



Dietary Management Practiced By Subjects Suffering From Chronic Disorders

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Abstract

Health is a basic pre-condition for happiness and progress in life of an individual and quality health care is lifeline for the growth of any nation. The metabolic disorders we know today is increasing day by day due to modernization, change in life style, mental stress, improper eating habits, faster pace of life, loss of physical exercises etc thereby culminatively contributing to chronic disorders. Dietary management is the key to good health and vigour. Dietary management approaches followed by the subjects related to food habits, adaptation of alternative system (medication), changes in this life style, work pattern, change in approach, sleeping pattern, type of stress, exercise, diet and pranayama were collected through a well structured interview schedule. In dietary management practices of subject suffering from hypertensive disorders, the consumption of restricted foods was higher in group-I (Allopathy) compared to group-II (Ayurvedic) and group-III (Naturopathy). Non-consumption of restricted foods, fruits and vegetables was highest in group II compared to group I and group III. In case of subjects suffering from Diabetes mellitus consumption of restricted foods namely rice, fruits and vegetables was highest in group II compared to group I and group III. Under group I subjects suffering from cardiac vascular disease consumed higher amount of fried foods and non-vegetarian foods compared to other groups.

Keywords: *Dietary management, chronic disorder, diabetes mellitus, hypertension, cardiovascular disease.*

Introduction

Chronic disorder is a progressive disorder with several factors influencing the rate of progression of the diseases such as modernization, mental

stress, bad food habits, lack of physical activity etc. which affect the health of people leading to obesity, diabetes, hypertension, CVD etc. In these circumstances, both in advanced countries and in

metropolitan cities of India the change in lifestyle and the normal traditional pattern of foods become inappropriate. This is considered to be one of the basic reasons leading to food related health problems (Chandrashekhar and Acharya 1989). Diabetes mellitus is a killer disease with high blood sugar level which causes a variety of other complications. It reduces life expectancy by five to seven years, increases the risk of heart disease by 50 times, gangrene by 25 times and renal problem by 17 times. Heart and vascular diseases often go hand in hand with diabetes. Persons with diabetes are at a much greater risk for heart attacks, strokes and high blood pressure (Vasanthamani and Rekha, 2006). Hypertension has become a major public health problem in many developing countries including India more in urban than in rural population affecting about 50 million Indians mainly the middle aged and elderly persons of both the sexes. From the meager epidemiological studies carried out in India, it is estimated that there would be approximately 50 million cases of hypertension in India with the prevalence of 2.3 to 15.4 % (Kas 1999).

Cardio Vascular Disease (CVD) is increasing rapidly in the developing world and is predicted to overtake infectious disease in near future. Sensible and healthy food habits right from childhood coupled with good lifestyles can not only delay the occurrence of chronic disorders but can also add to the quality of life and increase life expectancy. Today hypertension, diabetes mellitus and cardiovascular disease have emerged as the most important causes of premature disability and

death all over the world. Due to change in lifestyle, increased alcoholism, smoking and sedentary life, the prevalence of chronic disorders is increasing in India (Riwani 1991). In view of the facts, the present study was undertaken to know the dietary management approaches practiced by subjects suffering from chronic disorders.

Materials and methods

The data was collected on the subjects who were attending three different system of medicine like Allopathy, Ayurveda and Naturopathy. The total sample size consisted of 245 subjects under three system of medicine (both the sexes). Under Allopathic system 105 subjects were studied for all the three disorders. Ayurveda and Naturopathy system constituted 70 subjects of two disorders each. A detailed interview schedule was formulated to elicit the information on various aspects related to chronic disorders in consultation. The collected data was analysed by number, percentage.

Results and Discussion

Dietary management practices by the subjects suffering from diabetes mellitus disorder (Table.1) showed that, the consumption of restricted food items like rice was higher among the group II compared to other groups. This leads to increase in blood sugar level, but in group I none of the subjects were consuming sweets compared to other subjects. In case of foods to be avoided more restrictions was noticed on sweets in group II, III and I followed by the fried foods in all the

subjects. Consumption of vegetables and ragi balls was high in group II compared to other groups leads to reduction in the blood sugar level and good health as it is rich in calcium, iron and fibre. The reduction in blood sugar are in line with studies conducted by Jain and Shan(1987) who observed that two gram each of jambu seeds (*Syzygium cumini*) and Sarkaraikolli (*Gymnema sylvestre*) when mixed and given thrice daily for a period of six weeks. There was a drop of 64.86mg/dl in fasting and 77.15 mg/dl in post prandial blood sugar levels after administration. Dietary management and beliefs by the subjects suffering from hypertensive disorder (Table. 2) showed that the consumption of restricted foods like preserved foods was higher among group I compared to group II and group III. Whereas consumption of foods which are expected to be avoided was highest in group II compared to group I and group III. This could bring about increase in the blood pressure and also indicates

that group II subjects consumed highest amount of fruits and vegetables when compared to group I and group III. Whereas, consumption of food which are expected to be avoided was highest in group II compared to group I and group III. This could have brought about increase in the blood pressure and also indicates group II subjects consumed highest amount of fruits and vegetables when compared to group I and group III. This practice appeared pro-healthy mainly because they are rich in vitamins, minerals and fibers.

Dietary management practices by the subjects suffering from Cardio Vascular Diseases (Table. 3) showed that majority of group I subjects consumed fried foods and non-vegetarian food under restricted food category. Majority of the subjects consumed vegetables followed by greens and ragi ball in foods included category, as they are rich in iron, calcium and fibre content. Fruits were consumed by majority of subjects as specialty foods.

Table.1: Dietary Management Practices Followed by Diabetic Subjects

*Multiple responses

Name of foods	Group - I		Group -II		Group -III		Reasons given
	N	%	N	%	N	%	
Food restricted (less consumed)							
Rice	22	21.0	25	35.7	19	27.1	Increases the blood sugar level
Preserved foods	7	6.7	4	5.7	7	10.0	Increases the blood pressure
Fried foods	7	6.7	8	11.4	10	14.3	Increases the cholesterol level
sweets		-	7	10.0	10	14.3	Increases the blood sugar level
Foods avoided*							
Sweets	30	28.6	26	37.1	21	30.0	Increases the blood sugar level
Fried foods	12	11.4	8	11.4	9	12.9	Increases the blood sugar level
Preserved foods	7	6.7	1	1.4	6	8.6	Increases the blood sugar level
Bakery foods	1	0.9	1	1.4	-	-	Increases the body weight
Spicy foods	2	1.9	6	8.6	1	1.4	Increases the blood pressure
Fleshy foods	5	4.8	8	11.4	7	10.0	Increases the blood sugar level
Foods included*							
Ragi balls	23	21.9	17	24.3	14	20.0	Rich in fibre and calcium, reduces the sugar level
Dry chapathi	14	13.4	15	21.4	16	22.9	Good for health
Fruits	15	14.3	14	20.0	9	12.9	Rich in vitamins and minerals
Vegetables	27	25.7	29	41.4	24	34.3	Good for health
Greens	10	9.5	18	25.7	15	21.4	Rich in fibre and iron
Specialty of the foods*							
Fenu seeds greek	11	10.4	15	21.4	15	21.4	Reduces blood sugar level
Bitter juice gourd	14	13.4	11	15.7	9	12.9	Reduces blood sugar level
Butter methi milk+	4	3.8	11	15.7	12	17.1	Reduces blood sugar level
Ragi ganji	2	1.9	2	2.9	4	5.7	Reduces blood sugar level
Wheat juice grass	-	-	-	-	5	7.1	Reduces blood sugar level
Jamun powder seed	-	-	-	-	2	2.9	Reduces blood sugar level

Table 2. Dietary Management Practices Followed by Hypertensive Subjects

Name of the foods	Group-I		Group-II		Group-III		Reasons given
	N	%	N	%	N	%	
Food restricted (less consumed)							
Preserved foods	15	14.3	3	4.3	2	2.9	Increases blood pressure
Spicy foods	7	6.7	8	11.4	6	8.6	Increases blood pressure
Fleshy foods	8	7.6	11	15.7	8	11.4	Increases blood cholesterol level
Salty foods	0	0	9	12.9	15	21.4	Increases the blood pressure
Sweets	1	0.9	3	4.3	2	2.9	Increases the blood sugar level
Fried foods	12	11.4	11	15.7	11	15.7	Increases the blood cholesterol + weight
Foods avoided*							
Preserved foods	17	16.2	16	22.9	5	7.1	Increases the blood pressure
Spicy foods	2	1.9	8	11.4	5	7.1	Increases the blood pressure
Salty foods	8	7.6	9	12.9	10	14.3	Increases the blood pressure
Fried foods	5	4.8	5	7.1	7	10	Increases the blood pressure
Fleshy foods	3	2.9	8	11.4	8	11.4	Increases blood cholesterol level
Foods included*							
Fruits	16	15.2	20	28.6	16	22.9	Good for health, rich in vitamins and minerals
Vegetables	32	30.5	26	37.1	26	37.1	Rich in fiber, good for health
Greens	14	13.4	11	15.7	18	25.7	Rich in iron and fiber , good for health
Ragi ball	10	9.5	10	14.3	7	10	Rich in fiber and calcium, decreases the blood sugar level
Dry chapathi	8	7.6	5	7.1	12	17.1	Good for health
Salt free diet	5	4.8	6	8.6	3	4.3	Reduces the blood sugar level
Specialty foods*							
Butter milk	12	11.4	17	24.3	15	21.4	Good for health
Tender coconut	9	8.6	18	25.7	12	17.1	Good for health
Sugarcane juice	5	4.8	8	11.4	2	2.9	Good for health
Lemon juice + honey	1	0.9	5	7.1	4	5.7	Reduces the blood pressure
Wheat gross juice	-	-	-	-	3	4.3	Reduces the blood sugar level
Total water + honey	-	-	-	-	3	4.3	Reduces the blood sugar level

Table 3. Dietary Management Practices Followed by CVD Subjects

Name of foods	Group-I		Reasons given
	N	%	
Food restricted(less consumed)*			
Egg	1	0.9	Increases the cholesterol level in blood
Fried fruits	14	13.4	Increases the cholesterol level in blood
Bakery products	11	10.4	Increases the blood sugar level
Salty diets	2	1.9	Increases the blood pressure (bp)
Fleshy fruits	12	11.4	Increases the cholesterol level + weight
Foods avoided*			
Fried foods	7	6.7	Increases the cholesterol level + weight
Spicy foods	4	3.8	Increases blood pressure
Preserved foods	20	19	Increases blood pressure
Fleshy food	5	4.8	Increases blood pressure
Foods included*			
Greens	25	23.8	Rich in iron and fiber content
Vegetables	33	31.4	Good for health
Fruits	10	9.5	Good for health
Chapathi(dry)	10	9.5	Good for health
Ragiball	15	14.3	Decreases the blood sugar level
Fish	4	3.8	Good for heart problems/patient
Specialty foods*			
Neem leaves	1	0.9	Decreases the cholesterol level
Fruits	3	2.9	Good for health

*Multiple response

Conclusion

Obesity, hypertension, sedentary lifestyle and high fat diet were found to be causative factors in the development of cardio vascular diseases. Similar findings have been reported by Amirthaveni and

Vijayalakshmi (2000). In case of subjects suffering from Diabetes mellitus consumption of restricted foods namely rice, sweets was highest in group II compared to group I and group III. The dietary management practices of hypertensive subjects showed the consumption of restricted

foods was higher in group I compared to group II and group III. Consumption of foods which were expected to be avoided, fruits and vegetables was highest in group II compared to group I and group III. Under group I subjects suffering from Cardio Vascular Diseases consumed higher amount of fried food and non-vegetarian foods compared to other groups of subjects.

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