

## Depression - The Proteus of Medicine

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### ABSTRACT

Depression is discussed as a disease of antiquity with suitable contemporary references also. The prevalence of this disorder, which at a given time constitutes 121 millions world-wide is mentioned. Among the types of depression, comorbid depression forms an important one. Classical depression forms the visible part of the depression iceberg while somatic and other life contextual situation forms the submerged part. Somatic manifestations per se do not carry diagnostic weightage unless the core features of depression are elicited. Non-recognition of somatic manifestations result in under-diagnosis and under treatment of the disorder.

Key Words : Melancholia, Cognitive Triad, Suicidal brain, Comorbid depression, Pseudodementia, Somatisation.

### Introduction

The American poet Auden's 'Age of anxiety' has yielded to the 'Age of depression' and to aggression with consequent culture of violence. Our century has been termed the century of 'cognitive decline'. This is an invariable epiphenomenon of the extended longevity of the population.

'Melancholia is one of the great words of psychiatry. Suffering many mutations, at one time the guardian of outworn schemes or errant theories, presently misused, cavilled at, disposed, it has endured into our own times, a part of medical terminology no less than of common sense'. (Leivis 1934). Depression is the modern mutation of melancholia. The term depression was introduced in the twenties of the last century by Adolf Meyer of psychobiology fame. The word depression has its root in the Greek 'Barunomenon' - meaning 'weighted down' - the mind that is pressed down.

### Disease of Antiquity

Depression is a disease of antiquity. Reference to this are to be found in the ancient writings of all the lands. India's epics Ramayana and Mahabharata feature instances of depression. For example, "in his fifteenth year Rama's once radiant body became all at once emaciated, like the river floods going down in summer; his red cool face with long eyes became wan like a white lotus; and he ever seated himself in the Padma posture, with his hands resting on his chin and his young feet tinkling with bells. Then wholly absorbed in pensive thought, he forgot to perform his daily allotted duties of life and his mind grew despondent. His

followers, noticing the ever static like position their master has assumed, fell at his feet and asked him of the cause of his moody temper, to which Rama merely replied by performing his daily duties with such a depressed mind and dejected face as affected all who saw it. (Narayananswamy Iyer 1914). (The 'catching' nature of sad mood may be noticed here.)

The occurrence of depression in Dasartha, Rama's father and Dasaratha's father Aja is narrated by poet Kalidasa in his epic poem Raghuvamsam, thereby pointing out to the familial nature of the disorder.

Arjuna's grief on the eve of the battle of Kurukshetra also illustrates an aspect of depression.

The first chapter in Yogavasishta is captioned "Rama's dispassion" and the first chapter in Bhagavad Gita is titled "Arjuna's grief" ("Vishada Yoga") The Ramayana came into existence with Valmiki's feeling of sadness and compassion on witnessing the death of the crouching bird and from this 'soka' emerged 'sloka'. (Sitaramiah, 1972). This is indicative of creativity that springs from affective mood of sadness. This is in keeping with the modern view of the link between depression and creativity. (Andresen 1987; Post 1994) The comparison need not be stretched too far. Gowtama Buddha earlier called Siddhartha renounced the palace comforts and went out to become homeless. He became despondent and was in quest of remedy for disease, old age and mortality. He enunciated the philosophy which in essence is "Sarvam Dukkam and Sarvam Kshanitham".

The depression of these epic characters is not to be

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considered as clinical events. But they are spiritual exercises and prelude to a higher knowledge.

Contemporary and recent history offer several instances of depression through biographical and autobiographical accounts - William Styron (1992), Alvarez (1972) and Jamison (1997). However the depression of Sir Winston Churchill stands out. Churchill, the Nobel Laureate, known for his wit and wisdom and statesmanship and the man who was instrumental in winning the World War II, sank into such deep depression to exclaim that he achieved nothing. He named his depression, the **Black Dog**, reminiscent of the **Black Bile**, Melancholia (Storr, 1989). Vincent van Gogh, the Dutch painter, remarked "I prefer a melancholy that aspires and searches, to a melancholy that is stagnant and mournful and that leads to desperation" (Dawe Fredwide 1977).

Kay, herself a doctor, finds metaphors for her own depression. "I was a wraith-like alien in a world filled with normal people; Nothing mattered; food, appearance, money, reputation were all of no importance. I was hollow, devoid of thoughts or character".

### Classical Vs Cognitive School

The classical school attributed the clinical features of depression to the negative mood of depression. Also the illness was accorded a fairly benign course with a favourable remission without any residual defect. This view has since been challenged and it is now recognised that depression is a chronic illness with more than 15% left with sequelae like cognitive defects. It was more than 30 years ago, Beck (1967) advanced his now famous theory that negative cognitive changes lie at the root of depressive clinical profile. He described the so called 'cognitive triad' namely negative perception of the future, the present and the past. It is from these negative perceptions the core depressive symptomatology emanate. They consist of hopelessness, helplessness and guilt.

With the advances in neuro sciences especially neuro imaging techniques, neural substrate has been identified for explaining the cognitive defect. The neural circuits involving prefrontal area, amygdala and hippocampus together have been delineated as 'suicidal brain' (Herringen & Maru 2003).

The concept of the primacy of thought over thinking and behaviour is not new. For example, Dhamma Pada, the Bible of the Buddhists says "we are what we think; what all we are and do arise from our thoughts; we make the world without thoughts". Thus thoughts precede emotions.

### Prevalence

According to the World Health Organization (2001), 450 million people in the world currently suffer from some form of mental and brain disorders which include alcohol and substance mis-use. Within this figure, 121 million suffer from depression and it is estimated that more than 800,000 die by suicide each year. For these suicide figures, an established psychiatric diagnosis was available from developed countries - Europe and North America, while a mere 1.5% were from developing countries like India and Taiwan. Hence mental diseases accounting for suicide in developing countries are appreciably much less but data seem to be flawed. The tragedy involves younger people accounting for more than half of the total self-inflicted deaths. Projected figures from 1990 to 2020 suggest the proportion of the global burden of all diseases accounted for by mental and brain disorder increase to 15% from the present 8.5%. (Dejarlias Eisenberg, Good et al., 1995).

It is estimated that 6% of the population suffer from depression and of these 20% continue with symptoms beyond 2 years. Comorbid depression cases has been indicated to outnumber those with major depression twice or thrice in number. It has also been estimated for every 10 years of life depression carries one year of disability.

### Depression - Types and Effects

Depression carries a considerable degree of morbidity and mortality. The types of depression comprise major depression, bipolar depression i.e. mood swings with elation and depression (snake ladder phenomenon), dysthymia i.e. chronic depression and transient depressive episodes in response to stresses and co-morbid depression. Neurological diseases like Alzheimer's disease, Parkinson's disease, multiple sclerosis, stroke, epilepsy, HIV, dementia are associated with depression. Over 30% of subjects attending general practice suffer from symptoms pertaining to depression.

Economic loss from the illness is expressed in terms of Disability Adjusted Life Year (DALYs). Once considered as a benign condition, in recent decades the illness has ceased to be so. In the next two decades, depression will become one of the top ten of all important diseases at the global level. The Standards Mortality Ratio (SMR) for major depression, from accidental death and for death from natural causes and from suicide are 1.4, 1.7 and 19.7 respectively. Depression is characterized by recurrences. 30% of individuals experience a relapse within 3 months of

recovery and in the absence of maintenance treatment. This is the so-called Sisyphian phenomenon after the Greek character who was condemned to push a boulder up the hill and retain it there but it comes tumbling down resulting in the repetition of the act till eternity. 50% experience a further episode within two years. Depression has been identified as a major public health problem. In terms of the burden of illness, depression will rank second to ischaemic heart disease by 2020 (Scot and Dickey 2003).

## Clinical

Classical depression (major depression) is marked by a mood of sadness and dejection and retarded activities, negative thoughts, feeling of pessimism, helplessness and hopelessness and loss of interest in those activities which used to give pleasure hitherto (anhedonia). The classical depressive appears far older than his age with unhealthy complexion and lack lustre in facial expression. He is weary of life which becomes a burden for him. Suicidal ideation or even attempt occur in such patients. These types of patients are encountered in psychiatric practice. However, they constitute only the visible part of the proverbial depression iceberg. Submerged are those individuals who are nevertheless depressives but masquerade with bodily symptoms in the fore-front. Such patients are encountered in non-psychiatric clinics such as general medicine, general surgery, gastro-enterology, cardiology, neurology, cancer, rheumatology, gynaecology and eye clinics. Depression is a great simulator. Those with bodily symptoms have minimal or no presenting symptoms of classical depression. There are cases of depression sans-depression. Depression is encountered at every level of clinical setting.

The illness often employs bodily language to express itself; "Somatic talk". This is determined by socio-cultural milieu of the patients. Bodily symptoms are socially and medically acceptable and they are non-stigmatising. The process of expressing through the body without articulating the emotion is termed "Alexithymia".

It is to be noted that somatic manifestations of depression do not carry diagnostic weightage. The diagnosis of depression can be arrived at accurately only if the 'core' clinical features are elicited. By careful and intelligent examination depressive features can be made out amidst 'somatic noise'. This is so, when even though 80% of depression cases present with somatic manifestations. (Venkoba Rao, 1989). Missing the depressive nature of somatic manifestations leads to non-recognition or under diagnosis and under treatment of depression.

Besides the somatic presentations, depression figures in several other life situations as indicated below:

### Is it Laziness or Slothfulness?

Many depressives are found to be reticent, lying down without any activity and proceeding to stupor or akinetic mutism. These features are mistaken for laziness. Such individuals are aware of the inertia that has overtaken them and try to overcome but are helpless and so prefer to 'sleep'. There is lack of drive for any type of activity. They are mistaken and misunderstood as deliberate acts by members of the family and others. These depressives are the most unfortunate. A suicide attempt may come as a surprise in such a context.

### Pain and Ache Syndromes

Thomas Jefferson, philosopher, statesman and the third President of the United states of America once remarked that "the art of living lies in avoiding pain". The pains can occur in any part of the body but especially headache, neck pain, atypical trigeminal and facial pain, backache, chest and abdominal pain. Pains in the limbs are common. Pelvic pain is a common complaint of depressive origin in women. Several investigations are carried out that prove negative. That these pains have emotional origin needs to be explored by clinicians.

### Insomnia

Shakespeare's Macbeth (Macbeth Act 2, scene 2) says "Sleep that knits up the ravelled sleeve of care, the death of each day's life, sore labour's bath, balm of hurt minds, great nature's second course, chief nourisher in life's feast". These virtues of healthy sleep are denied to the depressives. Sleeplessness, perhaps, is the second reason for medical consultation next only to pain. The sleeplessness of depressives is characterized by waking up early in the morning - 2 to 3 hours before the usual waking and failure to regain sleep. Mornings fail to bring a feeling of freshness. This is a typical late night or early morning insomnia (the owl type). When associated with anxiety, the person may have difficulty in getting into sleep at bed time (early night insomnia). Total insomnia is also common. Some patients do sleep but deny having slept due to lack of depth in sleep and freshness while waking. Such denials are common.

This denial of sleep though having slept may be likened to agnosia. The patient definitely has no insight into his condition. Prescribing sedatives for sleep may not work in such patients.

## **Marital Problems**

It is difficult without a clinical assessment to ascertain whether depression in a spouse causes marital problems or the latter cause depression. There is lack of happiness in the marriage and the healthy spouse is unable to understand the lack of interest and the failure to carry out the daily activities and lack of interest in sex in the depressed spouse. Mis-understandings and conflicts result leading to separation. Marital counselling should take into account this psychopathology.

## **Loss of Interest in Work**

Owing to lack of interest and failing to cope up with even minor problems and grossly under-estimating one's potential, there are some depressive individuals who prefer to stay away from their work spot and offer resignation from their jobs. They appeal for reinstatement following remission after treatment.

## **Is it Cancer?**

Patients with depression lack appetite, more precisely loss of taste with consequent loss of weight, and complain of persistent constipation and easy fatigue. These patients are suspected to be suffering from malignancy especially the gastro intestinal system. Such cancer like patients remarkably respond to ECTs.

## **Is it Heart Disease?**

It is not uncommon for individuals to suffer from pain especially in the chest with features of anxiety. They are subjected to the so called panic attacks with increasing heart rate and pain, breathlessness and impending fear of collapse. They are investigated for heart attacks. These are manifestations of anxiety and panic attacks occurring in depressives. Comorbid anxiety may elevate blood pressure and they may be diagnosed as hypertension.

## **Is it Alzheimer's?**

There is lack of concentration, impairment of memory and inability to plan and proceed through the daily routine. There is a neglect of personal appearance. These symptoms may prevail in depression, the so called pseudo - dementia.

Depressive pseudodementia is encountered in 10 to 15% of patients investigated in neurological clinics for dementia. It is essential to separate the pseudodementia patients since

it differs in the treatment prognosis and outcome from true dementia.

Depression intrudes as a differential diagnosis for dementia. Depression has been explained as a reaction to chronic stress. Animal studies show prolonged exposure to stress hormones have adverse effect on the hippocampus - the region involved in memory and learning. Human investigations indicate that prolonged exposure to high levels of the stress hormone cortisol impairs memory. The chronic stress can contribute to depression and anxiety disorder which often interfere with normal memory processing especially when people age. (Mcquade and Young 2000).

Memory lapses in depression are now being explained on a neuro-endocrinological basis. There is an over-drive of HPA axis leading to hypercortisolemia which affects the glucocorticoid receptors in the hippocampus with the consequent inhibitory effect upon the HPA. Cortisol is a neurotoxin that damages neuronal cells especially those of hippocampus. Initially, the damaging effects are reversible; but later on they are likely to persist which lead to persistent memory defects varying from mild to severe and may persist during the remission. (O'Keane Veronica 2000). Severe memory impairment in depression may simulate dementia and pose diagnostic problems, especially when cases of geriatric depression are seen to increase.

As against the classical view that depression does not produce cognitive defects, are reports of cases of cognitive failure in a follow-up study. This is a departure from the traditional concept that depression leaves behind no sequelae. In a longitudinal study of depression, 6 patients had minimal dementing changes with memory failure. This intellectual and dementing features did not bear a relationship to number of relapses nor age nor ECT. This fails to support the traditionally held notion that manic depressive illness does not lead to any intellectual deficit. The study included 122 patients followed up for a period varying from 3 to 13 years. (Venkoba Rao & Nammalvar 1977).

The cognitive changes in depression have been attributed to the ageing process (especially in elderly depression) or anti-depressants or administration of ECT. Besides, poor concentration and inadequate motivation were also considered contributory. Recent studies have however indicated that cognitive defects appear to be integral to the depressive disease. These studies have been reported on patients who have not received any treatment or following withdrawal of treatment. (Porter, Gallegher, Thompson 2003).

## Alcohol and Depression

Depressives also tend to indulge in alcohol to overcome low mood. This may recur only during depression; Alcoholics also suffer from depression. Suicide is a major risk when there is a combination of depression and alcoholism.

## Is it an Endocrine Disorder?

Among the endocrine disorders, the symptoms of hypothyroidism mimic depression, a good number of depressives are mistaken for hypothyroidism. However thyroid hormone is administered as an adjuvant in the treatment of depression. Depression is also common in cushing syndrome.

## Eye Problems

There is a lack of brightness in vision in many depressives and they consult ophthalmologists. Grieving is noticed in the subjects who experience a sudden loss of vision. This is a mourning process from visual loss and needs recognition for purposes of rehabilitation and psychotherapy.

## Conclusion

Posing problems for the clinician, depression has been rightly christened 'Proteus of Medicine', after the Greek prophetic old man of sea, who used to assume manifold forms to escape being held. (Encyclopaedia Britannica ,1970). The facts that depression lies behind various somatic manifestations needs clear understanding.

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