Effect of diet on depression
Hafiz Muhammad Aslam, Hiba Arshad Shaikh, Shafaq Saleem, Arsalan Ahmad Alvi

Madam, depression is a highly prevalent mental disorder in our society, with 10-20% of the population experiencing a major depressive disorder episode during their lives. From the healthcare point of view, studies confirm that 25-35% of patients present with depression or anxiety disorder. It has been stated as the leading cause of disability and premature death in the world by the World Health Organization (WHO) in 2001. The WHO fact sheet regarding mental and neurological disorders in 2001 stated that 25% of individuals develop depression in one or more stages in their lives, in both developed and developing countries.

Wide variations exist in the prevalence of depression across countries; disparities in the distribution of several risk factors may determine their heterogeneity. Rising trends in the incidence of depressive disorders have been paralleled by a dramatic change in the source of fats in the western diet; this change mainly consists of replacement of poly unsaturated (PUFA) or monounsaturated fatty acids by saturated fats (SFA) and trans unsaturated fats (TFA). Villegas AS et al stated that intake of different types of saturated, mono unsaturated, poly unsaturated and trans unsaturated fatty acids were correlated with depression — SFA and PUFA were inversely correlated, while TFA was positively correlated with depression. In another study, it was also confirmed that trans fatty acid or fast foods and commercial bakery products were associated with a higher risk of depression, while lipids with anti-inflammatory properties such as omega-3 fatty acids or olive oil, pulses and fish were inversely related to depression. Mediterranean study also suggests that a diet rich in fresh vegetables, whole grains and olive oil helps to maintain mental health.

Finally potential effects of dietary pattern could be explained by the co-occurrence of other lifestyle related factors such as physical activity, alcohol intake, smoking, use of illicit drugs, marital and socioeconomic status.

The subject regarding impact of diet on depression has been underestimated in the past but a lot of researches are in progress which will increase our understanding in the next 10-20 years. Although a few prospective studies have analysed the role of dietary pattern, their contribution is still scarce. Large randomised controlled trials with intervention based on changes in the overall fixed pattern and inclusion of participants at high risk of mental disorders could provide the most definitive answers to confirm the findings of observational studies experimentally.

References