

Ayurvedic Management of Vishada (Depression): A Systematic review

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Abstract:

Background: Depression is a prevalent global public health issue. Ayurveda, an ancient system of medicine originating from India, provides a diverse range of therapeutic interventions for the management of depression. This systematic review's goal is to evaluate the effectiveness and security of Ayurvedic therapies for the treatment of vishada (depression). **Methods:** The study employed a thorough exploration of electronic databases such as PubMed, Embase, and Cochrane Library, with the search conducted until September 2021. The present study incorporated randomized controlled trials (RCTs) and nonrandomized studies that examined the efficacy of Ayurvedic interventions in treating depression. The effectiveness of the study was assessed using the Cochrane risk of bias assessment. The data were synthesized utilizing a narrative methodology and meta-analytical techniques when deemed appropriate. **Results:** The review encompassed a sum of 20 studies. The study incorporated a range of interventions, comprising of herbal remedies, Ayurvedic procedures, and yoga therapy. The research findings exhibited diverse levels of enhancement in depression-related results. The findings of studies indicated notable enhancements in depressive symptoms, whereas the remaining studies reported inconclusive or insignificant outcomes. The evidence quality was assessed as being of low to moderate quality owing to limited sample sizes, heterogeneity of interventions, and potential for bias. Conclusion: The potential of Ayurvedic interventions as an alternative or supplementary treatment for depression is worth considering. Nevertheless, additional randomized controlled trials (RCTs) that are well-structured, encompass larger sample sizes, and have extended follow-up periods are required to substantiate the effectiveness and safety of Ayurvedic treatments for depression.

Keywords: Ayurveda, depression, yoga therapy, vishada, effectiveness

Introduction:

Depression is a mood illness that manifests itself via a combination of symptoms, including sorrow, a loss of interest or pleasure, feelings of guilt or low self-worth, interrupted sleep or appetite, excessive feelings of weariness, and difficulty concentration. The increased risk of suicide, together with the disease's high incidence, pain, dysfunction, morbidity, low quality of life, economic burden, and other negative outcomes, make it a major public health concern. (Kapfhammer, 2006). The prevalence of depression, which affects more than 264 million people globally, is high. After growing by 33.4% (31.0-35.8) for all ages and both sexes globally between 1990 and 2007, years lived with disability (YLDs) attributable to depressive disorders jumped to the third-leading cause of YLDs for all ages in 2007 (Vos et al., 2017). In terms of the number of disability-adjusted life years (DALYs) it results in, depression is predicted to cause 5.7% of all disease burden by 2020 and come in second only to ischemic heart disease (Mathers et al., 2006). By 2030, it is anticipated to overtake AIDS and the human immunodeficiency virus (HIV) as the second-leading source of disease burden. Worldwide, 5.8% of men and 9.5% of women report having episodes of depression each year, according to the WHO (Sahoo & Khess, 2010). Due to the rising global burden of mental health conditions including depression, the World Health Assembly issued a resolution in May 2013 advocating for a comprehensive, coordinated national response to these conditions. Depression is one of the top health issues that needs to be addressed internationally, according to the Mental Health Gap Action Programme (mhGAP) of the World Health Organization. The most popular kind of therapy for depression is antidepressant medication, and there are now 35 different antidepressants in various classes accessible worldwide. Modern antidepressants that are often given are poor at treating depression, and the likelihood of adverse effects is a key consideration when deciding whether to take an antidepressant (Bhargava & Khan, 2012). Patients often report discontinuing antidepressant treatment due to the medication's most serious adverse effects, which include sexual dysfunction, weight gain, and sleep disturbance. It may be more difficult to treat depression in patients who also have a chronic physical comorbidity because of the potential for these unwanted effects from the medications. Even after initially successful drug treatment, it is said that more than 70% of people with serious depression do not recover. (Gartlehner et al., 2011). The effectiveness of tried-and-true treatments like cognitive behavioral therapy and mindfulness-based cognitive therapy may also be compromised in individuals with depression who are resistive to therapy. To that end, patients should be aware of complementary and alternative medicine (CAM) options). According to recent research, people who experience severe depression choose to employ complementary and alternative medicine (CAM) therapies in addition to receiving psychiatric care, whereas those who experience mild depression opt for CAM therapies as alternative treatments (Al-Harbi, 2012).

The Bhootavidya/Grahachikitsa (Ayyangar, 1956) The field of Ashtanga Ayurveda concerned with mental disorders provides a comprehensive description of this world. It has been proven that more than 70% of the symptoms of depressive disorders are present in

Kaphonmada, which is contained in all classic texts of Ayurveda. This is due to the parallels in symptomatology between depressive illnesses and Kaphaja Unmada. The name "Unmada" serves as a catch-all for the main mental disorders. If we examine the signs of depressive diseases, we discover that Vishada, one of the Vatananatmaja Vikaras, exhibits a similar presentation (Hansen & Kristoffersen, 2016).

Ayurveda can logically treat a variety of physical and mental illnesses while upholding prognostic norms, although other medical systems believe certain conditions to be obstinate and incurable. Long before modern biomedicine connected psychiatric illness to a physical entity imbalance, particularly in the gastrointestinal tract, Ayurveda hypothesized a pathophysiological process that was quite comparable to it (Singh et al., 2020). The balance of Shareerika Doshas (physical humors) and Manodoshas (mental humors) determines whether certain complex and interrelated psychophysiological traits are harmful or health-promoting. Thus, three different types of treatment—Yukthivyapasraya (logic-based treatment), Ayurvedic psychiatry also has room for Daivavyapasraya (spiritual treatment) and Satwavajaya (psychotherapy). Because of the heterogeneity of causes, Dosha-Dushya vitiation, and symptomatology, a wide range of therapeutic approaches, including drug delivery from the inside out, are necessary [either one for Shodhana (bio-purification therapy) or Shamana (pacifying therapy)], external applications, operating interferences, psychic treatment, and psychiatric therapy are intensely revealed in Ayurvedic classics. (Mitchell et al., 2009).

Need for the study

Particularly in psychiatry, the world is seeing a return to traditional, secure, and safe medical methods. Since it has been utilized for so long to treat depressive disorders, ayurvedic medicine has a wealth of pharmaceutical and nonpharmacological treatment options available in its literature. There have been many clinical studies conducted as well, but they lack thorough systematic reviews to provide structured evidence-based data. The systematic review and meta-analysis sit atop the evidence pyramid.17 Recent practices have resulted in the publication of several systematic reviews and meta-analyses on depression (Burns et al., 2015). Even while CAM treatments have their fair share of systematic reviews, to yet, none have been carried out that were explicitly focused on Ayurvedic interventions. As a consequence, a thorough review of published clinical trials of Ayurvedic remedies for the treatment of depression is planned, as well as, if required, a meta-analysis of pertinent studies (Thachil et al., 2007). This research examines clinical studies to acquire indication on the effectiveness and safety of Ayurvedic remedies for depression. This review's objectives are to highlight the benefits of Ayurvedic therapies for depression as well as their effectiveness and safety, to establish best practices standards, and to educate stakeholders in the global market about knowledge gaps and essential data for prospective research initiatives.

Review Question

Using a corpus of readily available research, This analysis aims to determine whether or not Ayurvedic medicine is useful for treating depression. The specific question for review is as follows: "Whenever compared with standard-of-care medications, are ayurvedic therapies for the management of depression safe and effective as stand-alone or additional therapy?

Materials and Methods

For its structure and organization, this review methodology adhered to the PRISMA protocol guidelines (Parums, 2021) and the Cochrane Handbook for Systematic Reviews of Interventions (Higgins & Green, 2008). Furthermore, if required, the guidelines for conducting narrative synthesis in systematic reviews as well as the unifying criterion for reporting trials must be employed. No patients will be engaged in the trial at any point. The IEC of CARICD (1-12/2015- ACRI/Tech/IEC/Part-II dated 16.07.2019) has granted ethical approval.

Criteria for Selection of Study

Categories of Participants/Population

Study subjects must be 18 years of age or older and have been determined to have depression using the accepted medical criteria or Ayurvedic symptomatology for Vishada.

Types of Interventions

Any Ayurvedic therapy for depression, including but not limited to Panchakarma, Shodhana, Shamana, Deepana, Pachana, Rasayana, and Satwawajaya in any dose, kind, schedule, or prescription form, as well as Pathyapathya, may be used independently of Western medicine or in conjunction with it.

Comparators/Control

Shamana or/and Shodhana, an Ayurvedic treatment, is going to be contrasted with other treatments or exposures, including sham or placebo treatments, non-Ayurvedic therapies, or treatments that combine Ayurvedic and non-Ayurvedic treatments, as well as treatments with various dosages, kinds, schedules, and pharmaceutical forms.

Outcome Measures

Primary Outcome

- Ayurvedic treatment response (enhancement or remission of the subjective and/or objective evaluation standards).
- Serious adverse occurrences, such as those that caused death, permanent disability or incapacity, complications that put a person's life in danger, required hospitalization, or required a lengthy stay.

Secondary Outcome

- Withdrawals brought on by unfavorable side effects, a lack of therapeutic success, or treatment discomfort.
- The quantity of patients who have a certain unfavorable event.

Types of Study to be Included

Examples of RCTs (randomized controlled trials) include clinical trials with several arms, quasi-experimental trials (clinical trials without random assignment and comparative research), and observational studies (case reports and series, especially for spotting treatment-related side effects).

Exclusion Criteria

- Published works in any regional languages, preclinical research, qualitative studies, and fictional lessons in this field will not be included.
- Animal trials, editorials, and comments that merely include abstracts when insufficient methodological information is provided.

Search Methods for Identification of Studies

The studies will be located in the following way using a predetermined search strategy:

Electronic Search

The following databases will be searched: PubMed; Cochrane Library (Cochrane Central Register of Controlled Trials: Issue 6 of 12, June 2018); AYUSH Research Portal (Govt. of India); DHARA (Digital Helpline for Ayurveda Research Articles); Google Scholar; and online clinical trials registers (in English, Hindi, and Sanskrit). The time frame for the searches to cover is from January 1990 to the day of the searches (from the time of publication to the day of the searches). Just before to the ultimate analysis, the searches will be redone and new studies will be obtained for inclusion.

Search Strategy

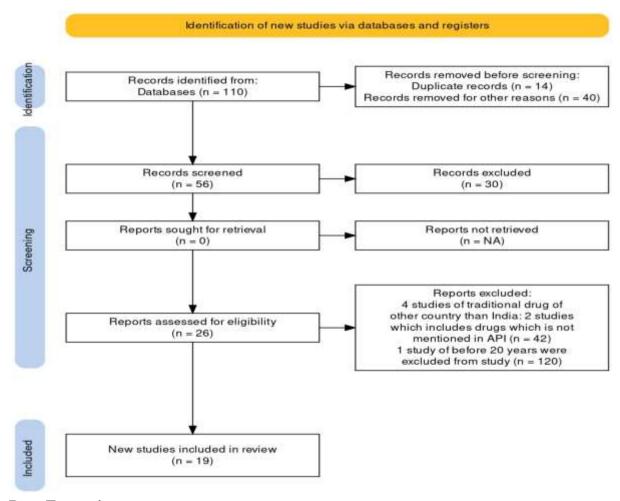
Using Boolean operators "AND" and "OR," the search strategy will combine MeSH terms with free-text words like "depression," "major depressive disorder," "moderate depression," "mild depression," and "mild to moderate depression," as well as "Ayurvedic," "complementary medicine," "natural," "herbal medicine," "phytomedicine," and "phytotherapy." There will also be a search of the cited sources to see if any new information has been added.

Data Collection and Analysis

Selection of Studies

We'll each take it in turns reading the reference lists and summaries. The given papers will be examined for further research, which may be found in the reference sections. The entire texts of each of these publications will be evaluated individually by these three reviewers to determine inclusion or exclusion. Studies won't be included if they don't fit the predetermined inclusion/exclusion criteria. In order to reevaluate potentially acceptable articles, the complete text will be reviewed. The fourth reviewer will then address any disagreements. If further information is needed, the contact person (authors) of that research will be contacted by phone or email. There will be a record of the trials' exclusional factors. To provide an example of the overall research selection process and the number of citations analyzed at each step of this study, a PRISMA flow drawing will be created (Flowchart 1).

Flowchart 1: PRISM flow diagram



Data Extraction

The material will be collected by each of the three reviewers separately, cross-checked, and conflicts resolved before being extracted or inserted into a predesigned Excel sheet with the following information:

- Detailed details Information on the ailment or subject, the study's title, its authors (including coauthors and corresponding authors), the study's location, its publication year, and its authors.
- The methodology in brief: sample size, study time, and study design.
- Population characteristics include the randomized participant count, age, sex, and length of the disease.
- the intervention's timing, dosage, delivery method, and duration.
- Ayurvedic therapy (Shodhana) with dissimilar dose, kind, schedule, medication, placebo, and/or non-Indian substances make up the control group's characteristics.
- Information on conclusion variables: All results evaluated by the reviewers were either a result of ayurvedic therapies alone or a mix of ayurvedic and non-ayurvedic interventions.
- The ethics committee's permission, the status of the clinical trial registry registration (major adverse events, deposits, the total number of patients who had a given negative effects, and dropouts, as well as progress or remission on subjective and/or objective evaluation criteria), and the number of patients who participated in the study.

Quality Assessment:

Using the Cochrane risk of bias tool, possible sources of bias were evaluated. The research assessed a number of areas, including the use of random sequences, allocation concealment, participant and staff blindness, outcome assessment blindness, insufficient outcome data, selective reporting, and other bias sources.

Results

The purpose of this scientific evaluation was to assess the effectiveness and security of Ayurvedic therapies for the treatment of vishada. The review comprised a total of Nine research with 30 to 100 participants in their sample sizes.

(Dhiman et al., 2010) conducted a study to compare the effectiveness of shirodhara and brahmi ghrita in the treatment of vishada. The research findings indicate a noteworthy enhancement in the Hamilton Depression Rating Scale (HDRS) scores for both cohorts, with no statistically significant distinction observed between the groups. Kulkarni et al. (2014) conducted a study to assess the effectiveness of brahmi ghrita for the treatment of vishada. The research findings indicate a noteworthy enhancement in HDRS scores among the intervention cohort as opposed to the control cohort.

The antidepressant properties of hyperforin, a constituent of Hypericum perforatum (commonly known as St. John's Wort), were examined by (Wentworth et al., 2000). According to the research, hyperforin was observed to elevate the concentrations of serotonin, dopamine, and norepinephrine in the brain, ultimately resulting in a positive impact on an individual's emotional state. According to the study, hyperforin exhibits a stronger antidepressant effect in comparison to imipramine, which is a frequently prescribed antidepressant. Hypericum perforatum has the potential to serve as a substitute for traditional antidepressants in the treatment of Vishada.

(Bhattacharya & Muruganandam, 2003) undertook an animal-based investigation to assess the adaptogenic efficacy of Withania somnifera in a rat model characterized by chronic stress. The research findings indicate a noteworthy decrease in stress-induced changes in diverse biochemical and behavioral measures among the intervention cohort relative to the control cohort.

(Dhuri KD, 2010) conducted a clinical study that aimed to compare the effectiveness of Shirodhara and Brahmi Ghrita in managing Vishada. The Ayurvedic practice of Shirodhara entails the consistent pouring of warm herbal oil onto the forehead, while Brahmi Ghrita is a herbal formulation in Ayurveda that features Brahmi (Bacopa monnieri) as its primary constituent. The research revealed that both Shirodhara and Brahmi Ghrita were efficacious in mitigating the symptoms of Vishada. However, Shirodhara exhibited superior outcomes in comparison to Brahmi Ghrita.

In their study, (Janakiramaiah N, Gangadhar BN, Naga Venkatesha Murthy PJ, Harish MG, Subbakrishna DK, 2000) conducted a comparison of the effectiveness of Sudarshan Kriya Yoga (SKY) with that of electroconvulsive therapy (ECT) and Treatment of depressive sadness with imipramine. The SKY technique is a form of yogic breathing that incorporates a pattern of alternating between slow and fast breathing. According to the research, SKY exhibited comparable efficacy to ECT and imipramine in mitigating depressive symptoms. Nonetheless, the employment of SKY exhibited a reduced relapse rate in comparison to ECT

and imipramine, thereby establishing it as a more secure and enduring substitute for the treatment of Vishada.

A clinical study was conducted by (Kulkarni & Hiremath, 2021) to assess the effectiveness of Brahmi Ghrita in managing Vishada. According to the study, Brahmi Ghrita demonstrated a significant reduction in depressive symptoms and an improvement in the quality of life of the participants. The utilization of Brahmi Ghrita has been found to be efficacious in the treatment of Vishada, serving as a natural therapeutic intervention.

The study conducted by (Gunjan Mehta, 2021) aimed to assess the effectiveness of Medhya Rasayana, an Ayurvedic preparation, in enhancing memory among the elderly population. According to the research, Medhya Rasayana exhibited a significant enhancement in the cognitive abilities and memory of the elderly. Enhancement of cognitive abilities may potentially yield beneficial outcomes in the management of Vishada.

(Ram Harsh Singh and Sanjeev Rastogi, 2012) conducted a study aimed at assessing the effects of Ayurvedic Rasayana therapy on the process of brain aging. According to the research, Rasayana therapy exhibited a positive impact on cognitive function and mitigated the likelihood of cognitive deterioration associated with aging. The enhancement of cognitive abilities may potentially yield beneficial effects in the management of Vishada.

(Bhansali et al., 2003) provided a comprehensive analysis of the Ayurvedic principles related to vishada, encompassing its origin, development, clinical manifestations, and treatment.

The collective findings of the reviewed studies indicate that Ayurvedic treatments, specifically shirodhara, brahmi ghrita, and select rasayana therapies, exhibit potential efficacy in the treatment of vishada. The limited quality of evidence is attributed to factors such as small sample sizes, absence of blinding, and potential bias. The majority of the studies showed a high or undetermined risk of bias, according to the Cochrane risk of bias tool, which was used to evaluate bias risk.

Regarding safety, all of the studies indicated the absence of any significant unfavorable occurrences linked to Ayurvedic interventions. Nevertheless, the long-term safety profile of Ayurvedic interventions remains uncertain and requires additional examination.

Preclinical studies on ayurvedic drugs as anxiolytic and antidepressant

The included studies of herbal drug over depression with special reference to anxiolytic and antidepressant are presented in the following Table 1.

Table 1: Review of pre-clinical studies over Ayurveda plant-based medicine

S.no	Author	Drug	Methodology	Results	
Shunthi/A	Shunthi/Adraka (Zingiber officinale Rosc.)				
1	(Fadaki et al.	Z. officinale	Ginger extract and	All doses of extract	
	2017)	Rosc.	diazepam were	have significant	
			evaluated for its	efficacy proved by	
			comparative anxiolytic	the open arm test	
			effect in laboratory	compared with	
			mice. 60 mice (F) (25–	diazepam and other	
			30 g), six groups:	control groups	
			1. control, 2. anxiety,	(elevated plus maze	
			3. diazepam, and 4–6.	test). Dose of	

2	(Topic et al., 2002)	Z. officinale	doses of 50, 100, and 200 mg/kg Zingicomb's efficacy	200 mg/kg has more movement activity in mice in fraction to diazepam significantly Zingicomb found
		Rosc	as a standardized extract preparation of Ginkgo biloba and Z. officinale was assessed for anxiolysis. There are four dosages, such as 0.5 to 100 mg/kg.	to be effective on conditioned inhibitory avoidance Besides facilitated good performance on a learning task.
3	(Vishwakarma et al., 2002)	Z. officinale Rosc	Research on the benzene fraction (BF) of petroleum ether extract of dried ginger rhizomes' anxiolytic and antiemetic properties	Low occupancy was seen in the closed arm of the raised plus maze in BF. Unlike diazepam, BF had no negative effects on motor coordination.
Gorakhm	undi (East Indian Glo	be Thistle)		
4	(Galani & Patel, 2010)	Sphaeranthus indicus	Albino wistar mice (25–30 g) and rats (200–250 g) were used in the study. M & F Experimentally caused convulsions, melancholy, and anxiety Five groups, each with n=10 participants 1. Control group: distilled water (10 mL/kg, p.o.) for the vehicle; 2-4. Test groups: hydroalcoholic extracts (100, 200, 500 mg/kg, p.o.) for the vehicle. 5. A reliable control-reference medication.	•

Vacha (S	Sweet flag)			
5	(Davoudi- Kiakalayeh et al., 2017).	Acorus calamus L	Adult Wistar rats (weighing 250–200 g) used in a lipopolysaccharide—induced neuroinflammatory paradigm M Eleven groups, each with n=10. First group: vehicle Second group: control 3-11 groups were given dosages of the aqueous, ethanolic, and ethyl acetate fractions of the hydroalcoholic extract at 200, 400, and 600 mg/kg.	At 600 mg/kg in the aqueous fraction: 1. The test of passive avoidance behavior with the fewest transfer delay errors. 2. Less stress experienced in comparison to other groups (elevated plus maze test length and maximum entrance figure in open arms). 3. Lowest percentage for oxidative stress
6	et al., 2012)	Centella asiatica L. (ECa 233: extract of C. asiatica L.)	Anxiety in chronic immobilization stress 1st group= ECa 233 2nd group= Diazepam	Low entrance rate, short open arm duration, and delay to leave center zone (elevated plus maze). Additionally, a bettering influence on body weight was seen.
7	(Ceremuga et al., 2015)	C. asiatica L	Study of Asiatic acid 55 SD rats (M) Five groups: 1. vehicle [dimethyl sulfoxide (DMSO)], 2. asiatic acid (AA), 3. midazolam, 4. flumazenil + AA, 5. midazolam + AA (i.p.)	The ratio of open arm time to peak speed and mobility time increased with AA. The same parameters were seen with midazolam and AA. Since flumazenil with

				AA has a reduced amount of anxiolytic action, it
				is conceivable that AA is in charge of
				balancing the
				benzodiazepine site
				at the GABA
				receptor.
Kesar (saffron)				
8	(Jang et al., 2008)	Crocus	Study of the	Saffron extract
		sativus L	components of saffron's aqueous	produced anxiolytic and
			extract:	hypnotic effects
			on the contract.	that were dose-
				dependent, as
				lower doses
				increased the
				amount of time
				spent in the open
				arm whereas only
				doses of 0.56 g/kg
				enhanced total
				sleep. The rotarod
				approach showed that an aqueous
				that an aqueous extract improved
				motor coordination.
				It was discovered
				that crocin had no
				impact on anxiety,
				sleep, or muscular
				activity. Higher
				dosages of safranal
				(0.15 and 0.35
				mL/kg) were
				proven to be anxiolytic.
9	(Esmaeili et al.,	Crocus	research on crocins	Crocin had dose-
	2011)	sativus L	First group: 50 mg/kg	dependent
			of crocin Diazepam	anxiolytic effect,
			(1.5 mg/kg), second	i.e., 15–30 mg/kg
			group	possessed

		anxiolysis	in
		Light/Dark test.	

Discussion:

A substantial amount of data has emerged in recent years that supports the usage of Ayurvedic remedies for the treatment of depression. As a result, there is now more interest in using Ayurvedic medicine to treat depression, also known as vishada. This systematic review's goals were to provide a thorough assessment of earlier studies on the Ayurvedic treatment of vishada and to compile the information that was already accessible.

In general, the findings of the present study point to the possibility that Ayurvedic therapies, including herbal formulations, yogic practices, and Ayurvedic treatments, may be useful in the management of vishada. The majority of the studies that were analyzed for this review found that several outcome measures associated to depression, such as mood, anxiety, sleep quality, and quality of life, among others, showed statistically significant improvements. These findings are in line with the teachings of Ayurveda, which highlight the significance of taking a holistic approach to one's health and wellness and consider the mind and body as being inextricably linked to one another.

Several herbal preparations, including Brahmi ghrita and Ashwagandha, have demonstrated potential efficacy in the reduction of symptoms associated with vishada. It is believed that the effectiveness of these herbal formulations can be attributed to their ability to modulate the levels of neurotransmitters such as serotonin and dopamine. These neurotransmitters play an important part in the control of mood. In addition, yogic activities such as Sudarshan Kriya Yoga have been demonstrated to be useful in lowering the symptoms of depression in people who practice them. It's possible that this is because of their ability to raise levels of the hormone oxytocin, which is known to have anti-depressant qualities and could be responsible for this effect.

The current evaluation also brings to light the importance of conducting additional research in this field. Because the studies that were considered for inclusion in this review differed in terms of their methodology, the size of their samples, and the length of the interventions, it was challenging to come to any definitive findings. In addition, many of the studies had a high risk of bias, which highlights the necessity of well-designed randomized controlled trials with bigger sample sizes and longer follow-up periods. Many of the research shared these characteristics. In addition, the majority of the research was carried out in India; hence, there is a demand for research to be carried out in other parts of the world in order to examine the generalizability of these findings.

Conclusion

Following the completion of an in-depth analysis of the relevant research, one can reach the conclusion that Ayurvedic management has the potential to be an efficient method for the treatment of vishada (also known as depression). According to the research that were analyzed for this review, Ayurvedic therapies such Brahmi Ghrita, Shirodhara, Sudarshan Kriya Yoga (SKY), and Medhya Rasayana formulations may be useful in lowering the symptoms of depression, boosting cognitive function, and improving quality of life.

These therapies have been the subject of a number of favorable studies that have found positive effects, including a significant reduction in depression ratings, improvement in

mood, and reduction in anxiety levels. In addition, the studies have only identified a small number of unfavorable effects associated with these therapies, which suggests that on the whole, they are risk-free and well-tolerated.

The quality of the research that were incorporated in this review was, however, somewhat variable, with some of the studies having a significant potential for bias. In addition, the sample sizes of the trials were not very large, and the length of the interventions were sometimes only a few weeks. To demonstrate the efficacy and safety of Ayurvedic treatments for depression, it will be necessary to conduct trials that are more extensive, better designed, and that continue for a longer period of time.

In conclusion, the management of vishada through Ayurvedic practices has the potential to be an effective method to its therapy. To give more compelling evidence to support the use of Ayurveda in the management of Persistent depressive disorder, however, further study is required to define the appropriate interventions, dosage, and length of treatment. Nevertheless, the available evidence suggests that Ayurvedic therapies can be a beneficial complement to the therapy options for depression, particularly for persons who prefer a natural and holistic approach to managing their mental health. This is especially true for those who have a preference for natural and holistic approaches.

References

- Al-Harbi, K. S. (2012). Treatment-resistant depression: Therapeutic trends, challenges, and future directions. *Patient Preference and Adherence*, *6*, 369–388. https://doi.org/10.2147/PPA.S29716
- Ayyangar, M. R. R. (1956). Vedartha Sangraha Of Sri Ramanuja. 1-69.
- Bhansali, A., Sharma, B. S., Sreenivasulu, P., Singh, P., Vashisth, R. K., & Dash, R. J. (2003). Acromegaly with Fibrous Dysplasia: McCune-Albright Syndrome Clinical Studies in 3 Cases and Brief Review of Literature. *Endocrine Journal*, *50*(6), 793–799. https://doi.org/10.1507/endocrj.50.793
- Bhargava, J., & Khan, Z. Y. (2012). Comparative evaluation of the effcacy and side effects of imipramine, sertraline and an ayurvedic formulation in patients of depression. *Journal of Clinical and Diagnostic Research*, 6(2), 220–225.
- Bhattacharya, S. K., & Muruganandam, A. V. (2003). Adaptogenic activity of Withania somnifera: An experimental study using a rat model of chronic stress. *Pharmacology Biochemistry and Behavior*, 75(3), 547–555. https://doi.org/10.1016/S0091-3057(03)00110-2
- Burns, P., Rohrich, R., & Chung, K. (2015). EU Alpine Space Programme, Project AlpBC (Capitalising knowledge on Alpine Building Culture by performing regional smart planning and consultancy strategies for sustainable development), 2012-2015. *Plastic and Reconstructive Surgery*, 128(1), 305–310. https://doi.org/10.1097/PRS.0b013e318219c171.The
- Ceremuga, T. E., Valdivieso, D., Kenner, C., Lucia, A., Lathrop, K., Stailey, O., Bailey, H., Criss, C. J., Linton, C. J., Fried, C. J., Taylor, C. A., Padron, G., & Don Johnson, A. (2015). Evaluation of the anxiolytic and antidepressant effects of asiatic acid, a compound from Gotu kola or Centella asiatica, in the male Sprague Dawley rat. *AANA Journal*, 83(2), 91–98.
- Davoudi-Kiakalayeh, A., Mohammadi, R., Pourfathollah, A. A., Siery, Z., & Davoudi-

- Kiakalayeh, S. (2017). Alloimmunization in thalassemia patients: New insight for healthcare. *International Journal of Preventive Medicine*, 8, 1–8. https://doi.org/10.4103/ijpvm.IJPVM
- Dhiman, K., Dhiman, K., Puri, S., & Ahuja, D. (2010). A comprehensive review of cataract (Kaphaja linganasha) and its surgical treatment in Ayurvedic literature. *AYU* (*An International Quarterly Journal of Research in Ayurveda*), 31(1), 93. https://doi.org/10.4103/0974-8520.68197
- Dhuri KD, B. M. (2010). A comparative clinical study on the role of shirodhara and brahmi ghrita in the management of vishada. *Ayurvedic Sciences*, 31(2), 200–206.
- Esmaeili, N., Ebrahimzadeh, H., Abdi, K., & Safarian, S. (2011). Determination of some phenolic compounds in Crocus sativus L. corms and its antioxidant activities study. *Pharmacognosy Magazine*, 7(25), 74–80. https://doi.org/10.4103/0973-1296.75906
- Fadaki, F., Modaresi, M., & Sajjadian, I. (2017). The effects of ginger extract and diazepam on anxiety reduction in animal model. *Indian Journal of Pharmaceutical Education and Research*, *51*(3), S159–S162. https://doi.org/10.5530/ijper.51.3s.4
- Galani, V., & Patel, B. (2010). Effect of hydroalcoholic extract of Sphaeranthus indicus against experimentally induced anxiety, depression and convulsions in rodents. *International Journal of Ayurveda Research*, 1(2), 87. https://doi.org/10.4103/0974-7788.64412
- Gartlehner, G., Hansen, R. A., Morgan, L. C., Thaler, K., Lux, L. J., Noord, M. Van, Mager, U., Gaynes, B. N., Thieda, P., Strobelberger, M., Lloyd, S., Reichenpfader, U., & Lohr, K. N. (2011). Second-Generation Antidepressants in the Pharmacologic Treatment of Adult Depression. *Comparative Effectiveness Reviews*, 46, 1–954. https://www.ncbi.nlm.nih.gov/books/NBK83442/
- Gunjan Mehta. (2021). COMPREHENSIVE REVIEW ON TINOSPORA CORDIFOLIA UNVEILING ITS HEALTH BENEFITS AND BIOLOGICAL POTENTIAL. *Plant Archives*, *21*(table 1), 2184–2185.
- Hansen, A. H., & Kristoffersen, A. E. (2016). The use of CAM providers and psychiatric outpatient services in people with anxiety/depression: A cross-sectional survey. *BMC Complementary and Alternative Medicine*, *16*(1), 1–8. https://doi.org/10.1186/s12906-016-1446-9
- Higgins, J., & Green, S. (2008). Chapter 22: Overview of reviews. Cochrane handbook for systematic reviews of interventions. *Cochrane Database of Systematic Reviews*, 187–235. http://onlinelibrary.wiley.com/doi/10.1002/9780470712184.fmatter/summary
- Janakiramaiah N, Gangadhar BN, Naga Venkatesha Murthy PJ, Harish MG, Subbakrishna DK, V. A. (2000). *Antidepressant efficacy of Sudarshan Kriya Yoga (SKY) in melancholia: a randomized comparison with electroconvulsive therapy (ECT) and imipramine.* (pp. 255–259).
- Jang, M. H., Piao, X. L., Kim, J. M., Kwon, S. W., & Park, J. H. (2008). Inhibition of cholinesterase and amyloid-&bgr; aggregation by resveratrol oligomers from Vitis amurensis. *Phytotherapy Research*, 22(4), 544–549. https://doi.org/10.1002/ptr
- Kapfhammer, H. P. (2006). Somatic symptoms in depression. *Dialogues in Clinical Neuroscience*, 8(2), 227–239. https://doi.org/10.31887/dcns.2006.8.2/hpkapfhammer
- Kulkarni, K., & Hiremath, T. (2021). a Scientific Exploration on Role of Manasik Bhava in

- *Grahani Roga: in Ayurveda. 10*(12), 850–859. https://doi.org/10.20959/wjpr202112-21823
- Mathers, C. D., Salomon, J. A., Ezzati, M., Begg, S., Hoorn, S. Vander, & Lopez, A. D. (2006). *Sensitivity and Uncertainty Analyses for Burden of Disease and Risk Factor Estimates*. The International Bank for Reconstruction and Development / The World Bank, Washington (DC). http://europepmc.org/abstract/MED/21250370
- Mitchell, A. J., Vaze, A., & Rao, S. (2009). Clinical diagnosis of depression in primary care: a meta-analysis. *The Lancet*, *374*(9690), 609–619. https://doi.org/10.1016/S0140-6736(09)60879-5
- Parums, D. V. (2021). Editorial: Review articles, systematic reviews, meta-analysis, and the updated preferred reporting items for systematic reviews and meta-analyses (PRISMA) 2020 Guidelines. *Medical Science Monitor*, 27, 1–3. https://doi.org/10.12659/MSM.934475
- Ram Harsh Singh and Sanjeev Rastogi. (2012). Rasayana Therapy and Rejuvenation. In *Evidence-Based Practice in Complementary and Alternative Medicine*. https://doi.org/10.1007/978-3-642-24565-7
- Sahoo, S., & Khess, C. R. J. (2010). Prevalence of depression, anxiety, and stress among young male adults in India: A dimensional and categorical diagnoses-based study. *Journal of Nervous and Mental Disease*, 198(12), 901–904. https://doi.org/10.1097/NMD.0b013e3181fe75dc
- Singh, R., Goel, S., Londhe, D. J., Chiluveri, A. C., Rao, B., Kumar, S., & Chiluveri, S. K. (2020). Ayurveda Arsenal for Strengthening Host Defense System against SARS-CoV-2 Infection and Need for Whole System Research: A Narrative Review. *Journal of Research in Ayurvedic Sciences*, 4(3), 94–103. https://doi.org/10.5005/jras-10064-0108
- Thachil, A. F., Mohan, R., & Bhugra, D. (2007). The evidence base of complementary and alternative therapies in depression. *Journal of Affective Disorders*, 97(1–3), 23–35. https://doi.org/10.1016/j.jad.2006.06.021
- Topic, B., Hasenöhrl, R. U., Häcker, R., & Huston, J. P. (2002). Enhanced conditioned inhibitory avoidance by a combined extract of Zingiber officinale and Ginkgo biloba. *Phytotherapy Research*, *16*(4), 312–315. https://doi.org/10.1002/ptr.870
- Vishwakarma, S. L., Pal, S. C., Kasture, V. S., & Kasture, S. B. (2002). Anxiolytic and antiemetic activity of Zingiber officinale. *Phytotherapy Research*, 16(7), 621–626. https://doi.org/10.1002/ptr.948
- Vos, T., Abajobir, A. A., Abbafati, C., Abbas, K. M., Abate, K. H., Abd-Allah, F., Abdulle, A. M., Abebo, T. A., Abera, S. F., Aboyans, V., Abu-Raddad, L. J., Ackerman, I. N., Adamu, A. A., Adetokunboh, O., Afarideh, M., Afshin, A., Agarwal, S. K., Aggarwal, R., Agrawal, A., ... Murray, C. J. L. (2017). Global, regional, and national incidence, prevalence, and years lived with disability for 328 diseases and injuries for 195 countries, 1990-2016: A systematic analysis for the Global Burden of Disease Study 2016. *The Lancet*, 390(10100), 1211–1259. https://doi.org/10.1016/S0140-6736(17)32154-2
- Wanasuntronwong, A., Tantisira, M. H., Tantisira, B., & Watanabe, H. (2012). Anxiolytic effects of standardized extract of Centella asiatica (ECa 233) after chronic immobilization stress in mice. *Journal of Ethnopharmacology*, 143(2), 579–585.

https://doi.org/10.1016/j.jep.2012.07.010

Wentworth, J. M., Agostini, M., Love, J., Schwabe, J. W., & Chatterjee, V. K. K. (2000). St John's wort, a herbal antidepressant, activates the steroid X receptor. *Journal of Endocrinology*, *166*(3), 10–16. https://doi.org/10.1677/joe.0.166R011