

Nutritional Knowledge and Dietary Use among Cardiac Patients at Chaudhary Pervaiz Ellahi Institute of Cardiology, Multan

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Abstract.....Objectives: to examine the life habits, and risk factors that associated as risk with cardiovascular diseases between people in different areas. **Methodology:** A cross-sectional study was held in the region of Multan. The random sampling apply with a questionnaire according to geographical are age and gender. A total 404 sample was collected a questionnaire was designed to calculate their intake of nutrients, exercise and dietary habits. **Results:** The study showed that 75.7% were cutting down salt. 47.8% people was doing exercises to control blood pressure. Only 10.9% were reading food labels to choose low sodium content. Most of the time was only 28.2% who read labels to choose lower in calories. The patients who were drinking regular soft drinks pop/soda more than once a day were 4.2%. **Conclusion:** Nutritional knowledge among patients of cardiovascular disease is not sufficient. The patients were not taking healthy diet. There is a strong need to improve the knowledge regarding nutrition in these patients and encourage then to adopt healthy lifestyle.

Keywords: Knowledge, Cardiovascular disease, Dietary habit, Urolithesis

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INTRODUCTION

Coronary heart diseases are the leading cause of delay adjusted life years globally. The CVD mortality rate has been on the rise in individuals over the age of 65. Globally 17.7 million deaths each year are attributed to CVDs, making an estimated 31% of all global deaths. Risk factors are tobacco smoking, unhealthy weight reduction, physical inactivity and harmful use of alcohol leading to raised blood pressure, elevated blood glucose, obese and increase weight^{1,2}.

Cardiovascular disease patients require multiple cares of everyday situations of life that includes at work, at homes as well as in community that requires the understanding and consumption of the information of health and disease related and also decision making information. So a patient with cardiovascular diseases needs suitable knowledge about health to expand expertise and command in the management of individual itself^{3,4}.

The foundation of sound health is nutrition. Recently, the nutritional importance, as an essential part to solve the nutritional problems to many societies, communities and challenges in economic that facing the world which is emphasized. Maintenance of that health include non-communicable diseases their prevention and treatment as well as management of weight^{4,5}.

Nutrition plays an integral role in the causes of Cardiovascular Diseases (CVD). The information on nutrition is divided into three different main parts: different diets, separate items of food, and supplements of nutrition. The fact has been known that effects of Malnutrition on the clinical consequences in patients with CVDs⁵⁻⁷, thus implying that sufficient knowledge should be present in cardiac patients about nutrition and their dietary intake. This study will try to find out what is the current knowledge regarding nutrition is in cardiac patients going to a tertiary care hospital in Multan. It will help with making future propositions for the better quality of life of cardiac patients.

In 2016, a study was done in Canada, which looked at the dietary pattern impact on CVD. The association among specific different types of macronutrients as well as foods and CVD was identified through paper and the food system, globally. Impact of patterns of diets that increase the threats for the population for ill health patients who were experienced was summarized too. Study design was prospective cohort study and outcome was CHD, stroke and type 2 DM. New SDG emphasize the researcher implement of policy and intervention of better food supply. New SDG goals are to reduce non communicable diseases' burden so policy and interventions are made to emphasize on increasing food supplies and altering dietary patterns which will have societal, traditional and eco-friendly benefits⁷⁻¹⁰.

Methodology

A quantitative study was conducted from April 2018 to July 2018. Tool was designed and translated in to Urdu. It was pre tested to identify any possible problem in the translation flow or language to collecting data. The questionnaire (tool) was improved after pre testing. Random sampling technique was used to collecting data. A total of 404 outdoor patients were involved to take data. Different ages of patients were chosen through random sampling. After collecting the data it was analyzed in SPSS and MS Word.

Results

The study was conducted in CPEIC Multan cardiology hospital. Most of the patients were illiterate and poor and belong to poor families. But all participants were cooperative and given consent to fill the questionnaire and also my organization given me permission to collect the data.

Most of the respondents (55.7%) were aged between 51 and above years. Male cardiovascular and hypertensive patients were 56.2% than females. Illiterate persons were more prone to disease i.e 40.8%. Majority of the respondents were males (44.6%) Low and middle socioeconomic status were involved in cardiovascular diseases/hypertension. Urban population (62.9%) was more hypertensive and cardiac diseases.

Age of patients was 35-40 years of age were 9.7%, 41-45 years of age 8.7%, 46-50 years of age 26%, 51 and above years of age 55.7% Table-1. Socio economic status of low economic condition was (44.6%) middle economic condition (44.6%) and upper economic status to be (11.4%) Table-3. Question concerning nutritional knowledge about salt intake, exercise and eating habits. Only 75.7% were cutting down salt 47.8% Table-2.

Table-2: Nutritional Knowledge

Knowledge	Response	Frequency
Cutting down salt	Yes	306 (75.7%)
	No	65 (16.1%)
	Don't use	26 (6.4%)
	Don't know	7 (1.7%)
Exercise to control BP	Yes	193 (47.8%)
	No	143 (35.4%)
	Don't know	67 (16.6%)
Changing eating habits to help lower or control blood pressure	Yes	289 (71.5%)
	No	75 (18.6%)
	Don't Know	40 (9.9%)
Read food labels to choose low sodium content	Never	241 (59.7%)
	Sometime	48 (11.9%)
	More of time	44 (10.9%)
	All of time	41 (10.1%)
	Does not apply	30 (7.4%)
Drain the fat when cook ground meat	Never	57 (14.1%)
	Sometime	51 (12.6%)
	More of time	162 (40.1%)
	All of time	91 (22.5%)
	Does not apply	43 (10.6%)
Read labels to choose lower in calories	Never	117 (29.0%)
	Sometime	50 (12.4%)
	More of time	114 (28.2%)
	All time	80 (19.8%)
	Does not apply	43 (10.6%)
Read food labels to choose foods lower in saturated fat/trans fat/cholesterol	Never	147 (36.4%)
	Sometime	38 (9.4%)
	More of time	96 (23.8%)
	All time	91 (22.5%)
	Does not apply	32 (7.9%)

Table-1: Demographic variables

Age	35-40	39	9.7
Age	41-45	35	8.7
	46-50	105	26
	51 and above	225	55.7
	Gender	Male	227
Gender	Female	177	43.8
	Education	Illiterate	165
Education	Primary	50	12.4
	Matric	112	27.7
	Bachelor	43	10.6
	Masters and above	34	8.4
Socioeconomic status	Low	180	44.6
	Middle	178	44.6
	Upper	46	11.4
Area of living	Rural	150	37.1
	Urban	254	62.9
Types of family	Joint	250	61.9
	Nuclear	154	38.1

Table: 03 Table showing socioeconomic status category

Charateristics		Freque ncy	Percentage
Socioeco nomic status	Low	180	44.6%
	Middle	178	44.6%
	Upper	46	11.4%

Table-4: different dietary products by patients in daily life

Variables	More than once a day n (%)	About once a day n (%)	2-3 times a week n (%)	About once a week n (%)	1-3 times a week n (%)	Less than one Month n (%)
Eat processed meat	14 (3.5)	19(4.7)	18 (4.5)	33 (8.2)	42 (10.4)	278 (68.8)
Eat whole grain bread	316 (78.2)	26 (6.4)	24 (5.9)	12 (3)	8 (2)	18 (4.5)
Eat baked goods doughnuts coffee cake	45 (11.1)	9 (2.2)	30 (7.4)	39 (9.7)	11 (28.5)	166 (41.1)
Eat lettuce or green leafy salad	17 (4.2)	17 (4.2)	41 (10.1)	88 (21.8)	141(34.9)	100 (24.8)
Eat French fries/fried potatoes/ater	15 (3.7)	15 (3.7)	43 (10.6)	93 (23)	117 (29)	121 (30)

meats, bakery products, Pakistani bread and food purchased from outside the home; a fruit and vegetable pattern including fruits, juices, raw and cooked vegetables, lean meat and low-fat milk; and a seafood and yogurt pattern identified by prawns, fish, potatoes and yogurt.

The fat and sweet pattern scores were low among older subjects, those with high BMI and waist circumference but high among females and physically active participants. The fruit and vegetable pattern was associated with younger age, high BMI, education and non-tobacco use. The seafood and yogurt pattern was associated with high BMI, increased physical chronic diseases activity and non-tobacco use¹⁷. Through this study it was observed that majority of the respondents were middle aged patients (46-50) years old .In my study most of the respondents showed interest to gain information about dietary habits and nutritional knowledge that may them save from cardiac complications.

Discussion

Even though the global burden of cardiovascular disease (CVD) has steadily decreased during the past 10 years, CVD remains the leading cause of death and disability in developed countries²⁴. Nutritional status assessment provides the data necessary to study the effects of nutrition on health and disease, to identify critical nutrients in a specific population and the groups within this collective that are at risk of deficiency, and to develop effective public health policies to prevent and cure nutrition-related diseases. Indeed, diet-related non-communicable diseases are the most common cause of death world- wide and are associated with obesity and excessive intakes of SFAs and/or free sugars. Knowledge of the nutritional status is also required for the formulation of recommendations for nutrient intake²¹.

This study provides an opportunity not only to assess the perception of food habits and nutritional knowledge but also describe the pattern and experience related to food, nutritional composition and knowledge. This study revolves around six important association age, gender, level of education, socioeconomic, area of living and types of family of cardiac patients.

A similar cross-sectional study report specific dietary patterns among a low-income urban people in Pakistan and to determine their associations with sociodemographic, anthropometric and life-style characteristics of subjects(25). Three dietary patterns were identified: a fat and sweet pattern characterized by fried snacks/foods, desserts, organ

A study in USA showed that older patients with heart failure (HF) were challenging to manage due to the high prevalence of frailty, polypharmacy, cognitive impairment, and other geriatric conditions. Malnutrition and poor dietary habits are also common and strongly predict adverse outcomes in older patients with HF. Current dietary recommendations for HF primarily advise reducing sodium intake, but randomized studies suggest that excess restriction can lead to adverse outcomes. The optimal dietary pattern, caloric intake, advice for weight management, and strategies for self-care in this population have not been determined²⁵ In this study most of the respondents started interested to change their eating habits to help lower or control their blood pressure. They have interested to cutting down salt from their meal. Study reflects that males are more prone to cardiac diseases. In this study there is not much difference in the ratio of males (56.2%) and females (43.8%). It is known fact that family and friends play a very important role in everyone’s life; it involves not only dietary patterns but also lifestyle, sociocultural, cultural tradition and environmental aspects take part in our life.

Conclusion

The results of the study concluded that nutritional knowledge among patients of cardiovascular disease is not sufficient. The patients were not taking healthy diet. There is a strong need to improve the knowledge regarding nutrition in these patients and encourage them to adopt healthy lifestyle.

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