

Editorial

Diabetes Mellitus an Emerging Silent Killer

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Editorial

Diabetes mellitus is one the most dreaded life style disease condition which is spreading as an epidemic across the globe. Large number of individuals who meet the current criteria for diabetes mellitus remain asymptomatic and unaware of having this disorder.

Once regarded as a single disease entity, diabetes is now seen as a heterogeneous group of diseases, characterized by a state of chronic hyperglycaemia resulting from a diversity of etiologies, environmental and genetic, acting jointly. Depending on the etiology, factors contributing to this state of chronic hyperglycaemia include reduced insulin secretion, decreased glucose utilization, and increased glucose production.

The number of people with diabetes has risen from 108 million in 1980 to 422 million in 2014. The global prevalence of diabetes mellitus among adults over 18 years of age has risen from 4.7% in 1980 to 8.5% in 2014 and at the current rate there will be some 300 million by the year 2025 as predicted by the WHO [1].

Apart from available modern drugs, various Complementary Alternative Methods (CAM) such as, Life style modification, Yoga, use of Medicinal plants has multiple beneficial effects. Alternative methods not only take care of most of the metabolic abnormalities associated with diabetes but can also reduce the risk of developing or delay the onset of diabetes mellitus amongst susceptible persons, are becoming good & effective alternatives to modern medicines.

Modifications in our present life style can be a good alternative approach to any life style diseases especially Diabetes mellitus. It is in the form of: Good eating habits- Less carbohydrate low fat diet, inclusion of fruits, green vegetables and fibers in the diet. Taking of small multiple meals instead of two or three large meals considering the total calories. Regular exercise for more than a hour, five times a week. de-stressing methods e.g. regular meditation and enjoying hobbies routinely & many more. The change in diet and regular exercise has also been advocated by American Diabetes Association in its Medical Nutrition Therapy (MNT) [2].

Yoga is a traditional exercise regimen that has yielded a statistically significant role in controlling the progression of diabetes mellitus. Yoga helps to regulate the body function and psychic processes, thus improving the well-being of the patients. Regular yoga practice can help reduce the level of sugar in the blood, along with lowering blood pressure, keeping your weight in check, reducing the severity of the

symptoms and slowing the rate of progression of the disease [3-5]. Pranayam, Setubandhasana, Dhanurasana, Chakraasana and many more are especially beneficial in preventing as well as controlling diabetes mellitus type-2. These asanas can be seen through website [6].

Nature has been a source of medicinal agents for thousands of years. Some herbal plants are proven to provide symptomatic relief and also prevent secondary complications of the diabetes mellitus. WHO (1980) [7] has also recommended the evaluation of the effectiveness of plants in conditions where there are no safe modern drugs. Some medicinal plants like *Aegle marmelos* [8], *Allium sativum* (Garlic) [9], *Azadirachta-indica* (Neem) [10], *Eclipta alba* [11], *Embllica officinalis* [12], *Gymnema sylvestre* [13], *Trigonella foenum graecum* (fenugreek) [14] to name a few are found to be effective in preventing & controlling Diabetes mellitus. Apart from this some Micronutrients [15,16] e.g. Alpha lipoic acid, Chromium, Magnesium, Vanadium and Omega 3 fatty acids have also been reported to be necessary in maintaining healthy blood sugar level in normal as well as in patients of Diabetes mellitus type I & II.

The modern generation of Diabetologist, Endocrinologist involved in diabetes management especially with Complementary Alternative Treatment (CAM) options e.g. Yoga, Dietary changes, Medicinal herbs & other dietary Micronutrients have advocated for this holistic approach, which can restore physiology of insulin secretion. Understanding of glucose metabolism, lipid abnormalities, preservation of beta cell and its regeneration with stem cells & most importantly life style changes is now the challenge of the day for most of the Physicians, Researchers and Scientist across the globe.

I am thankful to the Chief Editor of this journal who has given me opportunity to express my view over this most talked life style disorder and I hope this journal & especially the coming issue will serve the function of giving update knowledge about fundamental principles of diabetes mellitus and latest treatment options and will be of great help to Researchers, Physicians and Scientist involved in this field in tackling effectively this worldwide emerging epidemic.

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