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Yoga: An Alternative Treatment for Depression and Anxiety

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Abstract

Millions of people are suffering from depression and anxiety, at least half of those suffering go without treatment due to cost, availability, and stigma. In this paper, research studies conducted by professionals were compared in order to identify the therapeutic effects of a yoga practice in people suffering from depression and anxiety. The examined studies support yoga as an effective way to relieve symptoms of depression and anxiety though no authority on public health currently lists yoga as an alternative treatment or therapy for either ailment. The results of research indicate that there is a strong positive influence of yoga on those suffering from depression and anxiety which can be examined in the increase of certain brain chemicals known to be low in those with depression and anxiety and a decrease of overall symptoms including those that were self-rated. In one case in particular, yoga proved to be an even more effective treatment for depression and anxiety than traditional SSRI(s) antidepressants were. Unlike traditional treatments, there is no negative stigma that comes with the Yoga practice or risk of negative side effects.

Yoga: An Alternative Treatment for Depression and Anxiety

Having depression and anxiety was a constant shadow that would make me feel cold even on the warmest days. They kept me in bed even if I was well, and for many years I avoided doing anything out of fear and self-doubt. The standard treatments came in the form of therapy appointments and antidepressants that left me feeling like a different person. Yoga changed that cycle of trial and error because it taught me how to self-examine my own symptoms and provided me breathing practices and postures to find the relief I sought. According to a 2016 World Health Organization (WHO) fact sheet on depression, approximately 350 million people around the world suffer from depression and it is currently the number one cause of disability. The Center for Disease Control (CDC) stated that anxiety and depression are interrelated diseases (2016) and according to the National Institute of Mental Health (NIMH) one of the most common treatments for depression and anxiety are antidepressants known as selective serotonin reuptake inhibitors (SSRIs) which carry a black-box warning for potentially fatal side-effects (2016). Recent studies conducted by researchers from universities worldwide indicate that yoga could be an effective form of alternative therapy for the millions of people who may want to avoid medications like SSRIs. Considering the possible side effects of medication, cost, availability of treatment, and stigma of therapy, it may even be the better choice. In the age of modern psychiatry and antidepressants, I assert that yoga is in many ways a more effective treatment for depression and anxiety.

Background

Yoga originated in India and has been practiced for thousands of years as a lifestyle that promotes total wellness, this includes both physical and mental aspects. Given its origins and popularity in India, some may associate yoga with religion; it is not. According to Deborah

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Bennett, a Yoga Instructor of over 25 years and who currently teaches at Germanna Community College, Yoga is not connected with any one religion, but instead can be described as a lifestyle and a study of energy that aims to help people find balance in all aspects of life (2016). Bennett guides her students down the path to peace by helping them to understand all the unique aspects of Yoga that when combined help to reduce the symptoms of depression and anxiety.

The Yamas and Niyamas are ten ethical practices that make up the first two limbs of yoga, these practices help students find peace within themselves through self-reflection and lifestyle changes. The third limb is made up of the dynamic postures known as Asanas; these physical postures build strength and flexibility in the body while stimulating the central nervous system through movement (Bennett 2016). The fourth limb Pranayama is a breathing practice in which students are taught to control their breath, a deep breath in followed by a slower exhale is beneficial in relieving stress and deepening the poses known as Asanas (Bennett 2016). Unlike the first four limbs, Bennett (2016) described the remaining limbs as the non-physical aspects of yoga where the mental focus is inward and the student can concentrate on deep breathing (Pratyahara), maintaining focus inward by clearing the mind of distractions or repeating a mantra if necessary (Dharana), recognizing distractions or emotions and letting them go (Dhyana), and meditation (Samadhi). Samadhi is accomplished when students can see and accept the unique world around them without challenging differences (Bennett, 2016). Rather than trying to deny the things that cause negative emotions, Samadhi is about accepting all things. The yoga practice is more than just a regular exercise and the limbs are all unique in the way that they bring relief to common problems in life.

Confirmation

The positive effects of yoga on depression and anxiety are a curiosity that have mental health experts seeking concrete evidence to support what is happening to the brain during the yoga practice, professionals from Boston University shed some light on the unknown in a 2010 research study comparing the effects of yoga versus walking on symptoms of anxiety and overall mood. By metabolically matching a walking group with a yoga group Streeter et al.(2010) were able to examine if the effects on brain γ-Aminobutyric acid (GABA), a neurotransmitter known to be low in those with chronic anxiety, are unique to the practice of yoga or common in all metabolically similar activities. After participating in 3 sessions a week for 12 weeks, the 19 participants in the yoga group reported better mood and anxiety levels than the 15 participants in the metabolically matched walking group (Streeter et al., 2010). The improvement in mood and anxiety correlated with an increase in GABA levels that was not present in the walking group (Streeter et al., 2010). The rise in Brain GABA levels, significant decrease in anxiety, and improved mood found in the yoga group indicate that it is specifically the yoga practice that is yielding therapeutic results and not simply metabolic activity in general.

Researchers at Boston University are not the only experts looking into the therapeutic effects of yoga, similarly Naveen et al. (2013) identify the effects of yoga in depression by monitoring the elevation in Brain-derived Neurotropic Factors (BDNF) and through the Hamilton Depression Rating Scale (HDRS) over the course of a 12-week study on depressed outpatients. The participants were given the option of treatment through only: (1) yoga, (2) yoga with medication (SSRIs), and (3) only-medication to better understand how each affected their Serum BDNF and HDRS scores before, during, and after the three month study (Naveen et al., 2013). While all participants experienced some decreased depression ratings according to the

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HDRS, there was more improvement in the HDRS scores reported by the group participating in the only-yoga option which correlated with the increase in Serum BDNF levels unique to the only-yoga group (Naveen et al., 2013). Serum BDNF is known to be chronically low in patients with depression however the results of this study indicate that those receiving any form of SSRIs during the 12 week study had no increase in BDNF levels (Naveen et al., 2013). While it is hard to make claims based on one study alone, patients taking any form of SSRIs did not experience the same increase in Serum BDNF levels that yoga participants did which indicates that yoga is more effective at increasing Serum BDNF than antidepressants are.

The effectiveness of yoga as a treatment for depression and anxiety is also found in a study published in the National Journal of Integrated Research in Medicine (2012) where researchers monitored the heart rates and self-reported anxiety levels of healthy university students over the course of three months during a daily yoga practice (Mehrotra, Phadke, Kharche, Pranita, & Joshi). Mehrotra et al. reported a clinically significant decrease in selfreported anxiety and resting heart rates in the Yoga group, the control group that did not participate in any therapy during this time did not experience the decrease (2012). Research conducted on 24 women who participated in a 12 week yoga study yielded similar results. The mood and anxiety levels of the participants were monitored through the Profile of Mood States (POMS) questionnaire and compared to the presence of oxidative stress and serotonin levels before and after the 12 week time period in which they participated in yoga for at least 90 minutes a week (Yoshihara, Hiramoto, Oka, Kubo, & Sudo, 2014). The test results of this study were compared to the same test results in a long-term yoga group made up of 38 women and the control group which consisted of 37 women with no yoga experience at all (Yoshihara, et al., 2014). Women who participated in yoga experienced a decrease in their condition evident in the results of the POMS questionnaire with the long term yoga group reporting the best moods, the yoga-training group reporting a significant improvement in mood, and the control group reporting little change and while there was a promising decrease in the oxidative stress in both yoga groups there were no significant change in the control group or change in the cortisol levels of any group (Yoshihara, et al., 2014). Each study provides evidence through extensive testing that Yoga plays an important role in reducing the symptoms of depression and anxiety and indicates that Yoga may be an effective alternative treatment option.

Opposition

Despite researchers providing evidence that yoga is an effective treatment for depression and anxiety, many mental health professionals and patients are wary of an Eastern practice that lacks a clear science-base. The WHO recommends physical activity and face to face therapy as treatments for depression affecting children and elderly adults where antidepressants are unsafe. However, most healthy adults with no risk factors are encouraged to try out different prescription antidepressants with the assistance of a psychiatrist or physician until they find the right dose and medication for their depression and anxiety, this process may take some time and the NIMH recommends therapy to reach optimal results (2016). Therapy provided by a health care professional is arguably the best form of treatment because there is the presence of a medical doctor and the treatments are structured, having been perfected by professionals and backed by countless studies and scientific research over the course of many years. Medication may even be a necessary intervention for some patients not able to find relief through therapy. Yoga may not be the best solution for all cases of depression and anxiety and as with any mental health condition, treatment is often as unique as the brain itself.

However, antidepressants are not suitable for all people including children, young adults, and the elderly. SSRIs also come with a black-box label indicating that they can cause a significant increase in suicidal thoughts and tendencies that require all patients to be closely monitored and have common side effects including nausea, headaches, sexual-disorders, and trouble sleeping (NIMH 2016). While therapy is an excellent choice on its own, mental health care is not accessible to a vast majority of the world, with an average of just 2.8% of government budgets dedicated to mental health (WHO 2011). Even when there is a mental health professional, the sheer number of patients to doctors in most countries is staggering. According to WHO data published in 2011, in over 60 countries there is just one psychiatrist to every 100,000 patients. There isn't a lot of planning for mental health worldwide and the WHO (2011) estimates that one person will die from suicide every 40 seconds, perhaps the focus should be on educating the population on alternative ways to find relief for their depression and anxiety rather than telling them to seek out help they may not find. Unlike other treatments yoga is accessible across a wide verity of platforms, lacks the stigma generally associated with seeking out therapy, and doesn't have the high price that is preventing many people from seeking out mental health care.

Conclusion

Depression and anxiety are serious problems for society and traditional treatments are not readily available in the majority of the world and when they are it is cost, stigma and antidepressant side effects preventing at least half of all affected people from seeking help (WHO, 2016). It is time that public authorities on health such as the CDC and WHO recognize the therapeutic effects of Yoga in patients with depression and anxiety and encourage citizens to begin a yoga practice whether self-guided or in a classroom setting when other solutions and

treatments are not an option to them. Yoga has many of the same benefits that are provided through traditional therapy, but is more accessible to people in countries where mental health is not a priority. Yoga provides students with the tools to self-examine symptoms of depression and anxiety, lead a healthier lifestyle, and the unique poses and breathing exercises which have proven beneficial in reducing the common symptoms of depression and anxiety. By recognizing yoga as an effective form of treatment for depression and anxiety more people may be encouraged and open to trying the non-traditional approach which has no side effects or stigma and is greatly enjoyed by participants of all ages and walks of life. Depression and anxiety are a painful burden, while more research may be necessary to fully understand the effect of yoga on the brain, it is clear that those suffering will find some relief in yoga.

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