



MIND AND IMMUNITY

¹Dr Rakshitha, ²Dr Shrilatha Kamath T, ³Dr Dhaneshwari H.A

¹ PG scholar, ² Professor, HOD and Guide, ³ Assistant Professor

¹ Shri Dharmasthala College of Ayurveda and Hospital, Kuthpady Udipi

Abstract : Admst the covid pandemic, people have become more cautious about their health .Everyone want to increase their immunity and prevent themselves from disease. Immunity is generally taken in terms of physical health, but when we see into it deeper, we realize there are entities of mind which play important role too. Many physical illnesses cause mental disorders and many mental illness cause physical illness. In this article detailed description on how mental factors play role in immunity is been discussed. We should give equal importance to both physical and mental health for well-being of a person.

Keywords- immunity ,entities, mental disorders .

INTRODUCTION

In definition of *swastha*(healthy person) *prasanna atma indriya mana* (pleasant soul ,sense organs and mind) is explained. Only when mind is healthy then healthy state is attained¹In Ayurveda *ojas* can be related to immunity. *Ojas* is the essence of all the dhatus. It is also called as *bala* (strength)².Immunity is not only related to physical body but also to mental entity.

AIMS AND OBJECTIVES

To determine how mental factors can be the cause for physical illness and also how physical illness lead to mental disorders.

MATERIAL AND METHODS

For this study various ayurvedic and modern literature and journals are reviewed.

OJAS AND MANAS

Several mental factors responsible for decrease of *ojas* like *chinta* (worry) *bhaya*(fear) *shoka*(sadness) is explained³. When *ojas* is decreased it also shows symptoms related to mind like *bibethi* (scarednes) *abhishkanam dhyayathi*(repeated worry) *vyathitendriya*(sense organ is affected) .*Durmana*(disturbed mind) is also explained. ⁴*Tandra* (drowsiness), *nidra*(sleep)is explained in *oja vyapat* (disturbance in *ojas*) .*Moha* (confusion) *murcha* (falling) is also mentioned in *oja kshaya* (decrease in *ojas*)⁵

Acharya's have mentioned that one who want to protect, *ojas* should avoid *manasa dukkha hetu* (one which cause unhappiness to the mind)⁶

In *bala vriddikara bhava* (factors improving strength) *satva sampat* (good quality of mind) is explained.⁷

SATVA OF A PERSON

During the examination of *rogi*(patient) *satva pariksha* (examination of mind) is also explained⁸ Person with superior mental faculty are possessed with excellent qualities of mind. Even if possessed of weak physique because of superior qualities of mind tolerate serious exogenous and endogenous diseases, without too much difficulty. Individuals with medium mental faculty tolerate pain when they understand others can tolerate it, they gain strength from others. Those having inferior mental faculty neither by self nor by others sustain their mental strength. Even if possessed with big physique they can't tolerate mild pain. They are easily prone to fear, grief, greed, delusion, and ego. When they hear stories having fearful hateful terrifying situation or see flesh or blood of animal or man, they show depression, pallor, fainting, madness, giddiness, falling on ground etc and even may lead to death.

INTERRELATIONSHIP BETWEEN MIND AND BODY

It is said both physical and mental diseases are *paraspara anubanda*(interrelated)⁹

Mental illness leading to physical illness

When a person has lot of stress, his cortisol level increase, cortisol is a hormone which also causes increased glucose production making him diabetic. A research found that. patients with diabetes mellitus experience increased peripheral artery resistance caused by vascular remodelling making them prone for hypertension.¹⁰

We frequently see many students experiencing diarrhoea during exams. It is due to change in the gastrointestinal motility. There is a lot of research conducted about the gut brain relationship. It is interactions between enteric microbiota central and enteric nervous system. Different type of psychological stressers modulate the composition of total biomass of enteric microbiota independently from duration due to communication between CNS effectors and presence of enteric neurotransmitter receptor on bacteria.¹¹

Physical illness causing mental illness

There are also conditions where in a physical illness can cause mental illness. Autoimmune diseases like multiple sclerosis can lead to depression

In systemic lupus erythematosus psychosis is seen. Proposed theory is the defect in blood brain barrier which allow the entry of pro inflammatory cytokines.¹²

Psoriasis and vitiligo like skin conditions make an individual feel inferiority to others leading to depression¹³

Due to social stigma individuals with HIV will be kept at a distance which can cause depression and suicidal ideations. HIV can cross blood brain barrier release neurotoxin that lead to depression, mania, psychosis etc¹⁴

The hypothalamopituitary adrenal axis- The Hypothalamic–Pituitary–adrenal (HPA) axis is a positive and negative feedback influences between the hypothalamus, pituitary gland, and adrenal gland. The mechanism by which the HPA axis remains in homeostasis depends widely on the release and uptake of several key regulatory molecules. The hypothalamus contains neuroendocrine neurons that secrete corticotropin-releasing hormone (CRH). CRH will, in turn, act on the pituitary gland to stimulate the production and release of adrenocorticotrophic hormone (ACTH) into the circulation. Circulating the ACTH then induces adrenal gland to synthesize and release corticosteroids, such as cortisol and corticosterone. The cardiovascular system is another organ system particularly susceptible to prolonged dysregulation of the HPA axis. Hence body mind relationship is established again¹⁵

So how can we prevent it?

Foods like ghee and milk is explained While explaining properties of milk *manaskara* pleasantness to mind is told. In the commentry we get to see it is one which cause increase in ojas.¹⁶

Ahara and manasika vikara

According to *bhagvath geeta* 3 tpe of food is mentioned¹⁷ *Satwika ahara rajasika ahara and tamasika ahara* *Satvika ahara* like vegetables is said to increase *satva* (strength of mind) *bala* (physical strength) *arogya* (health), *suka* (happiness) *preethi* (love) and *snigdhatva* (unctuousness) *stirata* (stability) *hrudya* (pleasant to heart) *Rajasika ahara* very spicy salty processed food and is responsible for *duka* (unhappiness) *shoka* (sadness) and *amaya* (diseases) *Tamasika ahara* is the cause of *vyadi* (diseases).

In an article it was noted that low folate intake and low b12 intake was associated with depression¹⁸

Practising of yoga, Pranayama like *Sheetali* help to keep our mind cool. We can follow *sadvruatas* (good activities) as said in classics. They are worshipping God, respecting cow, elders, guru. Taking bath twice daily, cutting of hairs nail, providing help to the poor, performing yajna homa etc It is said not to indulge too much in any activities that give pleasure to sense organs. Accepting happiness and sorrow equally.¹⁹

Achara rasayana (behavioural rejuvenation therapy) is to be followed. It is being truthful, not getting anger easily, devoid of alcohol, sex, follows nonviolence ,pleasant sweet talk, indulges in reciting names of God and cleanliness, brave gives alms to poor , respects god elders cow proper sleep and awakening ,takes milk and ghee daily²⁰.

Naistiki chikitsa (treatment of not having desire) should be followed . When there is no *upada* (desire) then one can be prevented from diseases A silkworm weaves thread around self and gets stuck by it. Same way desires too make the person stuck in itself. So, one should keep away from the worldly pleasures which lead to misery.²¹

When disease is already manifested *nidana parivarjana* (avoiding causative factors) should be done like *ashouha* (uncleanliness) is told in cause of *unmada* So cleanliness should be practised.²²

Daivya vyapashraya chikitsa (divine therapy) can be followed which includes the following²³

Mantra (reciting holy words or phrase), *mani* (gem therapy), *mangala* (religious rituals), *homa* (fire rituals), *niyama* (self-rituals) *svastharyana* (vedic hymns) *pranipatha* (astanga namaskara) and *gamanadi* (going to pilgrimage) etc.

Nidra is told to improve *bala*.²⁴ According to research sleep and immunity are bidirectionally related. immune system alter sleep and sleep in turn affects innate and adaptive body defense system. sleep effects various factors associated with reduced infection risk²⁵

I. CONCLUSION

Both physical and mental health should be given equal importance as disturbance in physical entity cause mental illness and disturbance in mental factors cause physical illness.

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