ABSTRACT

OBJECTIVE: To assess the knowledge, attitude and practices of female undergraduate medical students regarding coronary heart diseases.

STUDY DESIGN: A survey research.


METHODOLOGY: A questionnaire was designed to reflect the knowledge, attitude and daily practices of the students. A total of 100 students, from 2nd and 3rd year Medical program of a public university in Saudi Arabia were randomly distributed the questionnaire. Incomplete forms were excluded from the study (n=97). After filling in the responses, a percentage analysis was done.

RESULTS: The results reflected a deficient knowledge of coronary heart diseases among students, especially unawareness of the risk factors. Fifty one and 38% of the students respectively did not know the association of physical inactivity and over-eating, to coronary heart disease. Non-healthy attitudes and practices of frequent junk food consumption (30%), overeating (13%), and inactive lifestyle (77%) was observed in the survey.

CONCLUSION: Proper counseling and training of the medical students for better understanding of the disease and its risk factor prevention is required.

KEY WORDS: Coronary Heart Disease, Knowledge, Attitude, Practice.

INTRODUCTION

Coronary heart disease (CHD) is a major public health problem worldwide. The coronary atherosclerosis is the main cause of coronary artery disease. However non atherosclerotic types of coronary heart disease are also reported. The clinical presentation of coronary artery disease includes angina pectoris, myocardial infarction, and chronic coronary heart disease. In atherosclerosis the lumen of arteries are narrowed due to buildup of plaque around the artery wall. The disease hinders the flow of blood leading to the development of CHD. Obesity and overweight are major risk factors for coronary artery disease. Both these conditions and are expected to be increasing in the Kingdom of Saudi Arabia (KSA) especially among females. There is no available scientific data regarding the prevalence of CVD in certain regions of Saudi Arabia. In year 2010, Nadira et al reported in their study that only 2.7% of the participants were aware of having cardiovascular disease. This percentage was lesser than the one reported in 2004 by Nozha et al in a study on the prevalence of coronary artery disease in Saudi Arabia (5.5%), revealing a progressively decreased awareness of this fatal disease.

Studies suggest that CHD is one of the main health problems in Saudi Arabia. It is the third most common cause of hospital-based mortality after accident & senility. By the time cardiac problems are diagnosed, the underlying atherosclerosis, progressing for decades is usually quite advanced. Vascular lesions begin to accumulate in adolescence. So although the disease manifests itself in later years of life preventive measures should be taken in childhood and adolescence.

Occurrence CHD has been reported in young women, even presenting to a severe degree between ages 20 and 30. Similarly it may prevail in young age with asymptomatic patients who are not undergoing investigations therefore greatly undermining the gravity of the situation. Over a period of ten years, the prevalence of obesity in Saudi women increased from 23.6% to 44.0, while physical inactivity worsened from 84.7% to 98.1% according to a survey report published in 2014.

Overweight reduction and obesity are of considerable importance to public health. Other risk factors of CHD include raised cholesterol, diabetes mellitus, overeating, smoking, hypertension, and lack of physical activities. The aim of this study was to evaluate the knowledge, attitude and practices of undergraduate female medical students of a Saudi Medical school regarding coronary heart diseases and its association to eating habits and physical inactivity.

METHODOLOGY

A survey research was done among the undergraduate female medical students of a Public University of Saudi Arabia from November 1st to December 31, 2013. A questionnaire was designed comprising of 10 assessing questions covering the
students' knowledge, attitude and routine life practices for eating and questions. The same was randomly distributed among 100 students of 2nd and 3rd year MBBS program by group in charge teachers. The forms were recollected after filling in the answers. The exclusion criteria was set as incompletely filled forms. After excluding the incomplete forms a total number of 97 forms were included in the study (n=97). Percentage was calculated using SPSS version 17 and comparison of the responses was done after data collection.

RESULTS

Fifty three percent of the students were familiar with coronary heart diseases, 51% were not able to relate its association to physical inactivity and 38% were unaware of its relevance to overeating. 6% of the students had the information of positive family history for CHD. However, despite of lack of information of basic causes of CHD, the general attitude depicts an active lifestyle, where 59% of the students rated themselves as brisk walkers. On the other hand 89% prefer to take lift instead of stairs in their daily routine. Day to day practices of these students reflect that 30% of the students take junk food on regular basis, 13% eat more than 5 times a day and only a negligible percentage of 6 follow a healthy diet plan. However 23% of the total female students undertake a physical workout program.

DISCUSSION

The coronary heart diseases have been labeled as lifestyle diseases. Diet and lifestyle are major factors thought to influence the appearance of Coronary heart diseases. Awareness of the risk factors, especially those related to daily attitudes and practices is very important for prevention and cure of CHD.

Although a global problem, physical inactivity is a rising problem in Saudi population. Physically inactive people are least likely to perceive their behavior as harmful. This noncompliance makes the scenario even more complicated to handle. Therefore public awareness is very important for the prevention of CHD in this community.

Physical activity is has a beneficial effect on health. A high-fat diet has been related to CHD in adults, and also to young people. Deranged lipoprotein profiles risk occurrence of CHD. Physical fitness and activity promote advantageous effect on lipoprotein levels. High levels of lipoprotein are known risk factor for CHD. Studies depict a 50% risk reduction among active women compared with sedentary women. Recent evidence suggests that even moderate-intensity activity, including brisk walking, is associated with substantial reduction in CHD risk. Thirty minutes of moderately intense physical activity most days of the week, is a recommendation for a healthy life. According to a report girls are more likely than boys to report inactivity (17.7% vs. 10.0%).

The current survey was conducted to evaluate the knowledge, attitude and practices of young age group of female medical students regarding coronary heart diseases. Medical students are a reflection of health atmosphere of the community. Not only are they in a constant training regarding health issues, their etiology, prevention and cure but also are in a better position to search and apply their knowledge to daily routine. They are more informed and motivated to follow the health rules and recommendations. The trends of the youth in medical schools are the best practical reference for positive health practices.

The results of the current study reflect an intermediate response of the medical students regarding their awareness and application of their knowledge in a healthy manner. Almost 50% of the students were aware of the CHD, but a similar percentage was not cautious of the major causative factor- physical inactivity. 38% were neglecting overeating, while 51% were ignoring physical activity as a risk factor. Such responses of the students reflect the non-perception of the risk factors of the coronary heart disease.

The attitude of the students included in the study was also not conclusive as 59% committed themselves as brisk walkers in daily life, while 89% acknowledged their preference of ease opting for lift (elevators) to carry them to their routine points. The nutritional problems in Saudi Arabia are mainly due to a change in eating habits, illiteracy and ignorance, rather than a shortage of food supply or low income. Importance of exercising, and controlling related conditions e.g. diabetes, hypertension, overweight tendencies and stress cannot be overemphasized. The daily practices of the students in the study group were found to be care free regarding their dietary habits with casual intake of junk food, overheating and failure to adopt a healthy diet plan. However a good percentage of the students were found to be following a physical workout plan. The contradicting results may be due to negligence of risk factors for the CHD but an overall weight consciousness of the female teenage group, which participated in the study.

A survey regarding the dietary habits, practicing life styles and their relevance to coronary heart diseases was conducted amongst the undergraduate students of two institutes of Islamabad in 2012 (one of the two was a non-medical institute). In this study percentage assessment showed that above 90% of students were aware of the consequences caused by physical inactivity and unhealthy dietary habits. 60% of them could relate this knowledge to CHD risk factors. But despite of this high percentage of awareness above 70% had a negative attitude towards their health and above 50% of them also continued unhealthy practices like no regular exercise, intake of unhealthy diet and over-eating.

Comparing the two studies, it can be inferred that the two communities although have different awareness levels of CHD, and its related risk factors at the undergraduate level, still reflect a parallel unsatisfactory approach to the issue.

CONCLUSION

The awareness of the coronary heart disease, and its risk factors although is present in the undergraduate medical students but it does not reflect completely in their attitude and practices. Prevention of CHD requires modification of attitude and practices of the young female age group regarding its risk factors.
factors. Medical students being the representatives of the medical professionals in the community and future health care providers need to be specially trained for a better and health lifestyle.

RECOMMENDATIONS

Periodic seminars, public campaigns and proper guidance at institutions should be arranged for the awareness of the students ensuring a change in the attitude and practices of the youth. This will impart knowledge, inculcate healthy life styles and shall prove a good preventive measure against CHD.

REFERENCES