

Depression: Major problem of today's generations

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Abstract

Major depression is a mood disorder characterized by a sense of inadequacy, despondency, decreased activity, pessimism, and sadness where these symptoms severely disrupt and adversely affect the person's life, sometimes to such an extent that suicide is attempted or results. The search for an extended understanding of the causes of depression, and for the development of additional effective treatments is highly significant. Clinical and pre-clinical studies suggest stress is a key mediator in the pathophysiology of depression.

Keywords: Depression, Mental Disorder, Bipolar Disorder, Stress, Anti-Depressant.

1. Introduction

Fourth century BC Plato said that "on order for any person to succeed in life, god provided him with two means, education and physical activity. Not separately, one for the soul and the order for the body but for the two together. With these two means, man can attain perfection".

Physical activity is incorporated with a span of health benefits, and its deficiency can have harmful effects such as increasing the risk for coronary heart disease, diabetes, certain cancers, obesity, hypertension and all cause mortality (CDC 1996) [1]. Physical inactivity may also be similar with the built out of mental disorders: some clinical and epidemiological studies have shown associations between physical activity and symptoms of depression and anxiety in cross sectional and prospective-longitudinal studies. [2]

According to WHO, now-a-days depression come to the second largest illness in terms of unwholesomeness in all over world, already one out of every five women, and twelve men have depression. Not just adults, but two percent of school children and five percent of the teenagers also suffers from depression, and these mostly go unsettled. Depression has been the commonest reason for the people come to a psychiatrist, although the common man's realization is that all psychological problems are

depression[3,4] People still believe that it is because of some weakness of personality, or that one can cure it by oneself, or that medication would go lifelong and are minimal sedatives. All these are misbelieve, and mostly created by faithful healers, or unqualified counsellors, and non-medical experts for their own vested interest, and largely by an ignorant of society. [5]

All over world, according to world census data indicates a lifetime universality rate of 8-12%, differ from a low of 3% in Japan to a high of 16.9% in the US.[6] Major depression is the fourth leading cause of disability World Wide and is ranked as the second leading cause of disability for the 15-44 year age group for both sexes.[7,8] Although the pathways to suicide are multiple and complex, strong linkage between severe depression and suicide have been narrated[9]. Approximately 850,000 people committed suicide each year, and an estimated 30-70% of suicide completers are irritated with a mood disorder, most commonly major depression. [10]

2. Depression

Depression is a typical and crippling mind-set issue that is influencing increasingly individuals around the globe. An expected 350 million individuals of any age experience side effects of depression and around 13 percent of Americans take antidepressants- an assume that bounced to 25 percent for females in their 40s and 50s. [11-14]

Table 1: The Indian Council of Medical research, a collaborative project at four centres (Bikaner, Goa, Patiala and Vellore) and the outcome [15]

ICMR descriptive categories	Bikaner N=68%	Goa N=85%	Patiala N=102%	Vellore N=68%	All Centres N=323%
Predominantly Depressed type	5.9	11.8	17.7	11.8	11.8

Table 2: World total population effects of different depression interventions are reported in given above Table [16]

	Africa		The America			Eastern Mediterranean		Europe			South-East Asia		Western pacific	
	Afr D	Afr E	Amr A	Amr B	Amr D	Emr B	Emr D	Eu	Eur B	Eur C	Sear B	Sear D	Wpr A	Wpr B
Total population (million)	294.1	345.5	325.2	430.9	71.2	139.1	342.6	411.9	218.5	243.2	293.8	1241.8	154.4	1532.9
Current burden of Depression	1906	2154	5031	5589	867	1184	3507	4074	2548	2634	2832	17123	1000	14515

Study from India and whole world have shown that life events during the period preceding the onset of depression play a major role in depression.

3. Depression an Emotion or Feeling

It appears that most depression involves the numbing of emotions, especially sadness, fear, provoke and shame. Depression arises when these emotions loop back on themselves, having feeling about feelings, sometimes without limit [17-19].

3.1 Types of Depression

Basically Depression is divided into 3 types which are followed as-

- 1- Major Depression
- 2- Dysthymia
- 3- Manic-Depressive

Major Depression is set of some symptoms which create disturbance with ability to work, sleep, eat and enjoy once pleasurable activities. This type of depression can occur once, twice or several time in whole life.

Dysthymia, is less severe type of depression, and involves long-term, which never be disable on the other hand, it keeps working or feeling good.

Manic-Depressive is also called as bipolar, it involves cycles of depression and happiness or mania. And also sometimes mood switches are dramatic and rapid. [20, 21] There are also some specific types of depression:-

- Seasonal affective disorder (SAD): Depression that occurs in mostly winter.
- Prenatal depression: Sometimes also called antenatal depression generally it seems during pregnancy.
- Postnatal depression (PND): It repeats in weeks and then months after becoming a parent. It is found in only females but in some cases it happens with men too. [22,23]

3.2 Causes of Depression:-

There are basically two types of cause of Depression i.e. Genetic Cause of Depression and Environmental Cause of Depression.

3.2.1 Genetic Cause

Bipolar disorder has a strong genetic influence. Of those with bipolar disorder, approx 50% of them have a parent with a history of clinical depression. When a mother or father has bipolar disorder, their child will have a 25% chance of developing some type of clinical depression. If both parents have bipolar disorder, the chance of their child also developing bipolar disorder is between 50% and 75%. Brothers and sisters of those with bipolar disorder may be 8 to 18 times more likely to develop bipolar disorder, and 2 to 10 times more likely to develop major depressive disorder than others with no such siblings[24]. Studies have shown that when one fraternal twin becomes depressed, the other also develops depression about 19% of the time. This is still a higher rate of depression when compared to overall rates for the general public, again pointing towards a genetic influence in the development of clinical depression [25].

3.2.2 Environmental Cause of Depression

Environmental causes of depression include events such as stress, traumatic events, childhood difficulties, synthetic chemicals, noise pollution, and natural and catastrophic disasters. [26]

Stress:- They appears to be a very complex relationship between stressful situations, the reaction of the individual's mind and body to stress, and development of clinical depression. Examples of negative stress: are loss of a loved one, loss of a job, loss of a relationship and divorce. Examples of positive stress are planning for a wedding, preparing for a new job, and moving to a new city. [27]

Traumatic Events:- Traumatic events in the lives of people include loss of a loved one, a serious medical illness, the end of a marriage or significant financial loss. These types of events can destroy the sense of control and stability in a person's life, often leading to emotional distress [28].

Childhood Difficulties: - The most common childhood difficulties include sexual, emotional, or physical abuse, dysfunctional upbringing, parental separation, and mental illness in one or both of parents. One of the most difficult emotional events for a child to endure is the separation or death of a parent before the age of eleven [29, 30].

Synthetic Chemicals: - Every day we take in synthetic chemicals from all over. Synthetic chemicals and pollutants are now being more closely looked at as a link to depression and Major Depressive episodes [31].

Natural and Catastrophic Disasters:- they are like hurricanes, earthquakes, or fires and even manmade disasters like bombing and war can push already susceptible person into a severe Major Depression [32]. The National Centre for Environmental Health has found that people, who normally would not be a candidate for depression, can become depressed after major life altering episodes, such as their house being destroyed in a natural disaster [33].

3.3 Signs and Symptoms of Depression

You may experience some of the following problems if you are depressed: [34]

- Criticizing, attacking, and berating you.
- Skipping days of work or not going to work.
- Avoiding social activities, hobbies or recreations.
- Loss of interest in sex.
- Neglecting you physically (in terms of grooming and hygiene).
- Crying a lot or feel like crying without knowing why.
- Feeling irritable and getting into fight easily.
- Involve in taking high amount of alcohol and smoking or drugs.

3.4 Risk Factors of Depression

- Loneliness and isolation [35,36]
- Lack of social support
- Stressful life experiences
- Family history of depression

- Relationship problems
- Financial strain
- Early childhood trauma or abuse
- Health problems or chronic pain

3.5 Treatment of Depression

Mild depression can be effectively treated with either medication or psychotherapy. Moderate to severe depression may require an approach combination medication and psychotherapy [37]. 60-70% of patients respond to the first antidepressant. Choice can be guided by matching patients' symptoms to side effect profile, presence of medical and psychiatric co-morbidity, and prior response. For example, in a person with a significant problem with problem with insomnia, the choice of a medicine with sedating effects would be better than one that produced agitation. [38]

Drug Treatment:

A number of different drugs refer to as antidepressants, are used to treat depression. Antidepressants belong to several categories. They affect the function of Central nervous system in brain. Now-a-days drugs are widely used to treat both type of depression (i.e. major depression and Dysthymia). Some important drugs are given below:-

- PROZAC (fluoxetine)
- PAXIL (paroxetine)
- ZOLOFT (sertraline)
- LUVOX (fluoxamine)
- CELEXA (citalopram)
- LEXAPRO (escitalopram oxalate)

3 main SNRIs (serotonin and norepinephrine) are currently available. They are:-

- EFFEXOR (venlafaxine)
- REMERON (mirtazapine)
- CYMBALTA (duloxetine)

Table 3: List of medicines/sides is not exhaustive; Dose may be kept on lower side for medically ill or elderly patients

Generic Name	Usual Daily Dose (mg)	Common Side Effect	Remarks
Selective Serotonin Reuptake Inhibitors (SSRIs) :-			
Escitalopram	10-20 mg	SSRIs may cause nausea, headache, anorexia	Minimal drug-drug interactions, Relatively safer
Sertraline	50-150 mg	Restless	-
Fluoxetine	20-40 mg	Agitation, Insomnia, Sedation, G.I distress,	Long half- life, High chance of drug interactions
Paroxetine	20-40 mg	Sexual Dysfunction, Most inhibit, Cytochrome enzymes	May cause Sedation
Serotonin Nor-epinephrine Reuptake Inhibitors (SNRIs) :-			
Duloxetine	30-60 mg	Nausea, Restlessness, Insomnia	May be preferred in patients with prominent somatic symptoms
Nor-adrenergic and Specific Serotonergic Anti-depressant (NASSA) :-			
Mirtazepine	15-30 mg	Sedation, weight gain	No sexual dysfunction

An additional drug that is widely used to treat both major depression and Dysthymia is WELLBUTRIN (bupropion); it directly affects chemicals in brain other than serotonin, mainly nor-adrenaline and dopamine [39].

3.6 Side Effect of Drugs

The impact of these side effects on the individual and his/her partner(s). Sometime delay orgasm can be advantages if premature orgasm has been a problem in the sexual activity. Sexual desire may be dismissed, or absent. Sometimes spontaneous thoughts of sex lessen or disappear, while sexual response to external stimulus is well maintained. Erectile problems, when they do occur, generally respond well to treatment with VIAGRA, CIALIS, or LEVITRA. Sometimes people don't care about sexual function when depressed [40].

4. Conclusion

Depression is a chronic and disabling illness that is associated with a significance social and economical burden. In addition to being highly prevalent, depression has high rates of psychiatric co morbidity and impairment. Depression is a group of brain disorder with varied origins, complex genetics and neurobiology. Many new finding and research directions that require immediate follow-up because one or more presage rapid changes in clinical practice have recently emerged in diagnostic, the choice of currently available treatments, and novel treatment development itself. Depression is a common disorder that affects quality of life, productivity, and healthcare outcomes.

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