International Journal of Medical Sciences
Volume 5 | Issue 1 & 2 | April & October, 2012 | 55-59

RESEARCH PAPER

To Study the Efficacy of Neem (*Azadirachta indica*) and Tulsi (*Ocimum sanctum*) Leaf Powder Supplementation and Nutritional Counselling on Blood Glucose Levels and Blood Pressure of Non Insulin Dependent Diabetic Patients

NIVEDITA SINGH, JAYA PATHAK AND NEHA SINGH

See end of the paper for authors' affiliation

Correspondence to :
NIVEDITA SINGH
Department of Nutrition and Dietetics, Fortis Hospital, MOHALI (PUNJAB) INDIA
Email: ns4286@gmail.com

ABSTRACT : The purpose of this study was to determine the effect of neem and tulsi leaf powder and nutritional counselling on the blood glucose level of NIDDM subjects. Thirty patients in the age group of 35-65 years free from serious complications of diabetes were selected from Pilani town. Selection was based on their fasting blood glucose test. The subjects were divided into 3 groups *viz.,* Group-I consisting of 10 subjects taken as control group where as Group-II and Group-III consisting of 10 subjects each were taken as experimental group. Group I was continued only on prescribed medicines by the doctors. Nutritional counselling along with medicines prescribed by the doctor was given to group-II where as nutritional counselling and neem and tulsi leaf powder along with medicines prescribed by the doctor was given to group-III to see the efficacy of neem and tulsi leaf powder on blood glucose and blood pressure of the subjects. The systolic blood pressure of group-II decreased from (100 to 98) mm Hg while of group-III it decreased from (84 to 82) mm Hg. The diastolic blood pressure of group-II reduced from (156 to 155) mm Hg and of group-III it decreased from (130 to 125) mm Hg, where as, no variation was found in group-I. The fasting blood glucose level of group-II decreased from 243.600 to 236.700 mg/dl while of group-III from 196.600 to 173.000 mg/dl where as post prandial blood glucose level in group-II decreased from 376.800 to 368.100 mg/dl and of group-III it decreased from 339.700 to 320.900 mg/dl.

How to cite this paper : Singh Nivedita, Pathak, Jaya and Singh, Neha (2012). To Study the Efficacy of Neem (*Azadirachta indica*) and Tulsi (*Ocimum sanctum*) Leaf Powder Supplementation and Nutritional Counselling on Blood Glucose Levels and Blood Pressure of Non Insulin Dependent Diabetic Patients. *Internat. J. Med. Sci.,* **5**(1 &2) : 55-59.

Key Words :
Diabetes, Neem, Tulsi, Anthropometric Parameters, Blood pressure

Paper History :
Received : 03.10.2012;
Accepted : 21.10.2012

The prevalence of diabetes mellitus is increasing all over the world and becoming a problem of significant importance after cardio-vascular and oncological diseases. According to WHO every fifth person in the world is diabetic. Globally diabetes has affected 246 million people, which is about 6 per cent of the total adult population. India has been declared as the "Diabetic capital of the world with largest number of people with diabetes *i.e.* 40.9 million in the year 2007 (IDF, 2007). It is projected to rise to 74 million by the year 2025 (King, 2001). Currently upto 11 per cent of India's urban population and 3 per cent of rural population above the age of 15 is suffering from diabetes. Diabetes mellitus is a chronic disease characterized by elevated blood glucose level resulting defects in insulin secretion, insulin action or both. Psychosocial stress, changing life style and food habits, together lead to higher chances of developing obesity and diabetes. Further, obesity especially the central obesity has been strongly correlated with insulin resistance. Oral hypoglycaemic drugs such as modern system of allopathy is greatly accepted throughout the world to control and maintain