IJCRT.ORG ISSN : 2320-2882

INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Evaluation Of The Effect Of Preksha Meditation In Managing The Depressive Component Of MADD

Priyanka Kumari[1]*, Jai Singh Yadav[2], Sadashiv Kumar Dwivedi[3], Girish Singh[4], Jyoti Shanker Tripathi[5]

[1] Senior Research Fellow (SRF), Department of Kayachikitsa, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi-221005, India.

[2]Professor & Head, Department of Psychiatry, Faculty of Modern Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi-221005, India.

[3]Professor, Department of Sanskrit, Faculty of Arts, Banaras Hindu University, Varanasi-221005, India.

[4]Scientific Assistant &Statistician, Division of Biostatistics, Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University, Varanasi-221005, India.

[5]Professor &Former Head, Department of Kayachikitsa, Faculty of Ayurveda, Institute of Medical Sciences, Banaras Hindu University, Varanasi-221005, India.

Abstract:

OBJECTIVE: Depression is one of the most common mental illnesses in the world. Depression as a disorder has always been the focus of attention of researchers. Over the last 50-60 years, large number of studies have been published from India addressing various aspects of this commonly prevalent disorder. Preksha Meditation is an effective intervention for the management of depressive Disorder. However, the influence of Preksha Meditation on depression in patients has not been studied. Therefore, the present study has been undertaken.

METHODS: It was an Interventional study that consisted of two groups of patients who were suffering from Depressive Disorders. The patients were recruited from Deptt. Of Kayachikitsa and Deptt. Of Psychiatry, Sir Sundar Lal Hospital, IMS, BHU, Varanasi. The patients of experimental group A underwent Preksha Meditation practice for 30 minutes daily once in the morning for a total period of 30 days. The patients registered under control group B were kept only on medication. In each group, there were 25 patients aged between 20yrs to 60 years belonging to both sexes. The assessment of the patients was done before the start of the trial and after the session using the DASS-42 scale.

RESULTS: Results showed a significant change in experimental group A as Preksha Meditation positively decreased the Depression level of subjects in comparison to Group B.

CONCLUSION: Preksha Meditation can be considered as an effective non-pharmacological practice for reducing Depression which starts revealing effects in a short duration, as it relieves the Depression of the patients only after four weeks of practice. So, it can be said that this technique would have a better and more profound effect on depression management, if practiced for a longer duration.

Keywords: Preksha Meditation, Depression, Alternative Therapy, Therapeutic Yoga Practice, Mental Health.

Introduction:

Depression is the most common mental disorder in the world which affects one's mood and action . According to the most recent World Health Organization report, depression is the leading cause of disability worldwide and is believed to be a major contributor to the overall global burden of disease.[1]

Major depression is a common and recurrent disorder associated with considerable morbidity and mortality. Population studies have consistently shown major depression to be about twice as common in women as in men, although it is yet unclear why this is so.[2]People are most likely to suffer their first depressive episode between the ages of 30 and 40, and there is a second, smaller peak of incidence between ages 50 and 60.[3] The risk of major depression is increased with neurological conditions such as stroke, Parkinson's disease, or multiple sclerosis and during the first year after childbirth.[4]The risk of major depression has also been related to environmental stressors.[5,6]

Depressive disorders are most common in urban than in rural population and, in general, the prevalence is higher in groups with adverse socio-economic factors.[7]

Depression is different from general mood ups and downs and emotive acknowledgment to challenges in daily life. Depression may become a serious health condition. When depression becomes worst, it can lead to suicide. Approximately 800000 people die due to suicide per year.[8]
Treatment for depression consists of participation in psychotherapy, taking antidepressants, or a combination of both. However, many individuals do not participate in psychotherapy or antidepressants due to factors such as unmet needs, side effects, lack of
Access/ resource, and personal choice.

Currently, researchers are studying the efficacy and effectiveness of mind-body interventions such as yoga as an alternative and complementary treatment for depression. Yoga, with its origin in ancient India, is recognized as a form of alternative medicine that implements mind-body practices. The philosophy of yoga is based on 8 limbs that are better described as ethical principles for meaningful and purposeful living.[9]

The slow rhythmic breathing practices and meditative/ relaxation practices of yoga are designed to induce a sense of calm, well-being, stress tolerance, and mental focus, all of which may minimize depression, anxiety, stress, and rumination.[14]

Presently many meditation techniques are being practiced. However, all of them can be grouped into two basic approaches- concentrative meditations and mindfulness/insight meditations. Concentration meditation, e.g. transcendental meditation (TM) aims at single-pointed focus on some sound, image or sensation to still the mind and achieve greater awareness. Mindfulness meditation e.g. vipashyana and zen meditation on the other hand involves opening up or becoming more alert to the continuous passing stream of thoughts, images, emotions and sensations without identifying oneself with them.

'Preksha Meditation' (PM) is a special type of meditation propounded by Acharya Mahaprajna, the Jain Monk, in 1978 as a remedy for the mankind suffering from stress, tension, frustration, depression and ill health. Though primarily a mindfulness practice, it has element of concentration also. It aims at awakening one's own mind resulting in changes in attitude, personality, behaviour and emotion. It has eight components which are used in different combinations i.e. Kayotsarg (relaxation), Anteryatra (internal trip), Shwas preksha (perception of

breathing), Shareer preksha (perception of body), Chaitanya kendra preksha (perception of psychic centers), Leshya dhyana (perception of psychic colours), Anupreksha (contemplation), bhavana (positive feelings).[10]

Materials & Methods:

Objectives:

To evaluate the effect of the Preksha Meditation in the management of Mixed Anxiety Depressive Disorder with special focus on Depression component

Type of Study and Patient recruitment

The present study is Parallel arm interventional open controlled clinical trialstudy. The study consisted of two groups of patients who were suffering from Mixed Anxiety Depressive Disorder as per diagnostic criteria of DSM- IV.[23] In both the groups, there were 25 patients aged between 20yrs to 60yr belonging to either sex.

The patients were recruited from Neuro – Psychiatric &Psychosomatic Medicine division (Manas Chikitsa) , Deptt. Of Kayachikitsa and Deptt. of Psychiatry, Sir Sundar Lal Hospital, Institute of Medical Sciences, Banaras Hindu University, Varanasi.

Study Groups

The patients of experimental group 1, underwent Preksha Meditation practice for 30 minutes daily once in morning for total period of 30 days as an add on therapy to ongoing medication. The patients had been provided the audio recording of instruction of Preksha Meditation to avoid any variation in the practices after initial period of direct training and instruction .

The patient registered under group 2 were taken as Control group did not receive any intervention and were kept only on medication.

Trial Intervention:

Components of Practical trial session of Preksha Meditation(PM)

Following components of Preksha Meditation were advocated to the patients of Group one as per the described protocol-

Preparatory Step (5 minutes) consisting of Dhyanasan,Veet-raga Mudra, Dhyan Mudra, Maha pran Dwani, Sankalp(Resolve) followed by **Kayotsarga (5 minutes),Antaryatra (Internal Trip) -5 minutes, Shwas Preksha (10 minutes)**consisting of Deergha Shwas Preksha (Deep Breathing)& SamaVritti Shwas Preksha (Alternative Breathing) followed by **Jyoti Kendra Preksha (4 minutes) and Completion step at the end.(1 minutes)**

Kayotsarg (relaxation) refers to relaxation of the body with full awareness. It is the first step in Preksha Meditation, through which the stability of body is achieved, the muscles are relieved from stress and relaxed by autosuggestion.

Antaryatra: The second step of Preksha meditation is the practice of internal trip through the spinal cord. Awareness is taken to the lower end of the spinal cord, called the Centre of Energy and then the mind is allowed to go upward inside the spinal cord (Sushumna Nadi) upto the top of the head called the Centre of Knowledge. The same process is repeated again and again. Thus, in Antaryatra practice , the conscious mind travels from Saktikendra to Jnana Kendra (knowledge centre, crown of the head) via the spinal cord.

Shvasa Preksha

During the practice of Shvasa Preksha , the practitioner is asked to take slow but deep breaths with the closed eyes .The person is asked to pay his attention and feel its presence at naval region. On breathing in, stomach expands and on breathing out, stomach contracts. The person has to be aware of this expansion and contraction at naval region. It is ensured that not a single breath goes unnoticed. The breathing is regulated in such a way that inhalation and exhalation process takes equal time. It should be synchronized. Then, the attention is diverted to the tip of nostrils. Awareness of breathing process is created . While breathing in, a sensation of cool air and while exhaling, a sensation of warm air is created at the tip of nostrils. A vigilant eye on movement of breaths is kept.

Jyoti Kendra preksha

Under the Jyoti Kendra Preksha the conscious mind is concentrated at the middle of the forehead. A bright white colour is visualized over there. Visualization is made that the full moon is rising and it's bright radiations are spreading on the Centre of Enlightenment. Experience is made that anger is going away, the negative emotions and passions are being pacified and excitations are subsiding.

After two to three minutes, mind is allowed to spread throughout the forehead and perceive the bright white colour there, entering the forehead is experienced. The peace of mind and inner Bliss is experienced.

Parameters for assessment of Response of Clinical Trial

The assessment of patient was done before the start of trial and after the Thirty days at the end of the study using the DASS-42 scale (Depression Anxiety Stress Scale) which was developed by Lovibond. & Lovibond in 1995. In 2013 it was translated and validated in Hindi by Bhupinder Singh and Amol R Singh with overall reliability of the scale is .83

The DASS is a 42-item questionnaire which includes three self-report scales designed to measure the negative emotional states of depression, anxiety and stress. Each of the three scales contains 14 items, divided into subscales of 2-5 items with similar content.

The Depression component of scale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia.[11]

Results:

Study of Demographic Profile

The following details of patients were taken under the demographic profile: -

Age, Gender, Habitat (Rural/Urban),Marital Status, Religion, Education, Occupation, Socio-Economic Status, and Family Type(nuclear/joint).Socio-economic status: It was assessed using *Modified BG Prasad Socio-economic Classification, Updated-2020.*[22]

All 50 enrolled cases completed the study. The demographic characteristics of all the 50 randomized cases are shown below in Table 1. In group A (Preksha Meditation), the Majority of patients of depressive disorders belonged to the age groups 31 to 40 (N=13,52%), male cases (N=13,52%) were more than females (N=12,48%), and more cases belonged to the urban habitat (N=16,64%), unmarried (N=15,60%), Hindu(N=23,92%), graduate (N=10,40%),Student/unemployed(N=12,48%), Upper Middle class (N=11,44%)and the nuclear family (N=17,68%).

Table1: Distribution of the patients of the two trial groups based on their Demographic characteristics

Demographic Factors	Categories	Number & Percentage(%) of Patients in Group A(N=25)		Number & Percentage(%) of Patients in Group B (N=25)	
Age Groups	20-30	7	28%	8	32%
	31-40	13	52%	12	48%
	41-50	4	16%	5	20%
	51-60	1	4%	0	0.0%
	Total	25	100%	25	100%
Gender	Male	13	52%	14	56%
	Female	12	48%	11	44%
	Total	25	100%	25	100%
Habitat	Rural	9	36%	7	28%
	Urban	16	64%	18	72%
	Total	25	100%	25	100%
Marital Status	Married	10	40%	9	36%
	Unmarried	15	60%	16	64%
	Total	25	100%	25	100%
Religion	Hindu	23	92%	24	96%
	Muslim	2	8%	1	4%
	Total	25	100%	25	100%
Education	Higher	6	24%	5	20%
	Secondary	4	16%	5	20%
	Graduate	10	40%	11	44%
	PostGraduate	5	20%	4	16%
	Total	25	100%	25	100%
Occupation	Student /Unemployed	12	48%	14	56%
	Employed /Business	10	40%	9	36%
	House Wife	3	12%	2	8%
	Total	25	100%	25	100%
Socio-Economic Status	LowerMiddle Class	4	16%	3	12%
	Middle Class	10	40%	12	48%
	UpperMiddle Class	11	44%	10	40%
	Total	25	100%	25	100%

Family Type	JointFamily	8	32%	7	28%
	NuclearFamily	17	68%	18	72%
	Total	25	100%	25	100%

In group B (Control Group), Majority of patients of depressive disorders belonged to the age groups 31 to 40 (N=12,48%), male cases (N=14,56%) were more than females (N=11,44%), and more cases belonged to the urban habitat (N=18,72%), unmarried (N=16,64%), Hindu(N=24,96%), graduate (N=11,44%),Student/unemployed(N=14,56%),Middle class (N=12,48%)and the nuclear family (N=18,72%).

Changes in Depression Score

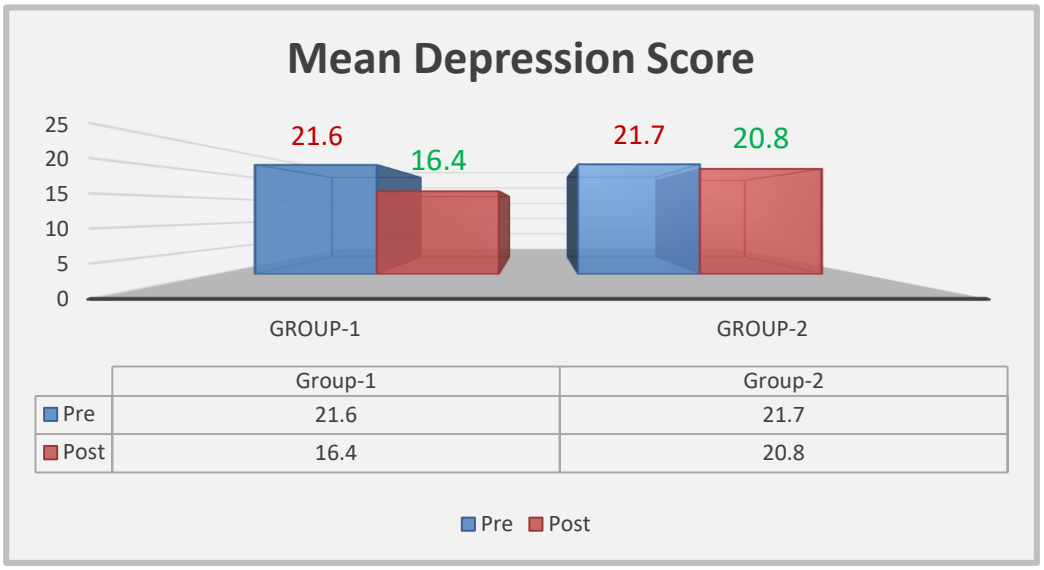
In the patients of Group1, the initial Mean Depression Score was 21.60, which reduced to 16.40 after intervention and this change of the mean was statistically significant. In Group2 initial Mean Depression Score was 21.70 which became 20.80 after intervention, and this change of the mean difference was also significant.

The intergroup comparison was not statistically significant initially but highly statistically significant after intervention.

Table: Table showing changes in Mean Depression Score in the two groups of the patients of Depression syndrome.

Group	Depression Score Mean ± SD		Within the group Comparison paired t test
	Pre	Post	
Group1(Experimental)	21.60 ±5.275	16.40 ±4.526	5.200±2.741 t=6.000 p=0.000
Group2(Control)	21.70 ±3.592	20.80 ±3.155	0.900±0.568 t=5.014 p=0.001
Between the group comparison unpaired t test	t=0.0783 p=0.9379	t=3.9876 p=0.0002	

Figure: Mean Depression Score



Result shows significant change in the experimental group 1 as Preksha Meditation positively decreased the depression level of Patients as compared to Group 2.

Discussion:

The present study has demonstrated that the addition of Preksha Meditation to medical management significantly increased the level of improvement in Depressive status. It also indicates that the practice of Preksha Meditation acts synergistically with ongoing therapy and significantly improves the level of clinical response. Current research supports the idea that various yoga interventions can help participants improve self-reported perceptions of stress and improve the episodes of major depression.[15-17]

Intergroup analysis showed that the intervention group Preksha Meditation revealed better antidepressant effect as compared to the control group and a significant difference was found between the medication (control) and the intervention (Preksha Meditation) groups. Preksha Meditation (intervention group) has been found more effective as compared to control group .Thus better effect of the Preksha Meditation intervention was observed. Though the present investigation revealed that the medication (control) group also showed significant intra group results in the Depression level.

Another study demonstrated that combined Preksha dhyana meditation group has shown significant improvements in affect, attention, and short-term memory in a prospective cohort-controlled study. Improvements over baseline in affect for both Positivity and Negativity, as well as inattention and impulsivity, and improved short-term memory for numbers and words were seen. Benefits were seen in both genders. In other studies, mindfulness showed improvement of mood in college students, especially depression as well as stress reduction.[18 The] prefrontal cortex has been associated with enhanced cognitive focus and the parietal lobe with improved spatial cognition.[19] In another work, the study group using a focused meditation technique (colour) showed increased attentiveness and spatial recall ability, while this was not the pattern seen in the sound-based group. In a small but randomized controlled trial, short-term training with meditation over 8 weeks also led to increased functional connectivity between the amygdala and a region implicated in emotion regulation.[20] This finding suggests neuroplasticity even in short-term intervention. Other studies showed that different techniques activate different brain areas and stimulate different brain wave patterns.

In experienced meditators, EEG[21] and functional magnetic resonance imaging have shown that different meditative techniques correlate with variable activation in different brain areas. The study strengths included the large group size, subject retention in the intervention group, and using the length of buzzing as in internal marker of adherence. In addition, the use of Bonferroni correction reduced type 1 errors.

Different research findings directed on the general advantages of yoga researches have demonstrated resulting decrease in depression, stress and anxiety levels.[12,13]The results also indicate improvements in mood, quality of life, and general well-being. Specifically, Preksha Meditation is qualitatively different from other forms of relaxation, though being categorised as relaxation technique.

Conclusion:

Yoga is being used more and more as an alternative form of treatment for improving many conditions. One way that yoga is used is in individuals with depressive symptoms. Recently, researchers have examined the benefits and effectiveness of depression for managing depressive symptoms. This study reveals that yoga provides limited evidence that a restricted number of studies may influence depression outcomes in various populations. Many more interventions are needed to substantiate and understand the impact of yoga and depression in a complete way.

Preksha Meditation can be considered as an effective non-pharmacological practice for reducing Depression which starts revealing its effect in very short duration, as it relieved the reduction in Depression symptoms of the patients only after one month of practice. It can be presumed that technique would have exerted better and more profound effect on Depression management if practiced for longer duration.

References

1. World Health Organization. Depression. http://www.who.int/mediacentre/factsheets/fs369/en/. Accessed June 6, 2016. [Google Scholar]
2. Gender differences in unipolar depression: An update of epidemiological findings and possible explanations. Acta Psychiatrica Scandinavica. 2003;108(3):163–74. [Google Scholar]
3. Eaton WW, Anthony JC, Gallo J. Natural history of diagnostic interview schedule/DSM-IV major depression. The Baltimore Epidemiologic Catchment Area follow-up. Archives of General Psychiatry. 1997;54(11):993–99. [Google Scholar]
4. Rickards H. Depression in neurological disorders: Parkinson's disease, multiple sclerosis, and stroke. Journal of Neurology, Neurosurgery, and Psychiatry. 2005;76:i48–i52. [Google Scholar]
5. Rotenstein, Lisa S.; Ramos, Marco A.; Torre, Matthew; Segal, J. Bradley; Peluso, Michael J.; Guille, Constance; Sen, Srijan; Mata, Douglas A. (2016-12-06). "Prevalence of Depression, Depressive Symptoms, and Suicidal Ideation Among Medical Students: A Systematic Review and Meta-Analysis". JAMA. 316 (21): 2214–2236. ISSN 1538-3598. [Google Scholar]
6. Douglas A. Mata; Marco A. Ramos, Narinder Bansal, Rida Khan, Constance Guille, Emanuele Di Angelantonio & Srijan Sen (2015). "Prevalence of Depression and Depressive Symptoms Among Resident Physicians: A Systematic Review and Meta-analysis". JAMA. 314 (22): 2373–2383. [Google Scholar]
7. Psychiatry, 4th edition - Oxford University Press, 2012 by By John Geddes, Jonathan Price, Rebecca McKnight page 222 [Google Scholar]
8. World Health Organization “https://www.who.int/news-room/fact-sheets/detail/depression”
9. Woodard C. Exploring the therapeutic effects of yoga and its ability to increase quality of life. Int J Yoga. 2011;4(2):49–54. [PubMed]
10. Sanchetee P, Jain A, Agarwal H. Preksha Meditation and Mental Health in Elderly. Journal of the Indian Academy of Geriatrics. 2017 Sep 1;13(3).
11. Singh, B., Singh, A. R., Prabhuappa, K. P. & Eqbal, S. Depression, anxiety and stress scale: Reliability and validity of Hindi adaptation. Int. J. Educ. Manag. 3, 446–449 (2013).
12. Vorkapic, C. F. & Rangé, B. Reducing the symptomatology of panic disorder: The effects of a yoga program alone and in combination with cognitive-behavioral therapy. Front. Psychiatry 5, 3–4 (2014).
13. Balasubramaniam, M., Telles, S. & Doraiswamy, P. M. Yoga on our minds: A systematic review of yoga for neuropsychiatric disorders. Front. Psychiatry 3, 2–3 (2013).
14. Kinser PA, Goehler LE, Taylor AG. How might yoga help depression? A neurobiological perspective. Explore (NY). 2012 Mar-Apr;8(2):118-26. doi: 10.1016/j.explore.2011.12.005. PMID: 22385566; PMCID: PMC3293477.

15. Banerjee B, Vadiraj HS, Ram A, et al. Effects of an integrated yoga program in modulating psychological stress and radiation-induced genotoxic stress in breast cancer patients undergoing radiotherapy. *Integrative Cancer Therapies.* 2007;6(3):242–250. [PubMed] [Google Scholar]
16. Harinath K, Malhotra AS, Pal K, et al. Effects of Hatha yoga and Omkar meditation on cardiorespiratory performance, psychologic profile, and melatonin secretion. *Journal of Alternative & Complementary Medicine.* 2004;10(2):261–268. [PubMed] [Google Scholar]
17. Kjellgren A, Bood SA, Axelsson K, Norlander T, Saatcioglu F. Wellness through a comprehensive yogic breathing program - a controlled pilot trial. *BMC Complementary & Alternative Medicine.* 2007;7:43. [PMC free article] [PubMed] [Google Scholar]
18. Mendes, A., and Palmer, S. J. (2016). The value of mindfulness in people with long-term conditions. Br. J. Community Nurs. 21:532. doi: 10.12968/ bjcn.2016.21.10.532
19. ff S omers, D. C., and Sheremata, S. L. (2013). Attention maps in the brain. Wiley Interdiscip. Rev. Cogn. Sci. 4, 327–340. doi: 10.1002/wcs.1230
20. K ral, T. R. A., Schuyler, B. S., Mumford, J. A., Rosenkranz, M. A., Lutz, A., and Davidson, R. J. (2018). Impact of short- and long-term mindfulness meditation training on amygdala reactivity to emotional stimuli. NeuroImage 181, 301–313. doi: 10.1016/j.neuroimage.2018.07.013 Lehmann, D., Faber, P. L., Achermann, P., Jeanmonod, D
21. Dunn, B. R., Hartigan, J. A., and Mikulas, W. L. (1999). Concentration and mindfulness meditations: unique forms of consciousness? Appl. Psychophysiol. Biofeedback 24, 147–165. doi: 10.1023/A:1023498629385
22. Pentapati SSK, Debnath DJ. Updated BG Prasad's classification for the year 2022. J Family Med Prim Care. 2023 Jan;12(1):189-190. doi: 10.4103/jfmpc.jfmpc_1478_22. Epub 2023 Feb 15. PMID: 37025231; PMCID: PMC10071936.
23. Diagnostic and statistical Manual of Mental Disorders, Fourth Edition, Text revision DSM - IV TR, American Psychiatric Association Jaypee Brothers , New Delhi . 2005