Original Research

Assessment of cardiovascular diseases among students

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ABSTRACT:
Background: By addressing risk factors such as physical inactivity, tobacco use, diabetes mellitus, poor diet, obesity, elevated lipids, and high blood pressure, the majority of CVDs can be prevented. The present study was conducted to assess cardiovascular diseases among students. **Materials & Methods:**230 students of both genders were provided with a questionnaire. Sedentary lifestyle, and factors causing obesity etc. were recorded. **Results:** Out of 230 subjects, 110 were males and 120 were females.58% do exerciseand 42% don't. 80% had awareness about the increased sedentary lifestyle and 20% had not. 51% were strongly agree that sedentary lifestyle leads to obesity and other complications, 40% were agree and 9% were disagree. Factors causing obesity was lack of exercisein 42%, unhealthy diet in 35%, smoking in 13% and systemic diseases in 10%. 76% knew that obesity leads to high blood pressure and diabetes, and 24% not. Obesity leads to cardiovascular problems, 85% replied yes and 15% no. 48% were agree about obesity causes respiratory problems, 32% were strongly agree, 13% were disagree and 7% were strongly disagree. The difference was significant (P< 0.05). **Conclusion:** Nearly all of the study participants were aware of the dangers of a sedentary lifestyle.
Keywords: Cardiovascular diseases, Sedentary lifestyle, Obesity

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INTRODUCTION

By addressing risk factors such as physical inactivity, tobacco use, diabetes mellitus, poor diet, obesity, elevated lipids, and high blood pressure, the majority of CVDs can be prevented. Physical inactivity has grown to be a major health risk in the context of a sedentary lifestyle.[1] Eating junk food and not exercising are two aspects of a sedentary lifestyle that contribute to obesity, cardiovascular disease, and several other health issues. Nowadays, more people are leading sedentary lives, and students are doing so at a startling pace.[2] Obesity is become a serious public health issue. The number of students experiencing it is still rising. Numerous conditions, including diabetes, high blood pressure, heart issues, and many more, are brought on by obesity.[3]

Thyroid function issues have also been linked to obesity, according to studies. Being obese also has psychological effects, such as being bullied by society, which can result in depression. The transition from infancy to adulthood is known as adolescence. Adult life will be impacted by whatever is learned throughout this stage.[4] There are many studies on how
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people perceive their knowledge, attitudes, and behaviors linked to CVD risk factors, however the majority of them focus on women's perceptions, with very few studies examining young people's perceptions.[5] In order to start preventative activities, it is essential to comprehend the current knowledge, attitudes, and habits of the younger generation regarding CVD risk factors.[6]The present study was conducted to assess cardiovascular diseases among students.

MATERIALS & METHODS

The present study comprised of 230 students of both genders. All gave their written consent to participate in the study.

Data such as name, age, gender etc. was recorded. A questionnaire was prepared and distributed among all subjects. Sedentary lifestyle, and factors causing obesity etc. were recorded. They were asked to fill it and return. Data thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant

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RESULTS

Table I Distribution of subjects

| Total- 230		
Gender	Males	Females
Number	110	120

Table I shows that out of230 subjects, 110 were males and 120 were females.

Table II Assessment of parameters

Parameters	Variables	Percentage	P value
Perform exercise	Yes	58%	0.57
	No	42%	
Awareness about the increased sedentary lifestyle	Yes	80%	0.01
	No	20%	
Sedentary lifestyle leads to obesity and other complications	Strongly agree	51%	0.83
	Agree	40%	
	Disagree	9%	
Factors causing obesity	Lack of exercise	42%	0.05
	Unhealthy diet	35%	
	Smoking	13%	
	Systemic diseases	10%	
Obesity leads to high blood pressure and diabetes	Yes	76%	0.01
	No	24%	
Obesity leads to cardiovascular problems	Yes	85%	0.01
	No	15%	
Obesity causes respiratory problems	Agree	48%	0.04
	Strongly agree	32%	
	Disagree	13%	
	Strongly disagree	7%	

Table II, graph I shows that 58% do exercise and42% don't. 80% had awareness about the increased sedentary lifestyle and 20% had not. 51% were strongly agree that sedentary lifestyle leads to obesity and other complications, 40% were agree and 9% were disagree. Factors causing obesity was lack of exercise in 42%, unhealthy diet in 35%, smoking in 13% and systemic diseases in 10%. 76% knew that obesity leads to high blood pressure and diabetes, and 24% not. Obesity leads to cardiovascular problems, 85% replied yes and 15% no. 48% were agree about obesity causes respiratory problems, 32% were strongly agree, 13% were disagree and 7% were strongly disagree. The difference was significant ($P < 0.05$).

Graph I Assessment of parameters
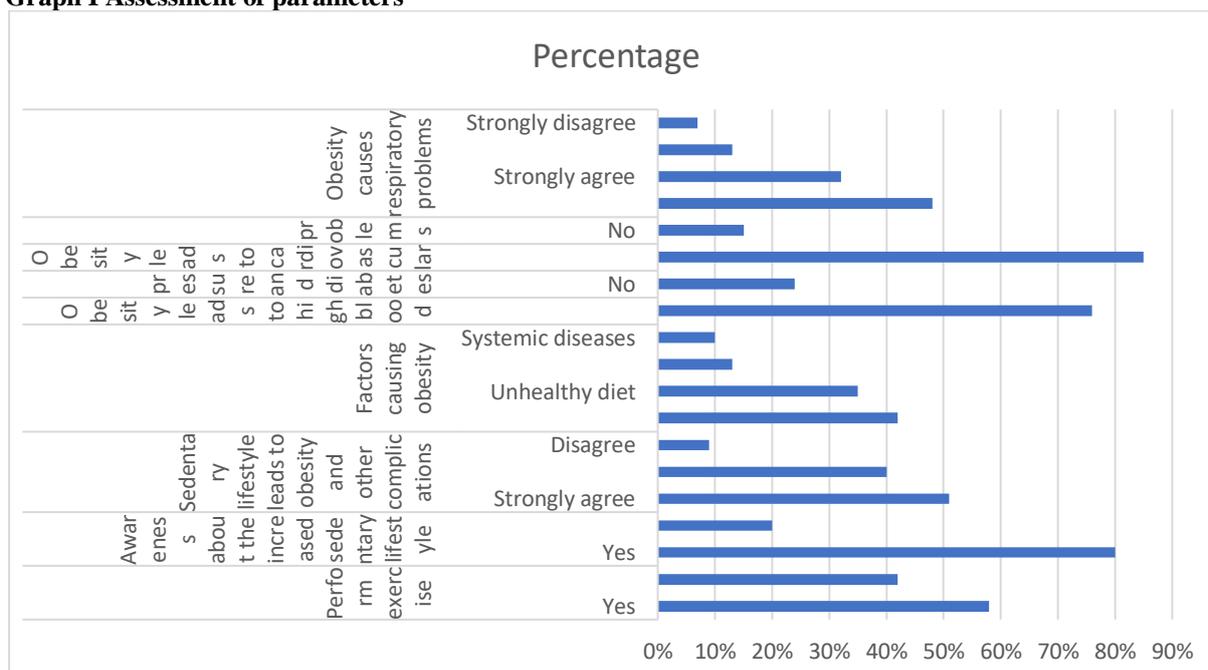
DISCUSSION

Globally, cardiovascular diseases (CVDs) are the leading cause of morbidity and mortality, with low- and middle-income nations accounting for over 75% of fatalities from CVDs.[7] It is the primary cause of death in India, and Indians die from cardiovascular disorders ten years earlier than people in Western nations.8 The most significant behavioral risk factors for insulin resistance, which results in metabolic syndrome, diabetes mellitus, obesity, and ultimately cardiovascular illnesses, include an atherogenic diet, a sedentary lifestyle, and a "South Asian lipid profile." Young adults' risk factor profiles can be used to predict their long-term cardiovascular disease risk. To create a tailored intervention through lifestyle adjustments, it is necessary to comprehend the types and extent of risk factors among young adults.[9]The present study was conducted to assess cardiovascular diseases among students.

We found that out of 230 subjects, 110 were males and 120 were females.Al-Almaie SM[10]determined the prevalence of obesity and overweight among Saudi adolescents. The sample was 1766 students, comprising 675 males and 1091 females. The mean age was 16.4 +/- 1.7 years. The prevalence of obesity was higher in male than female students (19.3% versus 11.8%) while a higher proportion of female students than males were overweight (17.2% versus 10.2%). No significant difference was found between the 2 references used to determine the prevalence of obesity and overweight.

We found that 58% do exerciseand 42% don't. 80% had awareness about the increased sedentary lifestyle and 20% had not. 51% were strongly agree that sedentary lifestyle leads to obesity and other complications, 40% were agree and 9% were disagree. Factors causing obesity was lack of exercisein 42%, unhealthy diet in 35%, smoking in 13% and systemic diseases in 10%. 76% knew that obesity leads to high blood pressure and diabetes, and 24% not. Obesity leads to cardiovascular problems, 85% replied yes and 15% no. 48% were agree about obesity causes respiratory problems, 32% were strongly agree, 13% were disagree and 7% were strongly disagree. Baig et al[11] examined university students' knowledge and attitudes regarding cardiovascular disease (CVD) risk factors, as well as the incidence of obesity and hypertension. 610 male students in all were chosen, and their body mass index (BMI) and blood pressure (BP) were measured. Out of 610 students, 29.8% were overweight, 10.7% were moderately obese, 7.9% were severely obese, and 7.5% had hypertension (systolic 2.6% and diastolic 6.3%) with a BMI of 51.6% in the normal range. The majority of participants believed that the primary causes of CVD were smoking, eating more fatty foods, being obese, having high blood pressure, and having higher levels of LDL cholesterol.The majority of participants concurred that maintaining a normal body weight, exercising frequently, and knowing one's blood pressure, blood sugar, and serum cholesterol are all important. They also knew that CVD could be avoided by leading a healthy lifestyle. The vast majority of individuals, however, did not lead healthy lifestyles. The primary reasons of obesity, according to 69% of respondents, are smoking, eating poorly, and not exercising. 95% agree that obesity contributes to respiratory problems. Almost 95 percent of students agree that fat-induced systemic diseases like diabetes and hypertension eventually lead to cardiovascular problems.

Sabra et al[12]in their study a sample size of 10% of the target population (2054 male students) was selected comprising 205 students. It was found that 28.9% of the university students do not practice any type of physical exercise. About 19% of the students were current smokers. A high proportion of university students were consuming fast foods, saturated fats, and soft drinks. Overweight (24.5%), obesity (11.9%), severe obesity (10.7%) as measured by BMI, as well as unacceptable WHR (10.7%) as an indicator of obesity were evident. Family history of obesity and unacceptable WHR were found to be statistically associated with increased obesity.

The limitation of the study was small sample size.

CONCLUSION

Authors found that nearly all of the study participants were aware of the dangers of a sedentary lifestyle.

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