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DIETARY HABITS AND PHYSICAL ACTIVITY OF TEACHING STAFF OF HOLY FAMILY HOSPITAL RAWALPINDI

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Abstract:

Objective: *The aim of the study is to observe the dietary habits and physical activity in the teaching staff of Holy Family Hospital Rawalpindi. This will provide us information regarding to what extent do they follow the recommended health parameters in their daily life and how their workload has affected their lifestyle.*

Material and Methods: *It was a census type of sampling in which 203 faculty members of Holy Family Hospital were asked, through the questionnaires, about their dietary habits and about the mode of physical activity they practice in their daily life*

Results: *Out of 203 members, 51.2% were reported to prefer health, 44.8% used to follow a special diet and 59% were not in the habit of missing a meal in their daily dietary practice. Prevalence rate of regular physical activity was reported to be 70% among the faculty members with jogging as the most common mode of exercise (25.1%).*

Conclusions: *Majority of the doctors' community in Holy Family Hospital, we're following a healthy lifestyle with a very few reporting failures to follow the required dietary and physical activity standard, due to certain hindrances at the workplace*

Keywords: *Dietary Habits, Physical Activity, Body Mass Index, Exercise.*

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INTRODUCTION:

A healthy balanced diet along with adequate physical activity is the basic foundation for good health. [1] Balanced diet is the one that contains all the major food groups namely carbohydrates, proteins, fats, vitamins, salts and minerals in appropriate proportion. [2] All of these constituents preferably fruits, vegetables, legumes, nuts, grains, unsaturated fats and less salt and sugar are considered vital for the basic growth and development of human body according to the World Health Organization (WHO) recommendation. [3] Physical activity, which is the second parameter of this study, is equally important. It reduces fat accumulation, controls blood glucose level and promotes a good mental health.[4] It does not include only the planned physical exercise but covers a wide range of other activities like occupational work, household chores, leisure-time activities like walking, running, cycling, gardening, hiking, swimming and playing games and sports.[5] For adults aged 18-64 years, the recommended physical activity is at least 150 minutes of moderate-intensity or at least 75 minutes of vigorous-intensity physical activity throughout the week.[3] Diet and physical activity have always been more emphasized in Public Health Sector. People with poor nutrition usually have reduced immunity, impaired physical and mental development and they are more prone to diseases. [1] Similarly, the individuals who are less active usually have increased body mass index (BMI) and have higher rates of coronary heart diseases, high blood pressure, hip and vertebral fracture and metabolic syndromes as compared to the active individuals. [6]

According to WHO report, lack of physical activity is the fourth leading cause of mortality accounting for almost 3.2 million deaths globally.[7] Less fruit and vegetable intake in diet is yet another risk factor that has caused approximately 1.7 million deaths all over the world.[8] Reports have shown that the prevalence of recommended physical activity in South-Asian population is 60% less than that in native Caucasians.[9] Due to which they have higher percentage of body fat and BMI than the European population.[7] Also, the risk for Diabetes Mellitus is comparatively 3-5 times more in South-Asia than in other subcontinents.[4]

A study in 2010 showed that only 15% of Pakistan's population is taking recommended amount of fruits and vegetables in their daily diet while one third of the population prefers junk food [10]. As per Asian-specific BMI cutoff of 23kg/m^2, one fourth of the population of Pakistan is overweight or obese, which is due to lack of physical activity and sedentary lifestyle [11].

Physical activity, as classified by a study, is of two types; one is Incidental physical activity which is a part of our routine task like walking, running, sitting and second is the Structured physical activity which is a planned activity aimed to improve health and fitness and is of longer duration i.e: more than 10 minutes, e.g: exercise like jogging, cycling, swimming [12]. In order to practice standard health measures, one should have some knowledge and awareness about these measures first. A study conducted on undergraduate students in Israel showed that there was a direct relation between perception about positive health measures and their practice in daily life. Students related to the subject of nutrition were more engaged in eating a healthy diet and performing regular physical exercise than the students of other disciplines [9].

Despite of awareness, there are certain barriers to the practice of a healthy lifestyle. A survey by National Obesity Observatory (NOO) showed that majority of the adults in United Kingdom had an understanding about what a balanced diet is; yet adults from lower income groups were not able to afford it daily [13]. Surveys among South-Asian population revealed that more than 80% of people does not consume sufficient amount of vegetables and fruits in their daily diet and proportion of physical inactivity was also high among them, reported to be 18.5%-88.4% in India, 60.1% in Pakistan (males-52.1%, females-69.8%) and nearly 11.0%-31.8% in Sri Lanka [14]. Lifestyle of workforce is specifically important because their performance at work depends on it. A study conducted on the doctors of a tertiary care hospital in Karachi, Pakistan reported 64% prevalence of dining out, 59% prevalence of consuming snacks in between meals and 50% prevalence rate of physical inactivity; contributing a major portion towards the high rate of obesity observed among them [15].

A study by University of Lahore, Pakistan reported that most of the people at workplace prefer fast food in their diet because it is easily available and also good in taste [16]. It is also reported that in Pakistan, due to higher stress and reduced sleep among people related to medical profession, prevalence of energy drinks (caffeine) was higher in them to boost their energy level [17]. Other ill dietary habits among them include excessive use of tea, coffee and anti-depressants [18].

WHO reported that unhealthy diet and inadequate physical activity are the leading risk factors for major

non-communicable diseases including cardiovascular diseases, diabetes, cancer and chronic respiratory diseases like chronic obstructive pulmonary disease and asthma [11,15]. A study by Nutrition and Physical Activity Group in United States of America showed that approximately one-third of cancer, 20-40% of heart diseases and 90% of diabetes is associated with unhealthy diet and physical inactivity [19]. The urban population of Pakistan, due to their sedentary lifestyle, reported comparatively higher proportion of these non-communicable diseases than the rural population [20]. Different research studies conclude that workers having tough job routine usually have poor health and higher risk of morbidity due to lack of time to take care of their diet and perform regular physical activity [21]. International Health Organization declares that more than 25% of the teachers, in developed countries, are showing health problems due to job stress [22]. Mostly it is seen that working community used to skip breakfast and take less meals a day as compared to non-working people which deteriorates their health [23]. Barriers like less awareness, lack of time, constant working and poor health to take regular exercise further worsens the situation [17]. A study among medical students of Lahore, Pakistan reported that more than 80% of students were not engaged in sports and only 28.7% students used to have regular walk or jogging; furthermore, among such individuals, approximately 30.5% males and 16% females had Body Mass Index greater than 25.0 kg/m^2 and central obesity was found in 46% of male and 31.4% of female students, indicating that majority of them were not following standard health parameters in the required manner [24].

Diet and physical activity are the two factors that play a leading role in determining health status of a person. Regarding balanced diet of an adult, following are the recommendations as summarized from different studies; at least 2-3 meals should be taken a day; more vegetables and fruits should be consumed in daily diet i.e: at least 400g per day; daily energy intake from fats should be less than 30% and preference should be given to sources of unsaturated fats like fish, nuts, vegetable oil, etc; salt intake should be less than 5g per day; less than 10% energy should be taken from sugars and daily sodium consumption should not exceed more than 2300mg [5,7].

MATERIALS AND METHODOLOGY:

It was a cross-sectional type of survey conducted among the teaching staff, both clinicians as well as non-clinicians, of Holy Family Hospital. Census was done on the study sample of 203 faculty members. The data was collected through the self-designed questioners after informed consent and ensured confidentiality. This questioner was having two parts. In the first part, faculty members were asked about their daily dietary practice, proportion of meal size and about the intake of special diet. The second part was concerned about the exercise habits and any limitations to it among the faculty. BMI of the members was also kept in consideration. The data was analyzed through SPSS 16.0 statistical software using various statistical tools.

RESULTS:

203 faculty members of Holy Family Hospital participated in this research project with 69.51% males and 39.41% females, ranging in age between 24 years to 61 years and standard deviation 1.199. Observed BMI rates were 1.5% underweight, 63.1% normal, 30% overweight and 5.4% obese.

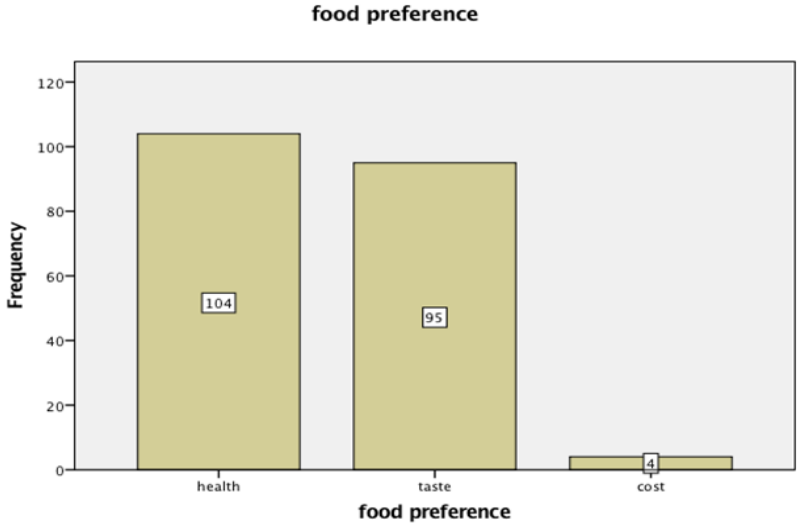

FIGURE:1 The dietary preferences were observed to be health in 51.2% members, taste in 46.8% members and cost in 2% members.

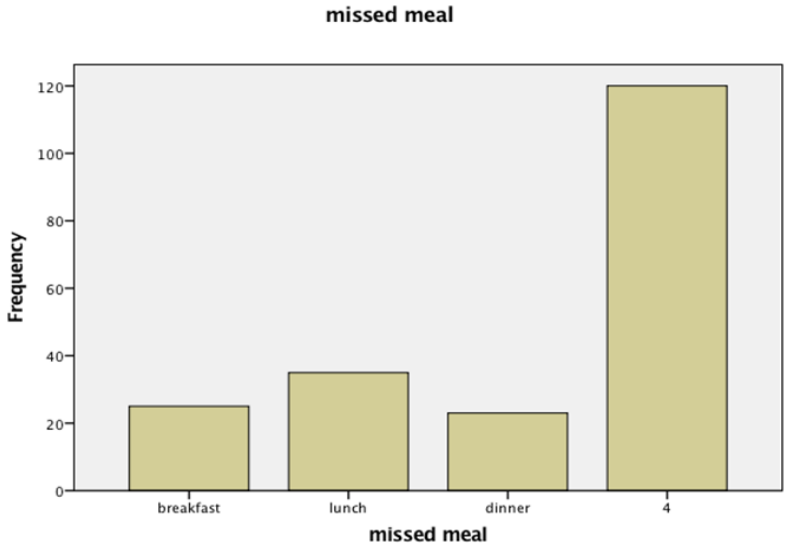

FIGURE:2 Frequency of missed meal was observed 40.9%, with 17.2% members missing lunch daily, 12.3% missing breakfast, 11.5% missing dinner and 59.1% of total faculty members do not miss any meal a day.

FIGURE:3 Majority of the members that is 66.5% reported no or occasional intake of fizzy drinks while 33.5% members used to take fizzy drinks with their diet daily.

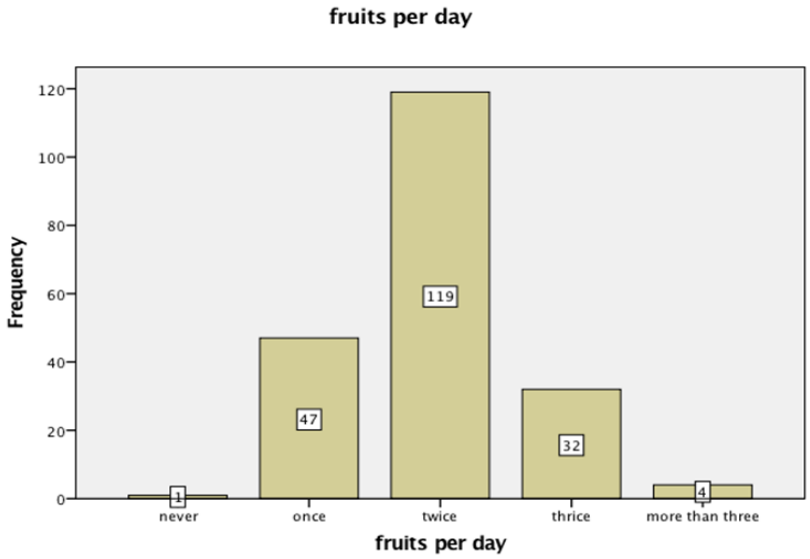

FIGURE:4 Rate of daily fruit consumption was observed to be twice or more in 76.35% of members or not at all in 23.64% members.

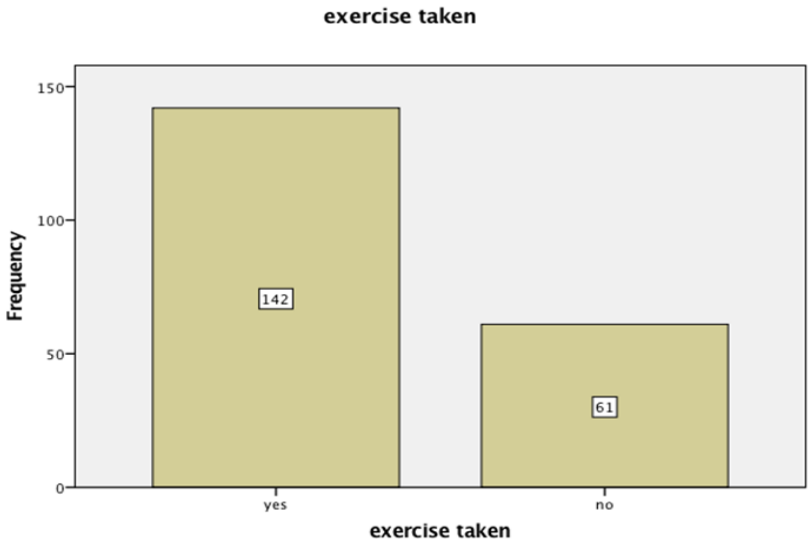

FIGURE:5 70% of the faculty members were indulged in healthy daily physical activity while 30% members could not exercise daily due to their tough routine.

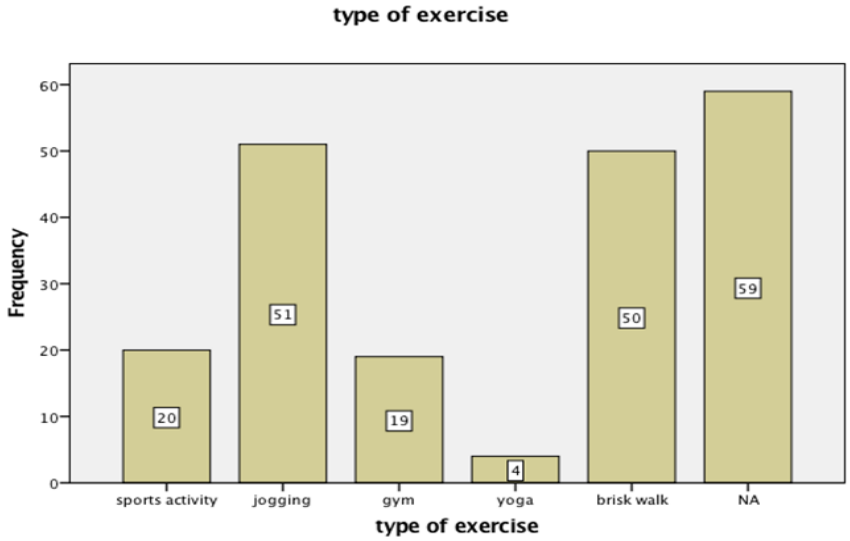

FIGURE:6 Jogging was observed to be the most common mode of exercise among the members, having the prevalence rate of 25.1%. Prevalence rate of other modes of exercise were brisk walk 24.6%, gym 9.4% and yoga 2%.

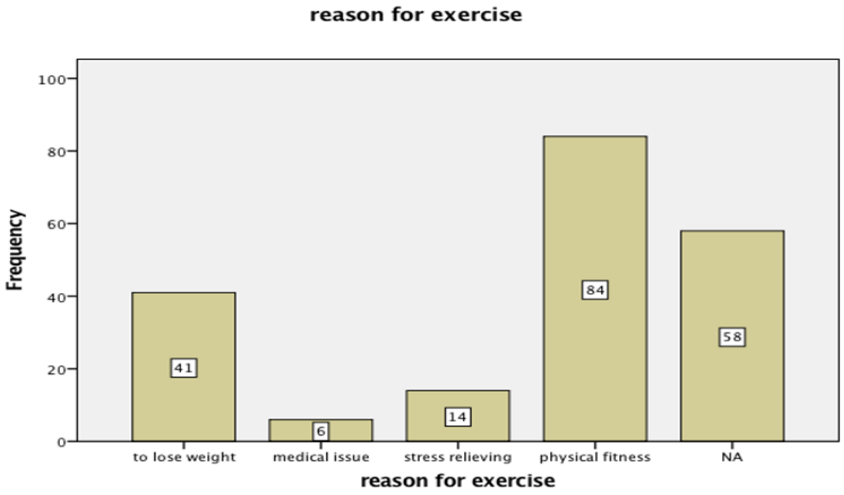

FIGURE:7 The most common reason for exercise reported was physical fitness 41.4%, with losing weight being the second most common reason 20.2%. Stress relieving and other medical issues were least reported reasons with the prevalence of 6.9% and 3%, respectively.

TABLE: 1

Dietary Contents * Exercise Taken Cross Tabulation

Special dietary intake and exercise habit were not observed to be significantly related, as 72.5% of those who follow a special diet and 67.8% of those who does not follow a special diet were found to take regular exercise in their daily life.

		exercise taken		Total
		yes	no	
dietary contents		76	36	112
	low fat	36	15	51
	low carbohydrate	10	4	14
	low sodium	4	0	4
	vegetarian	3	2	5
	others	13	4	17
Total		142	61	203

DISCUSSION:

Diet and physical activity are the two parameters that directly affects the lifestyle of a person. Those who take special care of their diet and also exercise regularly stay healthier and physically fit as compared to the rest of population [25]. As per results of this research, conducted on the diet and physical activity of teaching staff of Holy Family Hospital Rawalpindi, it was observed that dietary habits of most of the population under study were really up to the mark. Health was the preference of majority of the medical community. Majority subjects were taking a good and healthy diet, with less junk food and fat intake and more balanced diet intake. They were also taking a good proportion of meal size and very few of them were missing any meal occasionally due to their tough routine. This result was in accordance with a previous research conducted on doctor's community in Karachi, Pakistan which showed that only 25% doctors used to skip a meal (mostly breakfast) while majority of them have healthy dietary habits [14]. However, no direct link has been observed between BMI and special diet

intake as was shown in a previous research [26]. Also some previous researches proved that females are comparatively more conscious about their diet than males and 20s age population follow less dietary restrictions as compared to others [27]. But this difference was not observed in the study population of this research. This difference in results can be due to chance.

The prevalence of other parameter i.e: a good physical activity was satisfactory among the population under study. Majority of the doctor's community (about 70%) used to take adequate exercise which is in contrast to the results of a previous study conducted in Poland which showed low physical activity that is only about 24.4% among clinicians [13]. However, it was also observed that rate of obesity was higher in those who do not follow a regular exercise which is in accordance with a previous study that showed that only 20.8% follow an adequate physical activity, 71.3% physicians were having BMI above recommended [22]. No significant difference has been observed, among males and females or among population of age 20s and older, related to physical activity and this difference can be due to chance.

CONCLUSION:

This study concluded prevalence of a healthy diet and a good physical activity was good yet not as perfect as was expected from the doctor's community, despite of being more aware about the recommended healthy lifestyle and this lack of care was due to their busy routine and heavy workload as they belong to a really tough profession. Overall lifestyle of the teaching staff of Holy family hospital was satisfactory and healthy but they need to pay more attention towards their lifestyle, especially in terms of adequate physical activity as their health has a direct impact on their performance in the field of Medicine and also on the students and patients with whom they interact in their professional life.

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