

# Women with Anxiety and Depression: Out of the Darkness and into the Light

#### Introduction

Remember the days when you played outside till dark? You had to come in to eat and get ready for school the next day. You were sweaty from the heat, running through the creeks and neighborhoods bare foot, riding bikes, chasing girls or boys, climbing trees and making forts with your friends? Watching TV with three channels you had to walk over and change wasn't as important as running out to connect with your friends. Times have definitely changed. Before air-conditioning we knew our neighbors on the block and their children. We were forced outside with lemonade and conversations and catch a passing breeze. Natural remedies were all around us, dirt, trees, plants, gardens and good old mud puddles. Times have changed and we are not spending time in nature, rather we are buried with work, stress, and other demanding chores.

#### **Depression and Anxiety**

Mental disorders are increasing in number worldwide [1]. Between 1990 and 2013, the number of people suffering from depression and/or anxiety increased by nearly 50%. Approximately 10% of the world's population is affected by one or both of these conditions. Depression single-handedly accounts for 10% of years lived with disability globally. Depression is not the same as mood fluctuations and transitory emotional responses to challenges in life. Especially when long-lasting and with moderate or severe intensity, depression may become a serious health condition. It can cause the affected person to suffer significantly and function poorly at work, at school and at home. At its worst, depression can lead to suicide. Evidence suggests that women are more prone than men to experience anxiety, depression, and somatic complaints - physical symptoms that cannot be explained medically [2]. Depression is the most common mental health problem for women. Helping vulnerable women with mental health issues, and giving them the confidence to seek assistance, is vital. Evidence also indicates that these mental illnesses are on the rise: A 2015 Lancet study found that the prevalence of anxiety disorders increased by 42 percent and depressive disorders by 54 percent between 1990 and 2013 [3]. Because mental disorders significantly increase the risk of a person developing another chronic disease, and vice versa [4] it is clear that mental disorders affect both a significant portion of the population and disproportionate numbers of the vulnerable and the underserved.

## **Health Effects of Anxiety**

Research has indicated that the burdens of mental disorders are significantly underestimated [2]. Conservative estimates are that at least 10% of the world's population is affected by one or more mental disorders [5]. Through a combination of its health effects, injuries, and suicide, mental disorders are also a major killer. Even using the most conservative figures available, mental

**Review Article** 

Volume 4 Issue 6 - 2017

# Jean Kiernan<sup>1</sup>, Rhonda Etherton<sup>2</sup>, James Kiernan<sup>3</sup> and Panayiotis Zavos<sup>4</sup>

<sup>1</sup>Georgetown College, USA

<sup>2</sup>Director at Hal-lai an Art of Self Healing, USA

<sup>3</sup>Director at Chiropractic Practices, USA

<sup>4</sup>Department of Andrology, University of Kentucky, USA

\*Corresponding author: Panayiotis Zavos, Director & Chief of Andrology, Andrology Institute of America, Professor of Reproductive Medicine, University of Kentucky, Lexington, Kentucky, USA, Tel: 1-859-278-6806; Fax: 1-859-278-6906; Email: zavos@zavos.org

Received: March 29, 2017 | Published: April 18, 2017

disorders are the leading cause of years lived with disability globally [5]. Research on the physiology of anxiety-related illness is still undeveloped, but there's mounting evidence of mutual influence between emotions and physical functioning. Yet anxiety often goes unidentified as a source of other disorders, such as substance abuse or physical addiction, which can result from attempts to slow feelings of anxiety. Anxiety is a response to stress that has both psychological and physical characteristics. The feeling is believed to arise in the amygdala, a brain region that governs many emotional responses. As neurotransmitters carry the impulse to the sympathetic nervous system, heart and breathing rates increase, muscles tense, and blood flow is diverted from the abdominal organs to the brain. During a perceived threatening situation, anxiety prepares us to confront a potential crisis by putting the body on alert. But its physical effects can be counterproductive, causing dizziness, nausea, diarrhea, and frequent urination. And when anxiety is prolonged, it can have taxing effects on our mental and physical health. Anxiety has now been implicated in several chronic physical illnesses, including heart disease, chronic respiratory disorders, and gastrointestinal conditions [5]. Individuals who have untreated anxiety, the disease itself is more difficult to treat, their physical symptoms often become worse, and in some cases they die sooner.

# **Health Effects of Depression**

The origins of depression are multifaceted and vary from individual to individual. Life events, coping strategies, genetic factors and personality styles all have bearing on whether an individual experiences depression. Research suggests that the changes in neuro transmitters creates the change that gives rise



to depressive symptoms. A family history of depression, overuse of alcohol or other substances as a way of coping, or challenging situations such as marital stress or loss of a loved one can all contribute to depression. Pessimistic thought patterns and various coping styles can also influence the onset or persistence of depression. Increasingly, it is recognized that an accumulation of many smaller problems can often lead to significant depression [6]. Depression is a brain disorder that can lead to much emotional suffering. Changes in how your brain functions also can have a big effect on your body. Depression contributes to a wide variety of physical problems that affect everything from your heart, brain, and immune system. Long-term depression is known to negatively impact the heart. Depression causes inappropriate release of adrenaline which, over time, damages the cardiovascular system. An increase in artery and blood vessel stress are further health effects of depression. This can increase the risk of blood clots and heart attack [7]. According to a study by the National Institute of Mental Health, individuals with depression are four times more likely to have a heart attack over individuals without depression [8]. They are also at a higher risk to experience a second heart attack or death. In addition, research has shown that having a mental illness such as depression drastically increases a person's chance of attempting suicide. According to a study by the White House Conference on Mental Health, over two-thirds of suicides in the United States are caused by depression. Depression causes a person feel sad and often isolated- it can also damage the brain permanently, so the individual has difficulties remembering and concentrating once the disease is over. Up to 20 percent of depression patients never make a full recovery. People suffering from depression run the risk that their brains shrink and will remain smaller after the disease is over. Poul Videbech [9], a specialist in psychiatry at the Centre for Psychiatric Research at Aarhus University Hospital, scanned the brains of individuals suffering from depression, and he demonstrated that depression does indeed make a lasting effect on the anatomical structures of the brain. His research demonstrated that depression leaves it mark on the brain as it results in a ten percent reduction of the hippocampus.

One question that Videbech wanted an answer to was why some patients regain their previous ability to remember and concentrate after their depression was over and some patients do not. Videbech's theory was that this was due to the brain's plasticity - the brain can not only damage itself, but also rebuild damaged brain tissue by forming new brain cells. The ability for the brain to regenerate itself is called neurogenesis. "Although the discovery is over a decade old, only a limited number of researchers know about it," Videbech says. Increasing evidence is linking the pathways of the mind-body interaction. For example, as seen with the chronic feelings of loneliness can help to predict health status -- perhaps because lonely people have more psychological stress or experience it more intensely and that stress in turn reduces the function of the immune system. At the same time, depression may both reflect a lack of social support and/or cause someone to isolate themselves from significant others. Both can be stressful and hurt the body's ability to fight infection.

#### Conventional Treatment for Anxiety/Depression

#### **Antidepressants**

Finding the right medication to treat depression can be a complicated and enduring process. The antidepressant could be ineffective for you or the dose inadequate; there may not have been enough time to see an effect, or the side effects could be too bothersome -- leading to a failure of treatment. If you have low serotonin levels in the brain anti-depressant medicine boosts the serotonin level. New research according to Whiteford HA et al. [10] states this old theory is not true at all and brings terrible evidence to the forefront. Harmful side effects side effects like Birth Defects, Sexual Dysfunction, Suicide and depression coming back

**Antidepressant data:** Only about 30% of people with depression go into full remission after taking their first course of antidepressants. That's according to a 2006 study funded by the National Institutes of Health. Those who got better were more likely to be taking slightly higher doses for longer periods [11].

- a. One antidepressant may work for one person and not another. Antidepressants are very specific for each individual. It's not uncommon to try various medicines during treatment.
- b. Some people need more than one medicine for depression treatment.
- c. Antidepressants carry a warning about increased risk for suicidal thinking and behavior in children, adolescents, and young adults 18-24 years old.

# Physical activity

Physical activity aids in the prevention and improvement of a number of health problems, including high blood pressure, diabetes and arthritis. Research on anxiety, depression and physical activity displays that the psychological and physical benefits of movement can also help reduce anxiety, improve mood, and overall well-being. The connection between anxiety, depression and exercise remain to be unclear, but exercise and physical activity can certainly lessen the symptoms of anxiety or depression and make you feel more alive and well. Once the individual is feeling better, continued exercise may help keep anxiety and depression from coming back. Regular exercise helps ease depression in a number of ways, which may include:

- a. Better functioning of the neurotransmitters, endorphins and endocannabinoids. Releasing feel-good brain chemicals that may ease depression.
- b. Reducing immune system chemicals that can worsen depression.
- Increasing body temperature, which may have calming effects.

Exercising three days a week at a moderate intensity has many physiological and psychological benefits. Some of these are gained confidence, distraction from worries and social interaction,

possible increase in neurotransmitters, increased blood flow, and a feeling of well-being. Undoubtedly biking, lifting weights, playing sports and other fitness related activities that get your heart pumping can alleviate some of the depression and anxiety. But so can physical movement such as gardening, walking the dog, walking around the block or engaging in other less intense activities. Any physical activity that gets you off and moving can help improve your mood. The mental health benefits of exercise and physical activity may last only if you stick with it over the long term. This is another good reason to focus on finding activities that you enjoy. Finding an activity that is enjoyable, peaceful, and meaningful is a great method to decrease the effects of depression and anxiety.

### Cognitive behavioral therapy

Cognitive-behavioral therapy (CBT) works to substitute negative and destructive thought patterns with more realistic and beneficial ones. Treatment frequently involves facing one's fears as part of the pathway to recovery. Other possible conventional treatments for anxiety and depression include:

- A. Joining a support group for anxiety and/or depression
- Practice relaxation techniques, meditation, and breathing exercises.
- C. Talk with family members and friends and explain how they can be helpful.

#### Alternative treatments for depression and anxiety

'Complementary' describes a therapy that is used 'in addition to', and 'alternative' therapy is one that is used 'instead of' conventional therapy. CAM practitioners may be doctors of conventional medicine or may be doctors of naturopathic medicine (ND), nutritionists, herbalists, Chinese medicine practitioners, chiropractors, energetic healers, etc. The NCCAM classifies CAM treatments into seven categories:

- a. Alternative systems of medical care;
- b. Bio electromagnetic therapies;
- c. Diet, nutrition and lifestyle changes;
- d. Herbal medicine;
- e. Manual healing methods;
- f. Mind-body medicine; and
- g. Pharmacological and biological therapies.

Therefore, CAM therapies may incorporate nutrient therapies, botanical medicines, dietary changes, Ayurvedic medicine, energy healing, hypnosis, acupuncture, spinal manipulation, animal-assisted therapy, and physical medicines [12]. The Centers for Disease Control (CDC) and Prevention's National Center for Health Statistics recently reported that 62% of adults employed some form of CAM therapy during the past 12 months. Practices that were most used, in order of popularity, included prayer, natural products (nutrient therapies, botanicals), deep breathing, meditation, chiropractic care, yoga, massage, and dietary changes.

This verifies recent data, which finds prayer to be the most popular alternative therapy, as 35% of the population makes use of prayer for their health concerns [13]. CAM was most often used to treat anxiety or depression, back pain or back problems, head or chest colds, neck pain or neck problems, and joint pain or stiffness [14]. Christopher Lowry, a neuroscientist at the University of Bristol in England, has researched soil microbes and human health. "What we think happens is that the bacteria activate immune cells, which release chemicals called cytokines that then act on receptors on the sensory nerves to increase their activity," he states. Mycobacterium vaccae stimulates serotonin levels by releasing the same neurons found in Prozac. Lack of serotonin has been linked to depression, bipolar, anxiety and OCD. You can get a big dose of this by planting outdoors, taking a walk in the park and in nature. Lowry's results found just breathing in vaccae outdoors from the soil or eating plants from your garden raises a happy mood.

Multiple studies have found St. John's wort helpful for depression. But the evidence is conflicting. Two major studies showed that St. John's wort worked no better than a placebo for moderate depression. However, neither did the medication that was used. St. John's wort might prove more effective for milder forms of depression. For now, however, the evidence is uncertain. Women have always been more sensitive to harsh environments and criticism. 51% increase of women are now in the labor force since 2008-2017. The possibility is that women have more stress than in the past and feeling exhausted after work to come home and perform additional tasks. She's got dishes still to do, help with homework, children to get to bed and laundry to put in before she finishes that report for her early morning meeting. She's exhausted yet grateful and starts a new day. How can she repeat this day after day and not feel depleted? She loves her family/friends and keeps pushing through fatigue forgetting about herself in it all to help provide extra accoutrements for everyone to enjoy.

#### Conclusion

Depression is a multifactorial disease that is governed by a complex system moderated by lifestyle, dietary, psychological, spiritual, nutritional, and physiological aspects. Being depressed can make you feel hopeless. Along with therapy and sometimes medication, there's a lot you can do on your own to fight back. Changing your behavior, your physical activity level, lifestyle, and even your way of thinking are all natural depression treatments. Over the past couple of years, clinicians and researchers alike have been moving toward a new conclusion: Depression and anxiety are not two disorders that coexist. They are two faces of one disorder. In reality, many individuals suffer from both conditions-depression and anxiety. Most mood disorders present as a combination of anxiety and depression. Surveys show that 60-70% of those with depression also have anxiety [15]. And half of those with chronic anxiety also have clinically significant symptoms of depression. What if nature, microbes in dirt, talk therapy, gardening, oils of plants from nature worked on the innate levels of the human brain? Less alcohol and caffeine, walking, exercise, and digging in a garden was a prescription to increases serotonin? Could this be one new more appropriate prescription for depression and anxiety?

The first step in managing depression and anxiety is to learn as much as you can about the subject and treatment, as a comprehensive understanding of your depression and anxiety can in itself reduce its frequency and intensity. One who is depressed and/or anxious tends to avoid any objects or situations that provokes fear and uncertainty. This type of avoidance behavior, long term, can be counterproductive for the anxious and/or depressed individual [16]. When anxiety and/or depression comes, accept it. Do not try to run from these feelings, simply wait for them to pass. This may seem like a very difficult task, but it is vital that the individual practices this behavior. It is important for individuals with depression and /or anxiety to surround themselves with healthy, uplifting, and caring individuals. Often spending time around optimistic individuals has a contagious effect. Individuals who edify you by making statements such as you look beautiful, smell good, I value you, that was an amazing meal or I found something that reminded me of you today. That is just heartfelt truth and mindfulness. The innate wisdom within a women is to shine her gifts and talents with others. When she is appreciated for her efforts and feels loved, she will thrive, feel sexy and creative in more ways than one. The toughest, most isolating part of mental illness is trying to live up to real, or imagined pressure from family and friends to be happy. Supporting an individual with depression/anxiety may involve accepting that she is not happy at the moment. The best advice for family and friends is to simply be authentic and loving---do not try to change how she feels. Let her know that you may not fully understand what she is going through, but you believe she will prevail with strength and love, nevertheless.

#### References

- 1. De Silva M, Roland J (2014) World Health Organization. 10 Facts on Mental Health.
- Vigo D, Thornicroft G, Rifat A (2016) Estimating the true burden of mental illness. The Lancet Psychiatry 3(2): 171-178.
- Chisholm D, Sweeny K, Sheehan P, Rasmussen B, Smit F, et al. (2016) Scaling up treatment of depression and anxiety: a global return on investment analysis. Lancet Psychiatry 3(5): 415-424.

- 4. de Menil V, Glassman A (2015) Missed opportunities in global health: Identifying new strategies to improve mental health in LMICs. CGD Policy Paper 068, Center for Global Development, USA, p. 1-62.
- Whiteford H, Degenhardt L, Rehm J, Baxter AJ, Ferrari AJ, et al. (2013) Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. Lancet 382(9904): 1575-1586.
- PEARLS Program. 2009-2016.
- Tracy N (2016) Effects of Depression: Physical, Social Effects of Depression. Healthy place.
- Sumathipala A (2007) What is the evidence for the efficacy of treatments for somatoform disorders? A critical review of previous intervention studies. Psychosomatic Medicine 69(9): 889-900.
- Videbech P (2014) The Future of Depression Treatment: The Neurogenesis Theory. DUJS Online.
- 10. Whiteford HA, Ferrari AJ, Degenhardt L, Feigin V, Vos T (2015) The global burden of mental, neurological and substance use disorders: An analysis from the Global Burden of Disease Study 2010. PLoS One 10(2): e0116820.
- (2006) Depression and Chronic Pain. National Institute of Health, NIH publication, USA, p. 1-2.
- Mayo (2006) Complementary and alternative medicine. Healthy Lifestyle Consumer health.
- 13. (2006) Health Statistics and Information Systems: Estimates. World Health Organization, Switzerland.
- Bongiorno P (2008) Complementary and Alternative Medical Treatment for Depression. Biological Depression, Wiley, USA, p. 1-28.
- 15. Marano H (2003) Anxiety and Depression Together. Psychology Today.
- 16. Christopher L (2015) Immunization with bacteria promotes stress resilience, coping behaviors in mice, CU-Boulder study finds. CU Boulder Today, USA.