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DEPRESSION: A BRIEF REVIEW

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ABSTRACT

Depression is a mood disorder and the commonest reason for seeking the opinion of a psychiatrist or psychologist. World Health Organization also estimates the depression to be one of the most prevalent illnesses causing morbidity. Depressive disorder not only severely limits psycho-social functioning but also adversely affects the quality of patient's life and also of the people around him/her. The key to the management of depression lies in its early diagnosis and the support of the people around the affected person. Many researchers are conducting various studies all over the world to understand the causes of clinical depression and developing effective treatment for the same

KEYWORDS: Depression, mental health, neurotransmitters, relaxation therapy

INTRODUCTION

Depression is a common but neglected serious illness that not only adversely affects the life of the patient but also of people around him/her or associated with him/her. As per WHO (World Health Organization), in another decade depression shall serve as a leading cause of morbidity around the world and shall highly contribute to burden of diseases worldwide. At times, the long lasting and recurrent effects of depression can intensely affect a person's suffering, morbidity, disability and also contributes to financial burden. Even though depression is curable but there are several barriers that hinder the person suffering from depression to reach out for treatment. Some of the barriers for the treatment are lack of trained health-care professionals, inaccurate assessment, lack of resources and the major one is the social stigma associated with mental disorders. Common man perceives all psychological problems as depression and it has been the highest reason for which they consult a psychiatrist/psychologist.[1,2] Incorrect diagnoses of depressed people or misdiagnosing the people with no disorder are also the serious concerns associated with mental health.

Types of depression

There are different forms of depression and the right diagnosis is important for the effective treatment of the condition. i) Major Depressive disorder is manifested as having a depressed mood nearly daily, diminished interest or pleasure in activities that were once enjoyable for the person, self feeling of worthlessness, fatigue almost every day, difficult to concentrate in daily

activities, recurrent suicidal ideation or attempt for suicide, insomnia and hypersomnia. To diagnose it as major depressive disorder, there should be a remarkable change of person life from previous and the occurrence of five or more symptoms which last for at least 2 weeks or longer. [3] ii) Persistent Depressive disorder also known as dysthymia refers to the long term chronic depressive symptoms that last for at least 2 years or more. In this type the person might experience major depressive episodes. iii) Bipolar disorder also known as manic depression is not as common as other types of depressive illness. It involves the cycle of change in mood from extremely high manic state to steep low depressive episodes. The person exhibits the listed symptoms of mania when in extreme high energy phase and all depressive symptoms during the steep low phase. The mood changes can be rapid or gradual. The Manic state also affect the social behavior and thinking of the person, that can cause him/her harm and embarrassments in life.[4,5]

Symptoms

The exhibited symptoms of depression and their intensity vary from individual to individual, where some may experience a few symptoms and other may experience multiple. [6-9]

The common symptoms of depression include: i) feeling low in energy, lethargy and inactivity; ii) oversleeping or insomnia; iii) suicide ideation or attempt; iv) loss of appetite or overeating; v) decreased concentration and difficulty in making decision; vi) guilty feeling; vii)

persistent signs like chronic pain, headache that don't respond to treatments; viii) lack of interest in activities / hobbies that was once enjoyed; ix) weight loss or weight gain; x) restless or irritability.

Causes of depression

The disease etiology can be broadly classified into environmental and genetic factors.

Environmental Factors

Various environmental factors such as childhood difficulties, stress and traumatic events contribute to depression. These are the factors outside us and can occur to anyone in their daily lives. These factors are also referred to as sociological or psychosocial factors by some researchers as they are the combination of events occur and the way of functioning and thinking of the human mind. The past experience of life such as childhood development, crisis of life and past relationships do influence the thoughts, emotions and behavior of people. As per the researchers the events in our life will affect our mental health and wellbeing. The people's reaction to the various environmental factors in everyday lives serves as the significant cause in development of clinical depression. [10]

Traumatic Events: Traumatic events experienced by people such as serious medical problems, major financial loss, loss of a dear one, end of relationship etc. plays a significant part in developing depression. These events can often lead to emotional distress and also destroys one's sense of control and stability in life.^[11]

Stress: The relationship between stressful situation, the mind and body reaction to stress, and development of clinical depression appears to be a complex process. According to most researchers, in some people the stressful event have a direct impact in development of depression. Stress can be of negative nature such as loss of job, financial loss or it can be positive in nature such as moving to a new city and wedding planning etc. Both these types of stress can lead to development of depression. [12]

Noise Pollution: Noise pollution contributes to hypertension, tinnitus, hearing loss, increased stress levels and sleep disturbances. Precisely, tinnitus is associated to panic attacks, severe depression and forgetfulness. Increased blood pressure and cardiovascular disease are resulted from continuous exposure to noise pollution. Prolonged and continual exposure to noise pollution can make a person with possible depressive tendencies even more susceptible to depression. ^[13]

Childhood Difficulties: It is known that the rate of clinical depression is higher in people who had severe difficulties in childhood. The common childhood difficulties encountered are physical, emotional or sexual abuse, parental separation or death, mental illness of the

parents. For a child before the age of eleven, the separation or death of parent is the most difficult emotional event endured. [14,15]

Natural and Catastrophic Disasters: Severe major depression can be developed in susceptible persons when they are affected by natural, catastrophic or manmade disasters such as earthquakes, fires or wars. [16] According to the National Centre for Environmental Health, after the major life altering events such as loss of property in natural calamity, a person can be depressed even if normally he would not be a susceptible candidate for depression. [17]

Genetic Factors

The genetic contribution and the inheritance of susceptibility to depressive illness are not fully known. The researchers were able to determine that, to some extent depressive illness can be inherited that is the vulnerability to illness. That explains the inheritance of the tendency to develop the illness, if we have a close relative with clinical depression. However it does not certain that we become depressed. [18,19]

It is said that there is strong genetic impact in Bipolar disorder. Among 50% of those with bipolar disorder have a parent with history of depression. There is 25% chance of developing some clinical depression in children when either of their parents have bipolar disorder. The risk of bipolar disorder in children rises to 50%-75% if both of their parents have bipolar disorder. The probability to develop bipolar disorder may be 8 to 18 times more likely when their siblings are diagnosed with bipolar disorder, and 2 to 10 times more likely to develop in those with no siblings with the disorder. [20]

Studies on Twin: The known fact of genetic impact on clinical depression is derived from studies conducted on identical twins as their genetic code is alike. The studies established that about 76% of the time the incidence of bipolar disorder is seen in one identical twin if the other twin becomes depressed. Approximately 67% of the time the identical twins become depressed if they are raised apart from each other. The rate of depression in identical twins is on higher side suggesting the strong genetic impact. As the rate of developing depression in identical twins are not 100%, suggestive of other parameters influence on a person's susceptibility to depression. The parameters include the environmental factors such as stress, medical illness, and traumatic events etc. [21]

Similar studies were conducted on fraternal twins who share 50% of the genetic code. According to the studies, 19% of the time one of the fraternal twins develops depression if the other becomes depressed. Compared to the general public, the incident rate of depression in fraternal twins are on the higher side that put forward the impact of genetic influence in the development of clinical depression. [22,23]

Treatment

Medication and Psychotherapy can be effective in treatment of mild depression. While in the moderate to severe depression the combination of medication and psychotherapy may be required for the effective treatment.^[24]

Drug Therapy: The choice of antidepressants depends on patient's symptom, its side effects, previous response and presence of any psychiatric or medical co-morbidity. Response to the first anti-depressants is seen in about 50-65% of the patients. Patients on anti-depressants should be closely monitored for any worsening signs of depression or suicidal tendencies on initiation of therapy or any dose adjustments.

The changes in the neutron transmitter or neuro-transmission determine the therapeutic effects of antidepressants. The Monoamine hypothesis states that depression is the result of under activity of monoamines like dopamine, norepinephrine and serotonin in brain. In 1950s, the effective treatment of depression was discovered as monoamine oxidase inhibitors and tricyclic antidepressants. In 1965, based on these findings and evidences Joseph Schildkraut published the paper "The Catecholamine Hypothesis of Affective Disorders". Researches conducted in connection to other mental illness also found the low activity of specific neurotransmitters were involved. [25-27]

Another hypothesis states that the promotion of neurogenesis in the hippocampus may result in some long term effect of anti-depressants. Few researches on animals have revealed that expression of genes in brain cells can be affected by the antidepressants. [28,29]

There are theories that state the cause of depression is the hyperactive hypothalamic pituitary adrenal axis (HPA axis) that mimics the neuro-endocrine response to stress and these abnormalities contribute in the development of symptoms of depression, and regulation of the HPA axis function is done by the antidepressants. [30-32]

Regular visits: In the initial stage of treatment, regular visits are required to closely monitor the effectiveness of intervention, psychological support systems and the suicidal ideation.

Continuation therapy: After 9-12 months of resolving acute symptoms, the continuation therapy decreases the chances of relapse of major depression. Based on the patient's history of relapse or other clinical symptoms, long term maintenance or life time drug therapy need to be considered for some patients. [33,34]

Patient education/Support system: The patient resistance to the diagnosis of depression and the social stigma still continues to be a problem. [34] The patient education and support system is significant in resolving the problem.

Alternative treatments

Even though the people with mild depression may find relief from symptoms by alternative treatment, but there is no evidence of its effectiveness in treating moderate to severe depression. Relaxation can help to cope up with factors contributing to depression such as anxiety, role change and pain, this in turn provide relief from the symptoms of depression. It is important to consult a medical professional before using any alternatives form of therapy in treating depression. [35] Alternative therapies used are acupuncture, chiropractic treatments, Meditation, Yoga, Relaxation, Hypnosis guided imagery, Biofeedback etc. [36]

The relaxation method slows the sympathetic nervous system which leads to decreased muscle tension, lower heartbeat and blood pressure. In addition to these, it also decreases the oxygen consumption, decreases the stress hormone and lowers the catecholamine production. [37]

Different types of Exercises helps in improving the body flexibility, balance and energy, and also reduce the depression by keeping the stress at lower level and relaxing the person. In general, exercise is the effective and safe way to maintain the mental and physical wellbeing.

CONCLUSION

Depression is a profound public health concern that has a serious effect on a person's life. The social stigma related to mental illness creates a challenge in early diagnoses and treatment of depression. Even though several factors contribute to the development of depression, the identification of the effects, probable triggers and early treatment of illness will help in improving the physical and mental wellbeing of the individuals.

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