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Research Article

ROLE OF YOGA IN MANAGEMENT OF DEPRESSION

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Abstract

Depression is a mental state characterized by feeling of sadness, loneliness, despair of self esteem and self reproach; accompanying signs including psychomotor retardation, withdrawal from interpersonal contact and vegetative symptoms such as insomnia and anorexia. Depression is a mood disorder. Mood is a pervasive and sustained feeling tone that is experienced internally that influences a person's behavior and perception of the world. Mood disorders always result in impaired interpersonal, social and occupational functioning. This leads to physical and mental health related problems result in considerable disability, a heavy burden of suffering and economic loss. Most of the depressive patients take anti depressive drugs. This often leads to serious side effects. Yoga is an ideal antidote to combat these types of problems. Yoga postures can increase the level of neurotransmitters GABA which alleviates depression. This study was done to evaluate the effect of yoga in management of depression. The data analysis showed 91.3 % (<0.003) relief in symptom of depressed mood, 73.3 % (<0.003) relief in feeling of guilt whereas 88.4 % (<0.002) relief was seen in symptom of difficulty in work and activity.

Keywords: Depression, Yoga, Mood, GABA, Neurotransmitters

INTRODUCTION

Depression is defined as a change in mood characterized by feeling of "tone of sadness" which may vary from mild despondency to the most abject despair. This change in mood is relatively fixed and can persist over a period of days, weeks, months or years. Depression is the most common disorder occurs in this fast paced world. Around 121 million across the world peoples suffer from this disorder. The life time prevalence of depression is 2-25% where females are at two fold risk. The age of onset is mid to late twenties. Strong family history supports the disease. Usually disease onset is followed by negative life events. Yoga is an ideal antidote for such type of problems. Surya namaskara is the integral part of the yogic approach to these problems. Its versatility make it special not only for induction of healthy life but also for spiritual awakening.¹ Surya namskara is more than a physical exercise because it stretches, massages, tones and stimulates all the muscles by alternatively forwards and backwards bending of the body.² No yoga session is complete without the final pose – Savasana. Savasana has a regenerative effect on the mind and the body. It provides relief from any kind of stress and strain in a few minutes. The breath is the most vital process of the body. It influences the activities of each and every cell and most importantly is linked with the function of the brain. Most of the people breath incorrectly, use only small part of their lung capacity. The breathing is generally shallow, depriving the body of oxygen essential to its good health. Irregular breathing disrupts the rhythm of the brain and leads to physical emotional and mental blocks these in

turn lead to inner conflict, a disordered lifestyle and disease. Pranayama establishes a regular breathing patterns, breaking this negative cycle and reverses the debilitating process. It does by giving us a control on breath and re-establishment the natural, relaxed rhythms of the body and mind.

Aims & objectives

To study the role of yoga in management of depression

MATERIAL AND METHODS

10 B.A.M.S students participated in this study. Hamilton Depression Rating Scale Performa were collected before and after study. Consent were taken from subjects and study was approved by DRC.

Inclusion criteria

- Age group of the patient was taken between 18-30 years
- Written consent was taken from the patient
- Their score was in between the mild to moderate depression
- Hb, DLC, TLC, FBS, Urea & Creatinine, Thyroid (as available) was done

Exclusion criteria

- Depressive phase of substance abuse disorder
- Post schizophrenic depression
- Psychosis
- Suicidal ideation
- Any other co morbidity
- Depressive phase of bipolar disorder

Method

It was an open study

Source

The subjects for this study were taken from NIA, India (B.A.M.S under graduate students)

Criteria of assessment

The subjects were assessed on the basis of improvement in the sign and symptoms and Hamilton depression rating scale. To give some objectivity to the symptoms, each symptom was assigned suitable score. The scoring adopted for this was as follow.

The norms below give the idea of the level of depression.

- Score 0-7 Normal
- Score 8-14 Mild Depression
- Score 15-18 Moderate Depression
- Score 18-22 Severe Depression

Intervention: Surya Namaskara , Shava asana , Bhramari Pranayama

RESULTS

Subjects were professed 91.3 % relief in depressed mood, 73.3% relief in feeling of guilt, more than 65% relief was seen in insomnia early, 88.4 % relief was found in symptom of difficulty in work and activity and More than 65% relief was seen in agitation which are statistically highly significant

results. whereas 90% relief was seen in insomnia middle, 66.6% relief was seen in anxiety somatic and, 77.7% relief was seen in genital symptoms i.e. dysmenorrhoea ,irregular periods etc these results are statically significant. But more than 70% relief was seen in the symptoms of loss of weight, insight and diurnal variations, 50% relief was seen in anxiety (psychological) which is not statically significant (Table 1-9).

DISCUSSION

The above results may be due to Paroxysmal gamma waves produced in brain during the Bhramari Pranayama³ which is associated with positive thoughts, feelings of happiness and acts as a natural antidepressant.

PNS is associated with a relaxed and calm state of mind and body, its activation occurs in Bhramari Pranayama and Shavasana..

Surya namaskara which interacts with the organs of the body directly by applying pressure, massaging, stretching and generally toning up and supporting internal tissue structures. In this way it enhances well being⁴.

Bhramari Pranayama, Shavasana both of these calm the nervous system and bring in a mental state of calm and peace. In other words yoga has good effect on physical mental health. It may be due to vibration produced in Bhramari Pranayama “Creating a vibration in the skull leaves no room for negative spiraling thoughts and that calms the mind.” says Weintraub and it also decreases the activity of sympathetic nervous system.

Table 1: Age wise distribution of 10 patients of depression

Age	21-24	24-28	28-31
No. of patients	01	06	03
Percentage	10	60	30

Table 3: Education wise distribution of 10 patients of depression

Education	1 st year	2 nd year	3 rd year	Total
No. of patients	01	06	03	10
Percentage	10	60	30	100

Table 5: Habitat wise distribution of 10 patients of depression

Habitat	Urban	Rural	Total
No. of patients	07	03	10
Percentage	70	30	100

Table 2: Sex wise distribution of 10 patients of depression

Sex	Male	Female	Total
No. of patients	04	06	10
Percentage	40	60	100

Table 4: Socio economic status wise distribution of 10 patients

Socio economic status of patients	Upper middle	Middle	Lower middle	Total
No. of patients	06	04	00	10
Percentage	60	40	00	100

Table 6: Religion wise distribution of 10 patients of depression

Religion	Hindu	Muslim	Sikh	Jain	Total
No. of patients	08	01	00	01	10
Percentage	80	10	00	10	100

Table 7: Showing the “incidence of chief (psychic and somatic) complaints ” in 10 patients of depression

S. No.	Symptoms	No .of patients	Percentage
1.	Depressed mood	10	100
2.	Feeling of guilt	10	100
3.	Insomnia early	10	100
4.	Insomnia middle	7	70
5.	Insomnia late	2	20
6.	Work and activity	10	100
7.	Agitation	10	100
8.	Anxiety psychological	8	80
9.	Anxiety somatic	9	90
10.	Somatic symptoms	5	50
11.	Somatic symptoms (gastrointestinal)	8	80
12.	Genital symptoms	9	90
13.	Weight loss	5	50
14.	Diurnal variation	7	70

Table 8: Effect of yoga on Hamilton Rating Scale

Group 1	Mean		Mean Diff.	% of relief	SD	SE	T	W	P	Result
	BT	AT								
Depressed mood	2.3	0.2	2.10	91.3	0.8	0.2	7.58	45	0.003	V.S.
Feeling of Guilt	1.5	0.4	1.10	73.3	0.5	0.1	6.13	45	0.003	V.S.
Insomnia early	1.6	0.5	1.10	68.7	0.7	0.2	4.71	36	0.007	V.S.
Insomnia middle	1.0	0.1	0.90	90.0	0.74	0.23	3.86	28	0.015	S
Insomnia late	0.3	0.2	0.10	33.3	0.7	0.2	0.4	3	0.812	N.S.
Work and activities	2.6	0.3	2.30	88.4	0.6	0.2	10.	55	0.002	V.S.
Agitation	2.4	0.5	1.90	79.1	0.8	0.2	6.8	55	0.002	V.S.
Anxiety Psychology	0.8	0.4	0.40	50.0	0.5	0.1	2.4	10	0.125	N.S.
Anxiety Somatic	0.9	0.3	0.60	66.6	0.5	0.1	3.6	21	0.031	S.
Somatic symptoms (gastrointestinal)	0.5	0.3	0.29	40.0	0.6	0.2	1.0	5	0.37	N.S.
Somatic symptoms (general)	0.8	0.3	0.50	62.5	0.5	0.1	3.0	15	0.625	N.S.
Genital symptoms	0.9	0.2	0.70	77.7	0.4	0.1	4.5	28	0.015	S
Loss of weight	0.5	0.1	0.40	80.0	0.7	0.2	1.8	14	0.153	N.S.
Insight	0.7	0.2	0.50	71.4	1.0	0.3	1.4	16	0.218	N.S.
Diurnal Variation	0.7	0.2	0.50	71.4	0.5	0.1	3	15	0.062	N.S.

Table 9: Objective Parameters

Group 1	Mean		Mean Difference	%	SD	SE	T	P	Result
	BT	AT							
Hb	12.10	12.49	-0.39	-3.22	0.95	0.30	-1.30	0.2261	N.S.
TLC	6650	5890	370	5.56	1803.11	570.19	0.65	0.020	S.
DLC (N)	54.70	56.90	-2.20	-4.02	6.71	2.12	-1.04	0.3271	N.S.
L	39.70	39.50	0.20	0.50	7.24	2.29	0.09	0.9323	N.S.
EOS	3.30	2.10	1.20	3636	1.40	0.44	2.71	0.0239	S.
MONO	2.30	2.10	0.20	8.70	1.32	0.42	0.48	0.6424	N.S.
BLOOD SUGAR	76.97	79.98	-2.31	-3.00	17.15	5.42	-0.43	0.6801	N.S.
BLOOD UREA	29.41	29.26	0.15	0.15	3.09	0.98	0.15	0.88	N.S.
BLOOD CREATININE	0.78	0.82	-0.04	-5.13	0.17	0.05	-0.74	0.479	N.S.

No significant result has been seen in objective parameters

Surya namaskara because it is a valuable exercise for toning and regulating female reproductive systems and promotes the production as well as release of endorphins (natural painkiller of body). It massages the reproductive system and improves the circulation whereas *Bhramri pranayama* and *shavasana* decrease the anxiety as well as regulate the endocrine system.⁵

CONCLUSION

Depression is a disorder of fast paced life. The environment in which we are living is full of stress and tension. We are unable to adjust our self according to environment because health is not a stable state; it is a result of continuous adjustment of a person with its environment. So yoga is a good tool to maintain physical and mental health. *Surya namaskara* is not only a physical exercise, it also gives a mental peace to a person. *Surya namaskara* stimulate the sympathetic nervous system. It is followed by *shava asana*

which stimulate the parasympathetic nervous system and pacifies the sympathetic nervous system. In this way it helps in regulation of whole nervous system. *Bhramari pranayama* increases the concentration, relieve the anxiety.

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