

Research Paper :

Effect of neem (*Azadirachta indica*), methi (*Trigonella foenum-gracum*) and curry leaves (*Murraya koenigii*) on diabetic patients (Type II)

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ABSTRACT

Diabetes mellitus has become a leading killer disease in recent years. About 16 million people suffers from diabetes in the U.S. alone, with an estimated 12 million suffers world wide. Now a days Ayurveda plays very important role to control and cure various disease with life style management, diet management and treatment with specific herbs. In this research we found that neem, methi and curry leaves have some medicinal values to central diabetes with diet therapy and nutrition education.

Key words : Hyperglycemia, Diet management, Nutrition education

Diabetes imposes a major public health burden in the developed and developing countries. According to WHO (1995), the number of people with diabetes in the world would reach 300 million by 2025 (Unwin and Marlin, 2004) A recent publication by WHO links 3.2 million death world wide to diabetes each year.

In United States diabetes is the sixth leading official cause of death, killing 73,000 people per year and contributes to 224,000 deaths a year (centres of disease control 2000). In developing countries, three million death per year are attributed to complication arising from diabetes mellitus. The large population of India base poses a major challenge, as the number of diabetic patient would be very high even with low prevalence rate. This is particularly true because a large number of individuals could have undetected diabetes. In 1994, there were 20 million diabetics in India; according to the World Health Organization, diabetes was responsible for 102,000 death in 1998, and up to 75 per cent do not even known that they are diabetics. Studies over the last three decades show a rising prevalence of NIDDM (Non insulin dependent diabetes mellitus) which affects indians earlier than in the west.

Ayurveda, the ancient healing system from India, has steadily increased in popularity in the western world in recent years. The role of traditional medicines in the solution of health problems is invaluable on a global level. This is the more striking, where we consider the fact that approximately 80 per cent of the people living in less developed countries rely exclusively on traditional

medicine for their health care needs (Subbu Lakshmi and Naik, 2004) Traditional medicine has been described as one of the surest means to achieve total health care coverage for the worlds population, using acceptable, safe and economically feasible methods.

In the next millennium, traditional medicine would be proved as backbone of biomedical research. It is estimated by an All India Co-ordinated Research Project in Ethno biology that 8000 species of medicinal plants were used by the local health practitioners which included herbs, shrubs, trees, and climbers (Vasanthmani and Sarita, 2001).

The present study aims at identifying the medicinal qualities of selected leaves namely, neem, methi and curry leaves.

The specific objectives of the research is to develop antihyperglycemic herbal powder and traditional food products from these leaves and evaluation of hypoglycemic properties of the selected leaves on non insulin dependent diabetic subjects.

METHODOLOGY

252 non insulin dependent diabetics in the age group of 30 to 60 years were selected from different diagnostic centres of Varanasi city. All the subjects were divided in to 3 groups of 21 subjects each. The first experimental group were administered neem leaf powder (10g), second group were administered methi leaf powder (10g) and third group were administered curry leaf powder (10g) per day.