystic fibrosis, Sickle cell anaemia, etc.

Hereditary Disease:

A hereditary disease is a type of genetic disease caused by genetic mutations that are hereditary (can run in families).

Congenital Disease:

A congenital disease is one that is present at birth. It can also be the result of a vertically transmitted infection from the mother, such as HIV/ AIDS.

1.4 ETIOLOGY OF DISEASE

We have discussed the concept of disease according to Modern and Yogic view. Now, we will discuss the etiology of disease. When we are ill, we go to doctor. Then doctor discusses with us and tries to figure out the cause of that disease. They are actually trying to figure out the etiology of the disease. Etiology is the cause of a disease or the science that deals with such causes. According to the western system of medicine, germs are said to be the primary agents that cause all kinds of diseases in the body. But, various experiments and investigations of the modern medical experts have established that such a theory cannot be correct. Germs of diseases happen to be present not only in the diseased person but also in the system of healthiest person.

Germs of some diseases can be traced in the constitution of most of the youthful persons of unbroken health. But those germs can do no harm in their body-system unless the body-system itself is otherwise in a state of disorder. Germs of diseases produced internally cannot multiply and other germs infecting the body-system from outside also cannot cause any harm. Thus, infections of the body by the germs cannot be the primary cause of diseases.

The common etiologies are-

Some diseases are infectious. Means, diseases caused by micro-organisms (bacteria, viruses, protozoa and fungi). Some diseases are genetic (transmitted from one generation to another).

In simple words, the causes can be categorised as- airborne, foodborne, infectious, lifestyle and non-communicable.

- **Airborne** - The disease caused by **pathogens** and transmitted through the air.
- **Foodborne** – The illness resulting from the consumption of food contaminated with pathogenic **bacteria, toxins, viruses** etc.
- **Infectious** – The diseases resulting from the **infection.**
- **Lifestyle** – The disease caused by sedentary lifestyle or a diet high in unhealthy foods such as refined carbohydrates, trans fats, or alcoholic beverages.

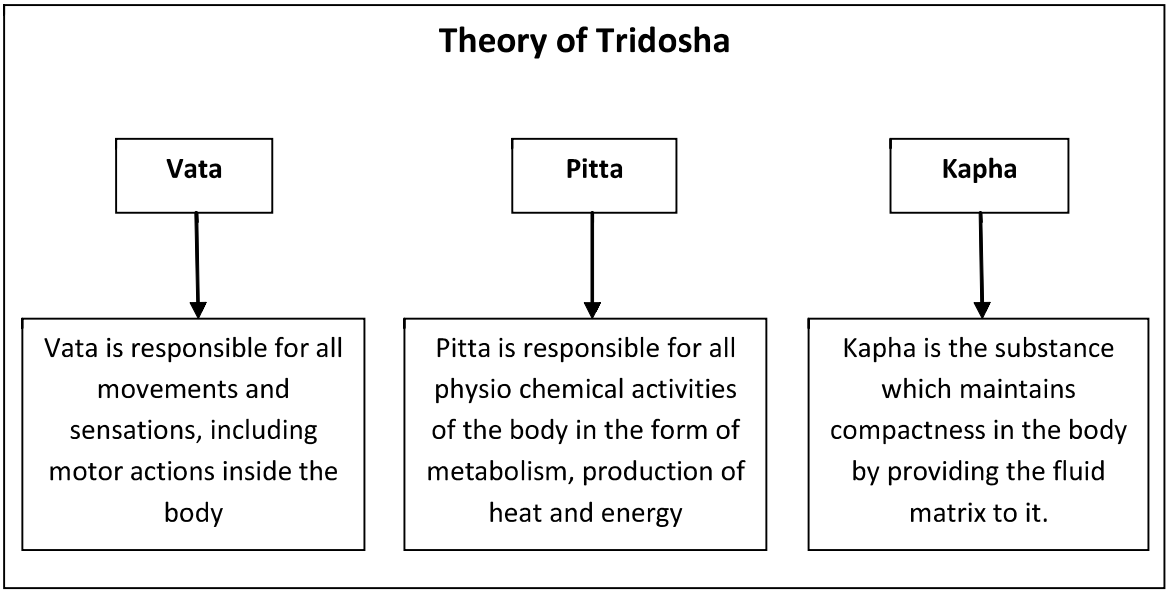
The way we behave with others, think, sleep, eat, take rest, play, perform exercises are all included under ‘Life-style’. Sedentary working patterns, improper diet and irregular timings of food, inadequate rest and sleep and lack of exercise constitute wrong life-style.

So, here, we learn that, diseases can be caused by pathogens, bacteria, toxins, viruses, infections and sedentary lifestyle and unhealthy food.

Now days, stress is also playing an important role in number of diseases. It is known that the continuous stressful situation leads to sympathetic over-activity. The stressful situations increases the level of adrenaline (also known as epinephrine) and nor adrenaline (also known as nor epinephrine). This over-activity causes spasm of the coronary

arteries. It also causes increase in cortisol level causing formation of blockages in the arteries speedily. In this way, the stress, which is actually the normal defensive mechanism of the body to protect us in danger situations, now becomes harmful. Emotions have an important role in our life. Generally emotions are considered as positive and negative. Positive emotions are constructive while negative emotions are destructive in nature. Negative emotions produce disturbed conditions of mind and also disturb the tone of the muscles including blood vessels. It also impairs autonomic functions of the human body such as respiration, circulation, glandular secretions. And finally it weakens the immune system. In this way, the stress, psychological condition, gradually move to psychosomatic condition and further it move from functional impairment to cellular disturbance. This condition finally leads to structural alteration. If this situation is not tackled early, it leads to permanent organic changes in the various organs of the body.

One of the major Indian concepts of disease causation is the imbalance of tridosha. This is found in numerous classical texts of Yoga and Ayurveda like Shiva Swarodaya, Sushruta Samhita, Charaka Samhita. The age-old theory of Tridosha is more rational and scientific than the infection (germs) theory of modern times. Tridosha theory is based on three basic elements inside our body, namely- *Kapha* (mucus), *Pitta* (bile) and *Vata* (air). Vata is the energy of the body that moves like the wind and causes flow in the body. Pitta is related to the bilious secretions and is the cause of heat in the body. It is the energy of catabolism that is essential for digestion. Kapha is the glue that holds everything together and is the energy of anabolism helping generative and regenerative processes.



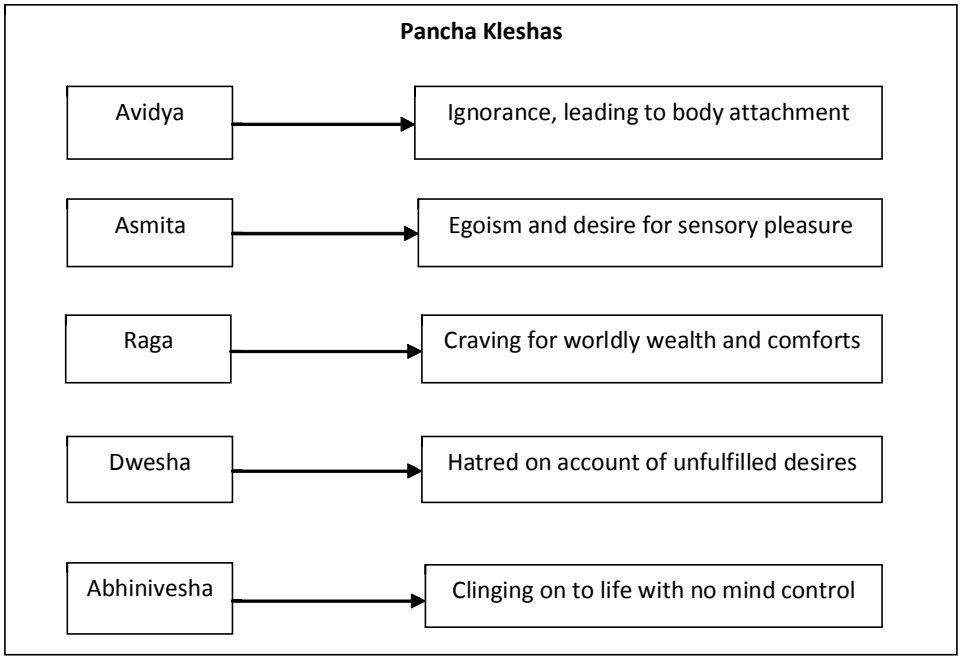
Inside our body, imperfectly digested food matters and accumulated waste matters get decomposed and they produce the poisons of diseases inside the body. As a result, the three basic elements – *Vata*, *Pitta* and *Kapha* themselves get infected and being overpowered by the accumulated poisons of diseases. As a result, they are irritated out of balance and their operation or working becomes weakened. In such a situation, numerous germs keep growing inside the body under the protective wings of these accumulated poisons of diseases. Also, the germs from outside, enter into such a poisoned constitution and find favourable conditions for multiplying themselves prolifically.

Thus, the basic causes for the growth of diseases in the body are to be found in the poisoning or infection of the body-system and in a disturbance or lack of balance in the operations of *Vata*, *Pitta* and *Kapha* inside the body which creates a favourable condition in the body for an increasing accumulation of poison. Thus according to the Ayurveda, imbalance in Tridosha is the fundamental cause of disease.

1.5 YOGIC CONCEPT OF DISEASE

Now, we will throw light on Yogic concept of disease. Yoga considers Samadhi as the ideal state of health which is disturbed by the *chitta vikshepa* (disturbances in mind) due to *kleshas* and *antarayas*.

Sage Patanjali has also explained the primary causation of stress based disorders through the concept of *pancha klesha* (psychological afflictions). These are five- *avidya* (ignorance), *asmita* (a false sense of identification), *raga* (addiction), *dwesha* (aversion) and *abhinivesha* (clinging on to life for fear of death) (Yoga Darshan II: 3).



Sage Patanjali, while explaining *antaraya*, has considered *Vyadhi* (disease) as one of the nine obstacles to the integrative oneness of Yoga i.e. Samadhi. Patanjali also enumerates manifest symptoms such as *dukha* (mental or physical pain), *daurmanasya* (sadness or dejection), *angamejayatva* (anxious terror) and *shvasa prashvasah* (respiratory irregularities) as concomitant expressions of mental disturbances (Yoga Darshan I: 30, 31).

The Yogic concept of health and disease enables us to understand that the cause of physical disorders stems from the seed in the mind and beyond. *Adhi* (the disturbed mind) is the cause and *vyadhi* (the physical disease) only the manifest effect in the Yogic scheme of things.

From the Yogic viewpoint of disease it can be seen that, stress related disorders appears to progress through four distinct phases. We can understand these as Psychic Phase, Psychosomatic Phase, Somatic Phase and Organic Phase. These four phases can be correlated with

koshas. Five koshas from subtle to gross nature of functions are- Anandamaya, Vijnanamaya, Manomaya, Pranayama and Annamaya.

1) Psychic Phase:

This phase can be marked by mild but persistent psychological and behavioural symptoms of stress like irritability, disturbed sleep and other minor symptoms.

This Phase can be correlated with *vijnanamaya kosha* and *manomaya kosha*.

2) Psychosomatic Phase:

If the stress continues, there is an increase in symptoms, along with the appearance of generalized physiological symptom such as occasional hypertension.

This phase can be correlated with *manomaya kosha* and *pranamaya kosha*.

3) Somatic Phase:

This phase can be marked by disturbed functions of organs, particularly the target, or involved organ. At this stage, one begins to identify the diseased state.

This stage can be correlated with *pranamaya kosha* and *annamaya kosha*.

4) Organic Phase:

This phase is marked by full manifestation of the diseased state. The pathological changes such as an ulcerated stomach or chronic hypertension, becoming manifest in their totality with their resultant complications.

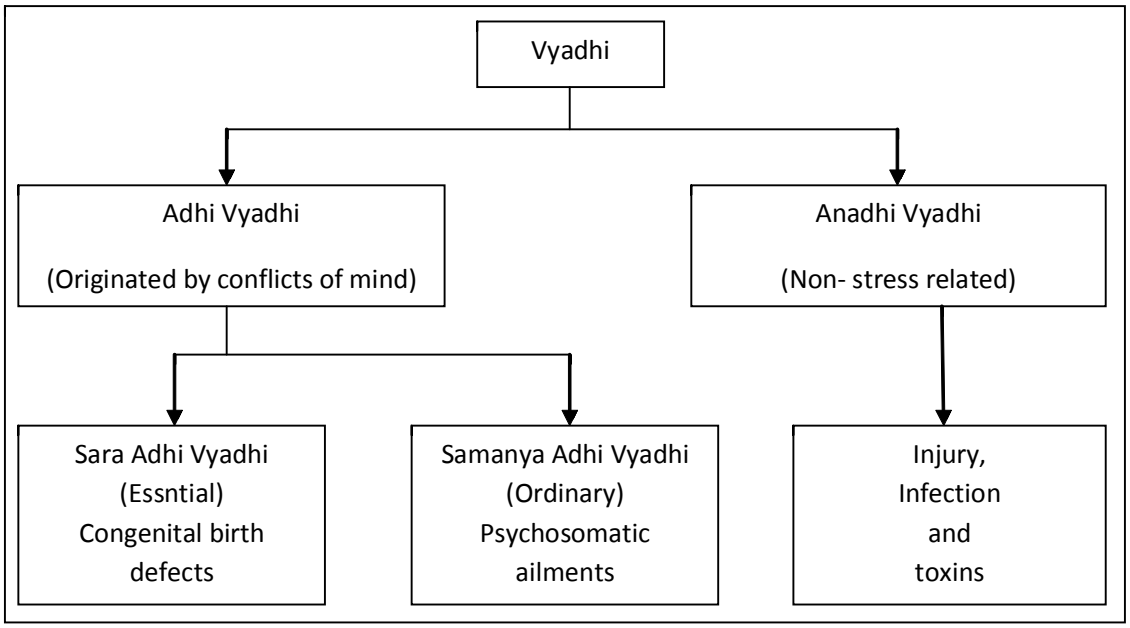
This phase can be correlated with the *annamaya kosha*. The disease has become fixed in the physical body.

The concept of disease according to Yoga is found in the treatise called Yoga- Vasistha. According to this text, the modern diseases such as asthma, diabetes, hypertension and anxiety are called "*Adhija Vyadhi*" (stress born diseases) originating in manomaya kosha- the astral layer of our existance. They arise from our actions that are governed by our emotions (our strong likes and dis- likes) rather than what is right or what is

wrong.

If the Adhi is not remedied at the astral layer, it will bring imbalances at the level of pranamaya kosha that shows up as breathing jerks, imbalances and speed. This in turn creates stress reactions causing imbalances in the autonomic and endocrine activity. These imbalances leads to diseases in the body called Vyadhi.

The other category of diseases such as infections and injuries come under *Anadhija Vyadhis* which essentially are physical in nature and can be tackled by modern medical system effectively.





CHECK YOUR PROGRESS

Q 1: Fill in the blanks:

1) Sage Patanjali has described the concept of disease as .....

2) According to Ayurveda, One is in perfect health when the Three doshas, Digestive fire, Dhatus, all the excretory functions are in perfect order with a pleasantly disposed and contented mind, senses and .....

3) Three basic elements in our body are- Vata, Pitta and .....

4) According to Yogic concept of disease, Adhija Vyadhi are divided into- sara adhija vyadhi and .....
5) Among the five kleshas described by Maharshi Patanjali, ... is the root cause for remaining all.
6) From the Yogic viewpoint of disease, psychosomatic disorders progress into- Psychic, Psychosomatic, Somatic and ..... phase.



1.6 LET US SUM UP

Here, in this Unit, we have discussed that Health is very important in our life. Health doesn't mean only the absence of disease but it is a state of complete physical, mental and social well-being. Being disease free is also important. Disease is a particular abnormal condition that negatively affects the structure or functions of an organism. Now days, our faulty life-style is responsible for the number of diseases. According to Ayurveda, health depends upon proper balance of basic three elements in the body- Vata, Pitta and Kapha. Ayurveda considers Tridosha as the fundamental cause of disease. Yoga considers Samadhi as the ideal state of health which is disturbed by the *chitta vikshepa* (disturbances in mind) due to five *kleshas* and *antarayas*. Yogic view emphasizes on *ignorance* (avidya) for all kind of sorrows. Vasistha Samhita gives description of Adhija and Anadhija Vyadhi. Adhija Vyadhi are further divided into sara adhija and samanya adhija vyadhi.



1.7 FURTHER READING

1) *Yogic Therapy*- Srimat Swami Shivananda Saraswati, Shivananda Math & Yogashram Sangh: Kamakhya, Guwahati.

2) *Yoga Therapy for selected diseases*- Dr. M.M. Gore, Dr. D.R. Vaze, Dr. S.A. Kulkarni, Dr. J.P. Oak, Kaivalyadhama: Lovavla, Pune.

3) *Yogic Management of Common Diseases*- Dr. Karmananda Saraswati, Yoga Publication Trust: Bihar.

4) *Yogic Therapy-Its Basic Principles and Methods*- Swami Kuvalayananda and Dr. S.L. Vinekar, Kaivalyadhama, S. M. Y. M. Samiti : Lonavla, Pune.



1.8 ANSWERS TO CHECK YOUR PROGRESS

Ans to Q No 1: 1) Vyadhi

2) Soul

3) Kapha

4) Samanya adhija vyadhi

5) Avidya

6) Organic.



1.9 MODEL QUESTIONS

Q 1: Discuss the concept of Disease.

Q 2: Explain the etiology of diseases according to Ayurveda.

Q 3: Write the common causes of diseases according to modern view.

Q 4: Discuss the Yogic concept of disease.

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