Research Article

8 fold Indigenous Approach for Improving Psycho-immunity: With Special reference to COVID19 pandemic

Piyush Trivedi^{1*}

¹Department of Scientific Spirituality, Dev Sanskriti Vishwavidyalaya, Gayatrikunj-Shantikunj, Haridwar, India *Corresponding author email: piyush.trivedi@dsvv.ac.in https://doi.org/10.36018/dsiij.v16i.158

Abstract. Enhancement of the Psycho-immunity is important aspect for enhancing the total immunity to prevent from stress, anxiety and infection in the time of COVID19 pandemic. In most developing countries of the world, the traditional medical systems can provide solutions and support to cope with the current situation. Present study aimed to find out some of the evidence based practices related to Ayurveda, Yoga and other Indigenous studies, which are helpful in current situation. The eight basic practices, tools or factors to enhance the level of psychological immunity were described in this study and most of them were tested previously through randomized control trials. These eight tools include – 'Brain Tonics, Code of Conducts, Golden Rules of Happiness, Yoga, *Satvik Karma*, Somato-psychic-factors, Adverse effects of biological and psychological pollution, Three Pillars (*vat-pitta-kapha*) and Three Sub-pillars (*aahar-nidra-brahmacharya*) of health' and thus the study presented the holistic mental health care module helpful in COVID19 pandemic.

Keywords. Psycho-immunity, COVID19, Ayurvedic Mental Health Care, Pillars of Health, Holistic Mental Health Care



Introduction

Ancient Indian medicinal literature describes Indigenous tools which server as preventive medicine that deal with all aspect of health including psychological problems. Mental health is more than the absence of psychological disorders. It is defined as a state of well-being in which every individual realizes one's potential and through which one cope with the normal stresses of life, work productively and fruitfully, and make a contribution towards community. This definition by WHO indicated the need for mental health care. In most developing countries of the world, the traditional medicalsystems are prevailing side-by-side with the modern system, and the majority of the population regularly consults both types of health practitioners and healers. Traditional practitioners are far outnumbered compared to modern health professionals (1).

Enhancement of the Psycho-immunity is as important as the enhancement of the general immunity to prevent ourselves from the stress, anxiety, fear, insecurity by COVID19 pandemic affecting the whole world and every individual. The eight tools of Indigenous practices presented in this study are simple and easy to practice and can support and be useful for fighting against the effects of COVID19 pandemic. In addition to these tools, few recent studies also suggest other ways such as a project of faculty of psychology, University of Beijing Normal University suggests minimum standards for Mental Health providers (2). Remote Psychological First Aid Protocol for Health care Workers in a University Teaching Hospital. Malaysia (3) etc. to cope with the current situation (4).

The specific part of the literature related to the ancient medical system shall be included in designing the modules of holistic mental health care against COVID19, which Indian Government along with other countries included in their adversaries against COVID19. However, the measures for psycho-immunity is had not been paid attention by the regulatory bodies which would be extremely of

importance post COVID19 time for reducing the traumatic effect of the pandemic. There are vast concepts which should be reached to mass helping their psycho-immunity.

Indigenous approaches to improve Psychoimmunity (Figure 1)

The graphical representation of eight selective aspects of the Ancient Indian Perspective for achieving holistic mental health is depicted in figure 1, which may play a supportive role in psycho-immunity in COVID19 pandemic era.

Rasayana Brain Tonics

1. Herbs

Many herbal practices recommended for Ayurveda maintaining psychoimmunity. Charak Samhita is a classical text of Ayurveda and considered as the foundation text of all Ayurveda texts Ayurvedic treatment. According to Charak Samhita, herbs such as Brahmi (Bacopa monnieri) Shankhpushpi(Convulvulus pluricaulis Choisy) are of important Medhya (related to mind and intellect) Rasayana (powerful formulation), which can help in psycho-immunity (5). There were many randomized control clinical trials conducted on Brahmi (Bacopa monnieri) for its effect on mental health available, however, there were fewer studies available for the effect of Shankhpushpi (Convulvulus pluricaulis Choisy) on mental health; regardless studies support the brain tonic effects of herbs recommended in Ayurveda. Previously randomized control trials regarding the effect of Brahmi (Bacopa monnieri) on protecting and improving memory power etc. showed that the capacity of Novel object recognition was increased significantly in 54 male rats (6).

2. Mentone tablet as a brain tonic

As anxiety is one of the important factors as a resultant of a pandemic like COVID-19, it demands the need to find out evidence based practices for the treatment of anxiety. According to Rekha A, 2 grams of Mentone tablet containing *Mandukparni* (Centella Asiatica),



Shankhpushpi (Convulvulus pluricaulis Choisy), Guduchi (Tinospora cordifolia), Yastimadhu (Glycyrrhiza Glabra) as ingredients can be administered in two divided doses with milk in the morning and night after food for 30 days for anxiety as well as for overall psycho-immunity (7).

Behavioural Rasayana (Code of Conduct)

Achar (behavioural) Rasayana is a Code of Conduct as per Ayurveda like truthfulness, nonviolence, lack of anger, talking with pleasing words, having sense concentrated to spirituality etc. These are also considered as brain tonics because they also nourish our brain. As it is difficult to do an experimental study on such conducts, this area of Indigenous practice remains unexplored in terms of evidence based practices. Regular use of Ghee is also included in Achar-Rasayana. There are many empirical shreds of evidence available on Avurveda preparations made of Ghee. Kushmandadi Ghrita in generalized anxiety disorder was administered in a survey study of 60 patients of Generalized Anxiety Disorder (GAD). The trial drug has shown significant improvement in various clinical parameters related to GAD (8).

Golden Rules of Happiness (lifestyle and Philosophy)

Indian Scripture and Indigenous knowledge kept so much weight on the concept of the righteous source of income, which is one of the important aspects of Happiness. Also, the desire of righteous company in the journey of life and such virtues are considered as Golden Rules for a happy and healthy life. The desire for the company of the good, taking up those means of livelihood which are not contradictory to social and religious ethics etc, are very important for maintaining good mental health as per indigenous spiritual guidance. The concept of Karma, what you do what you get, plays an important role in maintaining mental health and hence, these golden rules play an important role in overall mental health. So far no systemic modern study is taken to measure the effectiveness of these golden rules on mental health, and thus such studies would open up a dimension for modern psychology. However, there are some correlations and studies available in which one or more of these rules are part of the intervention, for instance, a disturbing daily routine is associated with anxiety and mood disorders (9).

Ashtanga Yoga

There are numerous studies available examining the effects of voga on anxiety and psychological health. For example, one study shows that yoga relaxation affected reducing anxiety levels among pregnant women at the third trimester (10), while one study shows the efficacy of yoga in increasing emotion regulation capacities of middle adolescents (11). However, a meta-analysis report indicated that studies with the large, well-defined populations, adequate controls, randomization and long duration should be explored further (12). Regardless, a plethora of scientific literature is emerging for its utility in physical and mental health and also, in the recent times, the concept of Yoga and Yogic life is being well adopted in lifestyle globally, and people are practicing them in daily life for total health.

Yajna and other Satvik Karma

A fundamental aspect of indigenous knowledge is three *Gunas* (fundamental constituents of existence) i.e. *sattva* (which brings peace and harmony due to virtues like sympathy, nobility, politeness, courage, care, etc), *rajas* (which brings activity, state of unhappiness due to vices such as anger, greediness, etc), *tamas* (which brings inaction, dormant state due to ignorance, darkness, etc.

According to Ayurveda, there are two mental *dosas*, which are root causes of mental disorders of mind i.e. *Rajas* and *Tamas*. The fact regarding *Satva-Guna* is that the person low in *Satva-Guna* is highly sensitive to mental health problems like Unmāda. Simple indigenous practices like Ayurvedic brain tonics, *Pancha-karma*,yoga, yogic life, and spiritual practices such as Yagya, Gayatri Mantra Chanting, etc, together can enhance the level of *Satva-guna* in a person. Increasing *Satva-Guna* is a strategy to cure these *dosas*. *Satvik* karmas like Yagya, Gayatri Mantra Chanting, etc have been previously



administered in many studies to benefit in mental ailments such as stress and anxiety (13) (14), obsessive compulsion disease and PolyCystic Ovarian Disease) (15), and Epilepsy (16), (17).

(Rasāyana) Brain Tonics	Behavioural Rasāyana (Codes of conduct)	Golden Rules of Happiness (Lifestyle and Philosophy)
Aṣṭāṁga Yoga	Mental Health	Yajña and other Sātvika Karma
Somatic Health	Pollution (Biological and Psychological)	Stambha (Väta-Pitta- Kapha) and Upasthambh (Ähära-Nidrä- Brahmacarya)

Figure 1. Eight indigenous approaches to improve psycho-immunity

Somatic Health

A healthy mind resides in a healthy body. The chronic physiological problem may lead to psychological problems too. In the absence of good respiratory health, anxiety regarding the infection of the COVID-19 is evident. There are numerous physiological factors have an association with anxiety and other psychological problems. For example, a study showed the presence of an association of low blood pressure with anxiety (18). Somatic health using Ayurvedic and Yogic practices could be improved to have good psycho-immunity.

Biological & Psychological Pollution

The association of air pollution with anxiety and other psychological disorders is an emerging field of scientific studies. One such study shows the association of air pollution and psychological disorders in elder people (19). Also, psychological pollution such as negative thoughts, stress, hatred, jealousy, etc has been a major issue emerging due to lifestyle especially in quarantine life scenario of COVID19 era. Psychological pollution has been always stressed out in indigenous techniques Satvik Karma, Code of conducts, golden rules etc play an important role in reducing psychological pollution.

Pillars (Stambha vat-pitta-Kapha) for mental health

Ayurveda is an Indian medical system which is one of the majorsources of mental health-related concepts. Ayurveda described health as the balance of three primary *dosas* (fluids/energy) in the body: wind (*Vāta*), gall (*Pitt*) and mucus (*Kapha*) (20). Monitoring of the balance of these three *Doṣas* will be a great help in prevention as well as in intervention of mental healthproblems.

Unmāda is a psychological disorder referred toin Ayurveda. In this particular case, as the Doshasaggravated, they affectthe upper part of the body channels (carrying on themental functions) and produce symptoms as in intoxication to that of a mental disease known as Unmāda or psychoses 21. Vata is responsible for anxiety (22). From PittajaUnmada, pathogenic pitta insanity the patient begins to have a posture of anger and violence in his relationships with others (23). Kaphaj Unmada can be correlated with moderate to severe depression (24).

The concepts related to aetiology of *VatajUnmada* can be included in indigenous modules to improve psycho-immunity. *Vāyu*is aggravated by the intake of rough, deficient and cold food, excessive evacuation, wasting of *Dhatus* and fasting affects the mind, which is already afflicted with anxiety and thus deranges intellect and memory quickly (25). The weakness of mind is a major cause of mental health problems. This fact is nicely explained in Ayurvedic literature. If we understand the strength of our mind we can preventit from many disorders like anxiety, depression in the time of this pandemic. If we follow Ayurveda to balance these *dosas*, it will strengthen our mind to achieve a higher state of mental health.

Sub-pillars (Upstambha aahar-nidrabrahmacharya) for mental health

Ayurveda Vata, Pitta and Kapha these three dosas are pillars of our health, while Food, Sleep and Brahmacharya (celibacy) are three sub-pillars of total health.

1. Food and Mental Health



A study showed that consuming 'unhealthy' foods (e.g. sweets, cookies, snacks, fast food) can have a significant positive association with perceived stress (females only) and depressive symptoms (both males and females). Conversely, consuming 'healthy' foods (e.g. fresh fruits, salads, cooked vegetables) can have a significant negative association with perceived stress and depressive symptoms for both sexes (26).

- 2. Sleep and Mental Health
 Adequate sleep is important for general psychological well being. It is also correlated with a reduction in psychotic experiences (27).
- 3. Brahmacharya and Mental Health *Brahmacharya* (Celibacy) is recommended in Ayurveda for a healthy life. *Brahmacharya* in the definition means to have an existence in Brahma (supreme power) i.e. action, thoughts, and character of person should be aligned to spiritual life should live in continuous harmony with supreme soal. Such lifestyle leads to mental health and psycho-immunity as a result. (28).

Conclusion

In the last couple of months (first half of the year 2020), COVID-19 has emerged as a public health threat around the world. To protect ourselves and our loved once, one has to follow the guidelines of local government. Apart from that, if we look at the traditional medical literature of India, we can find many tools to enhance our psycho-immunity against the anxiety and other mental disorders possible resulting in COVID-19 pandemic. The eight evidence based tools are shown in this paper may be useful in developing modules of prevention of mental disorders and to maintain our psycho-immunity and mental health.

Conflict of interest

The authors declare that they have no conflict of interest.

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