

**EVALUATING THE COMBINED EFFICACY OF *BRAHMYADI CHURNA* AND *ASHVAGANDHA CHURNA* WITH *SATWAVJAYA CHIKITSA* IN THE MANAGEMENT OF *CHITTODVEGA* WITH SPECIAL REFERENCE TO GENERALISED ANXIETY DISORDER: AN OPEN-LABELLED RANDOMIZED COMPARATIVE CLINICAL STUDY**

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**ABSTRACT**

Generalised anxiety disorder is the most frequent anxiety disorder which we come across in clinical practice. In Ayurveda, there are so many varied opinions on the concept of anxiety disorder conditions like *Chittodvega*, *Attatvabhiniवेशा*, *Anavasthitha Chittathva* etc. correlated with generalized anxiety disorder. *Chittodvega* is mentioned as one of the *Poorvarupa lakshanas* of *Unmada*. It includes symptoms like *Shira shoonyata*, *Chakshuraakulata*, *karna swana*, *Uchwasadikyam*, *Ayasa*, *Anannabhilasha*, *Arochaka*, *Avipaka*, *Satatam Loma harsha* etc, which are the symptoms commonly seen in patients with Generalised anxiety disorder. Patients with GAD typically present with excessive anxiety about ordinary, day-to day situations. The anxiety is intrusive, causes distress or functional impairment, and often encompasses multiple domains. Hence this study was taken up

to evaluate the combined efficacy of *Brahmyadi Churna* and *Ashvagandha churna* along with *Satwavjaya Chikitsa* in the management of *Chittodvega* with special reference to Generalised anxiety disorder. *Acharyas* have mentioned different *Medhya Rasayanas* for the management of mental illness and also *Satwavajaya Chikitsa* is a unique non-pharmacological approach for treating the mental disorders. *Satwavajaya Chikitsa* mentioned among *Trividha Chikitsa*

by *Acharya Charaka* not only prevents the impairments of *Dhee*, *Dhriti* and *Smriti* but also brings them back to the normal state, playing a significant role in the maintenance of harmonious state between these three factors ultimately leading to happy healthy state of individual.<sup>[7]</sup> Whereas *Ashvagandha Churna* is proven to have anxiolytic properties.<sup>[8]</sup> In the present study, 30 subjects diagnosed with the *Chittodvega* W.S.R to Generalised anxiety disorder were randomly selected and assigned to two equal groups Group A and Group B with 15 subjects each. Group A was administered with *Ashvagandha Churna* in the dose of 6gms with honey, morning and night after food along with *Satwavjaya Chikitsa* for 28 days where as Group B was given with *Brahmyadi Churna* in the dose of 6gms with honey morning and night after food along with *Satwavjaya Chikitsa* for 28 days. Both groups were assessed on 0th day (pre-treatment assessment), 28th day (post-treatment assessment) and also on the 43<sup>rd</sup> day (after 15 days of non intervention period).

**KEYWORDS:** *Chittodvega*, Generalized Anxiety Disorder, *Satwavjaya Chikitsa*, *Ashvagandha Churna*, *Brahmyadi Churna*.

## INTRODUCTION

Anxiety disorders are the most prevalent mental health issues across the world. Generalized anxiety disorder (GAD) is one among the most common kind of anxiety disorders characterized by persistent, excessive, and difficult to control worry and other associated symptoms such as fatigue, difficulty in concentration, sleep disturbances, restlessness, and abdominal discomfort.<sup>[1]</sup>

According to W.H.O Covid 19 pandemic triggered 25% increase in prevalence of anxiety and depression worldwide as per reported in 2022.<sup>[2]</sup> Prevalence of Anxiety was found to be 35%, stress 53% in a study conducted on the population of 113,285 individuals.<sup>[3]</sup>

According to NHMS Survey 2016 the overall prevalence of Anxiety Disorders in the adult population was found to be 2.57% and prevalence of GAD was found to be 0.57%.<sup>[4]</sup>

GAD is twice as common in women than men and is often associated with chronic environmental stress.<sup>[5]</sup>

Usually patient seeks medical help because of the somatic complaints associated with GAD like muscle ache and tension, headaches, backaches, gastrointestinal issues, problems with sleep and fatigue. All these leads to increased disability and decreases the quality of life of a

person. Individuals with GAD are at significantly increased risk of impaired social and role functioning, mental health, and overall physical-mental well-being.<sup>[5]</sup>

Clinical trials have shown that anxiolytic drugs alone have limited long-term efficacy. Moreover, they often have adverse side effects including dependency, drowsiness, impaired cognition and memory, and sexual dysfunction. Considering wide magnitude of GAD in Indian subcontinent and absence of promising therapy suffering population is turning towards other systems for effective therapies. Being an alarming disease, it requires effective management.<sup>[1]</sup>

In *Ayurveda* an exact co-relation to GAD is not found, but *Udvega* means anxiety, fear, distress or agitation and *Chittodvega* can be taken as affliction of mind with these, therefore in this study the term *Chittodvega* is compared with Generalised Anxiety Disorder.<sup>[6]</sup>

*Acharyas* have mentioned different *Medhya Rasayanas* for the management of mental illness and also *Satwavajaya Chikitsa* is a unique non-pharmacological approach for treating the mental disorders.

*Satwavajaya Chikitsa* mentioned among *Trividha Chikitsa* by *Acharya Charaka* not only prevents the impairments of *Dhee*, *Dhriti* and *Smriti* but also brings them back to the normal state, playing a significant role in the maintenance of harmonious state between these three factors ultimately leading to happy healthy state of individual.<sup>[7]</sup>

Considering that *Brahmyadi Churna* along with *Satwavajaya Chikitsa* is taken for the present study.

Whereas *Ashvagandha Churna* is proven to have anxiolytic properties hence along with *Satwavajaya Chikitsa* it is taken for the present study.<sup>[8]</sup>

## OBJECTIVE

Evaluation of comparative efficacy of *Brahmyadi Churna* with *Satwavajaya Chikitsa* and *Ashvagandha Churna* with *Satwavajaya Chikitsa* in the management of *Chittodavega*.

## MATERIALS AND METHODS

### Study design

- It was a randomized, open labelled, parallel group, active comparative clinical study. 30 subjects diagnosed with *Chittodvega* with special reference to Generalised Anxiety Disorder were selected and allocated randomly into two groups of 15 subjects in Group A and Group B.
- The trial was registered prospectively in CTRI on 08/07/2024 with CTRI number CTRI/2024/06/086624

These procedural steps ensured that the study conformed to ethical and scientific standards for conducting clinical research.

### Study participants

Subjects diagnosed with *Chittodvega* were recruited for the study without regard to gender, religion, socio-economic status, or occupation. These participants were selected from both the Outpatient Department (OPD) and Inpatient Department (IPD) of Sri Sri College of Ayurvedic Science and Research Hospital in Bengaluru and the camps organized within the hospital.

## DRUG SOURCE

### DRUG A

- Churnas were procured from GMP certified pharmacy and mixed in ratio of 1:2:1/25 in department of PG Studies in *Rasa Shastra* and *Bhaisajaya Kalpana* of Sri Sri College Of Ayurvedic Science and Research Hospital, Bengaluru. *Churna* was packed in Air Tight Container.
- Manufacturing Date-23/07/2024
- Expiry Date-07/2026

### DRUG B

- Churnas were procured from GMP certified pharmacy and mixed in ratio of 1:2:1/25 in department of PG Studies in *Rasa Shastra* and *Bhaisajaya Kalpana* of Sri Sri College Of Ayurvedic Science and Research Hospital, Bengaluru. *Churna* was packed in Air Tight Container.
- Manufacturing Date-23/07/2024
- Expiry Date-07/2026

### Inclusion Criteria

- Subjects who were fulfilling criteria based on DSM-5 and those getting score between 8-23 in Hamilton Anxiety Rating Scale were included in the study.
- Subjects suffering from GAD for a minimum period of at least 6 months.
- The study included individuals of both genders, aged between 20 to 60 years.
- Participants in the study subjects were provided informed, written consent in a language they were familiar with.

### Exclusion Criteria

- Subjects on use of anxiolytics or antidepressants in the previous 6 months.
- Subjects diagnosed with other psychiatric illnesses like mood disorder, psychosis, depression etc. from the past 12 months.
- Subjects suffering from Generalised anxiety disorder associated with other serious systemic illnesses that would interfere with the treatment.
- Subjects with uncontrolled hypertension, diabetes mellitus, thyroid dysfunction, renal dysfunction, organic mental disorder or psychoactive-substance related disorder, such as excess consumption of alcohol, amphetamine-like substances, or withdrawal from benzodiazepines.
- Pregnant and Lactating Women

### Study interventions

FEATURES	GROUP A	GROUP B
SAMPLE SIZE	15	15
INTERVENTION	1. BRAHMYADICHURNA 2. SATWAVAJAYA CHIKITSA	3. ASHVAGANDHA CHURNA 4. SATWAVAJAYACHIKITSA
DOSAGE AND ANUPANA	BRAHMYADI CHURNA – 6 g with Honey SATWAVAJAYA CHIKITSA – 5 SESSIONS	ASHVAGANDHA CHURNA – 6 g with Honey SATWAVAJAYA CHIKITSA - 5 SESSIONS
TIME OF ADMINISTRATION	BRAHMYADI CHURNA – TWICE DAILY MORNING AND NIGHT AFTER FOOD SATWAVAJAYACHIKITSA 1 <sup>st</sup> SESSION 0 <sup>th</sup> DAY 2 <sup>nd</sup> SESSION 7 <sup>th</sup> DAY 3 <sup>rd</sup> SESSION 14 <sup>th</sup> DAY 4 <sup>th</sup> SESSION 21 <sup>st</sup> DAY 5 <sup>th</sup> SESSION 28 <sup>th</sup> DAY	ASHVAGANDHA CHURNA – TWICE DAILY MORNING AND NIGHT AFTER FOOD SATWAVAJAYACHIKITSA 1 <sup>st</sup> SESSION 0 <sup>th</sup> DAY 2 <sup>nd</sup> SESSION 7 <sup>th</sup> DAY 3 <sup>rd</sup> SESSION 14 <sup>th</sup> DAY 4 <sup>th</sup> SESSION 21 <sup>st</sup> DAY 5 <sup>th</sup> SESSION 28 <sup>th</sup> DAY
TRIAL PERIOD	28 DAYS	28 DAYS

DRUG FREE FOLLOW UP PERIOD	15DAYS	15 DAYS
ROUTE OF ADMINISTRATION	ORAL	ORAL
TOTAL INTERVENTION PERIOD	43 DAYS	43 DAYS

Standard Diet and regimen were advised to the patients

### SATWAVAJAYA CHIKITSA MODULE

#### JNANA

<b>Goal</b>	<b>To provide support to the patient to develop an insight about self.</b>
<b>Day and Time of Session</b>	0 <sup>th</sup> Day Time of Session-20-30min.
<b>Techniques</b>	Assessment of MSE through detailed case taking, Then by using counselling skills like Active listening, Clarification, Reflection and using effective questioning skills provide self-awareness in the following areas. Strength/Weaknesses/Threats/Opportunities/Responsibilities towards family and society.
<b>Achievements</b>	1) Improved degree of responsibility and behavior control. 2) Correction of mis-conceptions. 3) Better adaptability. 4) Self realization.

#### VIJANA

<b>Goal</b>	<b>Providing guidance to understand the nature of illness and improve his coping capabilities.</b>
<b>Day and Time of Session</b>	7 <sup>th</sup> Day Time of Session-20-30 min.
<b>Techniques</b>	Theoretical knowledge Disease specific knowledge Treatment specific knowledge. Dos and don'ts and follow up medication Psychological stress specific information Provide general information's regarding sadvr̥tta
<b>Achievements</b>	A good rapport with therapist.

#### DHAIRYA

<b>Goal</b>	<b>Development of coping abilities.</b>
<b>Day and Time of Session</b>	14 <sup>th</sup> Day Time of Session-20-30 min.
<b>Techniques</b>	Self-control programme Cognitive Behavioral Therapy – Exercises to control emotions Re-scripting the negative thinking that lies behind him or her – Write down or record emotions – Count up to 100 – Spiritual advices

	Reassurance To build self-esteem or feel better about their lives Setting short term goal
<b>Achievements</b>	1) Better coping abilities. 2) A change from negativity to positivity.

**SMRITI**

<b>Goal</b>	<b>To understand the exact nature of the object.</b>
<b>Day and Time of Session</b>	21 <sup>st</sup> Day Time of Session-20-30 min.
<b>Techniques</b>	1. Probing into the past to develop insight about the present problem 2. To make patient understand the unrealistic nature of his Problem.
<b>Achievements</b>	The hidden conflicts which are the primary source of an emotional illness are exposed.

**SAMADHI**

<b>Goal</b>	<b>Restraining the mind from worldly objects and meditating on the spiritual dimension of personality.</b>
<b>Day and Time of Session</b>	28 <sup>th</sup> Day Time of Session-20-30 min.
<b>Techniques</b>	Meditation and other oriental techniques. Mindful chanting like A-kāra, U-kāra, MA-kāra, then end with A-U-M chanting Prāṇāyāma-Nādisuddhi Deep relaxation – 2 session
<b>Achievements</b>	1) Higher level of awareness 2) Mental tranquility

**OUTCOME****Primary Outcome Measure**

Reduction in the HAM-A Rating Scale

**Sample Size Estimation**

$$\text{Sample size (SS)} = 2(\text{SD})^2 \times (\text{Zb}^2 + \text{Z1a}^2) / \text{d}^2$$

$$= 2(80)^2 \times (0.84 + 1.96)^2 / 900$$

$$= 2 \times 6400 \times (2.8)^2 / 900$$

$$= 12800 \times 7.84 / 900$$

$$= 100352 / 900$$

$$= 111.5 = 112 \text{ samples.}$$

Sample size was determined based on the appropriate formula of RCT and it was estimated to

be 56 samples of each group.

As this research work is a part of post graduation academic curriculum, there is a time constrain and lack of feasibility, hence a standard sample size of 30 was taken.

### Randomization

In the present study, randomization was followed using Randomiser table method.

### Allocation concealment

The sequentially numbered, opaque, sealed envelope (SNOSE) technique was used for allocation concealment.

### Statistical Methods

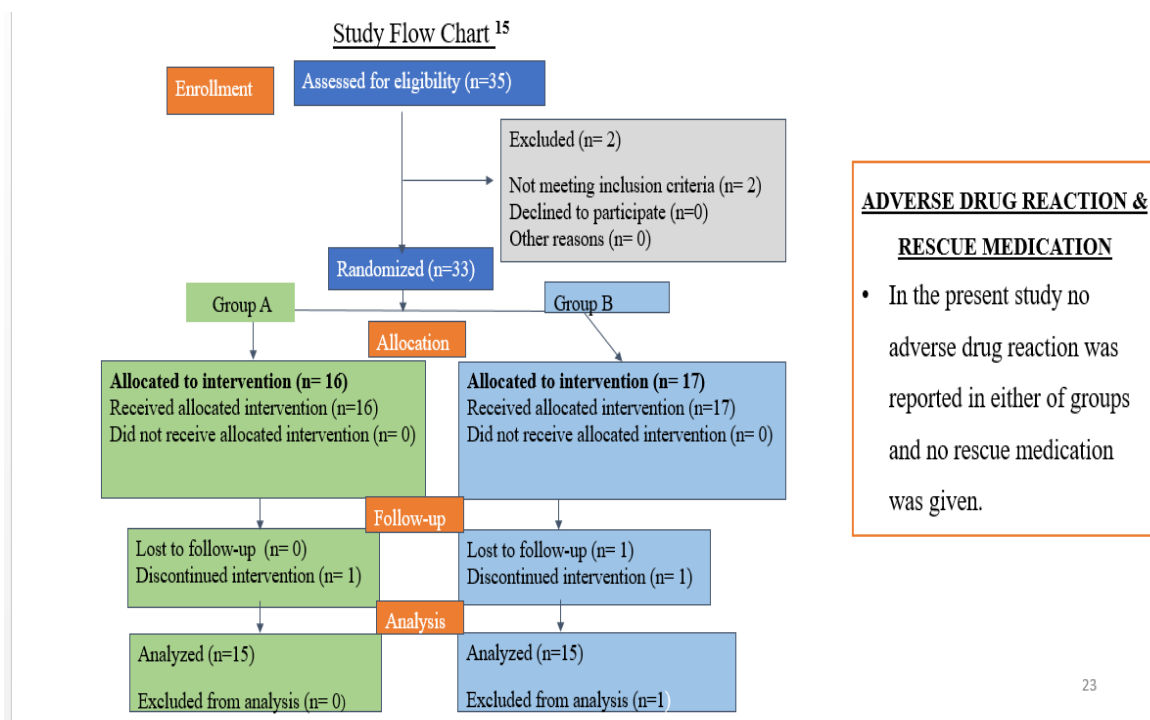
- The recorded data obtained in both the groups were presented in tables, diagrams and charts Statistical analysis was done using SIGMASTAT software version 3.1.
- In the present study following statistical tests were done:
  - ❖ For the assessment of parametric values (Objective Parameters) Wilcoxon Signed Rank test was applied to assess before and after treatment results, results within the group. Mann Whitney test was applied to assess results between the groups.
  - ❖ The corresponding p value was noted and obtained results were interpreted as :-
    - Interpretation as statistically non-significant for p value  $>0.05$
    - Interpretation as statistically significant for p value  $\leq 0.05$
    - Interpretation as statistically highly significant for p value  $\leq 0.01$
    - To ascertain whether the statistical analysis correlates with clinical improvement, Effect size determination was carried out for all the subjective and objective parameters.

**Table 1: Description of Effect size.**

EFFECT SIZE					
Between the groups					
No effect band	Very small effect band	Smalleffect band	Medium effect band	Large effect band	Very large effect band
0	<0.1	0.1 to <0.3	0.3 to 0.5	> 0.5 to 0.8	> 0.8

### RESULTS

In the present study, 35 subjects were screened, 33 subjects were enrolled and 30 subjects completed the study with 3 dropouts (Fig 2)



### Demographic and clinical characteristics

The study encompassed a majority of subjects who fell within the 21-30 years age group, accounting for 40% of the participants. Among the study's participants, 53.3% were female, and a significant proportion, totalling 73.33%, were married. In terms of educational status, 50% of the subjects were graduates, while 50% were employed in salaried positions. The largest percentage, 53.3% of the subjects, belonged to the upper middle-class category. Additionally, 70% of the participants were found to have a moderately active lifestyle, and the dietary preferences of 70% of the subjects were oriented towards vegetarian diet.

The predominant constitution observed among the subjects was *Vata Pittala Prakriti*. In terms of causative factors, a significant portion, specifically 76.66% of the subjects, reported family history of psychiatric illness, 66.6% had family problems, 63.3% had early parenteral attachment issues, 56.66% had impaired concentration, 60% were able to control impulsivity and 43.33% had history of disturbed sleep.

A majority of the study participants exhibited habits of addiction, with 46.6% reporting an addiction to tea, and 53.3% stating an addiction to coffee.

## Effect of intervention

PARAMETERS	WITHIN THE GROUP				BETWEEN THE GROUPS
	GROUP A 28 <sup>th</sup> Day	Group A 43 <sup>rd</sup> Day	GROUP B 28 <sup>th</sup> Day	Group B 43 <sup>rd</sup> Day	
Anxious Mood	Highly Significant	Non Significant	Highly Significant	Non Significant	Both groups exhibit similar significant reduction
Tension	Highly Significant	Non Significant	Highly Significant	Non Significant	Both groups exhibit similar significant reduction
Fears	Non Significant	Non Significant	Non Significant	Non Significant	Both groups exhibit similar significant reduction
Insomnia	Highly Significant	Non Significant	Significant	Non Significant	Both groups exhibit similar significant reduction
Intellectual	Non Significant	Non Significant	Non Significant	Non Significant	Both groups exhibit similar significant reduction
Depressed Mood	Highly Significant	Non Significant	Highly Significant	Non Significant	Both groups exhibit similar significant reduction
Somatic(Muscular)	Non Significant	Non Significant	Non Significant	Non Significant	Both groups exhibit similar significant reduction
Somatic(Sensory)	Non Significant	Non Significant	Non Significant	Non Significant	Both groups exhibit similar significant reduction
Cardiovascular	Highly Significant	Non Significant	Non Significant	Non Significant	Both groups exhibit similar significant reduction
Respiratory	Highly Significant	Non Significant	Significant	Non Significant	Both groups exhibit similar significant reduction
Gastrointestinal	Non Significant	Non Significant	Non Significant	Non Significant	Both groups exhibit similar significant reduction
Genitourinary	Non Significant	Non Significant	Non Significant	Non Significant	Both groups exhibit similar significant reduction
Autonomic Symptoms	Highly Significant	Non Significant	Highly Significant	Non Significant	Both groups exhibit similar significant reduction
Behaviour at Interview	Non Significant	Non Significant	Non Significant	Non Significant	Both groups exhibit similar significant reduction
Total Score	Highly Significant	Non Significant	Highly Significant	Non Significant	Both groups exhibit similar significant reduction

On the assessment of primary outcome measures like the HAM-A score Comparison within the Group A showed highly significant results with  $p < 0.001$  on total score is,

And Group B also showed with  $p < 0.001$  is highly significant results on total score (Wilcoxon signed Rank Test),

Between the Group difference – No significant difference was found

Based on the effect size calculation after 28 days of treatment in group A (2.56) and Group B (1.64) on total score on HAM-A Large effect band was found showing significant clinical improvement.

## DISCUSSION

### Discussion on results

The study's findings indicate that both *Brahmyadi Churna* with *Satwavajaya Chikitsa* and *Ashvagandha Churna* with *Satwavajaya Chikitsa* are equally effective in managing *Chittodvega*.

### Discussion on Mode Of Action of Intervention

**Brahmyadi Churna** acts through anxiolytic, neuroprotective, and GABA/serotonin-modulating actions. Together, these explain its effectiveness in reducing GAD symptoms and stabilising mental health.

*Ashvagandha Churna* acts in GAD through its *Rasayana*, *Vata-shamaka*, *Medhya*, and *Nidrajanana* properties. Modern studies support its role via GABA-mimetic, adaptogenic, and anti-stress actions. Together, these mechanisms explain its efficacy in reducing anxiety symptoms and improving mental well-being.

**Satwavajaya Chikitsa** is described as "*manonigraha*". It works through:

**Pragya-paradhahara** → Corrects errors of intellect causing anxiety-provoking patterns.

**Sankalpa-vikalpa-nigraha** → Training the mind to shift from negative ruminations to positive thoughts.

**Medhya & Manas-balavardhana** → Enhances concentration, coping skills, and resilience.

**Vata-shamana** → Reduces restlessness, palpitations, sleep disturbances.

**Rajo-Tama shamana** → Uplifts sattva guna, reduces overactivity (rajas) and negative emotions (tamas).

## CONCLUSION

The findings from the current study indicate that both interventions, namely *Brahmyadi Churna* with *Satwavajaya Chikitsa* and *Ashvagandha Churna* with *Satwavajaya Chikitsa*, demonstrated equal effectiveness in managing Chittodvega (*Generalised Anxiety Disorder*).

## SCOPE FOR FURTHER STUDY

- ❑ The study can be performed on a larger population to establish conclusive results.
- ❑ Study was conducted when both internal medication and psychological intervention was given together, if study was done comparing *Satwavajaya Chikitsa* and *Brahmyadi Churna* and *Asvagandha Churna* individually would have been more effective.
- ❑ Future studies can be conducted by administering *Brahmyadi Churna* and *Ashvagandha Churna* in tablet form to improve palatability.

## Informed consent

Written consent was obtained from the patients for publication of this case.

**Source of funding** -None.

**Conflict of interest** –None.

## Authors contribution

Anupam - Conceived and designed the analysis, Conceptualization, Data collection, Methodology, Writing original draft preparation,

Gopala Krishna G - Contributed data, Visualisation, Writing-reviewing, Supervision.

## REFERENCES

1. Zala DS, Thakar AB, Bhatt NN. Review of research works done on generalized anxiety disorder at Institute for Postgraduate Teaching and Research in Ayurveda, Jamnagar. Indian Journal of Health Sciences and Biomedical Research (KLEU) [Internet], Sep-Dec., 2017; 10(3): 231-236. Available from: [https://journals.lww.com/kleu/Fulltext/2017/10030/Review\\_of\\_research\\_works\\_done\\_on\\_generalized.2.aspx#O3-2-2](https://journals.lww.com/kleu/Fulltext/2017/10030/Review_of_research_works_done_on_generalized.2.aspx#O3-2-2)
2. World Health Organization. Covid 19 Pandemic triggers 25% increase in prevalence of anxiety and depression worldwide[Internet], 2022 Mar 02 [cited 2023 Sep 14]. Available from:<https://www.who.int/news/item/02-03-2022-covid-19-pandemic-triggers-25-increase-in-prevalence-of-anxiety-and-depression-worldwide>

3. Lakhan R, Agrawal A, Sharma M. Prevalence of Depression, Anxiety, and Stress during COVID-19 Pandemic. *J Neurosci Rural Pract* [Internet], 2020; [cited 2023 Sep14]; 11(4): 621. doi:10.1055/s-0040-1716442. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7554653/>
4. Manjunatha N, Jayasankar P, Suhas S, et al. NMHS National Collaborators Group. Prevalence and its correlates of anxiety disorders from India's National Mental Health Survey 2016. *Indian J Psychiatry* [Internet], Mar-Apr. 2022; 64(2): 138-142. doi:10.4103/indianjpsychiatry.indianjpsychiatry\_964\_21.
5. Anxiety and Depression Association of America. Understand the Facts: Generalized Anxiety Disorder (GAD) [Internet]. America; 2014 [cited 2020 Feb 12]. Available from: <https://adaa.org/>
6. Bagali SS, Baragi UC, Deshmukh RA. Concept of Satwavajaya Chikitsa (Psychotherapy). *J Ayurveda Integr Med Sci* [Internet]. 2016; 1(1): 56-63. Available from: <http://dx.doi.org/10.21760/jaims.v1i1.3637>.
7. Sharma RK, Dash Bhagwan, editors. Charaka Samhita of Agnivesa, Vimana sthana. Chap 6, Verse 5. Varanasi: Choukamba Sanskrit series, 2014; 185.
8. Sharma RK, Dash Bhagwan, editors. Charaka Samhita of Agnivesa, Vimana sthana. Chap 6, Verse 5. Varanasi: Choukamba Sanskrit series, 2014; 88.
9. Shivprasad Sharma, editor. (3rd ed.). Astanga Samgraha of Vriddha Vagbhatta with Sasilekha Sanskrit commentary of Indu, Nidana Sthana. Ch. 06, Ver. 15, Varanasi: Chaukhambha Krushnadasa academy, 2012; 380.
10. Paradkar HS, editor. (6th ed.). Astanga Hridaya of Vagbhatta with Sarvangasundra commentary of Arunadatta & Ayurvedarasayana of Hemadri, Nidana Sthana. Ch.05, Ver. 49, Varanasi: Chaukhambha Surbharati Prakashan, 2014; 483.
11. Acharya Jadavji Trikamji, editor. (Reprint edi.). Charak Samhita of Agnivesha with Ayurveda Dipika commentary of Chakrapanidatta, Sutra Sthana. Ch. 20, Ver.11, Varanasi: Chaukhambha Prakashan, 2011; 11.