## International Journal of Pharmacy & Therapeutics

**Journal homepage: www.ijptjournal.com**

# RISK FACTORS ASSOCIATED WITH DEPRESSION: A SHORT COMMUNICATION

## Shivanee Das, Manoj Dikkatwar, Radhika Bindu, Mrudangsinh Rathod*

Department of Pharmacy Practice, Parul Institute of Pharmacy, Parul University, Limda, Vadodara, Gujarat 391760, India.

**ABSTRACT**

Major depression is a chronic illness with a high prevalence rates in the society. Depression affects an estimated 6.7% of today's adult population. Depression is found to be fatal condition if not diagnosed at right time and treated accurately. Several risk factors and conditions can aggravate symptoms of depression or increase the risk to develop depression. There are many studies carried out throughout the world with a common agenda to identify the underlying risk factors and establish correlation with the present disease condition and depression. There are several established relations that may have a link with the possible disease and depression developing risk factors.

| Corresponding Author |
| --- |
| **Dr. Mrudangsinh Rathod**<br>Department of Pharmacy Practice, Parul Institute of Pharmacy, Parul University, Limda, Vadodara, Gujarat 391760, India.<br><br>**Email:-** mrudangsinh.rathod@yahoo.com |

### INTRODUCTION

Depression is a common mental disorder. Globally, more than 264 million people of all ages suffer from depression. Depression is different from usual mood fluctuations and short-lived emotional responses to challenges in everyday life. At its worst, depression can lead to suicide. Close to 800 000 people die due to suicide every year. Suicide is the second leading cause of death in 15-29-year-olds.Although there are known, effective treatments for mental disorders, between 76% and 85% of people in low- and middle-income countries receive no treatment for their disorder. Depression results from a complex interaction of social, psychological and biological factors. People who have gone through adverse life events i.e. unemployment, psychological trauma are more likely to develop depression (Andrew *et al*., 2015).

The basic ideologies behind these studies that are being conducted are to identify the possible connection to that would lead to developing depression lately. Identification of the risk factors that initiate the development of depression is important to prevent further such incidents and reduce the prevalence rates in the society. In this article we would be discussing the various conditions or underlying disease that would lead to development of the symptoms of depressive disorder.

### BODY

The populations that have undergone post transplantation have shown greater risk of morbidity caused due to depression than those patients who have still not been under scissors. This indicates that the depression identification and treatment is very much recommended in the post transplantation patients (Mary *et al*., 2015). Another fact that shows correlation is between smoking and increasing rates of major depressive disorder. Studies have provided new insights that smoking has likely increased the ratio of major depressive disorder in comparison to that population who are non-smokers. Smoking cessation may lead to reduce the prevalence of depressive disorder. Women smoking

more than 10 g of tobacco per day were at significantly increased risk of depression compared to women who did not smoke. Termination of smoking habit was advised to reduce the risk of developing depression as the disease could cause potential damage to mental health and the well-being of an individual (Trine *et al*., 2011).

Various studies have shown a robust relationship between childhood maltreatment and factors for developing depression in adult stage. Out of all the stress factors sexual abuse has been the most supreme factor that would lead to development of depression lately (Maria *et al*., 2016). There are several diseases that show a prominent relationship likely to develop depression.

Diseases such as diabetes mellitus, psoriasis and inflammatory bowel disease have shown increased risk to develop the depression when found with these underlying co morbid conditions. Due to over activation of cytokine mediated inflammatory response there is dysregulation of hypothalamic-pituitary-adrenal axis that further leads to insulin resistance, cardiovascular disease risks and depressive symptoms. Thus management of diabetes has shown reduction in the depression developing rates [5]. Psoriasis is a risk factor for depression. Depression can provoke the manifestations of psoriasis. In psoriasis, by excluding various co morbid factors such as age, gender, history of any cardiac failure such as myocardial infarction did not show any relative risk for developing depressive disorder. By management of the psoriasis it can also prevent from depressive disorder [6]. Inflammatory Bowel Disease (IBD) patients particularly when disease is active are reportedly more prone to develop anxiety and depression symptoms. This condition requires early detection and screening of depression and its management (Calum et al., 2015).

Another risk factor that has been associated is depression and female gender. Women are more vulnerable to develop major depressive disorder. There are many correlations established to identify the causes underlying here. Women who suffer from intimate partner violence are at higher risk of having poor mental health. Low socioeconomic outcome, antisocial personality, childhood maltreatment and violence contribute together to exacerbate the symptoms of depression. Women are more sensitive towards interpersonal relationship while men are more focused for their external career and goal oriented factors. Women also experience different kind of manifestation for depression-related illness, including premenstrual dysphoric disorder, postpartum depression and postmenopausal depression and anxiety that are associated with changes in ovarian hormones and could contribute to the increased prevalence in women. Women who are undergoing menstruation have reduced brain activity due to low serotonin levels (Paramita S, Anoop IB, 2015; Paul RA, 2015; Brandon *et al*., 2016).

Depression is can also be found in certain population such as athletes and elderly people. There is a fallacy that Athletes are immune to depression or any depression related symptom. However the studies conducted reveal that the factors such involuntary career termination, injury, performance expectations and overtraining are the causes that intensify the depressive disorders in athletes. Clearly depression in athletes exists proves the fact wrong that athletes are resistant to depression. Some serious outbreaks of depression in athletes are suicide.

Elderly group are at higher risk for developing depression serves as the risk factor. Elderly populations also have different types of co-morbid conditions which may also indicate to develop major depressive disorder. Results of the studies have shown that the urban residence, female gender, higher age, nuclear family, poverty were found to be associated with depression development [8]. Dietary insufficiencies have shown to increased risk factor that leads to development of depression. One of the supplements is magnesium. Low intake of magnesium in body has direct correlation with depressive disorder. Magnesium supplementation has shown improved rates in depressive symptoms. Daily magnesium intake has shown its efficacy in especially younger adults (Emily KT *et al*., 2015).

Adolescence is a junction between childhood and adulthood that includes various hormonal, physical, psychological and social changes. The most regular consequences of puberty evolution is irregular sleep patterns. 16% of adolescent suffer from insomnia. Reduced hours of sleep were more frequently found in girls. Sleep problems are affected by cultural, social and economic conditions that may surge sleep difficulties. Sleep deprivation has countless unfavorable outcomes i.e. Increased Impulsivity, Depression, Anxiety and Suicidal Behaviors. Internet addiction is a serious issue that is emerging these days and contributes to variety of mental problems. Non adaptive uses of internet and sleep problems are having powerful health concerns among adolescents. Excessive use of media and internet has a crucial role in initiating an increased rate of sleep problems among adolescents. 41.3% adolescents in United States (U.S) spent more than 3 hours online on school unrelated to school activities. Around 4% Adolescents are addicted to internet in Netherlands and 5.4% of them are addicted in Italy. Depression and Anxiety are the most commonly occurring impact on adolescents due to internet addiction (World Health Organization, 2019).

Patients with Chronic Kidney Disease (CKD) and End Stage Renal Disease (ESRD) are affected by depression that causes a serious result on patient quality of life. Depression is prevalent in CKD patients due to increased mortality and morbidity rates. Point prevalence of Depression in general committee is 2%-4%, in primary

care setting is 5%-10%, in CKD patients 20%-30%,Congestive heart failure 14% and in Coronary Artery Disease (CAD) 16% of depression rates. Patients with CKD AND ESRD experience excessive rates of events and death. Along with increased risk of Cardiovascular Events (CV), patients with CKD experience depression, substantial decrease in quality of life, functional impairment and sexual dysfunction. Selective reuptake inhibitors e.g.: Sertraline showed benefit on CV outcomes on patient with acute Myocardial Infarction (MI). Few studies have suggested the use of Anti-Depressant medicines along with psychotherapy, exercise, cognitive behavior therapy and modification in the regimen of dialysis in patients with CKD will lead to impairment (Katia *et al*., 2011).

## CONCLUSION

There should be study and tests conducted to estimate and determine the degree of the depression caused in all the age group population. Tests held at regular interval of time indicate further consequences. People of all population and especially children and geriatric should routinely undergo mental checkup from the health care provider. Depression contributes to lot of fatal mortality outputs. Thus various studies for identification of risk factors should be carried to avoid the consequences that are faced by general public. The possible and established risk factors should be understood and dealt with caution to avoid severe manifestations related to the symptom.

## REFERENCES

Andrew W, Michael G, Eugene. H. Depression in Athletes: Prevalence & Risk factors.14, 2015, 56-60.

Brandon EC, Kathryn J, Roger SH. Psoriasis and the Risk of Depression in the US Population. January 2016 Volume 152, Number 1, Pages 73-79

Calum DM, John CP, Khalida I. The link between depression and diabetes: the search for shared mechanisms.  Vol 3 June 2015, Pages 461-468.

Emily KT, Benjamin L. Magnesium Intake and Depression in Adults. March–April 2015 Vol. 28 No. 2 Pages 249-254.

Hamdan S, Levi D, Dahan L, Stukalin E. The effect of sleep disturbances and internet addiction on suicidal ideation among adolescents in the presence of depressive symptoms.

Katia M.H, John J.B.A and Alan G.S. The Impact of Depression on Social Economic Decision-making PMC 2011 May 1.

Maria R.I, Corinna R, Peter P, Adriano S , Antonia B, Michael K. Associations between depression and specific childhood experiences of abuse and neglect: A meta-analysis. Volume 190, 15 January 2016, Pages 47-55.

Mary AD, Emily MR, Larissa M, Andrea FD, Annette JV, Donna MP et.al. Depression and Anxiety as Risk Factors for Morbidity and Mortality after Organ Transplantation: A Systematic Review and Meta-Analysis, 100(5), 2015, 988–1003.

Paramita S, Anoop IB. Prevalence of Depression and Associated Risk Factors among the Elderly in Urban and Rural Field Practice Areas of a Tertiary Care Institution in Ludhiana. January-March, 2015 Volume 59, Issue (1) Pages 1-7.

Paul RA. Why is depression more prevalent in women? Journal of Psychiatry & Neuroscience, 40(4), 2015, 219–221.

Susan H, Fredric O.F. Epidemiology, Diagnosis, and Management of Depression in Patients with CKD. Vol 54, No (4) October, 2009: pp 741-752.

Trine FM, Mikael BS, Esben MF, Erik LM, Eva P, Janne ST. Tobacco smoking as a risk factor for depression. 45(2), 2011, 143-149.

World Health Organization Depression Newsletter 4 December 2019.