

## **YOGIC TREATMENT of DISEASE RESEARCH PROJECT**

### **- DEPRESSION**

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#### **STUDY OF DEPRESSION**

The understanding of the nature and causes of depression has evolved over the centuries, though this understanding is incomplete and has left many aspects of depression as the subject of discussion and research. (1.1)

**What is Depression?** Depression is a mental illness that involves the mind and body. Also called major depression, which affects how you feel, think and behave. Depression can lead to a variety of emotional and physical problems.(2)

A depressive disorder is a syndrome that reflects a sad and or irritable mood exceeding normal sadness or grief. More specifically, the sadness of depression is characterized by a greater intensity and duration and by more severe symptoms and functional disabilities than is normal. Depressive signs and symptoms are characterized not only by negative thoughts, moods, and behaviors but also by specific changes in bodily functions (for example, crying spells, body aches, low energy or libido, as well as problems with eating, weight or sleeping.)(3)

Depression is the leading cause of disability as measured by YLDs\* and the 4<sup>th</sup> leading contributor to the global burden of disease (DALYs)\*\* in 2000. By the 2020, depression is projected to reach 2<sup>nd</sup> place (after HIV) of the ranking of DALYs calculated for all ages, both sexes. Today, depression is already the 2<sup>nd</sup> cause of DALYs in the age category 15-44 years for both sexes combined. (4)

\*YLDs: Years Lived with Disability, \*\*DALYs: Disability Adjusted Life Years

#### **How many suffer?**

Estimates by WHO 2002 showed that 154 million people globally suffer from depression. From the results of ICPE\*\*\* Surveys 2003, it is shown that the life time prevalence falls within an 8-12% range. As for gender line, the Fact Sheet published by WHO 2000 estimates that 5.8% of men and 9.5% of women will experience a depressive episode in any given year. Population studies have consistently shown major depression to be about twice as common in women as in men, although it is unclear why this is so. (1.6)

\*\*\*International Consortium of Psychiatric Epidemiology (ICPE) Surveys. *Int J Methods Psychiatr Res.* 2003

#### **What are the Symptoms?**

According to Mayo Clinic, symptoms of depression include:

- Feelings of sadness or unhappiness
- Irritability or frustration, even over small matters
- Loss of interest or pleasure in normal activities
- Reduced sex drive
- Insomnia or excessive sleeping
- Changes in appetite – depression often causes decreased appetite and weight loss, but in some people it causes increased cravings for food and weight gain
- Agitation or restlessness – for example, pacing, hand-wringing or an inability to sit still
- Slowed thinking, speaking or body movements
- Indecisiveness, distractibility and decreased concentration
- Fatigue, tiredness and loss of energy – even small tasks may seem to require a lot of effort
- Feeling of worthlessness or guilt, fixating on past failures or blaming yourself when things aren't going right
- Trouble thinking, concentrating, making decisions and remembering things
- Frequent thoughts of death, crying or suicide
- Crying spells for no apparent reason
- Unexplained physical problems, such as back pain or headaches

In older depressed persons, there may be cognitive symptoms of recent onset, such as forgetfulness, and a more noticeable slowing of movements. Depression often coexists with physical disorders common among the elderly, such as stroke, other cardiovascular diseases, Parkinson's disease, and chronic obstructive pulmonary disease. (1.2)

Also depressed persons have a characteristic tendency to think that every issue belonging to the person has to be other ones' fault, which makes difficult to solve the problems.(10.1)

### **What are the Types of Depression?**

Five of the most common types of depressive disorders are discussed below.

- [Major Depression] is the most severe category of depression. In a Major Depression, a greater number of the symptoms of depression are present, and they are usually intense or severe. Major Depression is identified by a combination of symptoms that occur together, and last for at least two weeks without significant improvement.  
Symptoms:
- [Dysthymic Disorder] is characterized by chronic depression, but usually with less severity than a major depression. The essential symptom for the dysthymic disorder is an almost daily depressed mood for at least two years but without the necessary criteria for a major depression.
- [Reactive Depression] is, as the name implies, a reactive depression, is one that occurs in response to some specific and identifiable psychosocial stressor. Depending on the severity, it can be called as Major Depression. So, it is to be

categorized mild to moderate depression following a stressful event. In this category, the depression will last no more than about six months after the stressor has ended.

- [Bipolar Disorder] (Manic Depression)

Bipolar Disorder is different from other mood disorders because there is at least one manic episode. It typically begins in adolescence or early adulthood and continues throughout life. Research studies suggest a strong genetic influence in bipolar disorder.

- [Unspecified Depression]

This category includes people with serious depression, but does not fit into any of the other categories. (5)

### **What are the Causes of Depression?**

- Some types of depression run in families, indicating that a biological vulnerability to depression can be inherited. This seems to be the case especially with bipolar disorder. The investigators found that those with the illness have a somewhat different genetic makeup than those who do not become ill. However, the reverse is not true – not everybody with the genetic makeup that causes vulnerability to bipolar disorder will develop the illness. Apparently, additional factors, possibly a stressful environment, are involved in its onset. (3)
- Major depression may occur both with or without family history of depression. Any unwelcome changes in life patterns can trigger a depressive episode. (3)
- Men appear to be particularly sensitive to the depressive effects of unemployment, divorce, low socioeconomic status and having few good ways to cope with stress. Women who have been the victim of physical, emotional or sexual abuse are vulnerable to developing a depressive disorder. (3)
- The hormone estrogen has been implicated in depressive disorders due to the increase in risk of depressive episodes after puberty, the antenatal period, and reduced rates after menopause.(1.3)
- Certain medications may cause depression as a side effect. Specifically, some medications that are used to treat high blood pressure, cancer, seizures, extreme pain and to achieve contraception can result in depression. Even some psychiatric medications can contribute to the development of depression.(3)
- Depressive disorders appear to be associated with altered brain serotonin and norepinephrine systems. These neurochemicals may be lower in depressed people, however, it is still uncertain whether low levels of neurochemicals in the brain cause depression or whether depression causes low levels of neurochemicals in the brain. It is interesting to find in Donald J. Franklin Ph.D's report that all depression involves some changes in brain chemistry, even when the cause is clearly a psychological trauma. With recovery from depression, the brain chemistry returns to normal, even without medication. (6)

### **What is the General Medical Approach to treating Depressions?**

Medication treats the symptoms, not the problems that cause the depression. (5)

- Psychological treatments are based on theories of personality, interpersonal communication, and learning. Most biological theories focus on the monoamine chemicals serotonin, norepinephrine and dopamine which are naturally present in the brain and assist communication between nerve cells. (1.1)
- Psychotherapy  
Many people with depression benefit from seeing a psychologist or other mental health counselor. Research has shown that Cognitive-Behavioral Therapy is the best treatment for depression, compared to medication and other forms of psychotherapy. However, many people respond better to a combination of medication and cognitive-behavioral psychotherapy. CBT, more recently, the mindfulness-based cognitive therapy, is particularly beneficial in preventing relapse. (6)
- Antidepressant Medications  
With more complex and chronic forms of depression, a combination of medication and psychotherapy may be used. (1.4) Everyone's different, so finding the right medications for the person will likely take some trial and error. This requires patience, as some medications need eight weeks or longer to take full effect and for side effects to ease as your body adjusts. (2)  
Two recent meta-analysis of clinical trial results submitted to the FDA\* concluded that antidepressants are statistically superior to placebo but their overall effect is low-to-moderate. \*FDA: Food and Drug Administration (1.5)
- Electroconvulsive therapy (ECT)  
In ECT, electrical currents are passed through the brain. This procedure is thought to affect levels of neurotransmitters in the patient's brain. Although, many people are leery of ECT and its side effects, it typically offers immediate relief of severe depression when other treatments don't work. ECT is usually used for people who don't get a better response with medications or other treatments and for those at high risk of suicide. It may be an option if the patient has severe depression and in pregnancy who cannot take regular medications. Also, it can be effective for older adults who have severe depression and cannot take antidepressants for health reasons.(2)
- Other treatments – Lifestyle and home remedies  
Depression generally isn't an illness that you can treat on your own, but you can do some things for yourself that will help, which may include exercises, avoiding alcohol and illicit drugs, and getting plenty of sleep.(2) Yogic approach is strongly recommended in this category as a safe and low cost remedy.

## **YOGIC REMEDY**

WHO has launched an initiative on depression in public health. Its overall objective is; to reduce the impact of depression by closing the substantial 'treatment gap' between available cost-effective treatments and the large number of people not receiving them, worldwide. It is encouraging to know that one of the planned activities includes 'Multi-site intervention studies to improve the primary care for depression', which may include various alternative/holistic approaches. One of the examples shown by U.K. health

authorities is that physical exercise is effective for those with depression and a systematic review of 23 studies indicated a large clinical effect. (7)

### **Depression and Mindfulness**

A randomized clinical trial (1998) by Center for Mindfulness of UMass Medical School showed that patients with moderate to severe psoriasis undergoing phototherapy of photochemotherapy and who listened to guided meditation tapes while receiving the ultraviolet light treatments healed at four times the rate of subjects receiving just the light treatments. It resulted in reduced treatment cost and in the risk of basal cell carcinoma from the UV exposure. This experimental system provides a fruitful avenue for the further study of mind/body effects and their psychophysiological pathways and mechanisms.(8) Dr. Kabat-Zinn had founded a stress-reduction program in 1979, now known as MBSR, which is anchored in mindfulness meditation and yoga practices and their applications to stress, pain and chronic illness. MBSR has proved to be enormously empowering for patients with psychological problems. (9)

Mindfulness state of mind can be experienced in the midst of daily activity by clients who have not yet practiced Yoga. See followings for the practice.

- Try checking in with yourself right now and sense your presence at the moment.
- Notice your breath, feel the weight of your body
- Be aware of your eyes scanning something
- Pay attention to whatever you are experiencing moment by moment.
- Come back to your senses in this way, again and again whenever you remember to do so.

Through practicing, you may be referred to as mindfulness, which may enhance your appreciation for being alive and fully present in each moment. If you would like to bring more mindfulness into your life, you may want to consider cultivating it in a more formal way – Pranayama (breathing exercise), body scan meditation, sitting meditation and yoga. Set aside time on a regular basis to focus exclusively on the practice.

From a spiritual point, there is a tip when one meditates. Bring the attention into your 3<sup>rd</sup> Chakra where anxieties stay. Ask the anxieties to move to the 6<sup>th</sup> chakra (3<sup>rd</sup> eye) where these problems will be evaporated and be purified in the cosmic mind. Chakras are easy to manipulate. Then focus on the breath and feel the moment.

### **Elevate Mood through Yoga**

Mood shifts are not unusual in the world of athletics – take, for example, the runner's high. Exercise in any form may serve as an antidote to the melancholy mood. However, there is something qualitatively different and more nuanced about how yoga affects those who practice it. Patricia Walden, senior Iyengar Yoga teacher, in her book 'The Woman's Book of Yoga & Health', says these yoga asanas affect emotions.

- Standing poses ground you and build confidence.

- Backbends bring a feeling of hope as they invigorate you and open your heart.
- Upward bow pose stimulates your whole body and brings feelings of elation.
- Inversions stabilize our emotions; turning upside down helps you get “unstuck”.
- Plough pose and supported bridge pose relieve irritability and quell anxiety
- Deep inhalations lift your mood and long slow exhalations soothe your nerves.

### **Ayurvedic and Diet Recommendations**

- Folic Acid intake: Researchers from Tufts University in Boston, Massachusetts found that blood levels of folate were much lower among people with depression than in people who were not depressed. Although research shows that the connection is not that simple, it seems logical to conclude that folate foods can be recommended for people with depression. Increase your intake of foods rich in this vitamin such as;

- Green leafy vegetables
- Legumes (black beans, lentils, peas, etc)
- Citrus fruits and juices
- Fortified cereals and grain products

- From the Ayurvedic concepts, mental health problem or neurological function disorder often comes from Vata imbalance. Vata is the most influential dosha and without the flow of vata, the other two doshas (Pitta and Kapha) are unable to function. Sattvic foods should be taken so that Vata comes in balance. Consulting with Ayurvedic doctor is recommended.

- Aroma therapy using essential oils would be a nice way to make the person calm or to lift up the spirit. Aroma inhaled through nostrils is something easy to do, and it has immediate effects to the brain because aroma reaches there directly through the nostrils. Consulting with Aroma therapist is recommended.

- Herbs: In recent studies, the effectiveness of herb utilization is gaining expert's attention. One of the effective herbs is St. John's Wort which has been used for thousands years in both Western and Eastern medication. It is said to improve insomnia or anxieties. However, it is important that one should consult with an expert before utilizing to avoid conflictions with other drug medications being taken.

### **Conclusion**

As struggles still exist in medical scene in finding relationships between brain and mind, most of the current medications are focused to treat symptoms. (10.2) From this point of view, Yoga or yogic tools can be considered as, at the least, a safe complementary care which may contribute significantly to reduce various depressive symptoms. This indirect and multidimensional approach may be more applicable for a broader range of subjective symptoms rather than conventional direct medical ways.

End of the Report.

[\(1.1\) Wikipedia/major depressive disorder/overview](https://en.wikipedia.org/wiki/major_depressive_disorder/overview)

## Yogic Treatment of Disease Research Project

- (1.2) Wikipedia/major depressive disorder/1*
- (1.3) Wikipedia/major depressive disorder/2.1.2*
- (1.4) Wikipedia/major depressive disorder/5.1*
- (1.5) Wikipedia/major depressive disorder/5.2.2*
- (1.6) Wikipedia/major depressive disorder/7.1*
- (2) Mayo Clinic com/diseases and conditions/depression/basics.*
- (3) MedicineNet.com/depression articles*
- (4) WHO 2010/Mental Health/Depression,*
- (5) Dr. Donald J. Franklin.com/psychotherapy/major depression*
- (6) Psychologyinfo.com/depression*
- (7)National Institute for Health and Clinical Excellence 2007*
- (8)UMass Medical School/cmfmajor research findings*
- (9)The Mindful Way through Depression, written by Mark Williams*
- (10.1) Wikipedia/depression/5*
- (10.2) Wikipedia/depression/10*