e-ISSN: 2322-0139 p-ISSN: 2322-0120

# An Overview on Depression

Siva ManiMala Y1\*, Sanjana Gautam1 and Goutham Reddy B2

<sup>1</sup>Department of Pharmacy, Vignan Institute of Pharmaceutical Technology, Visakhapatnam, Andhra Pradesh, India

<sup>2</sup>Department of Engineering, Pydah College of Engineering and Technology, Visakhapatnam, Andhra Pradesh, India

#### **Review Article**

Received: 26/08/2016 Revised: 30/08/2016 Accepted: 03/09/2016

#### \*For Correspondence

Siva ManiMala, Vignan Institute of Pharmaceutical Technology, Visakhapatnam, Andhra Pradesh, India

#### E-mail:

ysmanimala94@gmail.com

**Keywords:** Depression, Mental Health, Bipolar Disorder

#### **ABSTRACT**

Depression is a mood disorder that causes a persistent feeling of sadness and loss of interest. Also called major depressive disorder or clinical depression, it affects how you feel, think and behave and can lead to a variety of emotional and physical problems. It is a state of low mood and aversion to activity that can affect a person's thoughts, behaviour, feelings and sense of well-being.

#### WHAT IS 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 ladies in their 40s and 50s [1,2,3-11].

### IS DEPRESSION AN EMOTION OR FEELING?

It appears that most depression involves the numbing of emotions, especially grief, fear, anger and shame. Depression occurs when these emotions loop back on themselves, having feelings about feelings, sometimes without limit [5,8,10-21].

#### TYPES OF DEPRESSION

If you are given a diagnosis of depression, you might be told that you have mild, moderate or severe depression. This describes what sort of impact your symptoms are having on you currently, and what sort of treatment you're likely to be offered. You might move between different mild, moderate and severe depression during one episode of depression or across different episodes [12,13-18,22-39].

There are also some specific types of depression:

- Seasonal affective disorder (SAD): Depression that usually (but not always) occurs in the winter.
- Dysthymia: Continuous mild depression that lasts for two years or more. Also called persistent depressive disorder or chronic depression [18,19].
- Prenatal depression: Sometimes also called antenatal depression, it occurs during pregnancy.
- Postnatal depression (PND): Occurs in the weeks and months after becoming a parent. Postnatal depression is usually diagnosed in women but it can affect men, too [13,19].

e-ISSN: 2322-0139 p-ISSN: 2322-0120

#### CAUSES OF DEPRESSION

Although scientists agree that depression is a brain disorder, the debate continues about exact causes. Many factors may contribute to the onset of depression, including genetic characteristics, changes in hormone levels, certain medical illnesses, stress, grief, or substance abuse [20,40-74]. Any of these factors alone or in combination can bring about the specific changes in brain chemistry that lead to the many symptoms of depression, bipolar disorder and related conditions [2,4,21,22].

#### SIGNS AND SYMPTOMS

- Feelings of helplessness and hopelessness: In a brief nothing will ever get better and there's nothing you can do to improve your situation [7,64,70].
- Loss of interest in daily activities: You don't care anymore about former hobbies, pastimes, social activities, or sex. You've lost your ability to feel joy and pleasure.
- Appetite or weight changes: Significant weight loss or weight gain—a change of more than 5% of body weight in a month [22-28].
- Sleep changes: Either insomnia, especially waking in the early hours of the morning, or oversleeping.
- Anger or irritability: Feeling agitated, restless, or even violent. Your tolerance level is low, your temper short, and everything and everyone gets on your nerves [29,30].
- Loss of energy: Feeling fatigued, sluggish, and physically drained. Your whole body may feel heavy, and even small tasks are exhausting or take longer to complete.
- Self-loathing: Strong feelings of worthlessness or guilt. You harshly criticize yourself for perceived faults and mistakes [31-35].
- Reckless behavior: You engage in escapist behavior such as substance abuse, compulsive gambling, reckless driving, or dangerous sports [75].
- Concentration problems: Trouble focusing, making decisions, or remembering things.
- Unexplained aches and pains: An increase in physical complaints such as headaches, back pain, aching muscles, and stomach pain [16-18,36].

### **RISK FACTORS**

- Loneliness and isolation
- Lack of social support [76-78]
- Recent stressful life experiences
- Family history of depression
- Marital or relationship problems
- Financial strain
- Early childhood trauma or abuse
- Alcohol or drug abuse
- Unemployment or underemployment
- Health problems or chronic pain

#### **PREVENTION**

Although depression is a highly treatable condition, some forms of depression may not be preventable [14,30,57,68,79-94]. That's because depression may be triggered by a malfunctioning of nerve cell connections in certain brain circuits. However, the latest medical studies confirm that depression may often be alleviated and sometimes prevented with good health habits [18,38,39]. Eating a healthy diet, getting regular exercise, and taking time out for fun and relaxation, may work together to prevent a depressed mood [40-52].

e-ISSN: 2322-0139 p-ISSN: 2322-0120

#### TREATMENT

Treatment for depression involves either medication or talking treatments, or usually a combination of the two. The kind of treatment that your doctor recommends will be based on the type of depression you have [2,41,78,95-98].

Mild depression includes the treatment of Wait and See, Exercise and Self Health Groups while mild to moderate depression includes Talking Therapy and moderate to severe depression includes Antidepressants, Combination therapy. Mental Health teams [8,23,42,83,94].

### ONGOING RESEARCHES ON DEPRESSION

- Depression, Treatment and Maintenance Study
- The MoBI Project
- Managing Depression [99,100]
- Geriatric Telemental Health Research

•

#### REFERENCES

- 1. Yesavage JA, et al. Development and validation of a geriatric depression screening scale: a preliminary report. J Psychiatr Res. 1983;17:037-049.
- 2. Seligman ME. Helplessness: On depression, development, and death. WH Freeman/Times Books/Henry Holt & Co; 1975.
- 3. Katz TR, et al. "Double depression": superimposition of acute depressive episodes on chronic depressive disorders. Am J Psychiatry. 1982;139:438-442.
- 4. Geng L, et al. Influence of Childhood Physical Neglect on Depression: Potential Moderation by a Polymorphism in the OKI Gene. J Depress Anxiety. 2016:5:231.
- 5. Conti CL, Alvares da Silva-Conforti AM. A Brief Review on Epigenetic Aspects involved in Depression. Biol Med (Aligarh), 2016:8:311.
- 6. Beck AT, et al. Beck depression inventory-II. San Antonio, TX. 1996:78204-2498.
- 7. Hamilton M. A rating scale for depression. J Neurol Neurosurg Psychiatry. 1960;23:56-62.
- 8. Elder Jr GH. Children of the Great Depression: Social change in life experience . Westview Press; 1999.
- 9. Mir G, et al. Evaluation and Development of a Self-help Resource for Muslim Patients with Depression. Abnorm Behav Psychol. 2016;2:118.
- 10. Tang X, et al. A Randomized Controlled Clinical Trial on the Treatment of Type 2 Diabetes with Depression by Wu Ling Capsule. J Clin Trials. 2016;6:273.
- 11. Thomson W. Comorbidity between Depression and the Results of Mortality. J Depress Anxiety. 2016;5: 236.
- 12. Banhato EFC, et al. Depression Symptoms among Patients with Multiple Chronic Conditions. J Depress Anxiety. 2016;5:230.
- 13. Montgomery SA, Asberg MA. A new depression scale designed to be sensitive to change. Br J Psychiatry. 1979;134:382-389.
- 14. Radloff LS. The CES-D scale a self-report depression scale for research in the general population. Appl Psychol Meas. 1977;1:385-401.
- 15. Norouzi Z, et al. The Prevalence of Depression in Patients with Diabetes Mellitus Type II in the Shahid Rahimi Hospital of Khorramabad, Iran. Epidemiology (Sunnyvale). 2016;6:249.
- 16. Zhang J, et al. Effects of Psychological Strains on Chinese College Students' Depression and Suicidal Ideation. J Foren Psy. 2016;1:106.
- 17. Post RM. Recognizing Depression, Anxiety, and Externalizing Behaviors in Children of a Parent with Mood Disorders: Weekly Symptom Monitoring in the Child Network. J Depress Anxiety. 2016;S2:014.
- 18. Iqbal MZ, un Awan SN. Case Study of Major Depression. J Med Diagn Meth. 2016;5:214.
- 19. Rivera-Rivera Y, et al. Impact of Depression and Inflammation on the Progression of HIV Disease. J Clin Cell Immunol. 2016;7:423.
- $20. \ \ Zung\ WW.\ A\ self-rating\ depression\ scale.\ Arch\ Gen\ Psychiatry.\ 1965; 12:063-070.$
- 21. Morgan D. Mindfulness-based cognitive therapy for depression: A new approach to preventing relapse. Psychother Res. 2003;13:123-125.
- 22. Massie MJ. Prevalence of depression in patients with cancer. InNIH State-of-the-Science Conference on Symptom Management in Cancer: Pain, Depression, and Fatigue 2002;029.

p-ISSN: 2322-0120

- 23. Yesavage JA, Sheikh JI. 9/Geriatric Depression Scale (GDS) recent evidence and development of a shorter violence. Clin Gerontol. 1986;5:165-173.
- 24. Caspi A, et al. Influence of life stress on depression: moderation by a polymorphism in the 5-HTT gene. Science. 2003;301:386-389.
- 25. Cox JL, et al. Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. Br J Psychiatry. 1987;150:782-786.
- 26. Spitz RA, Wolf KM. Anaclitic depression; an inquiry into the genesis of psychiatric conditions in early childhood, II. Psychoanal Study Child, 1946.
- 27. Porsolt RD, et al. Depression: a new animal model sensitive to antidepressant treatments. Nature. 1977:266:730-732.
- 28. Beck AT. Cognitive therapy of depression. Guilford press; 1979.
- 29. Kovacs M. Children's Depression Inventory Teacher Version (CDI-T). North Tonawanda, NY: Multi-Health Systems Inc. 1997.
- 30. Larsen JK, et al. The Monoamine Oxidase Inhibitor Isocarboxazid is a Relevant Treatment Option in Treatment-Resistant Depression-Experience-Based Strategies in Danish Psychiatry. Health Care: Current Reviews. 2016;4:168.
- 31. Elizabeth A Crow, Suzanne Jasberg. Schizophrenia during Menopausal Transition. Ment Health Fam Med 2016;12:190-195
- 32. Vearrier L. A Feminist Perspective on Gender Justice in the Treatment of Chronic Pain. Arch Med. 2015;8:03.
- 33. Rahmani MJH, Dehbozorgi A, Khan M. Delayed Hospital Discharges could Pressure Sore Incidents in Fractured Neck of Femurs Patients and Elevated Nutritional Needs be a Contributing Factor. Arch Med. 2016;8:02.
- 34. Baxter LR, et al. Reduction of prefrontal cortex glucose metabolism common to three types of depression. Arch Gen Psychiatry. 1989;46:243-250.
- 35. Maas JW. Biogenic amines and depression: Biochemical and pharmacological separation of two types of depression. Arch Gen Psychiatry. 1975;32:1357-1361.
- 36. Blatt SJ. Experiences of depression: Theoretical, clinical, and research perspectives. American Psychological Association; 2004.
- 37. Gabaev DD, How I Got Over the Perseveration Depression, Anat Physiol, 2016;6:219.
- 38. Fekadu N. et al. Evaluation of the Antidepressant-like Activity of the Crude Extract and Solvent Fractions of Rosa Abyssinica Lindley (Rosaceae) Using Rodent Models of Depression. Clin Exp Pharmacol. 2016;6:207.
- 39. Dammen T, et al. A Two Year Follow up Study of Group Metacognitive Therapy for Depression in Norway, J Depress Anxiety. 2016;5:227.
- 40. Pare CM, Mack JW. Differentiation of two genetically specific types of depression by the response to antidepressant drugs. J Med Genet. 1971;8:306-309.
- 41. Rybakowski JK, et al. Types of depression more frequent in bipolar than in unipolar affective illness: results of the Polish DEP-BI study. Psychopathology. 2007;40:153-158.
- 42. Aharonovich E, et al. Suicide attempts in substance abusers: effects of major depression in relation to substance use disorders. Am J Psychiatry. 2002;159:1600-1602.
- 43. Asare M, Danquah SA. Observation Report from Clinical Practice in Ghana: Children and Adolescent Depression. J Child Adolesc Behav. 2016;4:286.
- 44. Al Hariri A. Vitamin D Deficiency and Insufficiency and their Role in Growing Levels of Depression and Anxiety in Saudi Arabia. J Psychiatry. 2016;19:360.
- 45. Perrotti A, et al. Relationship between Two Depression Scales and Quality of Life in Patients Undergoing Surgical Coronary Revascularization: A MOTIV-CABG Substudy. J Depress Anxiety. 2016;5:226.
- 46. Kim R. Observing the Effects of Mindfulness-Based Meditation on Anxiety and Depression in Chronic Pain Patients. Abnorm Behav Psychol. 2016;2:111.
- 47. Brancaglion MYM, et al. How Gestational Depression Impacts on Quality of Life. J Depress Anxiety. 2016;5:225.
- 48. Biran MW. Sexuality Conflicts Depression and Anxiety in Female Patients: The Neglected Path. J Depress Anxiety. 2016;5:224.
- 49. Lijo KJ, et al. Self-awareness and Depression among HIV-Affected Children in India. J Psychol Psychother. 2016:6:247.
- 50. Burvil PW. Recent progress in the epidemiology of major depression. Epidemiol Rev. 1995;17:021-031.
- 51. Davidson JR, et al. Atypical depression. Arch Gen Psychiatry. 1982;39:527-534.
- 52. Perez-Reyes M. Differences in sedative susceptibility between types of depression: Clinical and neurophysiological significance. Arch Gen Psychiatry. 1968;19:064-071.
- 53. Desai HD, Jann MW. Major depression in women: a review of the literature. Journal of the American Pharmaceutical Association. 1999;40:525-537.

e-ISSN: 2322-0139 p-ISSN: 2322-0120

- 54. Frates EP, et al. Its Fun: A Practical Algorithm for Counseling on the Exercise Prescriptions: A Method to Mitigate the Symptoms of Depression, Anxiety, and Stress-related Illness. Clin Exp Psychol. 2016;2:116.
- 55. Pare CM. Differentiation of two genetically specific types of depression by the response to antidepressant drugs. Humangenetik. 1970;9:199-201.
- 56. Malaguarnera M, et al. Interferon alpha-induced depression in chronic hepatitis C patients: comparison between different types of interferon alpha. Neuropsychobiology. 1998:37:093-097.
- 57. Szentesi P, et al. Depression of force production and ATPase activity in different types of human skeletal muscle fibers from patients with chronic heart failure. J Appl Physiol. 2005;99:2189-2195.
- 58. Zhang J, Sha L. The Use of Microblog, Social Support, and Depression: A Study of Chinese College Students. Int J Sch Cog Psychol. 2016;3:164.
- 59. Arbabi M, et al. Mode of Delivery and Post-partum Depression: A Cohort Study. J Women's Health Care. 2016;5:303.
- 60. Kemp A, Manahan-Vaughan D. Hippocampal long-term depression and long-term potentiation encode different aspects of novelty acquisition. Proc Natl Acad Sci U SA. 2004;101:8192-8197.
- 61. Overall JE, et al. Nosology of depression and differential response to drugs. JAMA. 1966;195:946-948.
- 62. Brown GW, Harris T. Social origins of depression: a reply. Psychol Med. 1978;8:577-588.
- 63. Sawyer Radloff L, Teri L. 6/Use of the center for epidemiological studies-depression scale with older adults. Clin Gerontol. 1986;5:119-136.
- 64. Katz J, Arias I. Psychological abuse and depressive symptoms in dating women: Do different types of abuse have differential effects?. J Fam Violence. 1999;14:281-295.
- 65. Leo AA. Spreading depression of activity in the cerebral cortex. J Neurophysiol. 1944;7:359-390.
- 66. Henningsen P, et al. Medically unexplained physical symptoms, anxiety, and depression: a meta-analytic review. Psychosom Med. 2003;65:528-533.
- 67. Collins JF, et al. Personality disorders and treatment outcome in the NIMH Treatment of Depression Collaborative Research Program. Am J Psychiatry. 1990;147:711-718.
- 68. Hackett ML, et al. Frequency of depression after stroke a systematic review of observational studies. Stroke. 2005;36:1330-1340.
- 69. Kokkinaki T. Maternal and Paternal Postpartum Depression: Effects on Early Infant-parent Interactions. J Preg Child Health. 2015:2:e126.
- 70. Huston J, et al. Computerized Behavioral Activation Treatment for Maternal Depression Delivered in an Obstetric Clinic: A Case Study. J Preg Child Health. 2016;2:216.
- 71. Atkinson AG, et al. Employment may Protect Fathers in the Setting of Maternal Teenage Pregnancy from Anxiety and Depression: Findings from the Australian Father's Study. Reprod Syst Sex Disord. 2016;5:161.
- 72. Lawlor DA, Hopker SW. The effectiveness of exercise as an intervention in the management of depression: systematic review and meta-regression analysis of randomised controlled trials. Bmj. 2001;322:763.
- 73. Licinio J, Wong ML. Depression, antidepressants and suicidality: a critical appraisal. Nat Rev Drug Discov. 2005;4:165-171.
- 74. Islam F. Mini Review: Depression during Adolescence: The Rage Within. Clin Depress. 2016;2:107.
- 75. Manisuha V. Maternal Depression. Clinics Mother Child Health. 2016;13:223.
- 76. Russell JK, Seeley JR. Concurrent and Prospective Associations between Metacognition and Depression in Adolescents. J Psychol Abnorm Child. 2015;S1:001.
- 77. Zou P. Experiences of Immigrant Women with Postpartum Depression: An Interpretive Review. J Nurs Care. 2015;5:325.
- 78. Dickerson C, Kumar S. Quality and Readability of Online Patient Education Information and the Parents Comprehension for Childhood Depression. J Health Med Informat. 2016;7:214.
- 79. Jehn CF, et al. Impaired Thinking in Patients with Breast Cancer and Depression. J Palliat Care Med. 2016;6:248.
- 80. Rogers B. Use of minor tranquilizers and antidepressant medications by depressed outpatients: results from the medical outcomes study. Am J Psychiatry. 1994;151:694-700.
- 81. Nibuya M, et al. Regulation of BDNF and trkB mRNA in rat brain by chronic electroconvulsive seizure and antidepressant drug treatments. J Neurosci. 1995;15:7539-7547.
- 82. Katz MM, et al. Onset and early behavioral effects of pharmacologically different antidepressants and placebo in depression. Neuropsychopharmacol. 2004;29:566-579.
- 83. Alexopoulos GS, et al. The expert consensus guideline series. Pharmacotherapy of depressive disorders in older patients. Postgraduate medicine. 2001:01-086.
- 84. Khademalhossini Z, et al. Prevalence of Tea, Coffee and Nescafe Consumption among High School Students and its Relationship with Depression and Anxiety. Social Crimonol. 2015;3:127.
- 85. Uche N, Princewill S. Clinical Factors as Predictors of Depression in a Nigerian Prison Population. J Psychiatry, 2015;19:345
- 86. Yuksel G, Aydin N. IPT in Postpartum Depression. Clinics Mother Child Health. 2015;12:206.

e-ISSN: 2322-0139 p-ISSN: 2322-0120

- 87. Bakar N, Aşılar RH. Factors Affecting Depression and Quality of Life in the Elderly. J Gerontol Geriatr Res. 2015;4:249.
- 88. Hyun Oh J. Relationships between Acculturative Stress, Depression, and Quality of Life on in North Korean Refugees Living in South Korea. J Health Edu Res Dev. 2015;3:142.
- 89. Khouzam HR. Vilazodone for the Treatment of Paternal Post Natal Depression. Clin Depress. 2015;1:104.
- 90. Petit-Demouliere B, et al. Forced swimming test in mice: a review of antidepressant activity. Psychopharmacol. 2005;177:245-255.
- 91. Anderson IM, et al. Evidence-based guidelines for treating depressive disorders with antidepressants: a revision of the 1993 British Association for Psychopharmacology guidelines. J Psychopharmacol. 2000;14:03-020.
- 92. Simpson S, et al. Is subcortical disease associated with a poor response to antidepressants? Neurological, neuropsychological and neuroradiological findings in late-life depression. Psychological Medicine. 1998;28:1015-1026.
- 93. Nwaopara U, Stanley P. Prevalence of Depression in Port Harcourt Prison. J Psychiatry. 2015;18:340
- 94. Cho KJ, et al. Depression, ADHD, Job Stress, and Sleep Problems with Dry Eye Disease in Korea. J Psychiatry. 2015;18:331.
- 95. Petric M, et al. Anxiety and Depression in Inflammatory Rheumatic Diseases. Rheumatology (Sunnyvale). 2015;5:166.
- 96. Serrano-Ripoll MJ, et al. How to Make Lifestyle Change Recommendations in Major Depression. J Yoga Phys Ther. 2015;5:203.
- 97. Lin CC, et al. Acute Imidacloprid Poisoning Caused Prolong Depression of Butyrylcholinesterase. J Clin Toxicol. 2015;5:261.
- 98. Demir M. Effects of Laughter Therapy on Anxiety, Stress, Depression and Quality of Life in Cancer Patients. J Cancer Sci Ther. 2015;7:272-273.
- 99. Mocharla B, et al. Clinical Depression in Diabetic Geriatric Population. J Clin Trials. 2015;5:e121.
- 100. Wu JC, Bunney WE. The biological basis of an antidepressant response to sleep deprivation and relapse: review and hypothesis. Am J psychiatry. 1990;147:014-021.