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Evaluation of the Impact of Vipassana Meditation on Mental Health: A Pilot Study

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KEYWORDS

Anxiety, Ayurveda, Meditation, Mind, Manas Prakriti, Satva Guna, Wellbeing, Yoga.

ABSTRACT:

Introduction: The good mental health is the basic right of mankind. At present, various medicines are consumed for instant relief from mental health problems although having many side effects. In this realm of holistic healing, Vipassana Meditation stands as a profound and transformative non-pharmacological approach towards mental wellness. The aim of this study is to assess the effect of Vipassana Meditation on mental health among first time meditators.

Methods: A pilot study was conducted on thirty five participants (nineteen males and sixteen females) who came first time to Dhamma Thali Vipassana Centre Jaipur, for practicing Vipassana Meditation. To measure their mental health the Hamilton Anxiety Rating Scale, Mental Health Continuum-Short Form, Prototype Prakriti Analysis Tool (PPAT) - Revised Version, and Manas Prakriti Assessment Scale were used to collect data at baseline and after ten days of Vipassana practice.

Results: After ten days Vipassana Meditation the emotional, social, and psychological well-being scores were increased, whereas anxiety levels decreased, as compared to initial state. The higher scores in predominant domains of Satva Guna were observed, as compared to Rajas and Tamas Doshas, among participants with different Manas Prakriti.

Conclusion: The practice of Vipassana Meditation for ten days had significant impact on mental health of adult meditators.

1. Introduction

The good mental state is the key to unlock higher level of peace and discovering the true meaning of life. In this era, the economic recession, disease outbreaks, humanitarian crises, forced displacement and climatic changes etc. increase the risk of mental health issues.[1] About one billion people worldwide are suffering from a mental illness. Out of them 81% reside in low and middle-income nations and 5% suffer from depression. By 2030, mental health disorders are expected to be the main cause of global morbidity and mortality.[2]

Various medications and psychotherapies like cognitive behaviour therapy (CBT) targeting affective symptoms, behaviours and cognitive distortions etc. are under practice but not so helpful.[3] In spite of moderate to high efficacy of these treatments, about one-fifth to half of the adults face difficulty to interact with conventional psychological therapies. Further, over 50% of those who struggle with mental health issues do not seek treatment to start firstly.[4]

Ayurveda proclaims that every human being in a combination of *Sharira*, *Indriya*, *Mana* and *Atma*.[5] They are characterized by specific *Prakriti* (Basic

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constitution). *Sharirika Prakriti* based on the states of *Vatta, Pitta* and *Kapha* and *Manas Prakriti* is determined by *Satva, Rajas* and *Tamas gunas*. Imbalance of *Vatta, Pitta, Kapha* and *Rajas, Tamas doshas* leads to various psychosomatic disorders. Self-care routines like *Yoga*, meditation, balanced diet, proper sleep etc. could contribute to a healthy mental state by increasing *Satva Guna* and decreasing *Rajas* and *Tamas Dosha*. They maintain a strong inter and intra relationships with the self by promoting relaxation, easing tension, builds inner happiness and towards society. When a person engages in external pretenses, he starts giving space to negative thoughts in his mind, which, for a long time, causes mental illness. To remove the mental conflicts in life, It is very important to have medication of meditation (*Dhyana*) in life. According to Maharshi Patanjali, *Dhyana* is a part of *Antaranga Yoga* which can make the mind subdue gross and subtle waves. Practicing meditation as a daily habit controls all negative emotions and maintains mental equanimity.[6]

1.1 Mental Health

A person with good mental health is full of satisfaction and happy mind, who does not have impulses like lust, anger, greed, attachment, despair, guilt, anxiety, etc. "Mental health is defined as a state of well-being in which an individual realizes his abilities, can cope with normal stress of life, can work productively and is able to contribute in community."[7] He has three essential qualities: **first,** He perceives himself as reasonably secure, and comfortable. **Second,** he feels righteous towards other people. **Third,** he could handle life's demands and challenges.[7] Mental health describes a level of cognitive or emotional well-being or refers to the absence of a mental disorders with the state of internal equilibrium.

Anxiety disorders are most common among mental health conditions.[8] It's core symptoms are described in "Diagnostic and Statistical Manual of Mental Disorders (DSM 5)" and "International Classification of Diseases (ICD 11)". Anxiety is characterized by "excessive fear and associated behavioral disturbances. Anxiety related disorders vary from one another in the types of situations or objects that trigger anxiety, avoidance behaviors or fear, and with the corresponding cognitive ideologies". There are many types of anxiety disorders arranged according to typical age at onset like separation anxiety disorder, selective mutism, specific phobia, social phobia, panic disorder, panic attack specifier, agoraphobia, and generalized anxiety disorder.[9]

1.2 Manas Prakriti

The individual combinations and permutations between the dimensions of *Triguna* and *Tridosha* (biological entities derived responsible for physiological functions and its regulators) occur at the moment of conception. One's physical (*Sharirika*) and mental (*Manas*) *Prakriti* are determined by the prevalence of three *Doshas* (*Vata, Pitta,* and Kapha) and three *Gunas* (*Satva, Rajas,* and *Tamas*)[10] in the gametes of the male and female species, known as *Shukra* and *Shonita* respectively.[11] According to *Ayurveda*, both physical and mental nature are determined at the time of conception.[12] The physical nature remains constant throughout life where as mental nature changes and evolves over time.

Manas Prakriti represents the mental structure of any individual, which is made up of the proportion of the three *Mahagunas* (universal qualities) the *Satva* (clarity and balance), *Rajas* (passion and movement) and *Tamas* (inertia and stagnation).[13] They determine the three *Manasika Prakriti* namely, *Satvika, Rajasika,* and *Tamasika*. Every mental state shows these three properties in different proportions, where *Rajas* and *Tamas* are considered as *Mansika Dosha*. Among them the *Satvika* individuals are less prone to psychological diseases as compared to *Tamasika* and *Rajasika*. The predominance of *Rajas* and *Tamas* leads to *Prajnyaparadha*,[14] which ultimately responsible for various psychosomatic illnesses and mental disorders.

A healthy dietary pattern, daily routine and external environment have the direct impact on mental health. The transforming power of meditation offers comfort in preventing mental problems. Meditation balances the intensity of negative thoughts, develops purity of mind and reveals the facts of soul. Vipassana Meditation is an important tool to decreased stress and anxiety.

1.3 Vipassana Meditation

Vipassana Meditation is an important contributor to healthy mind. It is one of the ancient methods of meditation, rediscovered by Gautama Buddha, about 2500 years ago. The technique of Vipassana Meditation has three major aspects or code of discipline: *Sheela, Samadhi* and *Pragya*.[15] The main key for Vipassana

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Meditation is “observation”, and basic purpose is to witness whatever is being experienced at the level of the body and mind.[16] Without observing objectively, it is not possible to see any actual perception whether the inner mind or outer world. Recent studies proved that Vipassana Meditation eliminates the qualities of unhealthy states of mind and balance the healthy qualities.[17] Thus, it is significant to include Vipassana Meditation in daily lifestyle to promote inner balance reflecting the good mental health.

2. Materials and Methods

This pilot study was conducted to assess the effect of Vipassana Meditation on Mental Health on selected subjective and objective variables.

2.1 Plan of study

This study was a single-arm, open-trial, pre-post pilot study conducted to analyze the effects of ancient meditation technique the “Vipassana Meditation” on mental health in adult population aged 20 to 60 years. This study has been approved by the Research Council of Vipassana Research Institute, Igatpuri, India. The study has been done at Vipassana Meditation Centre, Dhamma Thali, Jaipur, Rajasthan, India. The participants attended the sessions in person and guided with the practice of Vipassana Meditation technique using recorded audios of Shri Satyanarayan Goenka. By maintaining consistency with established protocols, the researcher aimed to maximize the efficacy and validity of the study outcomes.

2.2 Inclusion Criteria

The study involved participants aged 20 to 60 both male and female genders, from the Dhamma Thali Vipassana Meditation Centre, Jaipur. Participants practiced Vipassana for 10 days, aiming for at least 9 hours per day.

2.3 Exclusion Criteria

Parsons suffering with any mental or neurological disorders or with chronic pain in any parts of body were excluded. The experienced Vipassana meditators were explicitly excluded from the study to ensure that the interventional group was solely of beginners.

2.4 Study Group

Total 46 participants willing to participate in this study and signed the informed consent form were registered in the beginning, on the basis of inclusion and exclusion criteria. Out of them only 35 participated till the end of study.

2.5 Intervention

The Vipassana Meditation is a ten-day residential program. The selected participants were committed to follow the codes of conduct and disciplines related to Vipassana Meditation, for 10 days. On first day, the uses of digital devices, reading or writing material, religious ceremonies, yogic practices, and addiction etc. were prohibited. They maintained noble silence and disciplined routine from 4:15 am to 9:00 pm, including observance of five codes of conduct as instructed by S.N. Goenka (to abstain from - killing any living things, stealing, telling lies, any sexual activity, and using any intoxicants). They practiced meditation with structured audio recordings on 0 to 10^{th} day. Participants are allowed to ask questions related to meditation practice only with the help of trained teachers. Participant data was collected on the 0th and 10th day with their voluntary permission.

2.6 Measures

2.6.1 Hamilton Anxiety Rating Scale (HAM-A)

It is developed by Max H., in 1969 and revised by Maier W. et.al. (1988). This scale is used to assess the severity of anxiety symptoms. It consists of 14 items for various aspects of anxiety including psychic and somatic symptoms. Each item is rated on a scale of 0 to 4 based on the severity of symptoms, with higher scores indicating more severe anxiety.[18]

2.6.2 Mental Health Continuum-Short Form (MHC-SF)

MHC-SF is a concise self-reporting instrument, prepared by Keyes (2005), consisting of 14 items. It evaluates the person's mental health on three levels: psychological, social, and emotional. Respondents rate the frequency of their experiences on a scale ranging from "never" to "every day".[19]

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2.6.3 Revised Version of Prototype Prakriti Analysis Tool (PPAT)

This tool evaluates the individual's prototype *Prakriti*, also known as the constitutional type, encompassing specific qualities of *Prakriti*. It is a practical, valid, and handy tool that comprehends the evaluation of a variety of total features of a particular prakriti. It provides insights into an individual's inherent nature and predispositions. The scale has a significant inter-rater correlation with *Vataj* (P<0.001) and Pittaj (P<0.01), whereas, less correlation with *Kaphaj* `(P<0.02). The total *Kaphaj* qualities are eleven; *Pittaj* are four; and *Vataj* are eight in number.[20]

2.6.4 Manas Prakriti Assessment Scale (MPAI)

The MPAI Scale, prepared by Aftab A. et al. (2018), is based on the three qualities of mind: *Satva*, *Rajas*, and *Tamas*, which determine the three *Manas Prakṛiti*, namely, *Satvika*, *Rajasika*, and *Tamasika*. It comprises 133 questions, and each question has five choices ranging from 0 to 4.[21]

2.7 Data collection and analysis

The data (pre) of 46 participants were collected on 0 day, however at the end of residential meditation camp (10th day) the data (post) of total 35 participants was collected. The numbers of dropouts were 11. For this pur,pose the Hamilton Anxiety Rating Scale, Mental Health Continuum-Short Form (MHC - SF), Revised Version of Prototype *Prakriti* Analysis Tool (PPAT) and *Manas Prakriti* Assessment Scale (MPAI) were used. The data were analyzed using SPSS Software version 20. The pre and post scores were compared using the paired-sample t-test, and significance was determined. P values less than 0.05 were considered as statistically significant.

3. Results

In this pilot study the pre and post data of 35 participants were collected and the results obtained after analysis have been depicted in table number 1 to 6, as under:

Out of 35 participants 54.3% (19) were males and 45.7% (16) females [Table 1]. Maximum number of participants (19) exhibited with *Kapha-Vata* predominant *Prakriti* type followed by 11 with *Pitta-Kapha* predominance and only 5 participants exhibited with *Vata-Pitta* predominant *Prakriti* type [Table 2]. There was no significant difference observed in pre and post Mean±SD values for Systolic Blood Pressure, Diastolic Blood Pressure, Pulse Rate and Respiration Rate [Table 3]. The statistically significant decrease in anxiety levels of participants was found after practicing ten days Vipassana Meditation [Table 4]. The emotional, social, psychological and overall well-being levels of participants have been improved symptomatically. The statistically highly significant (p <0.001) improvement in overall well-being was observed at the end of study [Table 5]. After Vipassana Meditation intervention statistically highly significant decrease in *Rajsika* and *Tamsika Manas Prakriti scores* was observed. There was increase in mean±SD for *Satvika Prakriti* scores, however, this difference was not statistically significant [Table 6].

Table 1: Distribution according to Gender (N=35)

Gender	Number (%)
Male	19 (54.3%)
Female	16 (45.7%)

Table 2: Results of Prototype *Prakriti* Analysis Tool (PPAT)

Gender	Vata-Pitta	Pitta- Kapha	Kapha-Vata	Total
Male	3(15.78%)	7(36.84%)	9(47.36%)	19
Female	2(12.5%)	4(25%)	10(62.5%)	16
Total	5(14.28%)	11(31.42%)	19(54.28%)	35

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Table 3: Results of Blood Pressure, Pulse Rate, Respiration Rate					
Variables	**Mean±SD**		**Within the group comparison Pre – Post**		
	Pre	**Post**	**Mean±SD**	**Paired 't'Test**	**P value**
SBP	120.11±13.66	120.60±13.718	-0.486±12.526	-0.229	0.820
DBP	76.74±7.698	77.86±8.416	-1.114±7.722	-0.854	0.399
PR	89.23±14.46	82.91±12.016	6.314±15.556	2.401	0.022
RR	97.89±0.900	97.94±.906	-0.057±1.110	0.022	0.763

SBP: Systolic Blood Pressure, DBP: Diastolic Blood Pressure. PR: Pulse Rate, RR: Respiration Rate, SD: Standard Division

Table 4: : Results of Hamilton Anxiety Rating Scale (HAM-A)					
Variables	**Mean±SD**		**Within the group comparison Pre – Post**		
	Pre	**Post**	**Mean±SD**	**Paired 't'Test**	**P value**
Anxiety	19.29±12.741	11.20±7.182	8.086±10.902	4.388	0.000

Table 5: Results of Mental Health Continuum-Short Form (MHC-SF)					
Variables	**Mean±SD**		**Within the group comparison Pre – Post**		
	Pre	**Post**	**Mean±SD**	**Paired 't'Test**	**P value**
EWB	8.43±4.461	10.49±3.609	-2.057±4.563	-2.667	0.012
SWB	12.14±5.709	16.60±4.704	-4.457±6.550	-4.026	0.000
PWB	19.74±6.913	22.34±5.620	-2.600±6.775	-2.271	0.030
OWB	40.14±14.981	49.43±12.241	-9.286±15.463	-3.553	0.001

EWB: Emotional Well-Being, SWB: Social Well-Being, PWB: Psychological Well-Being, OWB: Overall Well-Being

Table 6: Results of *Manas Prakriti* Assessment Scale (MPAI)					
Manas Prakriti Score	**Mean±SD of Score**		**Within the group comparison Pre – Post**		
	Pre	**Post**	**Mean±SD**	**Paired 't'Test**	**P value**
Satvika	60.064 ± 7.024	61.790 ±5.128	-1.726 ±6.493	1.573	0.125
Rajasika	47.030 ±8.421	43.235 ±8.944	3.795 ±8.007	2.803	0.008
Tamsika	47.267 ±11.337	40.403 ± 11.146	6.863 ±10.942	3.711	0.001

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4. Discussion

Vipassana Meditation is an ancient technique to improve self-awareness and equanimity. The realization about "everything is temporary" can be a potent remedy for mental health issues. An impartial view is necessary about the fact that everything is always changing, according to the idea of impermanence. Vipassana Meditation leans the participants to remain in the state of "here and now" with mental tranquility.[22] This pilot study attempted to address the effects of Vipassana Meditation on health-related variables, such as levels of anxiety; emotional, social, and psychological wellbeing; and associate relationship with predominant *Manas Gunas*. By examining empirical evidences and theoretical frameworks, this discussion aims to elucidate the mechanisms through which Vipassana Meditation may exert its beneficial effects on mental health, as well as the implications for clinical practice and public health interventions.

During the study, the systolic and diastolic blood pressure, pulse rate, and respiration rate of participants remained within normal ranges. This suggests that Vipassana meditation does not have any harmful effects on the cardiorespiratory system in healthy volunteers. The result demonstrated that among the 35 participants the anxiety levels significantly decreased, and there was a statistically highly significant improvement in overall wellbeing. There was statistically highly significant decrease in *Rajasika* and *Tamsika Manas Prakriti* scores. The *Satvika Manas Prakriti* scores were increased, but statistically not significant. These findings indicate a shift towards greater clarity, tranquility and harmony.

Various other researches also proved the beneficial effects of Vipassana Meditation. A notable shift in subjective variables was observed among 85 inmates of Tihar jail, after training of ten days Vipassana Meditation programme. The pre-test anxiety level was much higher than the post-test level.[23] The mindfulness breathing meditation reduces the stress, depression, and anxiety among university students. This non-pharmacological technique can be practiced by any person, at any time and place.[24] It was observed that Vipassana Meditation significantly reduces the severity of depressive symptoms among students participated in this course even for the first time. Hence it could be used as a therapeutic measure for depression along with other methods.[25] In a clinical case report reflecting her own experience the writer added that, practicing Vipassana Meditation provides a way to deal with health problems by controlling somatic responses. It is a good resource to control anxiety and stress and gives the sense of wellbeing.[26] The practice of Vipassana Meditation in a ten-day residential retreat improved the physical and psychological well-being of participants at Muscat.[27] A recent study proved that training of 10 days Vipassana meditation improved the mindfulness of the participants.[28] A study shown that after meditation the percentage of *Satva Guna* predominant participants was increased, however, *Rajas* and *Tamas Doshas* predominant individuals was decreased. It proves that meditation is helpful to deplete *Manasika Doshas.*[29]

5. Conclusion

This study reveals that a ten-days practice of Vipassana Meditation can significantly improves the mental health of participants. There was substantial reduction in anxiety, improvement in overall well-being, and decrease in *Rajas and Tamas Doshas* as compared to *Satva Guna*. Vipassana meditators could perform better in their own life and society. Further researches with large sample size and for long duration are recommended.

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Conflicts of interest

Nil

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References

1. Mental health [Internet]. 2024 [cited 2024 Aug 7]. Available from: https://www.who.int/news-room/fact-sheets/detail/mental-health-strengthening-our-response
2. The Lancet. Ensuring care for people with depression. Lancet. 2022 Mar 5;399(10328):885.

Journal of Chemical Health Risks

www.jchr.org

JCHR (2024) 14(5), 2166-2173 | ISSN:2251-6727

3. Society AP. Evidence-based psychological interventions in the treatment of mental disorders: a literature review. Australian Psychological Association, Victoria. 2010.
4. Capon H, O'Shea M, McIver S. Yoga and mental health: A synthesis of qualitative findings. Complementary therapies in clinical practice. 2019;37:122-32.
5. Shukla AV. Tripathi R. Vaidhyamanorama hindi commentary. Charak Samhita. Sutra Sthana. *Deerghanjiviteeya Adhyaya*, Ver. 42. Delhi: Chaukhamba Sanskrit Pratishthan; 2019. p. 13.
6. Tirtha S. Patanjal yog pradipika. *Sadhanapada*. Ver. 11. Gorakhpur: Geeta Press; 2019. p. 334.
7. Park K. Parks textbook of preventive and social medicine. 27th ed. Banarasidas Bhanot, Jabalpur, MP; 2023.
8. Kessler RC, Ruscio AM, Shear K, Wittchen HU. Epidemiology of anxiety disorders. Curr Top Behav Neurosci. 2010;2:21-35.
9. Arlington V. Diagnostic and Statistical Manual of Mental Disorders. 5th ed. American Psychiatric Association; 2013.
10. Shukla AV, Tripathi R. Vaidhyamanorama hindi commentary. Charak Samhita. Sharira Sthana. *Mahatigarbhavakranti Sharira*, Ver. 34. Delhi: Chaukhamba Sanskrit Pratishthan; 2019. p. 735.
11. Shukla AV, Tripathi R. Vaidhyamanorama hindi commentary. Charak Samhita. Sharira Sthana. *Khuddikagarbhav Krantim*, Ver. 3. Delhi: Chaukhamba Sanskrit Pratishthan; 2019. p. 715.
12. Shukla AV, Tripathi R. Vaidhyamanorama hindi commentary. Charak Samhita. Sharira Sthana. *Khuddika Garbhavakranti Sharira*, Ver. 13. Delhi: Chaukhamba Sanskrit Pratishthan; 2019. p. 720.
13. Shukla AV, Tripathi R. Vaidhyamanorama hindi commentary. Charak Samhita. Sharira Sthana. *Mahatigarbhavakranti Sharira*, Ver. 36. Delhi: Chaukhamba Sanskrit Pratishthan; 2019. p. 735.
14. Shukla AV, Tripathi R. Vaidhyamanorama hindi commentary. Charak Samhita. Sharira Sthana. *Mahatigarbhavakranti Sharira*, Ver. 102. Delhi: Chaukhamba Sanskrit Pratishthan; 2019. p. 693.
15. Sinha HP. Bhartiya Darshan ki Rooprekha.5th ed. Varanasi, India: Motilaal Banarasidas; 1993.
16. What is vipassana? [Internet]. Vipassana Research Institute. Available from: https://www.vridhamma.org/What-is-Vipassana#Introduction
17. Vipassana Meditation: A Positive Mental Health Measure. Available from: https://www.vridhamma.org/research/Vipassana-Meditation-A-Positive-Mental-Health-Measure
18. Shear MK, Vander BJ, Rucci P, Endicott J, Lydiard B, Otto MW, et al. Reliability and validity of a structured interview guide for the Hamilton Anxiety Rating Scale (SIGH-A). Depression and anxiety. 2001;13(4):166-78.
19. Yeo ZZ, Suárez L. Validation of the mental health continuum-short form: The bifactor model of emotional, social, and psychological well-being. Plos one. 2022;17(5):e0268232.
20. Rastogi S. Development and validation of a Prototype Prakriti Analysis Tool (PPAT): Inferences from a pilot study. AYU (An International Quarterly Journal of Research in Ayurveda). 2012;33(2):209-18.
21. Aftab A, Gehlot S, Joshi S. Evaluation of the relationship between Manas Prakriti, Deha Prakriti and Personality Traits. 2018.
22. Morris JS, Öhman A, Dolan RJ. Conscious and unconscious emotional learning in the human amygdala. Nature. 1998;393(6684):467-70.
23. Psychological Effects of Vipassana on Tihar Jail Inmates [Internet]. [cited 2024 Jun 2]. Available from: https://www.vridhamma.org/research/Psychological-Effects-of-Vipassana-on-Tihar-Jail-Inmates#:~:text=The%20overall%20results%20of%20the,is%20crucial%20for%20crime%20prevention)
24. Komariah M, Ibrahim K, Pahria T, Rahayuwati L, Somantri I. Effect of Mindfulness Breathing Meditation on Depression, Anxiety, and Stress: A Randomized Controlled Trial among

University Students. Healthcare [Internet]. 2022 Dec 22;11(1):26.

25. Adhikari K. Study of effect of vipassana on anxiety and depression. International Journal of Psychology and Behavioral Sciences. 2012;2(6):274-6.
26. Van der Riet P. Vipassana meditation: One woman's narrative. Collegian. 2011;18(1):36-42.
27. Dorvlo AS, Antony SX, Chavan D, Dave J, Purecha V, Al-Rahbi S, et al. Vipassana meditation:: A naturalistic, preliminary observation in Muscat. Journal for scientific research Medical sciences/Sultan Qaboos University. 2001;3(2):87-92.
28. Singh P, Tiwari T, Yadav AK, Singh IL, Singh T, Singh AL. Effect of short-term Vipassana Meditation Training on Measures of Mindfulness and Attentional Network Task. Journal of the Indian Academy of Applied Psychology. 2024;50(1):357-66.
29. Sourav S, Indapurkar K. Study of manas prakriti with special reference to rajas and tamas and effect of meditation on it. 2022 Aug 27;3(9):89–91.