AYURVEDA BASED DIETARY AND LIFESTYLE ADVOCACY FOR MENTAL HEALTH & PSYCHIATRIC DISORDERS





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प्रो. वैद्य के. एस. धीमान महानिदेशक Prof. Vd. K.S. Dhiman Director General

केन्द्रीय आयुर्वेदीय विज्ञान अनुसंधान परिषद् आयुष मंत्रालय

CENTRAL COUNCIL FOR RESEARCH IN AYURVEDIC SCIENCES Ministry of AYUSH, Govt. of India

Preface

Mind or *manas* is considered three dimensional in terms of three *gunas* viz. *sattva*, *rajas* and tamas. The *raja* represents activity and dynamism while the *tamas* denotes inertia and darkness. *Sattva* is the state of pure mind with absolute balance when both the extreme quality of mind viz. *rajas* and *tamas* cease or merge in each other. It is believed that all mental illness are because of the disorders of *rajas* and *tamas*. *Sattva* is never the cause of illness. This is why *rajas* and *tamas* are also called *manas doshas*. Ayurveda offers a specialized branch *Graha chikitsa* dedicated to mental health and disease management.

In spite of great advancement in the science of psychiatry, for decades the problems with the management of a certain mental problems like anxiety, stress, mental retardation etc. have remained not fully addressed with safe and effective solutions. In addition to this, adverse effect of anti-psychotic; medication is also creating considerable amount of discomfort to the patients. At this juncture there is a need for exposition and adaptation of such therapies that could effectively tackle such conditions without any adverse events. The entire Ayurvedic management is more health oriented than disease oriented. And as such there is a large scope of utilizing Ayurvedic approaches and therapeutics as an adjunct to the disease-oriented therapy of modern psychiatry to provide a full treatment.

CCRAS has been engaged in validation of classical *Ayurvedic* drugs and approaches for safety and efficacy and also research and development on new combinations focusing on mental disorders and generated scientific evidences. Further, the council is also focusing in disseminating the merits of Ayurveda through various ways and means such as Scientific Journals, IEC material for common public, booklets etc. emphasizing on prevention and health promotion based on the core fundamental of Ayurveda.

'यथा अन्न तथा मन'- Mental state is also reflected by the food we take. Satvika diet certainly reduces the Rajas & Tamas manas Doshas & harmonizes senses and body. To realize this, the council has been publishing diet & life style guidelines and advocacies for various diseases in a phased manner and the present compendium is dedicated to mental health and diseases management enriched with Ayurvedic advocacies.

I wish that this effort would certainly help in effective dissemination of Ayurveda based preventive and life style advocacy for prevention of mental health at large.

जवाहर लाल नेहरू भारतीय चिकित्सा एवं होम्योपैथी अनुसंधान भवन 61-65, सांस्थानिक क्षेत्र, सम्मुख 'डी' ब्लाक, जनकपुरी, नई दिल्ली-110058 Jawahar Lal Nehru Bhartiya Chikitsa Evam Homoeopathy Anusandhan Bhawan 61-65, Institutional Area, Opp. 'D' Block, Janakpuri, New Delhi- 110058 Phones : 011-28524457 Tele-Fax : 011-28520748 Fax : 011-28525959 Website : www.ccras.nic.in E-mail : dg-ccras@nic.in, dr_ks_dhiman@yahoo.co.in

Gram : "AYUSH"



डॉ. एन. श्रीकान्त उपमहानिदेशक Dr. N Srikanth Deputy Director General

केन्द्रीय आयुर्वेदीय विज्ञान अनुसंधान परिषद् आयुष मंत्रालय CENTRAL COUNCIL FOR RESEARCH IN AYURVEDIC SCIENCES Ministry of AYUSH,Govt. of India

Prologue

Psychiatric illness is fundamentally no different from medical illness. Historically illness in which there was prominent disturbance of psychological function or behavior and no obvious pathology came to be regarded as psychiatric. However, modern world now knows that there is demonstrably altered brain functioning in many psychiatric disorders; also psychiatric illness is no less real or less deserving of care than are medical conditions, Ayurveda defines health as a state of equilibrium of *tridosha*, *trimala*, *saptadhatu* and homoeostasis of mind as well as sense organs, '*Grahachikitisa'* is one among the eight major branches of Ayurveda that deals with prevention and management of psychiatric illness

Psychological and somatic maladies are invariably interlinked with each other. Most of the body disorders can be well averted by achieving a higher state of consciousness and a health mental state. Ayurveda strongly advocated Mental Health Care for keeping sound mental hygiene. Human mind is like the strong held of the horses '*Indrigyani*' (organs) of the chariot. *Sharira* (body) lead by "*Buddhi*" (intellect for the master) "Self" (Soul). An uncontrolled mind goes astray and provokes temporary lasting untruly destructive activities.

Ayurveda advocates comprehensive safe and effective pharmacological approaches for prevention and management of psychiatric illness comprising of drugs and panchakarma therapy. Besides this, the unique non-pharmacological approach "*Achara Rasayan*" is the hallmark of Ayurveda that encompasses a regimen for mental hygiene and social conduct.

The council has prioritized on development of diet and life style guidelines on prevention and management of various disorders as reflected in CCRAS-Vision Document 2030. And in this direction now, a concise and comprehensive advocacy is being presented focusing on Mental Health. This document would certainly facilitate in disseminating the merits of Ayurveda for maintenance of positive health at large.

(N. Srikanth)

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Contributors

Chief Editor

Prof. Vaidya K.S.Dhiman Director General

Executive Editor

Dr. N. Srikanth Deputy Director General

Editor

Dr. B. C.S. Rao Assistant Director (Ay.)

Content Development

Dr. Shweta Chaudhary, Research Officer (Ay.)Dr. Babita Yadav, Research Officer (Ay.)Dr. Sophia Jameela, Research Officer (Ay.)Dr. Sudha Kumari, Research Officer (Ay.)

Technical Support

Dr. C. Ashwin Chandra, Research Officer (Ay.)
Dr. C.Tejaswini, Research Officer (Ay.)
Dr. Azeem Ahmed, Research Officer (Ay.)
Dr. Mukesh chincholikar, Research Officer (Ay.)
Dr. Sumeet Goel, Research Officer (Ay.)

Reviewer

Prof. P. Murlikrishna S.V. Ayurvedic College, Tirupati

Prof. Suhas Kumar Shetty

SDM College of Ayurveda & Hospital, Hassan



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Section A

Basic Concepts of psychiatry in Ayurveda General description of psychiatric disorders

1.1 Background:

Mental well-being is a cardinal integrant of Ayurvedic definition of '*Swasthya*' along with Physical and Spiritual well-being. WHO defines mental health as a state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to contribute to her or his community. Mental health is the foundation for effective communication, learning, emotions, thinking and self-esteem in an individual. Mental health is integral in all spheres of human life like inter-personal relationships, personal and emotional well-being and contributing effectively to society. Mental illness is often used as an umbrella term for all diagnosable mental disorders involving significant changes in thinking, emotion and/or behavior and functional problems in family society and work place.

Studies estimate that at least 10% of the world's population is affected by mental illness and that 20% of children and adolescents suffer from some type of mental disorder. A study reveals that 56 million of Indian population suffers from depression and 38 million suffers from anxiety disorders. A report of WHO on depression reveals that almost 7.5% of Indian population suffers from major or minor mental disorders that require medical intervention. National Health survey of India reveals that "Every sixth Indian needs mental health help

In contemporary science, the insights of the gut-brain axis have opened a new dimension to the way we understand and treat mental illness which has led to creation of budding branches such as 'Nutritional Psychiatry'. Healthy gut function has been linked to normal central nervous system (CNS) function. Hormones, neurotransmitters and immunological factors released from the gut are known to send signals to the brain either directly or via autonomic neurons. However, Ayurveda has documented the 'body-mind' relationship aeons ago . Attempts to study mind in a scientific perspective was evident from the beginning of Vedic period itself. *Yajurveda* has tried to describe mind as a media for perception and memory. *Unmada* has been recorded for the first time in *Atharva veda* with its various stages and treatment. During the *Samhita* period, various *Ayurveda* treatises had compiled the aetiology, pathology, symptomatology and management of **Unmada**.

Ayurveda defines *Unmada* as a condition characterised by impairment/vitiation in faculties such as *Manas*(mind), *Budhi* (Intellect). *Sanjna*(Consciousness), *Gnana*(Perception), *Smrti*(Memory), *Bhakti*(Inclination), *Sheela*(Character), *Chesta*(Behaviour) and finally, *Achara* (Conduct) which impairs the person's life itself. Further Ayurveda has detailed the influence of mind on bodily factors such as *Ojas*, *Rasa Dhatu*, *Panchavidha Vata*, *Pachaka Pitta*, *Sadhaka Pitta*, *etc*. and also the critical impact of diet and regimen on it. There exists a two-way relationship between mental disorders and unhealthy behaviours such as unwholesome diet and unwholesome regimen, which in turn acts as contributing factors to diseases such as Cancer, Cardiovascular Disease, Obesity and Diabetes, and a range of other life-threatening disease conditions. Improvement in a population's mental health will lead to improvement in its physical health – and will help enhance overall social and economic welfare. The role of *Ahara-Vihara* in the nation's mental health is yet to be fully understood and brought to the purview of health sector.

Today, contemporary psychiatry still lacks access to the caverns of mind and its functional attributes. Aetio-pathogenesis of many psychiatric diseases is still not unravelled and the management is often only partially effective in bringing the person back to socially and medically acceptable normalcy. Hence, constructive role should be given to strengthening of mind, maintaining a healthy balance of emotions and preventing onslaught of psychological disturbance. Role of nutrition in healthy mind is one of the most undervalued concepts in psychiatry. Brain requires different amounts of complex carbohydrates, essential fatty acids, amino acids, vitamins, minerals and water to remain healthy. In order to reduce the prevalence of mental disorders, an integrated approach which synchronously reflects the interplay of biological, psychological, spiritual and social aspects of Psychiatry is needed. This book is intended as a preventive and curative guideline in psychiatric disorders for physicians and common man alike.

1.2 Concept of health in Ayurveda

Life according to Ayurveda is a conglomeration of the four interdependent components namely, the body (*Shareera*), the sensory and motor faculties (*Indriya*), the mind (*Satva*), and the soul (*Atma*). A healthy life necessitates a perfect complementary support of all these factors and thus the concept of health encompasses physical, mental, sensory and spiritual domains. It is also indicated that a person with *Swastha Mana* (healthy mental state), *Prasanna aatmendriya* (delighted soul with proper functioning of sense organs) along with sama dosha (well balanced state of dosha), *Sama Agni* (proper metabolism), *Sama Dhatu* (proportionate body organs and tissues) and *Sama Kriya* (proper physiology) is perfectly healthy.

Physical Health is the attainment of

- Desire for timely intake of food followed by proper digestion of consumed food.
- Timely evacuation of excretory products.
- Lightness to the body
- Pleasantness to the sensory organs
- Proper and satisfactory sleep and timely awakening without any distress
- Normal growth and development of body
- Nice complexion, texture and lusture of the body
- Good immunity.
- Absence of lethargy, heaviness and laziness.
- Steady, active and harmonious activities of mind and its attributes.
- Proportionate musculature and compactness to the body.
- Ability to withstand temperature variations and hunger.

Mental Health

While explaining the concept of Swasthya, Ayurveda has also included attributes of mental health like

- A well balanced and pleasant state of mind.
- Being cheerful and gracious.
- Proper and satisfactory sleep
- Steady and well balanced mental faculties
- Pleasant and active state of sensory attributes
- Control over Dharaniya Vega (Kama(lust), Krodha(anger), Bhaya(fear), Iershya(spite), Shoka(grief),

Lobha(greed) and *Moha*(infatuation)

• Mind not getting excessively afflicted with adverse events and ability to adjust with such other things.

1.3 Mind in Ayurveda – Physiological Aspect

The word *Manas* is derived from the root '*man*' adding the suffix '*asuna*' having the meaning, 'to perceive', 'to lead to knowledge', 'to analyze by special knowledge', 'Mind or psyche' (Monnier Williams). Synonyms of *Mana* are *Chitta, Chetas, Hrit, Hridd, Manas* and *Satva*.

"Chittam chetah hrdayam svantam hrnmanasam manah iti" (Amarakosha 1/4/3)

Mana is the entity through which the knowledge is obtained, which is closely related with Atma, through which one can perceive and the seat of *Mana* is *Hridaya*.

Mana is the superior analyzing faculty, the seat of soul or *Atma* and controls the whole body, by accommodating the superior senses and can be said as the seat of knowledge. The proof of existence of mind is given by Ayurveda is the existence of knowledge (*Lakshanam Manaso Jnana*). According to Vedanta Darshana, *Manas, Buddhi, Chitta* and *Ahankara* combine are called four *Antahkarana* (Internal instruments/Mechanism).

Manas is told as '*Ubhayatmaka*' i.e. it is a dual faculty which has both sensory and motor functions and hence considered as a superior faculty because it controls and co-ordinates all other faculties connecting them with the soul.

In contemporary psychology, mind is an all-encompassing umbrella term that covers the joint functioning of the brain and body in conjunction with the memory, world view, personality, soul, and other intangible facets of human life and psychology. It covers the way a person interacts with people and the world, how they learn and express themselves and how they relate to abstract concepts such as religion, spirituality, metaphysics, and other areas of thought. The mind is the manifestations of thought, perception, emotion, determination, memory, knowledge, conscience and imagination that take place within the brain.

1.4 Location/Seat of Manas

It is conventional in Ayurveda to attribute anatomical sites for conceptual entities to provide some concrete feature to abstract ideas. 'सत्वादधािम हृदयम् स्तनोर: कोष्ठमध्यगम्' Acharya Vagbhata says that the Hrudaya (heart) is the seat of Satva or Manas, likewise Acharya Charaka and Sushruta [S.Śa 4/33] also explains the Hridaya as the seat of Manas as it is said to be the Chetana Sthana. Acharya Bhela [B.Ci 8/2] in context of Unmada, says Head (Shira) as the seat of Mana.

It is possible to conclude that the sensory and motor functions of mind are attributed to brain, while the psychological functions, especially the emotional aspect of psyche to heart. Brain can be said as the physical structure upon which the attributes of mind are bestowed upon. Hence the brain and mind has an intimate and complex relationship. With the advance in research in fields of neurology, psychiatry, psychopathology and psychology and remarkably advanced tools of molecular biology, various links has been established on the role of brain and neurotransmitters in Psychiatric conditions.

1.5 Gunas (Properties) of Manas

The properties of *Manas* are '*Anutwa*' and '*Ekatwa*' i.e., subtlety and singleness or oneness. Due to its singleness, only single knowledge occurs at a time. *Manas* remains engaged in a particular sense organ and cannot perceive two or more objects at a time. And its subtlety enables it to move rapidly from one object to

another by which it may appear that simultaneous perception of several objects is taking place. The inability to focus on one thing or inability to withdraw from perception related to any particular *Vishaya* or object may be considered abnormal. Prolonged lingering on one thought may form the basis of obsessions and compulsions while inability to focus may be seen as symptom in Attention Deficit Hyperactivity Disorder(ADHD), Generalized Anxiety Disorder, Depressive Diorder etc

1.6 Karma (Functions) of Manas

The functions/actions of *Manas* has been described as *Indriabhigraha* (control of sense organs), *Svasyanigraha* (self-restraint), *Uhya* (hypothesis) and *Vichara* (consideration). *Indriyaabhigraha* is activation, direction and co-ordination of *Jnanendriya* and *Karmendriyas*. *Swasyanigraha* is self-control, restraining self from temptations and affected by emotions.

1.7 Arthas (Objects) of Manas

The objects, which are perceived through the sensory organs, are termed as *Artha*. Considering *Manas* as an independent *Indriya*, it must have its own objects, which are experienced by the mind. Thus, besides being capable of perceiving *Indriya Visaya* (sensory objects), *Manas* has the ability of experiencing its own objects like anything that is thinkable. Thus the objects of *manas* are:

- *Chintya* object of thinking about do's and don'ts
- *Vicharya* object of Reasoning, logic and discrimination
- *Uhya* object of Judgment or guessing
- *Dhyeya* –object of continuous thinking about desired things
- Sankalpa object of imagination and evaluation as to merit and demerit

Manas also functions introspectively without the relation to the sense organs. Any knowledge gained through this method or emotions perceived by the mind also become the subject of thought. *Sukha(happiness), Dukha(unhappiness), Kama(lust), Krodha(anger), Bhaya(fear)*, etc., belong to this kind of knowledge.

1.8 Mind as a cognitive Processor

Manas process the inputs from outside perceived directly or indirectly through sense organs and develop responses by the interrelated activity of its attributes

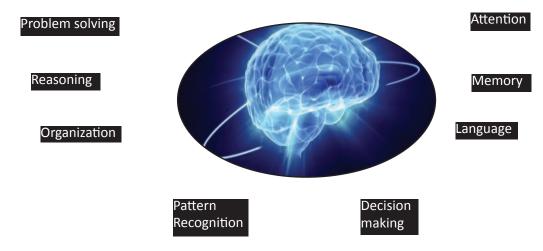


Fig: 1: Various aspects of mind

1.9 Faculties related with Manas

Dhee, Dhruti, and *Smruti* are the three main faculties, which are closely related to *Manas*. *Dhee:* [Buddhi]"Buddhirhi Nischayatmika"

The function of *Buddhi* is decision-making or determination of input *Manas* places before it, as perceived through *Indriyas*. It is correlated with Intellect.

Dhriti: 'Dhrtirhi Niyamatmika'

It is the power of will, which control Manas from the various diversions or temptations of surroundings.

Smriti: 'Smaraņat Smŗti'

Recollection of the past is known as *Smriti*. The experiences get registered by *Drishta* (seen), *Shruta* (heard) or *Anubhuta* (experienced) by the person and can be recalled later. An unimpaired condition of all these functional aspects is necessary for mental health.

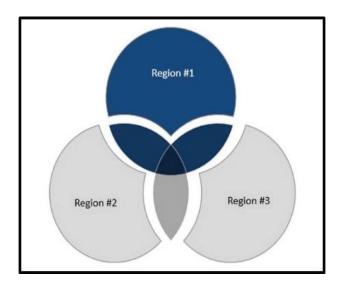


Fig 2: The three functional faculties associated with mind.

1.10 Prakŗiti of Manas

Since living being is a microsome of the macrosome or the universe, the mind in living organism is also endowed with the properties of *Trigunatwa* i.e., *Satva, Rajas* and *Tamas*. The *Akasha* is represented in *Satvaguna, Vayu* and *Teja* are represented in *Rajas* while *Prithvi* and *Jala* are represented in *Tamas*¹.Satva, Rajas and Tamas are the three essential constituents of mind, of which last two are noted "Manas dosha", which can potently cause Mano vyadhi (mental disorders).

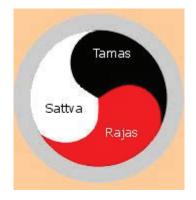
Out of these three, *Satva* is only pure (*Shuddha*) in quality due to its characteristic feature *Kalyanamsha* (Positive Elements) while, *Rajas* and *Tamas* are said to be impure due their qualities *Roshamsha* (Intense passion/drive) and *Mohamsha* (Being misconstrued), respectively². Activities of Psyche are due to the

¹ Vaidya Yadav ji trikamji acharya (editor)Dalhan, Sushruta Samhita, Nibandh Sangraha :Sharira 1/20, Page No. 343, Chaukhamba Orientalia, Varanasi, India, 2002

² Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,:Sharira 4/36, page no.735, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

dynamic interplay between the 3 *Gunas*. In every individual; the cognitive, conative and affective aspects of the mind is guided by the predominance of any of the three *Gunas*.

According to Susruta, the predominance of either Satva guna or Mano doshas will show the following



characteristics accordingly³.

Fig 3: Manogunas

Sattvika - Mercy, sharing nature, Endurance, Truthfulness, Good conducts, Belief in God, Knowledge, Intellect, Capacity to learn, Memory, Self-control/*dhruiti*, and Selfless service.

Rajasika -Excess grief, moving habit, lack of self-control, inflated self-esteem, Lying nature, Cruelty, Wickedness, Pride, Excitation, Attachment and Anger.

Tamasika - Depressed mood, lack of faith in God, lack of good conducts, intellectual deficits, ignorance, crookedness, laziness and sleepiness.

All the positive attributes of the mind are due to the *Satva* constituent, and unwholesome activities are results of *Rajas* and *Tamas* constituents. These factors are responsible for the various behavioural patterns of human being. According to the predominance of *gunas* the phenomenon of interaction between *Purusha*(microcosm) and *Loka*(Macrocosm) can be of 3 types.

Samyakyoga (normative interaction)- wholesome interaction with *Satva* predominance, which maintains the mind in a well balanced and harmonious state.

Atiyoga of mental activity is owing to *Rajoguna* predominance and will be characterised by excessive emotional outbursts, excessive excitement, anger, preponderance to violence etc.

Heena yoga of mental activity represents *Tamoguna* predominance and is characterised by *Avasada*(depression), ignorance, lack of interest in day to day activities etc.

Mithya yoga occurs due to erroneous interaction of three *Gunas* and is unwholesome to mental health. *Heena-ati-mithya* yoga of mind with its *Artha*, in the level of psyche is the first step in the pathogenesis of psychiatric conditions as per Ayurveda.

1.11 Concept of Satvabala /Mental strength

Satva has genetic endowment as it is inherited at the time of conception and this part of the individual gets nurtured in the womb especially by the influence of '*Satva vaisheshikakara bhavas*' and also by the influence of '*one's own experiences*' during infancy, childhood and adolescence and based on their characteristics they

³ Vaidya Yadav ji trikamji acharya (editor)Dalhan, Sushruta Samhita, Nibandh Sangraha,:Sharira 1/18, Page No. 343, Chaukhamba Orientalia, Varanasi, India, 2002

are classified into about 16 types (*Kayabheda* or Personality traits). Though these classifications help to understand the mental disposition better, *Charaka* has utilized the concept of '*Satva bala* 'in determining the predisposition to develop mental illness.

Mental strength is graded into superior, medium and inferior. Those with superior mental strength [*Pravara Satva*] can withstand mental trauma well. Those with inferior mental strength [*Avara Satva*] are incapable to suffer even trivial trauma and pain. Those with medium strength [*Madhyama Satva*] can afford to take hardships if consoled to do so.

1.12 Satvasara Lakshana ⁴ (Characteristics of Person With all the Seven Sara)

Along with the *Dhatusara lakshanas*, *Acharya Charaka* has mentioned the '*Satva sara lakshanas*' which can be considered as the Gold standard in terms of Positive Mental Health & Behaviour. The characteristic features are as follows:

- Good memory [*Smritimantah*]
- Devotion [*Bhaktimantah*]
- Gratitude [*Kritajnah*]
- Wisdom [*Prajnah*]
- Purity [*Suchayah*]
- Enthusiasm [Mahotsaha]
- Skillfulness [Dakshah]
- Boldness [Dheera]
- Courageous in combating various situations [*Samar Vikrantayodhina*]
- Absence of sorrow [*Tyakta vishada*]
- Good body language and movements [*Suvyavasthita gati*]
- Intelligence [Gambheera buddhi]
- Well organized behavior [*Gambheera ceshta*]
- Virtuous acts [*Kalyana abhinivesi*]

The kind of dietary and lifestyle practices an individual habitually chooses to follow will either influence *Satva guna* resulting in increase of *Satva bala* leading to positive state of mental health or vitiate *Mano doshas* resulting in decrease of *Satva bala* leading to a state of *Heena Satva* wherein the individual is at ahigher susceptibility to develop psychiatric disorders. An individual with increased *Satva guna* will choose wisely whereas a *Heena Satva* individual will succumb to various faulty practices and therefore this vicious cycle will become difficult to intervene and resolve.

1.13 Relation between Sareera and Manas

The functional components, involved in the normal physiological state of the body are *Dosha*, *Dhatu*, and *Mala* which maintain the integrity of the human body

⁴ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Vimanasthana 8/110, page no.647, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

Sareera Doshas and Manas

All the three *Sareerika dosha* are also related with the normal functions of the mind. More precisely *Praņa vayu, Udana vayu, and Vyana vayu, Sadhaka pitta* and *Alocaka pitta*, and *Tarpaka kapha* are more related with the normal mental functions. Of the three humours *Vata* is mainly responsible for the activities of the mind i.e. it is the controller and stimulator of mind and is responsible for enthusiasm.

Though in general *Satva, Rajas* and *Tamas* are concerned with the mental faculties and *Vata, Pitta* and *Kapha* with the anatomical and physiological entities, the former also have a part to play in the normal anatomy and physiology and latter affect the psyche of an individual. Thus, all these *Doshas* can be regarded as factors having psychosomatic role to play.

Dhatus and Manas

Dhatu: Dhatus are stated as the structural and functional units of the body. They support and nourish it. They are also said to support the mind and life, promoting the growth of an individual. *Sara*, the essence of *dhatu*, is dependent on the proper structure and the function of *dhatus*. *Sara* in different forms of *Rasa*, *Rakta*, etc. are acting vigorously in keeping the human body with good physique, good mental strength, and free from morbidity. This indicates that, dhatus also influence certain psychological characteristics, which are dependent on the excellence of the particular *Dhatu*.

Rasa Dhatu, Rasavaha Srotas and Manas

Among the seven *Dhatus*, the prime one is *Rasa Dhatu* which is formed from the essence of food nourishing all other dhatus and the foetus in the womb, since conception to death, circulate in the *Shareera*. Its prime site is *Hrudayam* and *Dasha Dhamanya* (ten great arteries), and in same way, *Manas adhisthana* is *Hrudayam*. An affliction of *Manas* directly affects *Rasa Dhatu*, *Hrudaya* and *Rasavaha Srotas*. The emotional factors like fear, anger, grief and excessive thoughts /stress leads to vitiation of *Rasavahasrotas*. On considering the *Rasapradoshaja Vikaara* (diseases resulting from vitiated *Rasa Dhatu*) most of the causative factors are unwholesome food and life style related. A close interrelation between the *Manas* and *Rasavaha Srotas* are responsible for influencing on each other⁵.

MalaMalas are the by-products of digestion and metabolism. They are of equal importance, for supporting the body as well as the life. They should be retained and eliminated through the body in proper time, for the normal functioning of the individual. Recent studies emphasise the role of gut bacteria and probiotics in normal brain functions.

1.14 Relationship between body and mind in disease.

It is known from earlier times itself that mind and body influence each other. Psychological suffering is often expressed through somatic problems. In individuals with difficulty in recognising and expressing emotions, physical manifestations are often seen in the form of loss of sleep, decreased/increased appetite, loss of libido, vague aches and pains in the body, fatigue, anger issues, eating disorders etc. Some physical diseases such as eczema, psoriasis, auto immune diseases, blood pressure etc are thought to be prone to worsen by mental factors such as anxiety and stress. A person's current mental state may affect how bad a physical disease is at any particular moment. Hypochondriasis, conversion disorder, Somatization disorder etc are believed to be rooted on mental problems.

Certain chronic conditions and life threatening conditions such as Cancers, Renal Diseases etc also affect mind retrospectively in the form of anxiety, depression, worthlessness, feeling of rejection etc.

⁵ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Vimanasthana 5/12, page no.589, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

Mind also can exert a positive or negative impact on the effect of treatment on body also. The positive impact of placebo on treatment is due to the effect of mind. The positive response of a patient to therapy is also guided by the innate positivity in the individual.

The concept of *Satvavajaya Chikitsa* in Ayurveda is centred on the mind by promoting positive vibes to the individual. Ayurveda believes individual as a whole, encompassing body and mind together and treatment is also aimed for both.

1.15 Manas and Ojas

Ojas is the finest essence of the seven *Dhatus* (tissue elements). It is also called *Bala* (strength) and body ceases to exist in its absence. *Ojas* is closely related to the proper functioning of the various functions of the body including that of the *Manas*. *Ojas* is depleted by mental emotions such as anger and grief and in conditions of its *Kshaya*, the person becomes fearful, worried and his faculties will not function properly. Fainting, confusion, delirium and even death may occur if *Ojas* is highly depleted.⁶ A normal level of *Ojas* is conducive to the proper functioning of mind and the factors which are good for *Manas* will improve *Ojas*.

Though Ayurveda has defined 'Life' in physical, mental and spiritual dimensions, the receptacles of diseases are related to Body and Mind only. Nature of *Dosha* vitiation (*Shareera/Manasa*) and symptomatology of manifested illness lead to the categorisation as Somatic or Psychic diseases/disorders. However, body-mind exists as continuum. Further the basic cardinal entity that is responsible for the formation of body and thus helping to create a conducive abode to the optimal functioning of mind is 'Food'. Therefore along with the physical health, mental health and illness also fundamentally depend on the wholesome or unwholesome food intake.

1.16 Ayurvedic Psychiatry – pathological aspect *Bhootavidya*

This is the branch of *Ayurveda* dealing with Psychiatric conditions and their treatment aspects. The different descriptions under this section are mainly characterized by gross behavioral abnormalities that are categorized and named according to the similarity of expression of their behavioural breakdown to those of the '*Bhootas*' or living beings of mythological origin viz., *Asura, Rakshasa, Pitru, Pisacha*, etc. These terms have been misconstrued widely and give Ayurvedic Psychiatry a superstitious outlook. Here the word '*Bhoota*' is used not in the concept of spirits or demonic possession or the microbes causing infections, but in the concept of 'living beings' that are clearly explained by *Acharya Vagbhata* ⁷i.e., the similarities shown in appearance, behaviour, speech, posture, gait and other psychomotor activities to the characteristics of the respective *Bhootas* is the basis behind the concept of *Bhootonmada*.

In Ayurveda, due importance was given to the role of psychotherapy (*Satvavajaya*) in somatic as well as psychiatric diseases. The essence of psychotherapy in many forms has been established in civilizations since the beginning of life in the form of counselling by elders either in supportive or in a rehabilitative way. *Satvavajaya* is achieved through spiritual knowledge, philosophical understanding, fortitude, remembrance of good things and concentration, *Mantrah* (Incantations), *Manidharan* (Precious Stones), *Oushadam* (Amulets), *Mangalam*(rites), *Balih* (sacrifice), *Homah* (oblations), *Upavasah* (fasting), *Japah* (prayer) and *Vratam*

⁶ Shri Lal Chandra Vaidya, Ashtanga Hrudayam, sarvangsundari vyakhya,Hindi commentary,: Sutra sthana 11/39 page no. 94, Motilal Banarasidas, Varanasi, India 1963

⁷ Shri Lal Chandra Vaidya, Ashtanga Hrudayam, sarvangsundari vyakhya,Hindi commentary,: Uttara sthana 4/2 page no. 605, Motilal Banarasidas, Varanasi, India 1963

(vows) were considered a part of the *Daivavyapasraya Chikitsa*(spiritual therapy) which was deemed to be effective in diseases of mind and body alike. Current psychotherapy is a version of the *Satvavajaya Chikitsa* mentioned in traditional Ayurveda system.

1.17 Classification of manovyadhi

For the sake of convenience in treatment, *Manasika Vyadhi* can be classified according to *Dosha* involvement and seat of manifestation. They may be divided as *Kevala Manasika* and *Ubhayatmaka*. Kevala *Manasika Vyadhis* are nothing but *Vikara* or *Vega* of *Manas*. *Ubhayatmaka* involve the *Sharira* and *Manasa* doshas. The classifications can be listed as:

- Mano Adhisthita Manasika Vikara Mental disorders where Manodoshas are only basically involved. E.g. Kama, Krodha, etc.
- Nanatmaja Manasa Vikara Endogenous mental disorders caused by specific type of Sharirikadosha.
 E.g. Tandra, Bhrama, etc.
- *Sharira Mano Adhisthita Manasika Roga* Mental disorders where both *Shaririika* as well as *Manodoshas* are basically involved. E.g. *Unmada, Apasmara*, etc.
- *Mano Śariradhisthita Manasa Roga* Disorders basically caused by affliction of *Manodoshas* subsequently leading to the involvement of the *Shaririika doshas*. E.g. *Shokaja Jwara, Bhayaja Atisara*, etc.
- Behavioural disorders like sexual perversions. Eg. Asekya, Kumbhika, etc.

This indeed help to understand that Ayurvedic texts describe a range of mental disorders, which seem to include all kinds of neurotic, psychotic, convulsive and personality disorders as known today.

1.18 Concept of Unmada

The word Unmada is derived from the root word मद् prefixed with उद् and suffixed with घञ्

उन्माद = उद् मद--अधारे घञ् (Vachaspatyam)

Acharya Charaka defines *Unmada* as the impairment in function of the eight aspects or faculties that make up a human being viz., *Manah* (psyche/mind), *Buddhi* (intellect), *Sanjna, jnana* (knowledge/perception/ cognition), *Smruti*(memory), *Bhakti* (inclination), *Sheela* (Character/Nature/habits), *Cheshta* (psycho-motor activity/behaviour) and *Achara* (Conduct/Behavior), It can be understood that this definition encompasses a wider meaning; beyond the purview of mere *Unmada*, *Unmada* word itself becomes a prototype to describe all mental abnormalities with variation in presentation of these cardinal features.¹

Acharya Charaka in Chikitsa Sthana explains Unmada under two categories as Nija and Agantuja. Those with Doshic predominance are included under Nija and hence their Nidana, Laksana and Samprapti are explained on the basis of Doshas and are further divided into Vatika, Paittika, Kapahaja & Sannipatika. The term 'Unmada' refers to indiscriminant knowledge. The disturbances in intellect, perception and memory reflect in the form of alteration in the habits, preferences and behaviour of the person.

¹ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,:Nidana 7/05, page no.532, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

1.19 General etiology of Unmada.

Prajnaparadha(Intellectual blasphemy), *Asatmyendriyartha Samyoga*(inappropriate contact of sense organs with objects) and *Parinama*(transformations of nature) are said to be factors that contribute to any disease, whether *Sareerika* or *Manasika*. Improper use of the intellect which results in a wrong understanding or impairment in judgement/discrimination which leads to hazardous or untoward activities is called *Prajnaparadha*. An unwholesome (excessive/deficient/distorted) stimulus perceived through senses, produces an unwholesome effect in the mind which in turn causes disturbance in the *Sattvic* quality of the mind and creates a *Rajasic* or *Tamasic* state, which predisposes the individual to disease. *Kala Parinama* refers to being out of synchrony in terms of natural transformation of nature, in terms of diurnal or seasonal variations.

1.20 Role of Prajnaparadha

'Prajnaparadha' is defined as perversion of *dhee, dhriti* and *smriti* resulting in defective decision making and inability in controlling mind from harmful objects. A wide list of factors under *Prajnaparadha* has been described in Ayurveda²

A person whose intellect, fortitude and memory are impaired, subjects himself to intellectual blasphemy by virtue of his bad actions leading to the aggravation of all *Doshas*. In *Charaka Samhita* the causes of *Manovikaras* like *Irshya, Shoka, Bhaya, Krodha, Mana,* and *Dvesha* are attributed to the defects in the intellectual or mental faculty of the person.

Due to *Prajnaparadha* the person is unable to delineate the good and bad and therby causing impairment in judgement. He dreams and desires unattainable things, become too much attached to worldly things and laments over their loss and fails in facing adverse situations. Hence *Prajnaparadha* is considered as the root for all the manifestations.³

Though many other etiological factors are mentioned under etiological factors of *Mano Rogas*, *Charaka* has clearly said that due to the *Prajnaparadha* of the person only, he is affected with mental illness.⁴

It is due to *Prajnaparadha* that the ignorant indulge in unwholesome gratification of senses, suppression of natural urges, exposure to strain beyond their capacity and adoption of temporary pleasing regimen. But the wise due to the clarity of vision do not fall into it. Observance of certain regimens may produce temporary unhappiness but in the long run leads to happiness. The wise observe wholesome regimen after proper examination and understanding whereas others who are devoid of these qualities are afflicted with *Rajas* and *Tamas*, get tempted to do unwholesome activities and succumb to various types of psychosomatic diseases.⁵

² Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Sharira1/102, page no.693, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

³ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Sutra 7/51-52, page no.131, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

⁴ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Nidana 7/19-21, page no.536, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

⁵ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Sutra28/36-38, page no.432, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

1.21 Specific etiology for Unmada

- Aharaja Nidana:
 - Tamasika Ahara: Eating unhygienic food, stale food, excessive eating, unhygienic cooking habits, skipping meals.
 - > *Rajasika Ahara:* Caffeinated food and drinks, alcohol, excessive spicy food etc
 - > Intake of food which is not in parlance with *Aharavidhi* mentioned in Ayurveda.
 - Consuming unwholesome or *Asatmya* food like junk foods, fast foods, refined and processed foods.
 - > Avoiding healthy and nutritious food in diet.
 - > Avoiding or reduced use of ghee and milk in food which are ideal *Satvika Ahara*.

• Viharaja Nidana

- > Physical inactivity and lack of exercises increases *Tamo Bhava* in the body.
- Excessive sleeping, day sleep etc also increase *Tamo Guna* in body
- > Inappropriate withholding or initiation of bodily urges.
- Spending too much time on games, televisions, parties, social media without doing ones responsibilities to self, family and society may reduce the *Satvika Bhava* in a person
- Smoking , use of habit forming substances etc alter the mental harmony
- > Reduced sleep at night and altered pattern of sleep, with skipping sleep at night and day sleeping.
- Unnecessary and/or excess indulgence stressful mental and physical activities can cause to imbalance of *Rajas Dosha*.

• Manasika Nidana

- Inability to control emotions such as Bhaya, Irshya, Dainya, Lobha, Kama, Krodha and Dukha may upset the mental balance.
- Life events such as mental trauma due to loss of family members, job, onset of severe illnesses etc.
- Sadvrtta Apalana:
 - > Not following the codes of conduct mentioned in Ayurveda for healthy living
- Avara Satva:
 - > People born with *Heena Satva*(mentally weak), are more prone to imbalances in mind.
 - People with predominance of *Rajas* and *Tamas* in mind compared with *Satva* have more probability to get psychologic imbalances.

1.22 Samprapti (Pathogenesis)

The *doshas* vitiated by unwholesome food, regimes and other causative factors in an individual with *Alpa Satva* mounts upwards through *Manovahasrotas* and vitiate *Hrudaya*, which is the seat of *Buddhi*, and disturb *Manas* occluding *Manovahasrotas*. As a result, *Chitta* is disturbed. This in turn causes loss of *Buddhi* due to which the individual loses the power of discrimination and indulges in faulty activities. And this disturbed state is referred to as *Unmada*.⁶

Vibhrama of mind begin in the subtlest levels, often due to *Prajnaparadha* which leads to imbalance in *Manogunas*, which gradually grows with further interaction with physical, psychological, social, economical and environmental stressors and begin to manifest in gross level which is expressed in the form of *Vibhrama*'s which constitute *Unmada*.

1.23 <u>Purvarupa of unmada(prodrome)</u>

- Feeling of emptiness in head/absent thoughts
- Congestion in eyes
- Noise in ears/tinnitus
- Hyperventilation/increased respiration
- Salivation
- Anorexia and difficulty in digestion
- Fickleness
- Anxiety/ meditation at improper places
- Dreams frequented by inauspicious things which are fearsome, moving etc

1.24 Samanya lakshana of Nija Unmada

Nija/Doshaja Unmada is characterised by the features such as intellectual confusion, fickleness of mind, unsteady vision, lack of patience, incoherent and indistinct speech, and inability to perform/process sensory information.⁷

The symptoms of each variety of *Unmad*a,viz., *Vataja*, *Pittaja*, *Kaphaja*, *Sannipataja* and *Agantuja Unmada*, is described in detail in all classical textbooks of Ayurveda and needs to be ascertained by the physician. Unmada is characterised by impaired functioning of *Budhi*(intellect), *Sanjna*(consciousness), *Jnana*(knowledge), *Smrti*(memory), *Bhakti*(inclination), *Sheela*(character), *Chesta*(behaviour), *Achara*(conduct).

1.25 Samanya lakshana of Agantuja Unmada

A second category of *Unmada* has been described as *Agantuja*, which often manifest acutely without/with manifestation of prodromal symptoms. The different descriptions under this section are mainly characterized by gross behavioural, psychological and physical attributes and named according to the similarity of the expression of these behavioural breakdown to those of the '*Bhutas*' or living beings, as described earlier.

⁶ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commen tary,: Chikitsa 9/5, page no.232, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

⁷ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commen tary,: Chikitsa 9/6, page no.233, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

Agantuja Unmada in general are characterized by abnormal behaviours in terms of exhibition of unnatural strength, energy, activity and enthusiasm, altered levels of perception, retention and memory, abnormality in speech and abnormality in perceiving self & environment and unexpected change in symptoms/relapse and remissions.⁸

The word *Graha* - '*Grħņati iti graha*' - that which catches or seize - is used to denote the unknown, unexplainable pathogenesis, especially in terms of doshic concept. For eg: In the case of *Deva graha*, it has to be inferred that the individual shows characteristic behavioural changes similar to that of a *Deva* like radiant face like that of a full blown lotus flower, calm and serene looks, lack of anger and less speech etc. Thus, the word *Graha* denotes the obscure mode of pathogenesis or manifestation and the mythological characters to which the similarity is shown became the basis of nomenclature.

⁸ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Nidana 7/13, page no.535, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

Section B

2.1. The concept of Ahara (Diet) in Ayurveda

Every living and non-living beings in this universe is composed of five basic elements, the *Pancha Mahabhootas*, namely Earth (*Prithvi*), Water (*Ap*), Fire (*Teja*), Air (*Vayu*) and Ether (*Akasha*) the *Panchabhuta* components of ingested food nourishes their respective tissue elements in the body. *Ahara* is the best of all medicines and is considered one among the three sub-pillars of Ayurveda (*Thrayo-Upasthamba*). *Ahara* (food) and *Vihara* (lifestyle) which are congenial to the channels, constitution and strength of an individual is termed as *Pathya* (wholesome) and that which is non-congenial is termed as *Apathya* (unwholesome). The preventive and curative aspects of Ayurveda revolve around the central theme of *Pathya Ahara* and *Vihara*. Ayurveda emphasizes basic dietary guidelines in terms of appropriate food, combinations of food, methods of cooking, storage, eating atmosphere, hygiene and etiquette (*Ashtavidha Ahara Vidhi Visesha Ayatana*)

Ayurvedic dietary guidelines include:

- 1. Intake of food in time (Kale Bhojana).
- 2. Food intake as per suitability (Satmya Bhojana)
- 3. Food intake as per the prakruthi of individual (*Hita Bhojan*)
- 4. Proper hygiene (Suchi Bhojan)
- 5. Intake of food which is unctuous (Snigdha Bhojan)
- 6. Intake of food which is warm (Ushna Bhojan)
- 7. Intake of food which is easy to digest (Laghu Bhojan)
- 8. Eat while there is interest to food and while eating concentrate on food and the process of eating (*Tanmana: Bhojana*)
- 9. Eat food with six taste components (Sad-Rasayukta Ahara)
- 10. Food should be primarily sweet in nature (Madhura Praya)
- 11. Food should be ingested calmly, neither too slow nor too fast (Na Ati Druta Vilambita)
- 12. After bathing (Snatah)
- 13. Food intake only when there is sufficient hunger (Kshudvan)
- 14. Proper washing of hand, feet and face should be done before food intake (Dhauta Pada-Kara-Anana:)
- 15. After offering prayers and paying obeisance to gods and forefathers (Pithru -Deva Tarpana)
- 16. After offering food to guests, teachers and chidren (Athithi-Balakaguru Tarpana)
- 17. Without disgracing food (Anindan Bhunjaana)
- 18. Silently (Moun)

2.2 Ahara Matra (quantity of food)

The food and nutritional requirement varies from person to person and depends upon the status of *Agni*, *Shariraprakriti*, age etc. Susruta and Vagbhata have suggested that if stomach capacity is hypothetically divided into 4 parts on the basis of its filling, one should take 2 parts of solid food, 1 part of liquid food and 1 part should be left empty for easy movement of *Vata*.

Sequence of food intake

Guru, Madhura and *Snigdha* food should be taken initially during the course of a meal followed by *Amla, Lavana Ahara.* Food which is *Ruksha, Katu, Tikta* and *Kashaya* should be taken in the last part of the meal for proper activation of *Agni*, proper absorption and assimilation of food. After taking food, it is advised to take rest for *Muhurta Matra* (48 minutes) for proper digestion.

Ahara vidhi viseshaayatana

To receive the total benefits of Ahara it is also necessary to have the knowledge about *"Ashta Ahara Vidhivisheshaayatana"*. They are

- Prakriti-food should be taken considering the nature of food, such as guru (Heavy food like milk, flesh), Laghu (food like green gram etc which are light to digest), Seeta (food which are cold in potency such as milk), Ushna (food which are of hot potency like spicy food), Ruksha (dryness inducing food), Snigdha (unctuous food such as ghee, butter) and their impact on Agni.
- 2. *Karana* It refers to modification in the food property by action of *Agni*, water etc.
- 3. *Samyoga* It denotes the combinations of food which either augment or nullify the actions of the individual components.
- 4. *Raashi*-This represents the quantum of food required to each person
- 5. *Desha*-The dynamics and kinetics of the food consumed is dependent on the habitat of the individual and also the area from where the substance has originated.
- 6. *Kaala* This represents time in terms of climate, phase of digestion, timing of the day, Stage (*Avastha*) of disease etc.
- 7. *Upayoga Samstha*-food should be taken as per the rules of dietetics.
- 8. *Upayokta*-It denotes the consumer of the food. Food intake should be guided by the personal preference and *Okasatmya* (habitual homologation) of each individual.

2.3 Concept of *Viruddhahara*(Dietetic Incompatibility)

Incompatibility or *Viruddha* is a unique concept in Ayurveda. The drugs and diet that provoke doshas, dislodges from their normal bio-rhythm and not eliminated out are called *Viruddha*.¹ Charakacharya has defined '*Virudhaahara*' as certain diet and its combinations which hinders the metabolism of tissue, which inhibits the process of formation of tissue and which have the opposite property to the tissue.² The food which is wrong in combination, has undergone wrong processing, consumed in incorrect quantity, with food

¹ Kaviraj Atridev Gupta, Ashtanga Hrudayam, edited by Vaidya Yadunandan Upadhyaya Vidyotini Hindi commentary,: Sutra Sthana 7/45, page no. 70, Chaukhamba Sanskrit Sansthan, Varanasi, India 2003

² Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Sutra 82/110, page no.380-384, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

of opposite qualities, consumed in incorrect time of the day and in wrong season can become *Virudhahara*. Charaka has mentioned 18 such conditions and those types of wrong combinations can lead to even death.

Such food if consumed regularly can lead to number of disorders such as Impotency, *Visarpa* (erysipelas), blindness, ascitis, psychiatric conditions, fistula in ano, coma or fainting, intoxication, abdominal distension, stiffness in neck, varieties of anaemia, indigestions, various skin diseases, diseases of intestines, swelling, gastritis, fever, rhinitis, and infertility.³

The etiological factors of almost all *Manorogas* enlist *Virudhahara* as a major cause. A new branch called topography (a science related to combination of food) is emerging, which tells about the combination of basic categories of the food and their effects in the body

2.4. Concept of Vihara (Lifestyle) in Ayurveda

The description about *Dinacharya, Rtucharya, Sadvrtta* and *Nidra* in Ayurveda clearly depicts the importance of a healthy regimen in the prevention and management of many diseases. A growing body of scientific evidence has demonstrated that lifestyle intervention is an essential component in the treatment of chronic disease that can be as effective as medication but considered to be safe without risks and side effects. A lifestyle is a characteristic bundle of behaviours that makes sense to both others and oneself in a given time and place, including social relations, consumption, entertainment and such other behaviours.

2.5 Dinacharya (Daily regimen)

Ayurveda promotes a lifestyle that's in harmony with nature.

- It is advisable to wake up during *Brahma Muhurta* (preferably between 4.00 a.m. to 5.30 a.m.).
- Drinking water early in the morning according to one's capacity cleanses the body by enhancing the elimination of toxic wastes.
- One should attend the nature's calls.
- The soft brushes made out of twigs of *Khadira, Karanja, Apamarga* etc. Tongue should be cleaned by a long flexible strip of metal or plant twig. It not only cleanses the tongue but also stimulates appetite and digestion. Mouth should also be cleaned properly.
- Eyes should be cleaned with fresh water to prevent eye diseases and promote vision. Also wash eyes with *Triphala Phanta* every day for clarity of vision and prevention of eye diseases.
- Chewing of betel leaves with small pieces of Areca nut (*kramuka*) and fragrant substances like cardamom, cloves, refreshes the mouth and enhance digestion.
- It is necessary to massage whole body with oil every day. Oil massage ensures softness and unctuousness of skin, free movement of joints and muscles, peripheral circulation and elimination of metabolic wastes.
- Regular exercise is essential for perfect health. It builds up stamina and resistance against disease, clears the channels of body (*Srotas*) and increases the blood circulation. It enhances efficiency of body organs, promotes appetite, digestion and prevents obesity.
- Bathing improves enthusiasm, strength, sexual vigour, appetite, span of life and removes sweat and other impurities from the body. After bath one should wear clean clothes and smear the body with perfume. One should do regular shaving, haircut, cutting of nails etc.

³ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Sutra 26/102-103, page no.385, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

• Person should avoid extra marital sexual relationship and sexual intercourse with a woman during her menses, pregnancy, within one and half month after delivery, devoid of passion, older than one and suffering from disease.

2.6 *Ritucharya* (Seasonal regimen)

In *Ayurvedic* classics, there has been a thorough consideration for seasons, besides the dietetic regimens for days and nights. Whole year is divided into six seasons and detailed regimen for these seasons is prescribed. In spring season, bitter, hot and astringent diet is advised while salty, sour and sweet food should be avoided. Wheat, barley, honey syrup, fruits like mango, jack fruit-etc. and meat of forest animals is advised. In summer season due to hot climate, aggravation of *Pitta* occurs. Hence *Pitta* pacifying cold, liquid, sweet and oily diet is advised. Excessive hot, spicy, sour salty diet should be avoided. Intake of rice, milk, ghee, sugar, grapes, coconut water etc is advised. In rainy season aggravation of *Vata* occurs, hence *Vata Shamaka* sweet, sour and salty food and drinks are preferred. The food should be hot, dry, fatty and easily digestible. Preserved rice, wheat, barley and mutton soups are advised. In pre winter and winter season *Vatadosha* aggravates due to cold, dry, chilly atmosphere hence *Vataghna, Pittavardhaka* diet is recommended. Hot, sweet, sour and salty food, milk, sugarcane, rice, oils and fats are advised and in autumn season aggravation of *Pitta dosha* occurs. Therefore, it is ideal to take ghee processed with bitter drugs; purgation, bloodletting, coolant, and light diet are advised. Diets dominant in Bitter, sweet, pungent diets are good.

2.7 Sadvritta (Ethical Regimen): Rules of good conduct

Ayurveda prescribes certain rules for maintaining healthy mind. These are principles of right conduct that are applicable to all people at all times and places. Practicing them gives balance and harmony to the mind. These are

- Always speak the truth.
- Do not lose your temper under any circumstances.
- Do not get addicted to sensory pleasures.
- Do not harm anyone.
- As far as possible, do not expose yourself to hardships.
- Try to control your passions.
- Endeavor to speak pleasant and sweet words.
- Meditate every day for tranquility of mind.
- Observe cleanliness in all things.
- Be patient.
- Observe self-control.
- Try to distribute knowledge, good advice and help to others.
- Whenever possible, devote your services to God, to the wise and to respectable or elderly individuals.
- Be straightforward and kind.
- Avoid irregularity in daily activities.
- Avoid over eating, overdrinking, too much sexual activity, too much or too little sleep.
- Behave according to the time and place where you are residing.

- Act always in a courteous and polite manner.
- Control your sense organs.
- Make a habit of doing all that is good and avoiding all that is bad.

2.8 Dharaneeya and Adharaneeya Vega

Vegadharana (withholding/inhibiting natural bodily urges) is said as a prohibited bodily function as it results in vitiation of three *Dosha*, and most importantly of *Vata*, which is acknowledged as the controller of mind and body. Vegas can be said as the natural urges of the body which help the body in maintaining its internal homeostasis by expelling the unwanted things.

The word '*Vegadharan*' has two components *Vega & Dharan*. Vega means natural urge & *Dharan* is suppression, thus *Vegadharan* means suppression of natural urges. *Adharaniya vegas* are the natural urges which should not be suppressed. Initiation of *Vega* is a normal body activity and is a process timely carried out by body at regular intervals & controlled by nervous system, suppression of which not only stops the elimination of waste products but also brings strain and disorders of nervous system causing many diseases. By triggering an urge or suppressing an urge, *Vata Dosha* is being forcefully hampered and thereby leading to imbalance in the mind, which ultimately leads to psychosomatic diseases or purely somatic diseases.

Dharaniya Vegas (suppressible urges) are *Lobha* (greed), *Irshya* (envy/jealousy), *Dwesha* (aversion), *Maatsarya* (competitive mentality), *Raga* (attachment). *Manasika vegas* also include the other emotions like *Kama*(lust), *Krodha*(anger), *Bhaya* (fear), *Soka* (grief), *Chinta* (anxiety). Excessive indulgence in *Dharaneeya Vega* is the result of improper *Atma-Indriya-Artha Samyoga* and further impairs the synchrony of *Manogunas*. Thus, one can understand that *Manasika Vega* is a result of vitiated *Rajas* and *Tamas* that cloud the mental faculties and cause it to form unwholesome association with objects due to impairment of the intellect and the other regulating factors.

He who is desirous of happiness both in this world and the other, should control these urges and thus gain control over one's sense organs. One should avoid speaking harsh words, back biting, lying and using untimely words⁴ .Violence against others, desire for other women and stealing should be avoided.⁵ Many of the psychological problems such as anxiety, depression and different forms of psychosomatic disorders result due to non-controlling of these *Dharaniya Vegas*.

⁴Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Sutra 7/27-28, page no.125, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

⁵ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Sutra 7/29, page no.125, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

Section C

3.1 Ayurvedic management and lifestyle advocacy for prevention and management of Psychiatric Illness

To promote mental health and prevent illness, there is a need to create such living conditions and environment that support mental health and allow people to adopt and maintain healthy lifestyle. The intake of healthy '*Ahara*' as per the rules prescribed and adhering to the principles of '*Dinacharya*', '*Ritucharya*' '*Sadvritta*' & '*Achara Rasayana*' are the fundamental entities which play a pivotal role in attaining positive mental health. Ayurveda has description of many single drugs and formulations for Psychiatric illnesses like Brahma Rasayanam, Brahmi Ghrita, Kalyankaghritam, Mahakalyanaghirtam, Maha Panchgavya Ghrita, Sarasvata Churna etc

The concept of *Dhatusamyata*, is also relevant here. It is a state of equilibrium of *dhatus*, where the word *Dhatu* stands for *Dosha*, *Dhatu* and *Mala*. It is also the main objective of *Ayurveda*¹. The characteristics enumerated under *Dhatusamyata* encompass the equilibrium state of physical and mental wellbeing and may be considered as the subjective markers for '*Vikaropashamana*' (alleviation of disease) is as follows²

- Alleviation of pain
- Appearance of normal voice and complexion
- Nourishment of the body
- Increase in the strength
- Appetite during the meal time
- Proper digestion of the food taken
- Getting sleep at appropriate time and waking up without fatigue
- Absence of morbid dreams
- Proper elimination of flatus, urine, stool, and semen
- Unimpaired state of the mind, intellect, and senses
- Absence of any type of diseases

General line of treatment of Unmada in Ayurveda:

Ayurveda approach *Unmada* in a holistic approach with due importance to the logic based pharmacotherapy, *Panchakarma* interventions and psychotherapy in the form of spiritual and psychological interventions.

¹ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,:Sutra 1/53,page no.25, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

² Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,:Vimanasthana 8/89, page no.640, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

Daiva –vyapashraya Chikitsa (Spiritual therapy):

Ayurveda considers individuals as part of the supreme conscience and the role of spirituality has been explained in detail in various contexts. Logical use of *Mantra, Aushadhi, Mani* (wearing gems), *Bali* (auspicious offerings), *Upahara* (gifts to deserving people), *Homa*(oblations), *Niyama* (observance of scriptural rules), *Prayashchitta* (atonement), *Upavasa* (fasting), *Svastyayana* (chanting of auspicious hymns), *Pranipatagamana* (obeisance to the Gods, going to pilgrimage), etc are aimed at boosting the self confidence and mental strength to the individuals.

Satvavajaya Chikitsa:

Satvavajaya Chikitsa literally means controlling the mind, in such a way that it is not acted upon by various stressors making it prone to *Prajnaparadha*. Acharya Charaka, defines *Satvavajaya* as withdrawal of mind from unwholesome objects. It includes

- Mano nigraha: regulating mind/subjugating mind from unwholesome interactions
- *Dhee-dhairyaatmadi vijnanam*: It is providing a deeper level of understanding which helps ultimately in better control of mind.

Charaka also explains the utility of replacing negative emotions with that of positive emotions that is beneficial to psyche. Thus *Satvavajaya* encompasses various aspects that deal with mind – its physiology, morphology, morbidity and also management of Psychological as well as Psychosomatic diseases.

Yuktivyapashraya Chikitsa :

This includes treatment through logical use of medicines and modification of *Ahara* and *Vihara* to suit the needs of the person. The patient should be encouraged to follow proper dietary regimen, follow rules of *Sadvrita*, to use *Medhya Rasayana* (medicines that boost psyche) and *Doshahara Ousadha* (medicines) to control the imbalanced mind.

Medicines usually prescribed for Unmada.

Single drugs:

- Brahmi(Bacopa monnieri)
- Sankhapushpi(Convolvulus pluricalis)
- Yastimadhu(Glycyrrhyza glabra)
- *Jyotishmati(Celastrus paniculatus)*
- Kushmanda(Benincasa hispida)
- Vacha(Acorus calamus)
- Rasona(Allium sativum)
- Shatavari (Asparagus racemosus)

Other preparations

- Ashwagandharishta
- Saraswatharishta
- Saraswatha churna

- Manasamitra gutika
- Dhanvantara Ghrita
- Panchgavya Ghrita
- Brahmi Ghrita
- Mahakalyanaka Ghrita
- Chetasa Ghrita
- Mahapaishachika Ghrita
- Lashunadya Ghrita
- Mahachetasa Ghrita etc

Panchakarma sodhana procedures are also mentioned to be done, as per the Dosha vitiation.

3.2 Role of Diet in Mental Health and Illness

Diet is said to be basis of life, strength, complexion, *Ojas*, growth and development, perspicuity of *Indriyas*, happiness, clarity of voice, lustre, pleasure, increase of *Dhatus*, intellect, health etc. According to *Chhandogya Upanishad*, the food inside the body is divided into 3 parts: *Sthoola, Madhyama & Anu bhaga* which nourish *Purisha, Mamsa & Mana* respectively, which means the subtle and abstract part of the *Anna* is *Mana*. "*Annamayam hi soumya manah*" is a popular quote from *Chandogyopanishad*, which means the mind is the essence of food we take. Just as when curd is churned up, the butter which is the finest part gather up, the finest part of food rise up and nourishes *Manas*.

Since Vedic era, food has been given the prime importance. Three categories of *Ahara* are described in *Bhagvad Geeta* (17/8, 9, 10) are *Sattvika, Rajasika & Tamasika*.

Sattvika persons prefers food which increases life span, nourishes *Satva*, keeps body healthy, increases happiness and prosperity, which are pleasing and full of nutrients, unctuous in nature, providing stability and conducive for the heart and soul³. Those persons who take foods which are very pungent, sour, salty, very hot, very sharp in taste, excessively dry, which causes burning sensation, and foods which causes sadness, depression and various diseases are *Rajasika* persons and thus such foods can be categorized as *Rajasika*⁴. Food that is not freshly cooked, unhygienic food or food which is devoid of nutrients, foul smelling, stale, mixed with pollutants, dust etc. and left over food comes under the *Tamasika* food and which is appreciated and practiced by *Tamasika* persons⁵.

Habit of taking *Ahara* which is non-*Satvika* i.e. *Rajasika* or *Tamasika* (continuously for a long time) causes some sort of mental disturbances and later on causes serious mental illnesses like *Unmada* and *Apasmara*. *Satvika ahara* not only consists of food with proper nutrition but also it indicates the rules of taking food should be followed. for eg. *Ashtaaharavidhi Visheshayatana* (Charaka), *Dwadashashan Pravicharana* (Susruta).

In the treatment aspect also, specific food along with health-conducive routines/regimens plays an important role along with medicines. Somatic or psychic food plays an important role as a preventive factor, causative

3 आयुः सत्त्वबलारोग्यसुखप्रीतविविर्धनाः।

उच्छषि्टमपचिामेध्यं भोजनं तामसप्रयिम्॥

रस्याः स्नग्धिाः स्थरिा हृद्या आहाराः सात्त्वकिप्रयािः॥ 4 कट्वम्ललवणात्युष्णतीक्ष्णरूक्षवदिाहनिः।

आहारा राजससुयेषटा दःखशोकामयपुरदाः॥

⁵ यातयामं गतरसं पूर्वा पर्युषतिं च यत्।

factor and as a curative factor. Proper diet helps a healthy person to stay healthy/improve it and prevent illness. In the diseased, it helps in easy recovery, not obstructing the action of medicine and regain lost vigor. The importance of food is studied in all contemporary medical systems but the study regarding the food that influence causation and treatment of psychiatric diseases is comparatively new in modern medicine, called as 'Nutritional Psychiatry' and lots of studies are coming in this filed, but Ayurveda owns clear and scientific concepts in this regard. The influence of digestive system on the emotional aspects of human beings is another domain of related study in modern research. Gut is considered as the second brain due to the intrinsic neuronal networks. The age old medical system, Ayurveda elaborated the same concepts eons before.

3.3 Importance of *Pathya*

Pathya Sevana is one of the most important supportive pillars for the successful management of the diseases. The proper use of diet also prevents the diseases and also helps in preventing the recurrence. "*Pathyam patho anapetam yadyachoktam manasa priyam* ||"⁶

The *Ahara* and *Vihaara* which is beneficial and nutritional to the body and also give the happiness to the mind is known as *Pathya* and opposite to that is known as *Apathya*. Wholesome food and regimen agreeable to mind and senses promote *Tushti* (mental satisfaction), *Urja* (mental strength) and *Sukha*(happiness) as a result of which disease gets diminished.⁷

Unwholesome food may not produce disease immediately, but becomes harmful depending on the nature of the locality, time, combination, potency, frequency of intake and quantity. So its effect can be negligible or gruesome depending upon where the person resides, the season prevailing, the associated *Doshas* and *Dhatus*, the seat of affliction and the quantity taken. When a person constantly takes unwholesome diet, the body becomes saturated with vitiated *Doshas* and become susceptible to serious diseases. It is also described that the persons with the habit of taking unwholesome diet and with poor mental strength become susceptible to physical and mental diseases.

These various *nidanas* described in *Ayurvedic* texts which are responsible for psychiatric disorders can be grouped under sub categories like *Aharaja*, *Viharaja*, *Mansika Bhava*, *Agantuja* etc. Though *Nidana* causing direct harm to mental health are the main etiological agents, beside this *Ahara* and *Vihara* also have an equal impact.

3.4 Pathya Ahara in Mental Illness

The foods with the qualities like colour, smell, taste and touch can be pleasing to the sense organs and conducive to the health if taken in accordance to the rules is the very life of living beings. If proper, it kindles the digestive fire, promote mental as well as physical strength, complexion, and strength of tissue elements and is pleasing to the senses, otherwise they are harmful⁸.

The *Pathyas* mentioned in *Unmada* & Apasmara prakarana of *Yoga Ratnakara* and Bhaishajya Ratnavali includes:

⁶ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Sutra 8/5, page no.539, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

⁷ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hin Commentary,: Chikitsa 30/332, page no.795, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

⁸ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Sutra 27/03, page no.388 Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

A] **Sakavarga** [vegetables], Patola [snake guard], Bramhi [*Bacopa monnieri* [Linn] Pennell], Shobhanjanam [*Moringa olifera*], Kakamaci [*Solanum nigrum Linn*], Vastuka [*Chenopodium album* Linn.], Tanduliyaka [*Amarantlus viridis* Linn.].

B] **Dhanyavarga** [cereals/pulses]: Raktha/Aruna-Sali [red rice], Godhuma/Yava [Wheat/barley], Mudga [green gram].

C] **Phalavarga** [fruits]: draksa [grapes], Panasa [jack fruit], Matulunga [Citrus medica Linn], Narikela [coconut], Kapittha [wood apple], Kusmanda [ash gourd], Dhatri [gooseberry], haritaki [terminalia chebula]

D] Gorasavarga [Milk and Milk products]: Ksira [Milk], Navanita [Butter], Ghrta [Ghee]

E] **Paniyavarga** [drinks/beverages]: Gangambu [Rain water], Madya [Alcohol], Rasala, Kulmasatarpana [Gruel of Kulmasa].

F] Mutravarga* [categories of urine]: Kharamutram [urine of donkey], ashvamutram [urine of horse]

G] Mamsa varga [Categories of Meat]: Koorma maamsa [Meat of tortoise]

* The concept has been mentioned in Samhitas as useful in insanity, but the scope and use has not been explored scientifically and as such is not in use in current scenario

Nootropics is a newly emerging branch of modern research which study drugs, supplements and other substances that may improve cognitive functions, memory, creativity, motivation etc. Botanical nootropics are described in *Ayurveda*, which are considered as *Medhya*, *Buddhi vardhaka*, *Smritikara* etc. Some of the fruits and vegetables having these properties are Sesame seeds, Ash gourd, Garlic, Pomegranate, black jeera, coconut etc which can be included in the diet.

3.5 Apathya Ahara in Mental Illness

The *Apathyas* mentioned in *Unmada & Apasmara Prakarana* of Yoga Ratnakara and Bhaishajya Ratnavali include, over indulgence in meat, fish, alcohol, sex, incompatible, heavy, hot and stale food articles, suppression of sleep, hunger, thirst, and natural urges, excessive exercise, excessive strain, leafy vegetables, bitter food items, bimbi, and rude acts, which are not in accordance with prescribed ethical code of conduct. It is also necessary to consider the different food related aetiological aspects of Unmada before suggesting the diet. In *Unmada Prakarana* of Charaka Samhita, it is mentioned that a person with a strong mind who does not indulge in meat and wine, who eats only healthy foods, remain clean internally and externally does not affected by either "*Nija*" or "*Agantuja Unmada*.

3.6 Role of Viharas in mental health and Illness

'Vihara' means the activities of daily life in accordance with the societal, economical and cultural norms of any person and Ayurvedic classics have described the healthy routines to be followed in Day time (*Dina Charya*), in Night time (*Ratri Charya*), and according to the seasonal variations (*Ritu Charya*) and codes of conduct (*Sadvritha & Achara Rasayana*). Resorting to these helps in prevention of diseases of body and mind

Pathya Viharas in Mental Illness

The healthy behavioral patterns to be followed by a person as an individual and a social being include *Pathya Vihara*, among which *Sadvritha* and *Achara Rasayana* that have influence on the mental wellbeing are worth mentioning.

⁹ Acharya Vidyadhar Shukla & Prof.Ravidutt Tripathi, Charaka Samhita, Vaidya Manorama Hindi Commentary,: Chikitsa sthana 9/96, page no.246, Chaukhamba Sanskrit Pratisthan, Delhi.India 2006

Sadvrittha(Code of conduct)

Sadvritta deals about the positive codes & conducts and morals & values which when followed transform the person belief system, cognitive framework and perceptive ability strengthening his state of positive mental health/ *Satva*. Following this, helps the person in preventing *Prajnaparadha* and thereby preventing disease.

Achara Rasayana

Achara Rasayana is a form of Rasayana [means to provide excellence of tissue elements] wherein practices of *Sadvritta* and habitual intake of natural products [Milk & Ghrita] will bring about excellence of *Dhatus/* tissue elements as well as *Satva/*Positive mental health. It is based on principle of conditioning showing the interrelation & interdependence of mind & body – 'Psycho-neuro-immunology'. Neurological research has identified over fifty neurotransmitters in the brain, several of which are related to mental health problems – Dopamine, Serotonin, Norepinephrine, and GABA (Gamma Amino Butyric Acid). Too much or too little of these neurotransmitters are now felt to produce psychiatric conditions such as schizophrenia, depression, bipolar disorder, obsessive-compulsive disorder, and ADHD

Achara Rasayana emphasizes the conduct of an individual in social settings. Since, human beings are social animals; definitely their social image and social reputation have an enormous effect on their mental status.

Exercise and the brain¹⁰

Exercise helps memory and thinking through both direct and indirect means. The benefits of exercise come directly from its ability to reduce insulin resistance, reduce inflammation, and stimulate the release of growth factors—chemicals in the brain that affect the health of brain cells, the growth of new blood vessels in the brain, and even the abundance and survival of new brain cells. Indirectly, exercise improves mood and sleep, and reduces stress and anxiety. Problems in these areas frequently cause or contribute to cognitive impairment.

Many studies have suggested that the parts of the brain that control thinking and memory (the prefrontal cortex and medial temporal cortex) have greater volume in people who exercise versus people who don't

Exercise affects the brain on multiple fronts. It increases heart rate, which pumps more oxygen to the brain. It also aids the bodily release of a plethora of hormones, all of which participate in aiding and providing a nourishing environment for the growth of brain cells.

Exercise stimulates the brain plasticity by stimulating growth of new connections between cells in a wide array of important cortical areas of the brain. From a behavioural perspective, the same antidepressant-like effects associated with "runner's high" found in humans is associated with a drop in stress hormones

Yoga and Mental Health ¹¹

The literal meaning of Yoga is 'to join', that is joining of Mind and Body.¹² Yoga advocates that every life form is interconnected and united¹³ the eight limbed path of yoga includes: Yama (moral codes), niyama

^{10 [}https://www.health.harvard.edu/blog/regular-exercise-changes-brain-improve-memory-thinking-skills-201404097110][https://www.brainhq.com/brain-resources/everyday-brain-fitness/physical-exercise]

^{11[}http://healthland.time.com/2013/01/28/yoga-and-the-mind-can-yoga-reduce-symptoms-of-major-psychiatric-disorders/][https://www.hindawi.com/journals/ecam/2012/165410/]

¹² Shroff F (2011)We are all one! A Yogic travel tale. J Postcolonial Cultures Societies 2:124-128.

¹³ Shroff F (2011) We are all one: Holistic Thought-Forms within Indigenous Societies Indigeneity and Holism. Wien: Peter Lang Publishin, Oxfordpp: 53-67.



(self-discipline), asana (postures), pranyama (breath practices promoting life force), pratyahara (sensory transcendence), dharana (concentration), dhyana (meditation) and samadhi (state of bliss).

Figure representing stimulation of chakras in the body through yoga

The application of yoga as a therapeutic intervention began early in the twentieth century, taking advantage of the various psycho-physiological benefits of the component practices. The physical exercises (*Asanas*) may increase patient's physical flexibility, coordination, and strength, while the breathing practices and meditation may calm and focus the mind to develop greater awareness and diminish anxiety, and thus results in higher quality of life. Other beneficial effects include, a reduction of distress, blood pressure, and improvements in resilience, mood, and metabolic regulation. It has been found in many researches that yoga have positive effects on mild depression and sleep problems, and it improves the symptoms of psychiatric disorders like schizophrenia and ADHD among patients using medication.

Some studies even suggested that yoga might affect the body in ways similar to antidepressants and psychotherapy. For instance, yoga may influence brain chemicals known as neurotransmitters (boosting levels of feel-good agents like serotonin), lower inflammation, reduce oxidative stress and produce a healthier balance of lipids and growth factors — just as other forms of exercise do.

4.1 CONTEMPORARY REVIEW OF ROLE OF NUTRITION IN PSYCHIATRIC DISORDERS.

The 20th century has seen major shifts in dietary intakes globally, with a marked increase in the consumption of sugars, snack foods, take-away foods and high-energy foods. At the same time, the consumption of nutrient and fibre-dense foods is diminishing. The very large body of evidence that now exists suggests that diet is important to mental health in the same way as it is to physical health. Feeding the brain with a diet that provides adequate amounts of complex carbohydrates, essential fats, amino acids, vitamins, minerals and water can support healthy neurotransmitter activity. It can protect the brain from the effects of oxidants, which have been shown negatively to impact mood and mental health.

Dry weight of the brain is composed of 60% fat and hence the fat we eat may be directly affect the structure and substance of the brain. Twenty per cent of the fat in our brain is made from the essential fatty acids omega-3 and omega-6, which must be taken from outside through diet. Unequal intakes of omega-3 and omega-6 fats are implicated in a number of mental health problems, including depression, and concentration and memory problems.

Recent trends in diet and nutrition, which might have played an important role in the causation of diseases, are

- Altered cooking and manufacturing practices
- Non-adherence to the dietary practices followed by the ancestors which were comparatively more healthy and in accordance with the general geographical traits.
- Increased access to fast food, food processed with unhealthy items
- Including fresh fruits and vegetables in regular diet is not being practised
- High caloric diet, which gives fast nutrition, is being highly used.
- Increased use of mood enhancing substances are being practised
- Increased use of alcohol, drugs etc
- Practices of reheating refrigerated food, using stale food etc

4.2 Holistic approach to mental health

The therapeutic approach to mental illness has undergone drastic change over the centuries and civilizations. It has started with shamanism, black magic and spiritual approach to the current comprehensive chemotherapeutic approach which is the main stay of psychiatric management. In-depth qualitative research shows that many factors are important in promoting wellbeing and preventing

mental ill-health, including medication, relationships with friends, family members and professionals, complementary therapies, religious and spiritual beliefs, self-help strategies, sport and physical exercise, and creative expression¹.

¹ Feeding minds: the impact of food and diet on mental health, mental health foundation, pp 14

S. No	Technique/substance	Impact
1	Processing	• packaged and processed foods are high in calories, fat, salt and sugar
		• Processed foods are commonly devoid of nutritional elements, such as vitamins, minerals and essential fats
		• Trans- or hydrogenated fat which has no nutritional benefit is being used excessively which is even more unhealthy
2	Additives	• Many substances such as salt, vinegar, etc have been used traditionally for preservation of food. But recently, the practice of using many chemical preservatives has increased.
3	Industrialized Farming	 The genetic diversity of crops is declining. Food grown somewhere and used elsewhere leads to packaging and preserving food materials for long duration. Vitamins A, C, E, riboflavin, folate and thiamine can easily be lost through long storage, exposure to light, oxygen and heat
4	Animal breeding	• Rearing animals for food has lead to the use of various growth enhancers to obtain rapid growth.
5	Pesticides	• The potential impact of pesticides on the body and mind has come to the notice and the impact is being studied.

Table 1: Impact of food production techniques on health (from Holford, 2003²)

A healthy brain requires complex carbohydrates, essential fatty acids (EFAs), amino acids, vitamins, minerals and water. The food we eat has the potential to affect our mental health and wellbeing at every stage of life. The development of the brain at conception, during pregnancy and throughout the first three years of life is critical in this process. Some nutrients trick the brain by triggering an over-release of neurotransmitters and some foods damage the brain by releasing toxins or oxidants that damage healthy brain cells. Both of these processes are implicated in long term mental health issues.

Table 2: Neurotransmitters and their effects (from Holford, 2003)

Neurotransmitter	Symptoms in deficiency	Foods to avoid	Foods to be included
Acetylcholine	• Deterioration of memory	• Sugar	Organic eggs
	• Fewer dreams	• Deep-fried food	• Fish like salmon,
	Increased confusion	• Junk foods	mackerel, tuna, sardine
	• Forgetfulness	• Refined and processed	
	Disorganization	foods	
	, j	Cigarettes	
		Alcohol	

² Holford,p.(2003)optimum nutrition for the mind,London Piatkus, published 2003

Serotonin	Low mood	Alcohol	• Fish
	• Difficulty sleeping		• Fruit
	• Feeling 'disconnected'		• Eggs
	• Apathy		• Avocado, pineapple
			• Low-fat cheese
			• Green peas
			• Nuts and seeds
Dopamine	Lacking motivation and/	• Tea	Almonds
	or enthusiasm	• Coffee	• Bananas
	Craving stimulants	Caffeinated drinks	Avocado
			• Vitamin C rich fruits
			• Eggs
			• Beans
			• Fish
			• chicken.
GABA	Anxiousness	• Sugar	• Dark green vegetables
	• Irritability	Alcohol	• Seeds & nuts
	• Difficulty To Relax	• Tea & coffee	• Potatoes
		Caffeinated drinks	• Bananas
			• Eggs

Complex carbohydrates:

Slow-releasing – or complex – carbohydrates, in foods like whole grains, vegetables and beans, take longer to digest than refined equivalents and capable of providing steady nutrition for longer duration is better suited for brain function.

Fats: Essential Fatty Acids (EFAs)

Fat is essential for the structure and substance of the brain. Omega-3 and omega-6 are especially essential to the brain functioning. Each fatty acid performs vital functions in the structuring of brain cells (or neurons), therefore ensuring that smooth communication is possible within the brain. Fish consumption has been reported to have an association with better moods. Omega-6 fats are found in a range of seeds, vegetables and vegetable oils.

Source of omega-3 fatty acids- fish like sardine, deep green leafy vegetables, pumpkin seeds

Source of omega 6 fatty acids: cooking oils, nuts, seeds, cereals, walnuts, avocado

Amino acids:

Neurotransmitters are made from amino acids and if the diet does not provide adequate amounts of these amino acids, deficiency of neurotransmitters may occur. For eg: stable and sufficient levels of serotonin are implicated in mood, wellbeing and sleep patterns and are derived from the amino acid, Tryptophan.

Vitamins and Minerals

Deficiencies in vitamins and minerals are sometimes implicated in a number of mental health problems.

Table 3: Table of essentia	l vitamins and minerals and	l source (from Holford, 2003)
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Vitamins	Deficiency	Source
Vitamin B1	Poor concentration and attention	Whole grains
		Vegetables
Vitamin B3	Depression	Whole grains, mushrooms, cottage cheese, sardines, mackerel
		Vegetables
Vitamin B5	Poor memory	Whole grains, egg yolk, milk, lentils,
	• Stress	sweet potatoes, peas
		Vegetables
Vitamin B6	• Irritability	Whole grains, milk, egg, carrots,
	Poor Memory	Bananas
	• Stress	
	Depression	
Vitamin B12	Confusion	Meat, Fish
	Poor memory	Dairy products
	Psychosis	Eggs
Vitamin C	Depression	Vegetables, guava, green leafy vegetables,
		Fresh fruit like oranges, lemon etc
Folic acid	Anxiety	Green leafy vegetables such as spinach,
	Depression	citrus fruits, legumes, asparagus, beets,
	Psychosis	broccoli, Brussels sprouts etc
Magnesium	Irritability	Green vegetables, figs, avocado, black
	• Insomnia	beans, chickpea, Nuts, Seeds, sea foods etc
Selenium	Irritability	Fish, Garlic, Sunflower seeds, Brazil
	Depression	nuts, Whole grains, , eggs, legumes etc
Zinc	Confusion	Oysters, Nuts, Seeds
	Blank mind	Fish, legumes, dairy whole grains.
	• Depression	
	Loss of appetite	
	Lack of motivation	

Water

Water is an essential element in the functioning of the brain. Inadequate hydration has significant effect on mind. The early effects of even mild dehydration affect feelings of wellbeing, performance and learning and in the long term may cause a number of health problems. The symptoms of inadequate hydration include increased irritability, loss of concentration and reduced efficiency in mental tasks.

Section E

Pathya and Apathya in Psychiatric diseases

General advocacy for prevention and management of Psychiatric disorders

A proper healthy diet and an active stress free life style plays major role in maintain a good health and a happy life. Due to improper dietary habits, changes in lifestyle and environmental changes, the incidence of psychiatric disorders are increasing day by day. Ayurveda has clearly indicated several practices such as *Dinacharya, Ritucharya, Achara Rasayana, Sadvritta etc* which must be followed to keep mind and body healthy. Below are the list of Do's and Don'ts for psychiatric patients.

<i>5.1 Pathya Ahara</i> an disorders			
Lohita Shali	E THE	Brahmi	
(Red variety of rice)		(Bacopa monnieri)	
Mudga (green gram)	· · · · · · · · · · · · · · · · · · ·	Mandukaparni	
		(Centella asiatica)	
Fresh Milk		Draksha (Grapes)	
Ghee		Amra (Ripe mangoes)	

Wheat		Dadima (Pomegranate)	
Butter		Dhatri (Gooseberry)	
Kushmanda(ash gourd)		Freshly prepared food	
Eat clean and hygienic food		Whole grain food	
Consume fresh, seasonal fruits and vegetables everyday to supply fiber, micro and macro nutrients for the well being of body and mind	to non-vegetarian food	Regular and timely intake of balanced meal in the right quantity	

Fish (omega 3 containing fish such as sardine, mackerel)		Organic eggs	
Activities			
Practice Yoga under the supervision of Yoga specialist		Be kind and polite to people, respect elders and others	RANDOM ACTS OF KINDNESS.
Proper & sound sleep (7-8 hrs on an average)	Contraction of the second seco	Practice panchakarma	Panchakarma Varana Vinchana Narya
Waking up at Brahma Muhurta(4.30 am to 5.30 am)		Following Dinacharya, Rtucharya (lifestyle regime mentioned as per Ayurveda)	DINACHARYA & RTUCHARYA Ayurvedic way for healthy life
Regular exercise (Aerobic exercises, including jogging, swimming, cycling, walking, and dancing has a positive effect on mood)		Be compassionate	

Have a helping attitude.		Recite hymns(as per individual religious preferences, if you are spiritually inclined)	
Read holy scriptures		Spend time with family and relax	adada Artica Cara
Relax with hobbies that take your mind off day to day stress like reading, singing, gardening, painting, listening to music	HOBBY	Control your mind from unnecessary indulgences	

Picture courtesy: Google.co.in

5.2 Apathya (Don'ts) for prevention of psychiatric diseases

Apathya (unwholeso	me diet and activities) in psychi	×	
Eating contaminated foods (road side stalls/unhygienic food)		Refined and processed food products	

Alcohol		Simple carbohydrates which do not provide sustained energy to brain.	
Excessive use of coffee, tea is not conducive to normal functioning of neurotransmitters		Caffeinated drinks (which stimulates the brain function instantaneously is not conducive in the long term)	
Smoking		Ghutka	
Prolonged fasting (Dieting, fasting regularly and such other practices impairs the brain and related structures as it is highly dependent on a steady source of energy)	FASTING	Eating dry foods (and avoiding use of unctuous substances). Brain is 60% fat and it requires unctuous substances for its normal functioning	
Regular use of fast food which are loaded with spices, processed food substances and trans fat with high chloestrol))		Excessively spicy food (pickles, food with lots of chilly, pepper etc)	

Refrigerated or extremely cold food	Excessively sour food(such as fermented items, vinegar etc)	www.medindia.net
Food which is difficult to digest (Maida products, vanaspati)	Eating putrified/stale food	e de rentration de la constantion de la const
Over eating	Eating without digestion of previously taken food	
Eating predominantly rajasika and tamasika food such as coffee, tea, spices, meat, heavy food, chocolates etc	Mutually incompatible food which should be taken together (Milk +fish/egg, hot + cold food together, fruits+ milk etc)	
Improper sleep pattern (sleeping late, waking up late, skipping sleep)	Sleeping during day time	0-00-0
Sedentary lifestyle with minimal physical activity/ exercise etc	Excessive stress	Doesd Health and Tear Binder Sold Tear Binder Sold Tear Discose Debt Work Sold Tear Discose Debt

Excessive indulgence or not controlling feelings of wrath, envy, lust, gluttony etc	RIDE SLOTH CLUTTON FNVY SLOTH	Non-adherence to societal rules, ethics and improper behavior etc	
Excessive thinking, constant worrying over inconsequential things and anxiety		Excessive use of sense organs like watching television or mobile continuously	
Uncontrollable anger, emotional outbursts		Indulgence in situations or things which causes excessive fear, grief, lust etc	
Initiation/induction of bodily urges such as defeacation, micturition etc which should happen naturally	RESTROOMS		
Sinful activities		CORRUPTION	

Picture courtesy: Google.co.in

#Above mentioned diet and regime can be used by general public for prevention of diseases and also as a supportive tool in management, along with suitable medicine as prescribed by the doctor

5.3 CONCLUSION

World is witnessing a global paradigm shift in health care sector with a lenience towards traditional system of medicine and *Ayurveda* is reviving its lost vigour. Unlike other branches of Ashtanga Ayurveda, Psychiatry or 'Bhootavidya' has not developed into a mainstream system except in the certain regions of India. The main reason being ignorance and obscureness prevailing around the concept of being afflicted with a mental illness, which is still considered a social stigma. Exploring its utility and developing its possibilities into a complementary support system to modern psychiatry is the need of the hour.

The principles of Ayurvedic Psychiatry revolves around the concept of mutual inter relationship between the 'Psyche' and 'Soma'. The psychic factors at large are influenced by the physical factors like food intake and activities of daily life. The structural and functional components of the body viz, *Dosha, Dhatu, Mala* and *Ojas* are nourished/maintained, depleted or vitiated by the influence of the *Ahara* and *Vihara* which becomes the determinants of health and ill health. Reciprocally the status of 'Satva' is also indispensably affected by these factors. The current statistics of psychiatric disorders also depicts the haphazardness of diet and regimen of modern life. In this regard Ayurvedic guidelines are of great relevance in the present era.

These guidelines of *Pathya Ahara* and *Vihara* (conducive diet and regimen) work in different domains of intervention viz, Preventive, Curative, and Rehabilitative/ Supportive aspects. The '*Satvavaisheshikakara Bhavas*' or the decisive factors on the psyche of the future progeny holds prime importance in the preconceptional care. It reiterates the importance of prescribed diet and regimen in the couple for the best possible satva in the progeny. The sensory inputs, douhrida (longings during pregnancy), restricted activities and emotions etc are equally important in creating the psyche of the baby. The 'Prasha' or electuary in the newborn and different sanskaras or ceremonies helps to prevent and check diseases.

Long-term mental illness negatively affects the general health of the individual. The concepts of *Sadvrita* and *Achara Rasayana* help in the preventing derailment of mind. The concepts of *Satvavajaya* and *Daivavyapasraya* can be used suitably in the form treatment modality and also in rehabilitation of the individual.

The streamlining of an inclusive society towards patients of psychiatric illness is necessary as a social support system. Vocational training, pleasure trips, physical activities, reading and involvement in entertainment activities are positive life style changes. All theses goal- directed activities are attempts towards strengthening the *Satvabala* of a person and ideally aims at attaining a state towards '*Satvasara Purusha*' which can be considered as a gold standard in positive mental health.