



# “An Observational Study To Assess Association Of Depression And Deha Prakriti In Post Covid Patients.”

Dr. Akshay Thorat<sup>1</sup>, Dr. Minakshi Randive<sup>2</sup>

<sup>1</sup> PG Scholar, Department Of Kriya Sharir, Tilak Ayurved Mahavidyalaya, Pune.

<sup>2</sup> HOD & Professor, Department Of Kriya Sharir, Tilak Ayurved Mahavidyalaya, Pune.

## **ABSTRACT –**

To observe association of depression and different deha prakriti, 80 post covid patients were included in this study as per inclusion and exclusion criteria, Prakriti assessment of Patients was done by using standard M.U.H.S Prakriti parikshan proforma. The study depended on self detailed information from a survey (clinical review) about the predominance of the Corona virus Pandemic's mental impacts in different deha prakritis (physical constitutions). Due to COVID-19, the prevalence of depression has risen to 25%, which is approximately 7 times higher, highlighting the significant impact of the pandemic on mental health.

This underscores the importance of integrating mental health into international and national public health programs. Therefore, it's crucial to focus on both the physical and mental health of patients. Evaluation should include the use of depression measuring scales, and appropriate guidance should be provided to prevent future mental disorders.

**Key words-** Covid-19, Post-Covid, Depression, Deha Prakriti.

## **INTRODUCTION:**

COVID-19 declared global emergency by WHO in 2020, leading to strict measures like social isolation. Psychological studies reveal common negative effects of quarantine, highlighting mental health toll. Post COVID-19 condition, or long COVID, can trigger mental health issues like anxiety and depression. Common symptoms of long COVID include fatigue, shortness of breath, memory problems, muscle aches, and loss of smell or taste.

Long COVID defined as continuation or development of new symptoms 3 months after initial infection, lasting at least 2 months. Depression is a major global cause of disability, impacting quality of life significantly. Post-COVID-19 depression can exacerbate these outcomes, further affecting quality of life.

Ayurveda views individuals as unique, categorized by their constitution or Prakriti. Prakriti defines physical, physiological, and psychological characteristics, aiding in personalized treatment. This Study aims to observe depression across different Prakriti types to understand varying potentials in handling mental crises.

**AIM –**

To observe the association of depression and deha prakriti in post covid patient.

**Objectives –**

- To assess depression in post covid patient with the help of Beck's depression inventory
- To assess deha prakriti with MUHS prakriti proforma.

**Subject Review –****1) PRAKRITI –**

A unique quality resulting from a dosha combination is called prakriti. It is a constant phenomenon that lasts from the time of the individual's birth till their death. It is not the resultant of those doshas which varies continuously, but doshas which remain constant throughout the life are responsible for the formation of prakriti. These doshas changes only at the time of death.

Prakriti is the bodily constitution of the individual along with its mental characteristics which also include likes and dislikes and behavioural personality of that particular individual. There are three doshas namely Vata, Pitta and Kapha. If the combine predominance of these three doshas occur in equal quantity it give rise to healthy person (Sama prakriti), whereas predominance of combination of two doshas or predominance of only single dosha give rise to the prakriti of unhealthy person (Aatur prakriti).

Acharya Vagbhata states that, between these single dosha predominance prakriti by taking consideration of different physiological, psychological, behavioural and biological factors.

**Vata prakriti is Hina (low level) prakriti**, Pitta prakriti is Madhyam (medium level) prakriti, Kapha prakriti is Uttam (high level) prakriti.

**COVID-19 AND POST COVID CONDITION.****Covid -19**

- In late 2019, the emergence of the novel coronavirus SARS-CoV-2 in Wuhan, China, led to a global pandemic declaration by WHO in March 2020, affecting over 11.8 million people worldwide and causing 5.44 lakh deaths by July 2020.
- The COVID-19 pandemic has disrupted human activity worldwide, prompting intense efforts to understand its cause, pathogenesis, and find effective solutions to mitigate its impact.

**Disease epidemiology:-** Current available evidence for COVID-19 suggests that the causative virus (SARS-CoV-2) has a zoonotic source closely related to bat-origin SARS-like corona virus but lab creation is being investigated.

- It is an enveloped RNA beta corona virus related to the Severe Acute Respiratory Syndrome (SARS) virus, and the virus has been shown to use the angiotensin-converting enzyme 2 (ACE2) receptor for cell entry. Persons infected with the novel coronavirus are the main source of infection.
- Direct person-to-person transmission occurs through close contact, primarily in indoor spaces, via respiratory droplets released during coughing, sneezing, or talking.
- These droplets can also contaminate surfaces, where the virus remains viable.
- Infection can happen when a person touches contaminated surfaces and then touches their eyes, nose, or mouth.
- The median incubation period is 5.1 days (range 2-14 days).
- Individuals with COVID-19 are infectious from 2 days before symptom onset until up to 8 days afterward.

- The virus has a Basic Reproduction Number (R0) of 2-2.5 and a serial interval of 4-5 days.

**Post covid** - Post COVID-19 Condition, commonly known as long COVID, can affect anyone exposed to SARS-CoV-2, regardless of age or severity of original symptoms

- Long COVID is characterized by symptoms persisting or developing 3 months after initial SARS-CoV-2 infection, lasting at least 2 months without other explanation.
- Common symptoms include fatigue, shortness of breath, and cognitive dysfunction, but over 200 different symptoms have been reported.
- Roughly 10–20% of COVID-19 patients may experience long COVID, but exact numbers are uncertain.

the most common symptoms of post COVID-19 condition include:- fatigue, shortness of breath or difficulty breathing ,memory, concentration or sleep problems ,muscle aches ,loss of smell or taste , **depression** or anxiety, etc.

### **DEPRESSION** -

Depression is a state of low mood and aversion to activity or apathy that can affect a person's thoughts, behaviour, feelings and sense of well-being. Depressed mood includes feelings of sadness, anxiety, hopelessness, and worthlessness. Loss of interest in enjoyable activities, appetite changes, concentration problems, and relationship issues are common. Suicidal thoughts or behaviors may occur in severe cases.

Depressed mood can occur in psychiatric disorders like major depressive disorder or as a normal reaction to life events like bereavement. It can also be a symptom of certain medical conditions or a side effect of medications and treatments.

Depression is said to be caused by chemical imbalance of brain, and this is what drug treatment is based on. Certainly, In many cases there is a reduction in the amount of certain neurotransmitters found( monoamines such as serotonin and norepinephrine) in depressed patients.

However, low serotonin levels are simply another symptom of depression, not a cause. The more negative introspection you carry out and the fewer pleasure giving activities you participate in, the lower your serotonin level becomes.

### **Material And Methods** -

Required material is categorized in two parts -

#### **1) Literature study material.**

#### **2) Observational study material.**

##### 1) Literature Study Material –

- Literature study in Ayurveda utilizes ancient texts (Bruhatrayi), modern literature, textbooks, and online sources.
- Data is collected under specific headings using available materials and previous works.

1. Previous work- Previous dissertations and available articles from the internet source related with depression and prakriti.

##### 2. Content of ayurvedic literature review –

- Concept of prakriti from bruhatrayi - Psychological and behavioural characteristics of the person according to each prakriti mentioned in bruhatrayi.

## 3. Content of modern literature review –

- Concept of depression
- Effect of depression

## 2) Observational study material-

- Written and informed consent was taken from all patients
- Prakriti of the patients is evaluated with the help of standard M.U.H.S. prakriti parikshan proforma.
- Depression level of the volunteer is calculated with the help of standard Beck's depression inventory scale.

**OBSERVATIONS AND RESULTS-****Statistical analysis****1. prakriti and Depression**

**Method 1** – Chi square test, 4 by 6 contingency table is made for chi square test according to the prakriti and Depression.

**Chi square test** is applied to prove whether there is association between the prakriti and Depression.

- **Null hypothesis-** There is no association between the prakriti and Depression.
- **Alternate hypothesis-** There is an association between the prakriti and Depression.

		Depression				Total
		Normal	Mild	Borderline	Moderate	
prakriti	VP	4	6	9	8	27
	VK	5	3	3	2	13
	PV	1	3	5	1	10
	PK	2	3	4	0	9
	KV	3	7	0	0	10
	KP	5	5	1	0	11
Total		20	27	22	11	80

**Discussion about observations.-**

- Total 80 patients were taken for the study ,age group was 30-50 years but majority of the patients i.e. 37 (46.25 %) were reported in age group of 30 to 35 years .Among 80 patients, 45 (56.25 %) were Male and 35 (43.75 %) patients were Female.
- The observations shows that a maximum of 27 patients (33.75%) who had Vata – Pittaj Prakruti exhibited borderline to moderate levels of depression.
- Those with a Pitta pradhan prakriti experience depression to a mild to borderline degree .
- While Kapha pradhan prakriti individuals suffer from depression less frequently.

**Conclusion-**

- Based on the above analysis, we can conclude that individuals with a Vata pradhan prakriti i.e. vata pradhan pitta are more prone to depression in post covid condition.
- Those with a Pitta pradhan prakriti experience depression due to post covid is mild to borderline degree.
- While Kapha pradhan prakriti individuals suffer from depression less frequently in post covid conditions.

Therefore, we can conclude that in post covid depression levels vary according to Deha prakriti. Hence there is association between Deha prakriti and depression in post covid patients.

**References**

1. Syed Mustafa Ali shah, Danish Mohammad, Sameeha Aleem; Prevalence, psychological response and associated correlated of depression, anxiety and stress in a global population, during the corona virus disease. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7590908/>
2. Samantha K Brooks, Rebecca K Webster, Louise E Smith, Lisa Woodland, Simon Wessely, The psychological impact of quarantine and how to reduce it: rapid review of the evidence, Lancet 2020; 395: 912–20
3. Coronavirus disease (COVID-19): Post COVID-19 condition, [https://www.who.int/news-room/questions-and-answers/item/coronavirus-disease-\(covid-19\)-post-covid-19condition](https://www.who.int/news-room/questions-and-answers/item/coronavirus-disease-(covid-19)-post-covid-19condition), 28 March 2023 | Q&A
4. Mario Gennaro Mazza, Rebeca De Lorenza, Caterina Conte, Sara Poletti Benedetta Vai, Irene Bolletinni; Anxiety and depression in COVID-19 survivors: Role of inflammatory and clinical predictors, nih.gov. 2020-07-03
5. Juan Bueno Notivol, Patricia gracia, Beatriz olaya, Isabel lasherars, Raul Lopez- Anton, Javier Santabarbara; Prevalence of depression during the covid-19 outbreak; A meta-analysis of community-based studies. 2020 Aug.31
6. Li Duan, Gang Zhu; Psychological intervention for people affected by covid-19,18 Feb. 2020
7. Samantha k. Brook, Rebecca k. webster, L.e. smith; The psychological impact of quarantine and how to reduce it rapid review of evidence;14-20 march 2020, pg. 912-920.
8. Manoavsada (depression) -National Health Portal of India, nhp.gov.in
9. Deepali Giri, Sonali Wairagade, Priti Desai, Abhilasha Agrawal, Roshan Kumar Jha; Relation Between Prakriti and Stress Handling Capacity: An Observational Study,08Aug 2020.
10. WHO, Covid 19 portal , [https://www.who.int/health-topics/coronavirus#tab=tab\\_1](https://www.who.int/health-topics/coronavirus#tab=tab_1)
11. Vd. Yadavaji Trikamji Acharya. Sushrut samhita of Sushruta with Nibandhasangraha commentary of shri Dalhanacharya. Chaukhamba surbharati prakashan, Varanasi.1994. Sharirsthan. Adhyay No.- 4. Shlok No.-63.Page no.-279
12. Dr.D. Panditrao and Vd. A. Pandey. Ashtangasangraha of Shrimad Vagbhat with Induvyakhya. Directed by Acharya B. Thakkar. Kendriya Ayurved Avam Sidhha Anusandhan Parishad, New Dehli.1991. Part – I. Sharirsthan. Adhyay No.-8. Shlok No.-6,7,8. Page no.-514.
13. Dr. Dhargalkar N.D. Sharir kriya vidnana (A text book of physiology inbayurveda).1st edition. Chowkhamba sanskrit series office, Varanasi.2006. Part I. Chapter no.1.14. Page no. 172,173.

14. Dr. A. Kunte and K. Navare. Ashtanghrudayam of Shrimad Vagbhat with Sarvangasundara commentary of Arundatta and Ayurvedarasayana commentary of Hemadri. Edited by Vd. B. Paradakara. Chaukhamba Orientalia, Varanasi.2005 Sutrasthan. Adhyay No.- 1. Shlok No.-10. Page no.-8.
15. Vd. Yadavaji Trikamji Acharya. Charaka samhita of Agnivesha elaborated by Charaka and Drudhabala with th Ayurvedadipika commentary by Sri Chakrapanidatta. Chaukhamba Surbharati Prakashan, Varanasi.2005. Vimansthan. Adhyay No.-8. Shlok No.-95. Page no.-277.

