INTRODUCTION

Emotions are basic feelings of human life. But when the people emotions, thoughts or behavior frequently trouble them or disrupts their day to day activities and those around them, they may be suffering from mental illness. It’s natural to feel down sometimes, but if that low mood persists day after day, it could be a signal of depression. Depression is a group of brain disorders with its varied origins, complicated neurobiology and complex genetics. It is a chronic and potentially debilitating form of psychiatric disorder. Any form of stressful life event is considered as the very initial sign of depression, thereby depression is often thought as stress related disorder. Depressive illness can cause loss of productivity, enjoyment and intimacy of an individual. Majority of depressed patients have sleep disturbances, including reduced amount of slow wave sleep (SWS), increased rapid eye movement (REM), sleep amount and shortened REM sleep latency. Although depression is a very different phenomenon, it also relates with sleep and they both get influenced by biological and environmental factors.

Globally depression is a common illness worldwide with an estimated 350 million people affected; according to WHO. It has a major contribution to the global burden of disease. As per the observation/ study females are more easily affected by depression than males. It is estimated that 1 million people die per year due to on and off cause of depression. By knowing the seriousness of this disease, WHO specially introduced “The Mental Health Action Plan” October 2013-2020 and celebrates “World Mental Health Day” on 10th October every year. In Ayurveda Vishada and Avsada are two conditions which have close resemblance to depression. According to ancient Indian literature of Mahabharata, at the battle of Kurukshetra, Arjuna suffered from Vishada which lead to a state of disability. Arjuna’s despondent state on the battlefield is referred as Vishada. It precipitated a prolonged depressive episode which is described in Arjuna vishada yoga. Charaka Samhita mentions “Vishada” as one of the vataja nanatmaja vikaras and it is further said that Vishada is the main factor that increases the range of all the diseases. Sushruta has mentioned it under the Mano Vikaras (Mental diseases). Further he mentioned that Vishada is common among the Tamasika Manasa Prakrutis. Whereas Vagbhata has stated that person with predominant Tamasa guna is more prone to suffer from Vishada. While describing anumanagamy bhavas in Charaka Samhita, Charaka quotes “Bhayam Vishadena” i.e. understanding the feeling of fear in a person by seeing his depressed state or behaviour. In classical text there is no direct reference regarding depression but based on symptoms of kaphaj unmaad, we can correlate it with depression.

Our mind controls our body. Mind body relationship and its significance in ayurveda can be illustrated by a number of fundamental principles such as psychological concept of evolution of universe, concept of Purush, Prakriti (Deha prakriti) as well as Manas prakriti and identification of psychosomatic factors in causation and presentation of several diseases.

ETIOLOGY

Depression has multifactorial etiology arising from environmental, psychological, genetic and biological factors. Researches over the past decade has clarified that depression is linked with neurotransmitter imbalances, deregulated inflammatory pathways, Hypothalamic Pituitary Adrenal axis disturbances, increased oxidative and nitrosative damage neuroprogression and mitochondrial disturbance.
PATHOPHYSIOLOGY OF DEPRESSION

Many research works have been done on animals and humans to identify the number of abnormalities which have played a major role in the pathogenesis of depression. The main findings which interact closely are genes, psychosocial stress (like low social support, marital problems, divorce, childhood sexual abuse etc), decreased level of monoamine (serotonin and noradrenaline) neurotransmission, low Brain Derived Neurotrophic Factor (BDNF) concentrations, altered stress hormone secretion, raised cytokines, deregulation of the HPA axis, cortical and sub cortical functional, structural brain changes. The structural changes in the brain particularly in the hippocampus and prefrontal cortex are due to abnormalities in neuroplasticity rather than neurodegeneration. Raised concentration of circulating cortisol trigger brain receptors, stimulating gene transcription and protein synthesis. Although this may have a good effect in the short term by enabling the brain to endure with smaller amounts of stress, but constant hypercortisolemia in chronic stress can disturb voltage-gated ion channels allowing increased calcium access into the activated neurons and causing neuronal damage. Mediating role of monoamines (serotonin and noradrenaline) are, most of the serotonergic, noradrenergic and dopaminergic neurons are located in midbrain and brainstem nuclei and project to large areas of the brain. This anatomy suggests that monoaminergic system is involved in the regulation of a broad range of brain functions, including mood, attention, sleep, appetite, and cognition. Almost every compound that inhibits monoamine reuptake, leading to an increased level of monoamines in the synaptic cleft, has been proven to be a clinically effective antidepressant. Inhibiting the enzyme monoamine oxidase, which prompt an increased availability of monoamines in presynaptic neurons, also has antidepressant effect.

Due to stress, emotions and capability to take decision is hindered. Stress & HPA axis play a crucial role in the pathogenesis of depression, given the multiple systems involved (neuroanatomical, neurochemical and immunological), insults other than the effects of stress hormones, cortisol and CRH also need to be considered. There is convergent data for CRH to play a major role in the pathogenesis of depression. Level of CRH in the cerebrospinal fluid is elevated in some depressed subjects. Post-mortem studies reported an increased number of CRH secreting neurons in limbic brain regions in depression, likely reflecting a compensatory response to increased CRH concentrations. In addition, CRH produces a number of physiological and behavioral alterations that resemble the symptoms of major depression, including poor appetite, disrupted sleep, decreased libido, and psychomotor alterations.

PSYCHOLOGY IN AYURVEDA

People in Satyuga (era of truth) were pious like gods, divine as saints and they followed dharma (ethics), yajna (worship) as per rules. They were devoid of anger, grief, envy, fear, laziness, greed, mental diseases, abnormal sleep and tendency to collect things.

Some rich people at the end of Satyuga, due to over indulgence got heaviness in their bodies which lead to fatigue. Fatigue gave rise to laziness and accumulation. These all factors resulted in greed.

During Tretayuga (ages of mankind) greed gave rise to malice; malice gave rise to false statements and from false statements arose passion, anger, vanity, hatred, cruelty, infliction of injury, fear, sorrow, grief, worry, anxiety, depression and many more mental disorders occur.

Acharya Charaka also said that the causes of psychological disorders are due to the wrong use of mind. “Thinking” is an object of mind. Thus the wrong use of mind creates abnormal mental conditions. The right use of mind creates mental stability i.e. if mind or mental faculties are properly utilized; this is conducive to the maintenance of the normal mental conditions; if not then abnormal condition prevails.

There are six mental conditions called as Shad - Ripu (six enemies), which are considered as main causes of mental disturbances. They are: Kama (wrong or right desires)- the word ‘Kama’ is primarily used for sexual desire but its real meaning is all types of desires, Krodha (Anger or Irritability), Lobha (Greed), Moha (Personal attachment or likes and dislikes), Mada (Ego or Arrogance), Matsa (Jealousy, envy etc.)

Out of the above six, Kama or desire and non-fulfillment of desire is the superlative and most important factor of mano-rogas. Acharya Charaka says in sharir shhana chapter one “Upadha (desires)” is the main etiological factor to produce pain (physical and mental disease/disturbance) to the body. Avoidance of all
types of Upadha (desires) removes all kinds of physical and mental disturbance\textsuperscript{14}. He compares upadha with a cob (silkworm)-web. He says, a silk worm provides for itself suicidal threads. So does an ignorant person, bound with worldly miseries, provide for himself desires arising out of the various objects. A wise person, who abstains from the objects of senses, considering them as dangerous as burning fire does not subjects with the result that miseries never overcome him. Thus, the root cause of majority of mental and physical diseases is non-fulfillment of one’s own desires\textsuperscript{15}.

Acharya Charak has also described that there is non-human elements like demons, gods, ghosts etc. which enters in the body and produce mental disorders like Dev unmada (psychological disturbances caused by entering of god), Bhoot unmada (due to ghost) etc. Lord Punarvasu Atreya considered Pragyapradha (Intellectual blasphemy) as the causative factor of such conditions. Due to the intellectual blasphemy the patient disregards the god, ascetics, ancestors, gandharvas, yaksas, rakasas, pisachas, preceptors, elders, adepts, teachers and other respectable ones. He also resorts to undesirable and such other inauspicious activities. The gods, ascetics etc cause psychological disturbances to the person\textsuperscript{16}.

Ayurveda recognizes three physical humors or doshas (vata, pitta and kapha) as well as three mental humors (satva, rajas and tamas). The Acharya Charaka describes the gunas as- Tamas (Inertia, darkness), Rajas (Momentum, desire), Satva (Peace, balance, steady)\textsuperscript{17}.

Charaka considered the prominence or imbalance of first two humors (i.e. raja & tama) as cause of several psychological disorders, while satva is the natural state of stable mind. Consciousness flows through mind which is considered as a srotas (channel). Mind originate from heart and flows in the body and in the five sense organs (eyes, ears, nose, tongue and skin)\textsuperscript{18}. Ayurveda describes the concept Manasprakruti (unique personality) through the language of the five elements and the three gunas\textsuperscript{19}. Classically, mental imbalances or Manasvikruti, are caused by three bodily humors (vata, pitta and kapha) and two mental humors (rajas & tamas)\textsuperscript{20}.

**SAMPRAPTI (PATHOGENESIS) OF DEPRESSION\textsuperscript{21}**

Etiological factors (Like food with incompatible, contaminated and unclean properties; possession by spirits like gods, teachers; mental trauma etc)

- Alpa satva person (weak minded people)
- Vitiation of doshas (raja, tama, vaat, pitta, kapha)
- Manas + Psychic Personality + Sharir
- Localization of doshas in Hridaya (heart)
- Manoavasada (Depression)

**DIAGNOSIS OF DEPRESSION**

Depression is that state of mind in which there are persistent low mood and aversion to activities that can affect a person’s thoughts, behavior, feelings and sense of well being. A major depressive disorder is defined as one or more episodes of negative mood and sadness that are sufficient to interfere with daily life routine\textsuperscript{22}. For an appropriate diagnosis, five of the following nine DSM-IV symptoms must be present continuously for minimum two weeks period.

<table>
<thead>
<tr>
<th>Depressed mood</th>
<th>Insomnia or hypsomnina</th>
<th>Feeling of worthlessness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loss of interest or pleasure</td>
<td>Psychomotor agitation or retardation</td>
<td>Diminished ability to think or concentrate</td>
</tr>
<tr>
<td>Significant weight or appetite alteration</td>
<td>Fatigue or loss of energy</td>
<td>Suicidal tendency</td>
</tr>
</tbody>
</table>

Table 1: DSM-IV SYMPTOMS
Table 2: PSYCHOLOGICAL FACTORS

<table>
<thead>
<tr>
<th>Mana (emotion, mood) vibhrama</th>
<th>Buddha (reasoning and decision) vibhrama</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sangya (orientation and adaptation) vibhrama</td>
<td>Smriti (learning and memory) vibhrama</td>
</tr>
<tr>
<td>Bhakti (attachment) vibhrama</td>
<td>Sheela (habits) vibhrama</td>
</tr>
<tr>
<td>Cheshta (Psychomotor function) vibhrama</td>
<td>Aachara (Conduct and behaviour)</td>
</tr>
</tbody>
</table>

In Avasada or vishada, Bhakti Vibhrama is the important sign on which Chakrapani quotes “Yatrechha purvam asait, tatra anichcha Bhavathi” means the psychological Doshas – Tamas and Rajas are balanced by spiritual practices and scriptural knowledge, patience, memory and meditation22. Thus, Acharya Charaka advised Psychotherapy to get rid of Vishada. The general principles in Ayurvedic management of depression should be as follow: Pharmacological and Non-pharmacological treatments are equally important for treating the mental disorders.

Non-pharmacological management:

1. Daivavyapashraya Chikitsa (Spiritual Therapy) It includes incarceration of Mantras, Aushadha (medicines), Maninamangala (wearing of gems and root), Bali (offering), Upahara (gift), Homa, Niyama, Prayaschita (atonement), Upavasa (fasting), Pranipata, Yatragaman (pilgrimage). These methods create self confidence and encourage the person.

2. Satvavajaya Chikitsa25 Sattava = psyche, Avajaya = to take over/ to suppress. Withdrawal of mind from harmful objects. It means one should keep himself established in his oneself after knowing real nature of soul and attaining height of spiritual wisdom.

3. Nidanparivarjana A detail history of the patient should be taken to enlist the causative factors. The patient should be made aware of these factors and their consequences. Then he should be motivated to rule out and avoid the causes and triggers.

4. Naisthikichikitsa26 “Naisthiki ya vinepadham” i.e. Absolute eradication of miseries obtained by elimination of desires which are root cause of all miseries. Absolute eradication of miseries is nothing but salvation. This stage can be attained only by virtue of the elimination of desires. Once such desires are shunned, one does not have attachment or hatred in respect of actions and so the possibility of any ground being created for further miseries is checked.

5. Yoga Therapy27 ‘Yoga moksho pravarkak’. It means that yoga serves as a means to the attainment of Moksha. Moksha implies absolute detachment of the soul from all mental as well as physical contacts. Increase in Satva and decreasing Raja and Tama leads to Karmakshaya (loss of deeds) and helps in attaining Moksha.

6. Shock Therapy28 He should be shown wonderful sights, told of the death of person whom he loves, be threatened by person of terrifying shapes; By elephants and wild animals which have been tamed and which are non-poisonous, threatened by binding him with ropes or beating with whips; or be tie and hidden in a solitary place.

7. Aahar (Diet) The diet of the patient should be tasty, appetizing and salutary, rich in vitamin D, Omega 3 fatty acid, vitamin B, zinc, protein rich food, selenium containing food (whole grain, some seafood, organ meet like liver etc).

8. Vihara Chikitsa: Life style modification is an important factor in the management of depression. Depressed persons should be trained with various Yogic, Aerobic, Music and Breathing exercises to cope up their stress and for relaxation of mind.

Pharmacological Management:

In Ayurveda the Chikitsa (treatment) is divided in to three types, which are Daivavyapashraya (Spiritual therapy), Yuktiyapashraya (Therapy based on reasoning), and Satvavajaya Chikitsa (Psyche therapy). Out of these Yuktiyapashraya comes under pharmacological treatment.

Yuktiyapashraya Chikitsa29 - 3 types (Antarparimarjana, Bahirparimarjana, Shastarparinidhana)

1. Antarparimarjana (Internal cleansing)
   a. Samshodhana (Purification): That is elimination of vitiated Doshas by Panchacarma therapy.
   b. Samshaman (Alleviation) - It include different type of drugs, diet activities used to alleviate the vitiated doshas. Eg. Medhya rasyana, Saraswat ghrit, Kalyanak ghrit etc.

2. Bahirparimarjana (External cleansing)
   It includes procedure like Snehan (oilation) & Swedishan (sudation), Lepa (Liniment), Parishheka (Fomentation), Shiro dhar c.

3. Shastraprinidhana (Surgical or para-surgical procedures) - Bloodletting has been indicated in various types of mental disorders.

Even though the above mentioned three fold therapy is mainly applicable to disease of the body, but they have their utility for cure of mental disorders (like Insanity, Epilepsy, and Depression etc) also.

DISCUSSION

Depression is a leading cause of morbidity and mortality worldwide with profound public health concern. In today’s era stress at home, work place, to match pace with others, to reach given targets, constant or recurrent fear of failure or lagging behind, incomplete desires to achieve something like fitness, body shapes etc are psychological causes of stress and depression. Chronic illness like kushta, apparent lesions on body, physical debilities like paralysis etc also cause depression. Similar causes can be traced in ayurvedic texts. Apart from psychological factors, dietary factors like incompatible, contaminated and distasteful food also play a major role in causing stress. Ayurveda consider sharira (body) and Satva (mind) are interrelated with each other and both follow each others pattern in terms of functioning. When sharirik dosha get disturbed eventually mansika dosha (raja and tama) aggravate thus along with physical
illness, mental illness also occurs and vice versa. Acharya Charaka has explained that there is a relationship between depression and immunity. He says “vishado rogavardhananam” means vishada (depression) is the foremost factor in worsening the disease condition. Positive and healthy mind helps to recover physical ailment fast and keeps body healthy and it can be best achieved by Ayurvedic psychological approach.

CONCLUSION

Among the dreadful psychological disorders, Depression is a serious disorder with multi factorial aetopathogenesis and it can be best managed by Ayurveda’s psychological approach like Daivavyapasyra, Satavajaya and yuktî vyapashraya chikitsa.

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Cite this article as: Sharma Ravikant and Sapra Umesh Kumar. Depression: An Ayurvedic Review. Int. J. Res. Ayurveda Pharm. 2019;10(3):13-17 http://dx.doi.org/10.7897/2277-4343.100354

Source of support: Nil, Conflict of interest: None Declared

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