

Depression and anxiety: Yoga as a remedy

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Abstract

Anxiety and depression are two most common mental health disorders concern in our society. Depression is the leading cause of disability worldwide. Yoga is for awareness of body and to calm the mind. Yoga therapy is effective in people suffering from depression and anxiety. Gama-amino-butyric-acid and serotonin level in brain significantly increases immediately after yoga. Yoga improves quality of life in people with mental disorders.

Keywords: depression, anxiety, yoga

Introduction

Anxiety and depression are the most common mental health concern in our society. Both disorders may occur together. It can be difficult to differentiate between them but it's important to treat both illnesses because they are associated with serious mental disturbances like memory loss, sleep disorders and thoughts of death or suicide [1].

Anxiety is a state of excessive fear. The acute stress response characterized by a state of abnormal or exaggerated fear [2].

Feeling worried or nervous is a normal part of everyday life but overwhelming anxiety interfering with daily life is not normal [3]. It includes panic disorder, obsessive compulsive disorder post-traumatic stress disorder, phobias [4].

Depression is typically characterized by low energy and mood, low self-esteem and loss of interest. The major depressive disorder (MDD) as a persistent depressed mood or loss of pleasure for at least two weeks accompanied by constellation of other symptoms that may include feeling of guilt or worthlessness, cognitive slowing, changes in sleep, changes in appetite and potential suicidal ideations [5].

Epidemiology

Depression affects people in all communities across the world. Depression affecting over 350 million people in worldwide. The world mental health conducted survey in 17 countries from where found on average about 1 in 20 people reported having a depressive disorder in the previous year [6]. According to WHO, depression was third leading global burden all over the world in 2004 [7]. Depression starts at young age they reduce people's functioning and for this reason depression is leading cause of disability in worldwide (WHO, 2012) [6]. It is estimated 1-2% India's population are affected with serious mental disorder and 5% population are affected with minor depressive disorder. A number of studies indicate that 20-25% patient attending primary care from depression and anxiety disorder [8]. According to survey the worldwide prevalence and burden of GAD to be in range of 1 and 22%. Anxiety affects one eight of the total population of the worldwide. About 85% depressive patient also experience

significant symptoms of anxiety [9]. In Australia, the 12-month prevalence of anxiety disorders is 14.4% and of effective disorder 6.2%. 39% individuals with generalized anxiety disorder also meet criteria for depression [1]. The overall prevalence rate for anxiety disorder is 24.9 % in India [10].

Pathophysiology of anxiety and depression

The GABA and Serotonergic neurotransmitter system have been implicated in anxiety and depression. GABA inhibitory neurotransmitter inhibits nerve transmission. In anxiety the level of GABA reduces [10]. The monoaminergic system involves in the regulation of brain functions, including mood, sleep, attention appetite and cognition. Serotonin neurotransmitter involved in the regulation of mood, anxiety pain and sleep. Serotonin may be metabolized by monoamine oxidase (MAO) causes serotonin deficiency. Serotonin reduction leads to the development of depressive symptoms [11].

Role of Yoga in Anxiety and Depression

Yoga is word taken from the language Sanskrit which means "union". According to Swami Vivekananda yoga includes following key principles for health: Relaxation (savasana), physical movement (asana), breathing practice (paranyama), meditation (dhyana) [5]. Yoga therapy is generally safe [5] and cost effective and easy to implement in daily life [12]. It helps human mind to get relief from stress and tension. Yoga has been used to reduce the symptoms of anxiety and depression [13] and help a lot to become healthy, fit and fine. Asana (paranyama techniques) focused on internal awareness and cleanliness [15]. In a study published in 2007 it was shown that yoga showed significantly reduction in case of anxiety and depression. Mood improved after the yoga classes were observed [12]. Yoga aim by mean of awareness of body and mind, it is a mindful exercise [16]. It is complex system of spiritual, moral to attaining self-awareness [17]. Yoga maintains mental activity and eventually reaching a clear state of mind [17].

Effect of yoga on neurotransmitters that involved in anxiety and depression

Stress and depression are clearly linked a stress may precipitate or exacerbate depressive symptoms and depression may be a cause and outcome of acute or chronic stress [5]. Level of GABA, inhibitory neurotransmitter enhances in anxiety and depression [13]. According to randomized controlled MRS (magnetic resonance study) conducted in 2010 year it was observed that GABA level in brain significantly increases immediately after yoga. This is the first study to report positive correlation between thalamic GABA levels and improved mood or decreased anxiety and depression [14]. The strongest evidence in benefits of yoga through direct influence on the sympathetic and parasympathetic activity in autonomic nervous system is common evidence. It suggests the respiratory effect of pranayama, visualization and calming effect in dhyana as well as motor movement in asanas reduce sympathetic activation, increases level of GABA, regulate the hypothalamic-pituitary-adrenal (HPA) axis to improve outcome in mood disorders, stress, well-being provide an anxiolytic effect [18]. It has been established that the level of serotonin increases which mediate beneficial effects on mental and neurological disorders after yoga exercise interventions [19].

Yoga helps over the quality of life

Yoga improves behavioural social interaction. Enhancing sleep quality to improve psychologic well-being, reducing social isolation, reinforce physical activity and self-care and healthier physical and psychological responses to stress; impairments in anxiety and depression [20].

On daily practice yoga can help you stay calm and relaxed and give strength to face as they come without restless. On daily practice it includes the complete package of asanas (body postures), breathing techniques (prayanama), meditation yoga has helped several patient recover and face life with new positivity and strength.

Asanas help release tension and negativity from the system. Dhanurasna (bow pose), corpse pose, marjaryasana (cat pose), at the end of the yoga posture session, lie down in yoga nidra to give your mind and body of through relaxation. The technique is helpful in flushing out body toxins, a primary cause of cause of stress from the system. Prayanams help to release anxiety. Kapal bharti prayanama and bhastrika prayanama, nadi shodhan prayanama (alternate nostril breathing) effective in releasing stress from the system (where the exhalation is longer than inhalation). Meditation can be an excellent technique to relax a distracted mind, give you a sense of calm and peace.

Scientific research has shown that regular meditation practice can help significantly reduce the level of stress hormone [21]. Yoga unique mind-body approach is being used more and more to reduce stress in case of PTSD, treat depression and to enhance overall wellbeing.

The following three studies provide some insight into the benefits of yoga for depression and anxiety:

1. After the session of yoga in experienced practitioner reported that GABA level increased. GABA is neurotransmitter that inhibits nerve transmission to the brain, resulting in calming and quieting the mind.

2. It has been established, the women show significant improvement on measurement of stress and psychological outcomes during exercise.

3. The effect of yoga on mood showed significant improvement in tension-anxiety, depression, and fatigueinertia.

Yoga asanas can be powerful practice for anxiety or depression. The breathing used in yoga, such as ujjayi, calm our stress response system and contributes to a state of calm. Five poses that can specifically help with depression are: Uttanasana (forward fold): in light on yoga, B.K.S Iyengar say about this pose, "any depression felt in mind is removed if one holds the pose for 2 minute or more.

Janu sirasana (head to knee forward bend): the head to knee forward bend posture is usually for calm the mind. Bhujangasna (cobra): this posture expands the chest and gives elasticity to the lungs.

Setu bandha sarvangasana: this pose is backbend that strengthen the legs, open the chest and stimulate the abdominal organs, lungs and thyroid.

Salamba sirasana (supported head stand): this asana is called the king of all asanas. Inversion literally turns your world upside down and gives your brain cells a fresh supply of blood. Attention and presence are essential in and it is a great to pause your thoughts and hoped-for new plans [22].

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