

Nutritional psychiatry: An evolving concept

Sir,

The World Health Organization states that at some point of their lifetime, one in four people will be having mental or neurological disorders.^[1] Mental disorders are the leading cause of global disability according to recent estimates, and currently, pharmacological-oriented therapy supplemented by psychotherapeutic intervention is the main treatment modality in psychiatry. Growing evidence shows that diet and nutrition are associated in prevention, development, and management of mental disorders.^[2] In spite of the conventional management, it has been projected that mental disorders will exponentially increase in upcoming years and pose for an impending epidemic worldwide.^[3]

Over the years, owing to globalization, there has been tremendous change in the pattern of food consumption which replaces the more nutritious, less dense, fiber rich traditional food to less nutritious, more energy dense, and fiberless modern food. Moreover, the increased food demand globally urges for adapting different food producing and manufacturing techniques such as industrialized farming, intensively reared animals, use of food additives, pesticide usage, and processing methods which in turn is having a negative impact on nutritional value of the food and thereby mental health.^[4]

Major contributing factors for mental disorder are complex which includes individual attributes and behaviors, socioeconomic circumstances, and environmental factors. Different nutrient factors such as omega-3 fatty acids, S-adenosyl methionine, N-acetyl cysteine, Vitamin B, C, D and E, folic acid, iron, zinc, selenium, and magnesium have their effect on numerous neuro-chemical modulatory reactions, and thereby mental health outcome.^[2,4] Nutrients-mediated pathways are involved in chronic inflammation, altered metabolism, impaired microbiota, oxidative stress, and other related pathways with people having mental disorders.^[3] Many studies advocate the use of nutrients either as nutraceuticals in the form of monotherapy, combined therapy or augmentation therapy, or simply dietary recommendation.^[5]

Over the life course from preconception, childhood, adolescence, adulthood to older age, nutrition and

its influence on mental health are inseparable and inevitable.^[1] As nutrition is one of the important predictors of both mental health and other noncommunicable diseases (NCD), it acts as direct and indirect link for mental health outcome. Moreover, NCD such as diabetes and other chronic diseases are associated with comorbid mental ill-health. Thus, by addressing the nutritional issues, one can achieve the betterment in both NCD control and mental health disorders. Even a minimal change in the dietary pattern of the community will have major effect on the distribution of common mental disorders as well as NCDs in the population, and it can even reverse the current trend of the disease.^[3]

Studies have shown that the introduction of micronutrient therapy along with standard treatment have reduced the psychiatric symptoms by 50%.^[4] Thus, dietary assessment and interventions should be an integral component of mental health services; it requires the validation of questionnaire for screening of mental disorders with questions representing dietary pattern. Dietary intervention is a cost-effective public health strategy for better mental health outcome and can be achieved through policy changes on food production and processing, legislative measures such as imposing fat tax for junk foods and behavior change communication.

Even though many psychiatrist professionals are aware of the importance of nutrition on mental health outcome, it is imperative to have a strategic direction for comprehensive and multidisciplinary management to address the growing burden of mental health disorders.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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Access this article online	
Quick Response Code: 	Website: www.jmsjournal.net
	DOI: 10.4103/jrms.JRMS_75_17

How to cite this article: Annadurai K, Danasekaran R, Mani G. Nutritional psychiatry: An evolving concept. *J Res Med Sci* 2017;22:88.

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