# Article #1:

# Diabetes and depression: Global perspectives

# Egede, L. E., and Ellis, C. (2010) Diabetes and depression: Global perspectives. Diabetes Research and Clinical Practice. 87, 302–312

# Link: <https://www.sciencedirect.com/science/article/pii/S0168822710000471>

1. Clouse et al. found that the onset and prevalence of coronary heart disease was affected in women with diabetes who were depressed
   1. R.E. Clouse, P.J. Lustman, K.E. Freedland, L.S. Griffith, J.B. McGill, R.M. CarneyDepression and coronary heart disease in women with diabetes
2. Anderson et al. conducted a [meta-analysis](https://www.sciencedirect.com/topics/medicine-and-dentistry/meta-analysis) of 42 published studies that included 21,351 adults and found that the prevalence of [major depression](https://www.sciencedirect.com/topics/medicine-and-dentistry/major-depressive-episode) in people with diabetes was 11% and the prevalence of clinically relevant depression was 31%
   1. R.J. Anderson, K.E. Freedland, R.E. Clouse, P.J. Lustman The prevalence of comorbid depression in adults with diabetes: a meta-analysis Diabetes Care, 24 (6) (2001), pp. 1069-1078
3. Ali et al. found that the prevalence of depression was significantly higher among patients with type 2 diabetes (17.6%) than those without diabetes (9.8%)
   1. They also found that the prevalence among females with diabetes (23.8%) was higher than their male counterparts with diabetes (12.8%).
   2. S. Ali, M.A. Stone, J.L. Peters, M.J. Davies, K. Khunti The prevalence of co-morbid depression in adults with Type 2 diabetes: a systematic review and meta-analysis Diabet. Med., 23 (11) (2006), pp. 1165-1173

# Article #2:

# The association between Diabetes mellitus and Depression

# Bădescu, S., Tătaru, C., Kobylinska, L., Georgescu, E., Zahiu, D., Zăgrean, A., and Zăgrean, L. (2016) The association between Diabetes mellitus and Depression. J Med Life. 9, 120–125

# Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4863499/>

1. The prevalence rates of depression could be up to three-times higher in patients with type 1 diabetes and twice as high in people with type 2 diabetes compared with the general population worldwide
   1. Roy T, Lloyd CE. Epidemiology of depression and diabetes: a systematic review. J Affect Disord. 2012;142(Suppl):S8–S21
2. Anxiety appears in 40% of the patients with type 1 or 2 diabetes
   1. Grigsby AB, Anderson RJ, Freedland KE, Clouse RE, Lustman PJ. Prevalence of anxiety in adults with diabetes: a systematic review. J Psychosom Res. 2002;53:1053–1060
3. The presence of Anxiety and Depression worsens the prognosis if diabetes, disturbs the quality of life and work productivity in individuals.
4. On the other hand, depression may increase the risk of developing type 2 diabetes with 60%
   1. Mezuk B, Eaton WW, Albrecht S, Golden SH. Depression and type 2 diabetes over the lifespan: a meta-analysis. Diabetes Care. 2008;31:2383–2390.
5. There are many environmental factors along with genetic factors that could have led to this co-morbidity of these two diseases. Some environmental factors include
   1. Lack of sleep, low socio-economic status, lack of exercise and poor diet.
   2. The common factor involved in these two conditions is Stress. Stress causes the release of cortisol (a stress hormone).
      1. Excess of cortisol, distrust the hippocampus, which is the region in the brain that is involve din depression as well as Type 2 Diabetes
6. Children and adolescents with diabetes have a two to three times greater prevalence of depression than youth without diabetes
   1. Grey M, Whittemore R, Tamborlane W. Depression in type 1 diabetes in children: natural history and correlates. J Psychosom Res. 2002;53:907–911.

**Article # 3:**

**Diabetes and Depression**  
Holt, R. I. G., de Groot, M., and Golden, S. H. (2014) Diabetes and Depression. Curr Diab Rep. 14, 491

Link: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4476048/>

1. Significant depressive symptoms affect approximately 1 in 4 adults with type 1 and type 2 diabetes, whereas a formal diagnosis of depressive disorders is made in approximately 10 %–15 % of people with diabetes
   1. Anderson RJ, Freedland KE, Clouse RE, Lustman PJ. The prevalence of comorbid depression in adults with diabetes: a meta-analysis. Diabetes Care. 2001;24:1069–78
2. A recent meta-analysis of 11 studies including nearly 50,000 people with type 2 diabetes but without depression at baseline has indicated that the incidence of depression is also 24 % higher in people with diabetes
   1. Nouwen A, Winkley K, Twisk J, Lloyd CE, Peyrot M, Ismail K, et al. Type 2 diabetes mellitus as a risk factor for the onset of depression: a systematic review and meta-analysis. Diabetologia. 2010;53:2480–6.
3. Fewer Studies on Children and Adolescents say that Rates of depression are also elevated in either type 1 or type 2 diabetes with prevalence rates ranging from 9 %–26 %
   1. Reynolds KA, Helgeson VS. Children with diabetes compared with peers: Depressed? Distressed? A meta-analytic review. Ann Behav Med. 2011;42:29–41

**Depression and Diabetes are Bidirectional meaning both cause each other.**

1. A meta-analysis of 9 cohort studies found that adults with depression had a 37 % increased risk of developing type 2 diabetes after accounting for factors common to both disorders including sex, body mass index, and poverty.
   1. Knol MJ, Twisk JW, Beekman AT, Heine RJ, Snoek FJ, Pouwer F. Depression as a risk factor for the onset of type 2 diabetes mellitus. A meta-analysis. Diabetologia. 2006;49:837–45.
2. A further meta-analysis of 13 studies found incident depression was increased by 15 % (OR 1.15 (95 % CI 1.02–1.30)) in people with diabetes at baseline
   1. Mezuk B, Eaton WW, Albrecht S, Golden SH. Depression and type 2 diabetes over the lifespan: a meta-analysis. Diabetes Care. 2008;31:2383–90.