Deeksheetha. P/J. Pharm. Sci. & Res. Vol. 7(9), 2015, 744-752

ISSN:0975-1459
Journal of Pharmaceutical Sciences and Research
www.jpsr.pharmainfo.in

Awareness of the Patients about the Predisposing Causes of Myocardial Infarction.

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Abstract:

Aim:
To find out the awareness about the predisposing causes of myocardial infarction,in patients coming to Saveetha Dental College, and to provide them with education.

Objective:
To do a survey in 100 out patients coming to Saveetha Dental College about the predisposing causes of myocardial infarction and to educate them about it.

Background:
A questionnaire was given to 100 out patients coming for dentral treatment, which was filled up by the researcher, about the patient's awareness of the predisposing factors of myocardial infarction. According to their variability in awareness they wereeducated about the predisposing factors like over weight, elevated blood pressure, smoking, stress, hereditary, and the prevention of myocardial infarction.

Reason:
As myocardial infarction has become more prominent in India, it can be reduced to some extent if awareness can be created about its predisposing factors and emergency management.

Keywords: Myocardial Infarction, out patients, awareness.

INTRODUCTION:

Cardiovascular disease is currently the major source of death in the developing countries,especially in India. Overall prevalence has increased from 2.06 percent in 1970 to 5 percent in 2002 in rural area and 1.04%in early 1960 to 13.02% in 2004 in urban area.[1]. The Global Burden of Diseases (GBD) study reported the estimated mortality from CHD[Coronary Heart Disease] in India at 1.6 million in the year 2000. [1]. It has been predicted that by 2020 there would be a 111 percent increase in cardiovascular deaths in India. This increase is much more than 77percent for China, 106 percent for other Asian countries and 15 percent for economically developed countries. Most Mis[Myocardial Infarction] occur in people over 50, and become more common with increasing age. Sometimes younger people are affected. MI is more common in men than in women. MI may occur in people known to have heart disease such as angina.[2]. It can also happen 'out of the blue' in people with no previous symptoms of heart disease. (Atheroma often develops without any symptoms at first.). People with risk factors such as smoking, diabetes, hyperlipidemia,obesity, high stress levels, heredity, etc have a higher risk of MI.Severe chest pain is usually the main symptom[1,4]. The pain may also travel up into the jaw, down the left arm, or down both arms. The person may also sweat, feel sick, and feel faint. The pain may be similar to angina, but it is usually more severe and lasts longer. (Angina usually goes off after a few minutes. MI pain usually lasts more than 15 minutes - sometimes several hours)[5]. A small MI occasionally happens without causing pain (a 'silent MI'). It may be truly pain-free, or sometimes the pain is mild and the person may think it is just heartburn or 'wind'. Some people collapse and die suddenly if they have a large or severe MI[2,6].

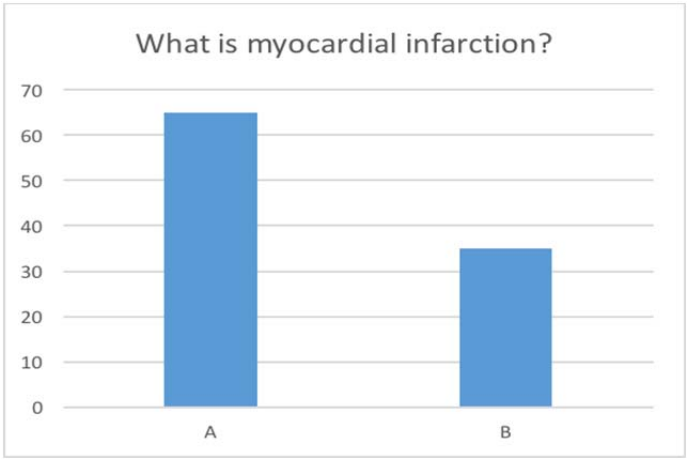
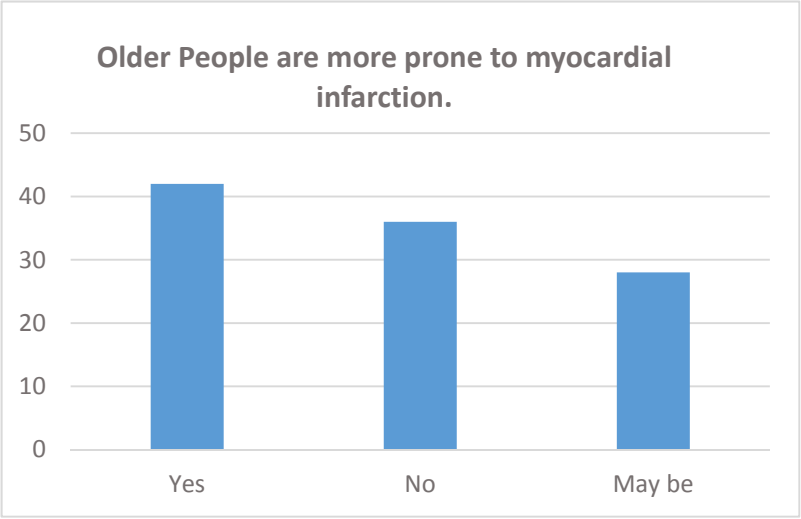
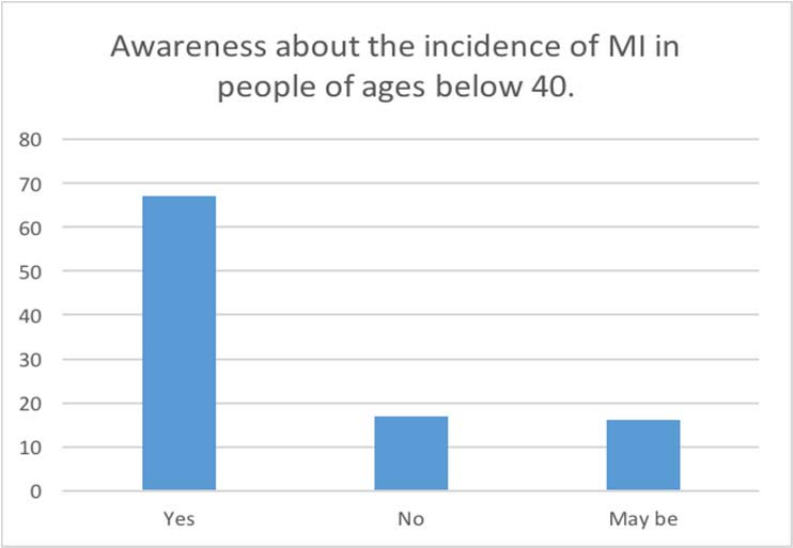
SUBJECTS AND METHODS:

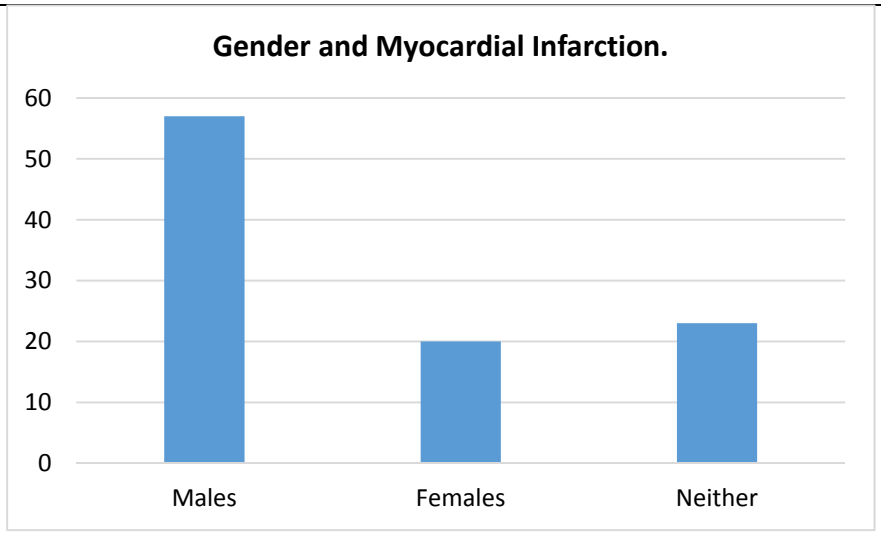
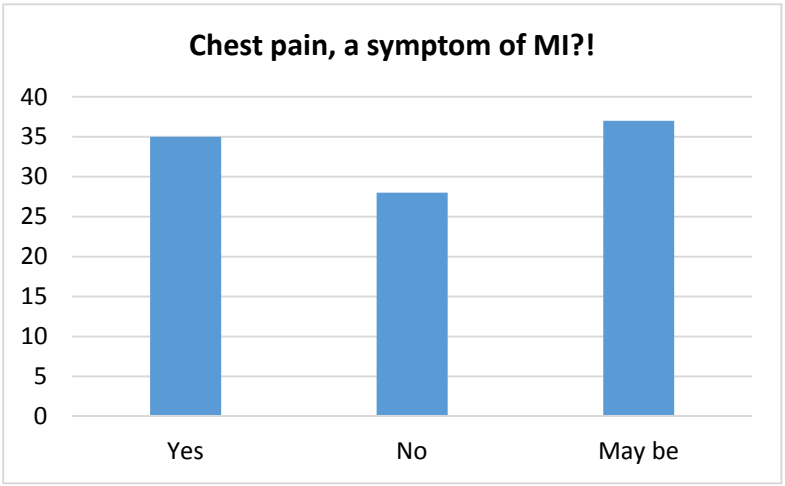
The main objective of the research was to do a survey in 100 out patients coming to Saveetha Dental College about the predisposing causes of myocardial infarction and to educate them about it.A questionnaire was given to the patients, about the patient's awareness of the predisposing factors of myocardial infarction. It was filled up by the researcher. According to their variability in awareness they were educated about the predisposing factors like over weight, elevated blood pressure, smoking, stress, heredity, etc.., and the prevention of myocardial infarction.

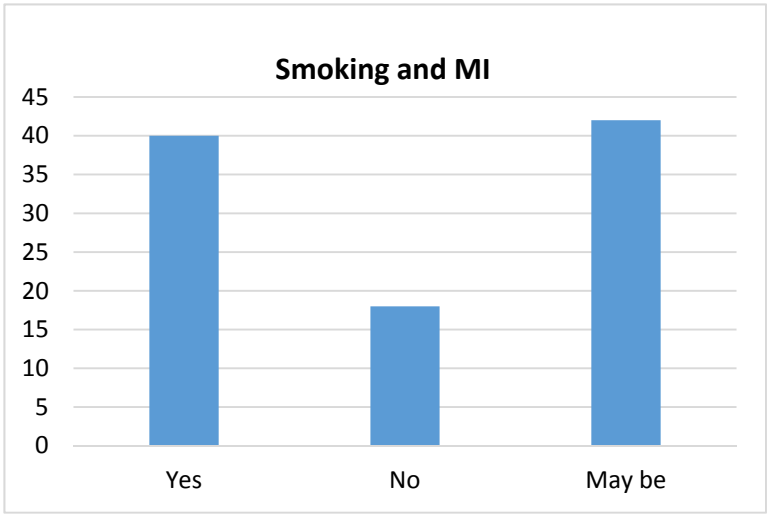
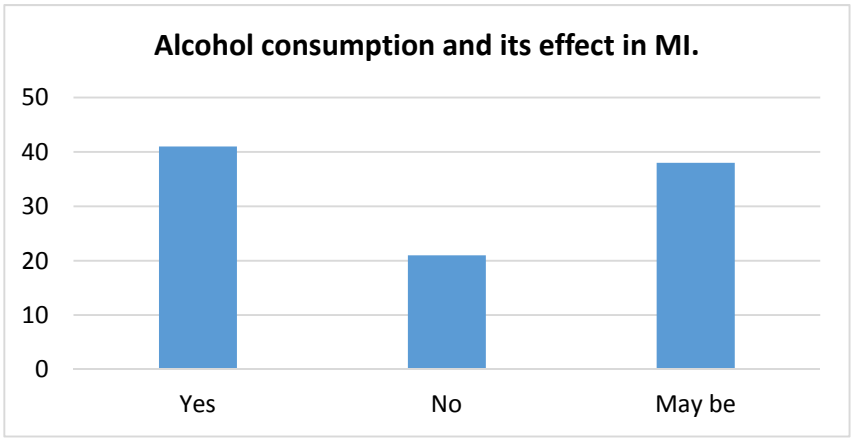
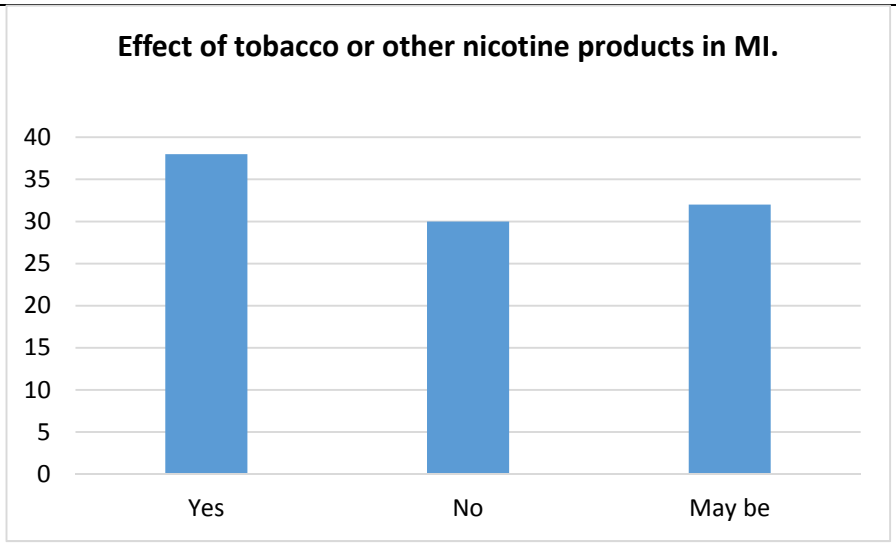
For the purpose of the research, patient information such as name, age, sex, weight, height and BMI were collected.

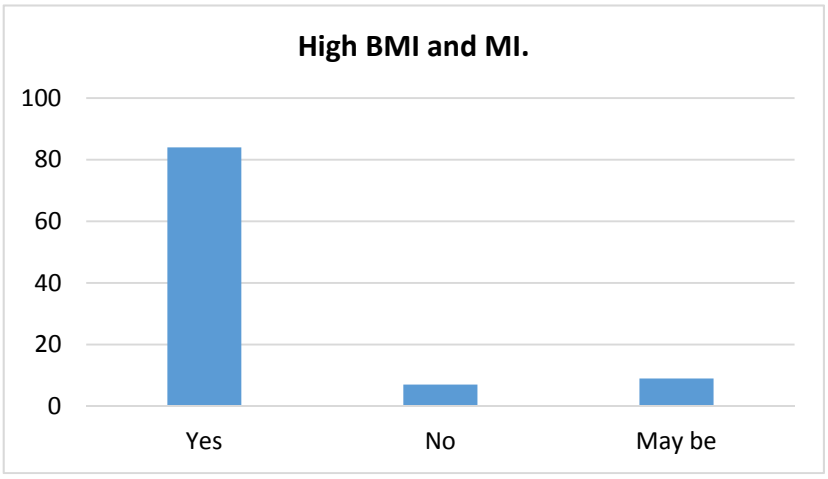
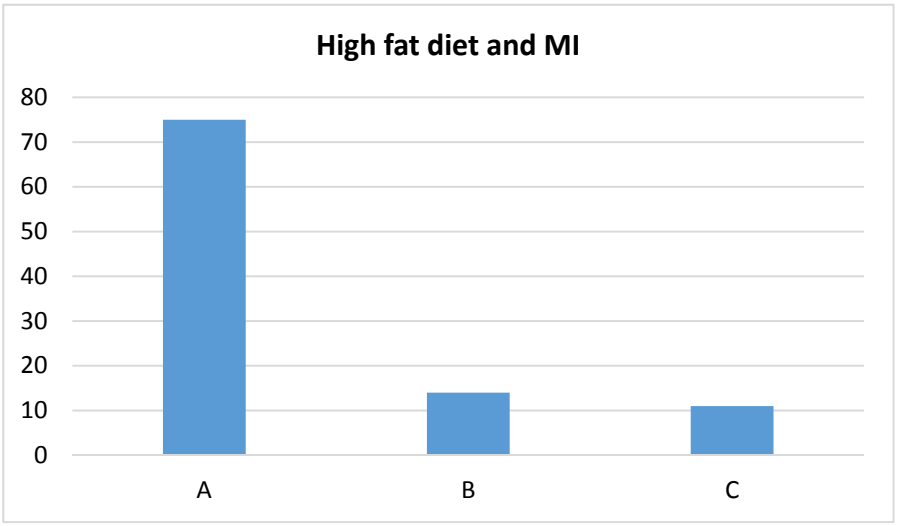
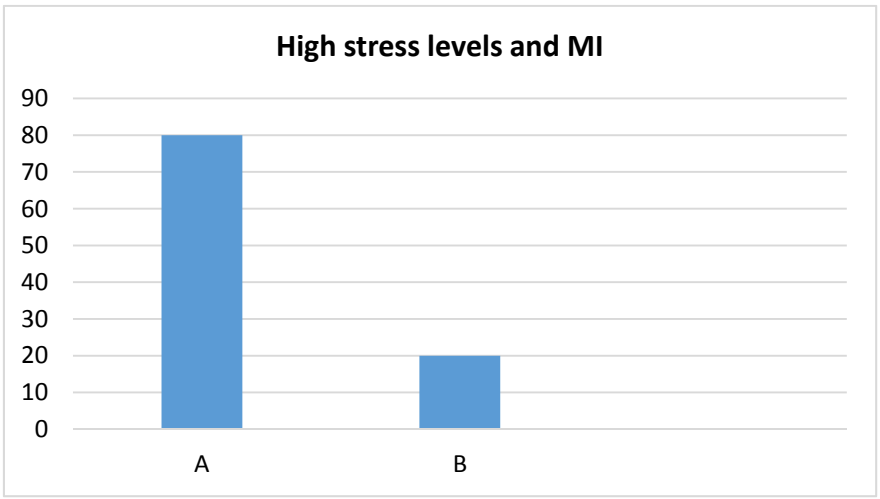
The questionnaire given to the patient is shown below along with the results obtained:
Name:
Age:
Sex:
Weight:
Height:
BMI:

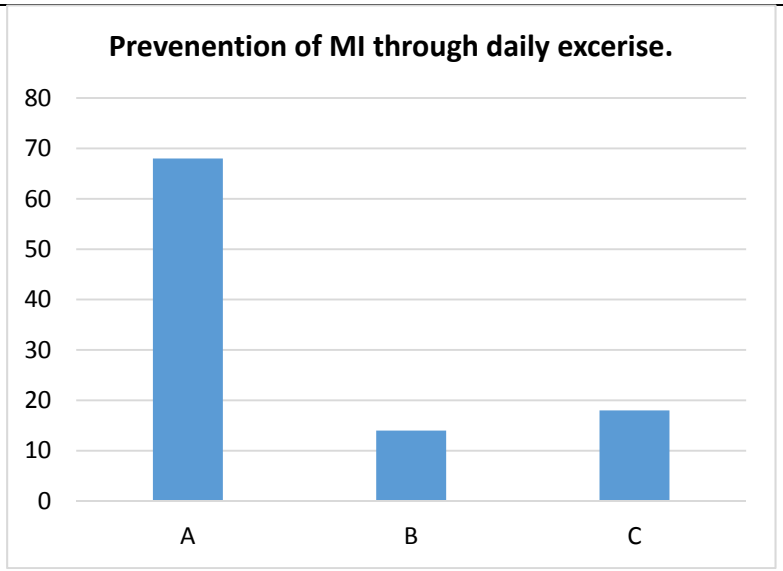
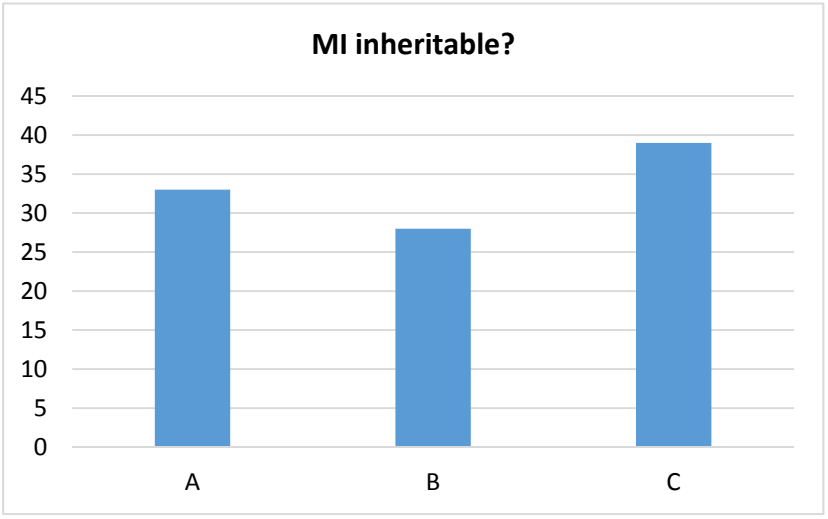
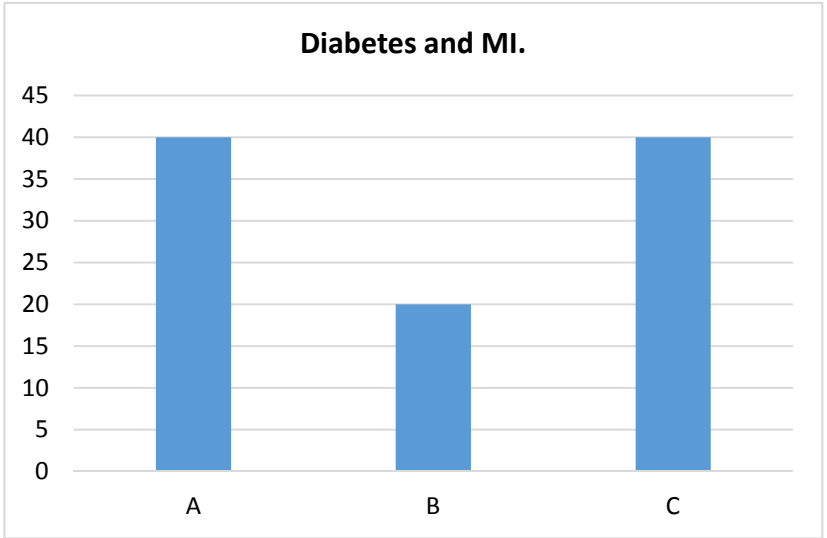
RESULTS:

1. Insufficiency of blood supply to the heart can lead to A) Pain which comes during exercise and disappears at rest (angina) or constant pain of heart attack (myocardial infarction). B) Don't know.	
2. Do you think older people are more prone to myocardial infarction than younger people? A) Yes B) No C) May be	
3. Can persons younger than 40 years develop myocardial infarction? A) Yes B) No C) Don't know	

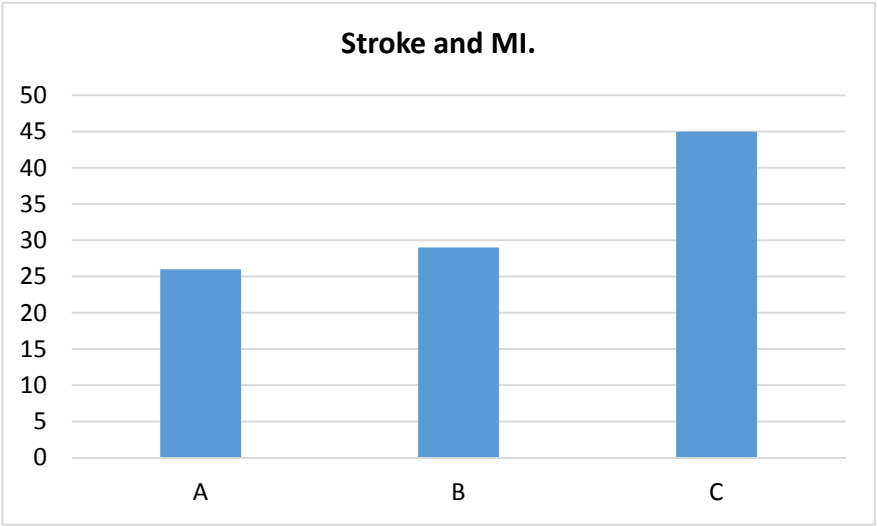
4. Which sex is more prone to myocardial infarction? A) Males B) Females C) Neither	
5. Does chest pain at work or during exercise a symptom of myocardial infarction? A) Yes B) No C) May be	
6. Did you know that myocardial infarction can occur without pain in the chest too? A) Yes, I knew it B) No, I didn't	

7. Do you think smoking can lead to myocardial infarction? A) Yes B) No C) May be	
8. Do you think consuming alcohol can cause myocardial infarction? A) Yes B) No C) May be	
9. Do you feel intake of tobacco or any other form of nicotine can lead to myocardial infarction? A) Yes B) No C) May be	

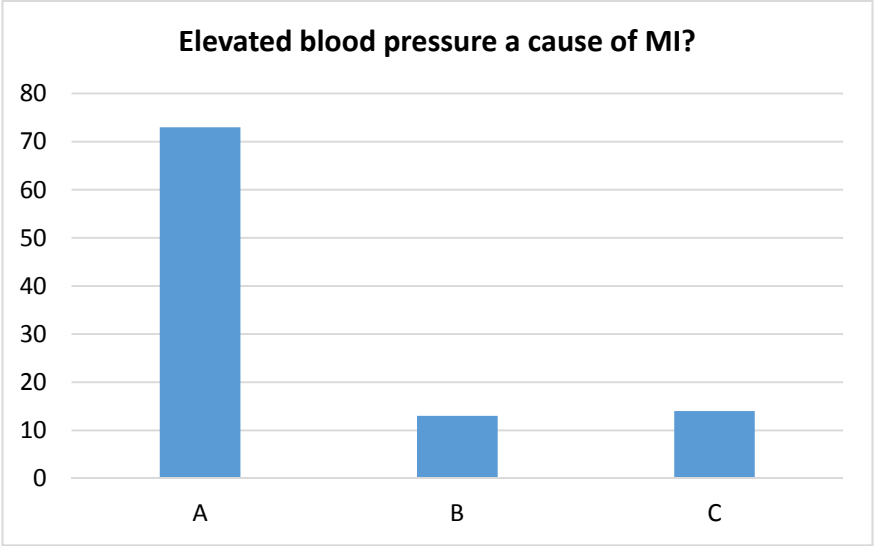
10. If a person is overweight, (higher BMI) is she/he more prone to myocardial infarction than a person with normal BMI? A) Yes B) No C) May be	
11. Do you think consumption of diet with high levels of starch and saturated fatty acids lead to myocardial infarction? A) Yes B) No C) May be	
12. High stress levels can lead to myocardial infarction. Agree or disagree A) Agree B) Disagree	

13. Do you think exercising regularly can prevent myocardial infarction? A) Yes B) No C) May be	
14. Do you think myocardial infarction can be passed down from generation to generation? In other words do you think it's hereditary? A) Yes B) No C) May be	
15. Diabetes - Is it associated with myocardial infarction? A) Yes B) No C) May be	

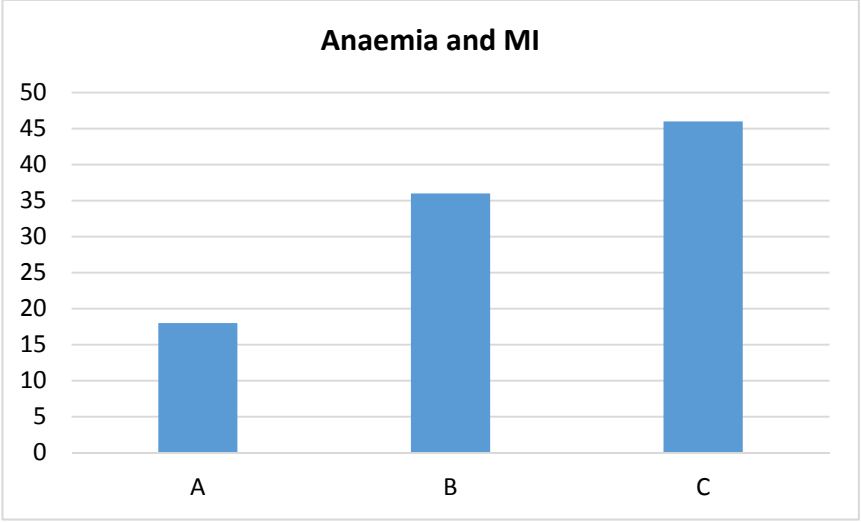
16. Can stroke be associated to myocardial infarction?
A) Yes
B) No
C) May be

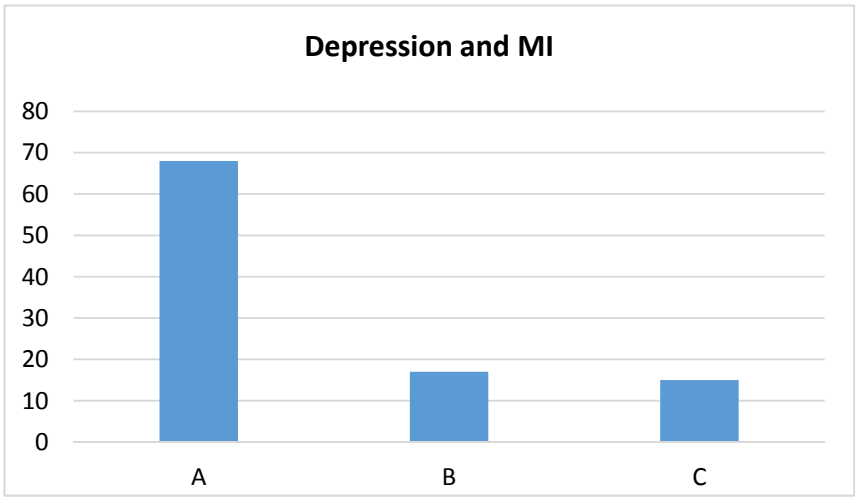


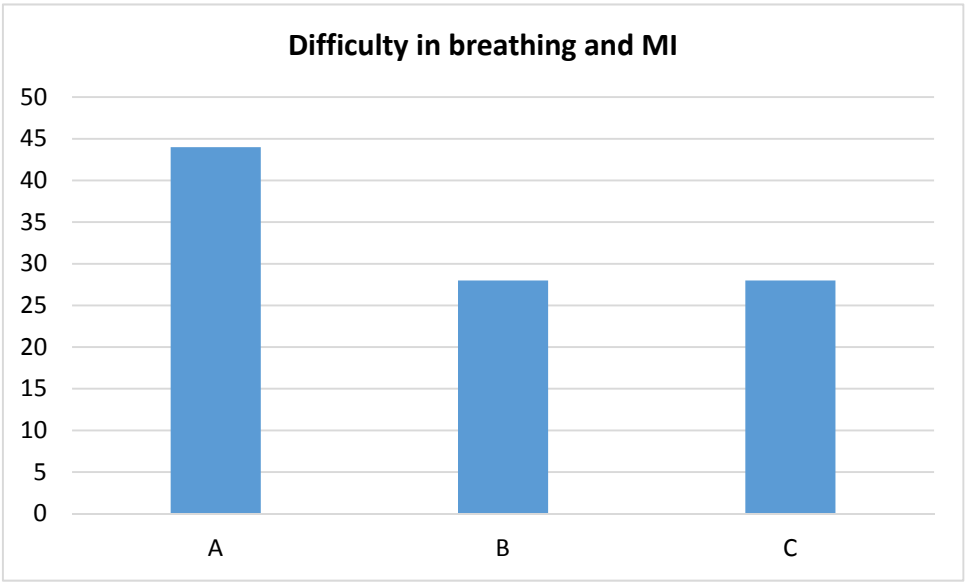
17. Elevated blood pressure levels can cause myocardial infarction?
A) Agree
B) Disagree
C) May be



18. According to you can anaemia lead to myocardial infarction?
A) Yes
B) No
C) May be



19. Can depression over long periods of time lead to myocardial infarction? A) Yes B) No C) May be	

20. Is difficulty in breathing a symptom of myocardial infarction? A) Yes B) No C) May be	

DISCUSSION:

According to the survey taken 65% of the out patients visiting Saveetha Dental College knew what exactly is myocardial infarction. [Table 1]. Old age can be a major cause for myocardial infarction and only 42% of the out patients were aware of it. [Table 2]. People younger than 40 years of age are also prone to myocardial infarction and over 50% of the subjects are aware of it. [Table 3]. Gender can be a reason for the occurrence of myocardial infarction and over 57% of the subjects are positive that males are more prone to myocardial infarction than the females. [Table 4]. Chest pain is a symptom of myocardial infarction and only 36% of the out patients are aware of it. [Table 5]. Myocardial infarction can occur without a pain in the chest, it is called as the silent infarction and 80% of the subjects were aware of it. [Table 6]. Smoking can be a leading cause of myocardial infarction and only 41% of the subjects were aware of it. [Table 7]. Alcoholism can be another factor that contributes to the incidence of myocardial infarction, 40% of the subjects were aware of it. [Table 8]. Consumption of tobacco and other types of nicotine products can be another cause of myocardial infarction and only 40% of the subjects were aware of it. [Table 9]. People who have higher BMI or people who are overweight have higher probability to get myocardial infarction than the others who have a normal weight and normal BMI and 59% of the subjects were aware of it. [Table 10]. Consumption of food containing high levels of starch and saturated fatty acids can be another leading cause for myocardial infarction, 54% of the subjects were aware of it. [Table 11]. High stress levels is a factor that leads to myocardial infarction and 80% of the subjects are aware of it. [Table 12]. Regular exercise can prevent myocardial infarction to over some extent but only, 51% of the subjects

were aware of it. [Table 13]. Myocardial Infarction can be inherited from one generation to the next, but only 35% of the subjects were aware of it. [Table 14]. Diabetes is an important factor which leads to myocardial infarction and only 40% of the subjects were aware of it. [Table 15]. Stroke can be associated with myocardial infarction and only 32% of the subjects were aware of it. [Table 16]. High blood pressure is a cause for myocardial infarction but only 53% of the subjects were aware of it. [Table 17]. Anemia is related to myocardial infarction and only 27% of the subjects were aware of it. [Table 18]. Depression over long periods of time can lead to myocardial infarction and only 50% of the subjects were aware of it. [Table 19]. Shortness of breath is a symptom of myocardial infarction and only 29% of the subjects were aware of it. [Table 20].

CONCLUSION:

The analysis of the collected show that the average awareness of an out patient, is good enough, but most of the patients are unaware about how other medical conditions like anaemia, blood pressure, stroke, shortness of breath, etc., are related to myocardial infarction. This survey was mainly done to create awareness among the people. As myocardial infarction has become more prominent in India, it can be reduced to some extent if awareness can be created about its predisposing factors and if the patients are educated about it.

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