Research Article

Analysis of knowledge and awareness of coronary atherosclerotic heart disease and the association between smoking and family history of cardiovascular disease among young adult population in South India

Aroka Rajkumar Shancy Merlin, Karthik Ganesh Mohanraj*

ABSTRACT

Introduction: Coronary atherosclerotic heart disease (CAHD) is a condition where the arteries supplying the blood to the heart are affected due to the plaque that gets buildup. It is very common in India affecting more than 10 million cases/year. The knowledge and awareness of CAHD are highly important to maintain a healthy lifestyle, analyze the early symptoms, and prevent the disease if possible. **Materials and Methods:** This was a questionnaire-based observational study comprising of 100 sample size of young adults between the ages of 18 and 35 years. All are subjected to a list of questions regarding CAHD. They are tested for their knowledge about the disease and are asked some other questions to determine the association between smoking and cardiovascular diseases (CVDs). **Result:** From the survey, it is evident that from the 100 sample space, 92% of the young adult population are aware of the CAHD. 72% of the sample size strongly agreed that there is an association between CAHD and a family history of heart attack. **Conclusion:** It is, therefore, evident that majority of the young adult population taken into consideration had an adequate knowledge of CAHD and that there is an association between smoking and CVD.

KEY WORDS: Cardiovascular disease, Coronary atherosclerotic heart disease, Family history, Plaque buildup, Smoking, Tobacco

INTRODUCTION

Atherosclerosis is a disease where the artery narrows up due to the buildup of plaque.[1] To begin with, there are no symptoms present until middle age. Once severe, it causes coronary artery disease, stroke, or kidney problems.[2] Coronary atherosclerotic heart disease (CAHD) is the thickening or hardening of the walls of the arteries due to the buildup of plaque in it.[3] It is a very common condition in India affecting more than about 10 million cases/year alone.

Smoking is a habit where a substance is burned, and then, the released smoke is breathed in and then absorbed into the blood stream. Smoking tobacco has been the causal agent for many of hazardous diseases such as lung or liver cancer, heart attack, COPD, and birth defects.[4] The most common type of smoking is tobacco. However, *Cannabis* which is extracted from the *Cannabis indica* plant, though considered illegal in many countries, is widely consumed by the public. Smoking is one of the most popular reasons that causes an early death in majority of the people. Male and female smokers reportedly lose 13.2 and 14.5 years of life.[5] Smoking is also associated with periodontitis and loss of teeth.[6] Apart from direct smoking, indirect smokers, i.e. people who inhale the smoke when standing next to a smoker, are also equally affected.

Cardiovascular diseases (CVDs) are the diseases that involve the blood vessels or the heart in general. It is estimated that majority of the deaths globally occur due to CVD. Treating of risk factors such as diabetes and heart attack is considered to be useful.[7] Consumption of aspirin in otherwise normal individuals is considered

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Department of Anatomy, Saveetha Dental College, Saveetha Institute of Medical and Technical Sciences, Saveetha University, Chennai, Tamil Nadu, India

*Corresponding author: Karthik Ganesh Mohanraj, Department of Anatomy, Saveetha Dental College, Saveetha Institute of Medical and Technical Sciences, Saveetha University, 162, Poonamallee High Road, Chennai - 600 077, Tamil Nadu, India. Phone: +91-9940545168. E-mail: karthikganesh.0446@gmail.com

to be beneficial.[8,9] Diagnosis of the disease occurs usually 7–10 years earlier in men when compared to women.[10]

Not just the developed nations alone will be affected by CVDs, even the developing nations will also be affected by it.[11] The rate of increment of CVDs in developing nations is practically twofold in contrast with modern countries.[12] Especially, more youthful ages will be increasingly influenced in developing nations; for instance, about 52% of demises from CVDs in India happen before 70 years of age, contrasted against 23% in buildup market

economies.[13] In perspective on this huge upcoming sickness issue, legitimate procedures to improve populace well-being in India require predictable endeavors to distinguish and address the genuine reasons for this quick ascent of CVDs.

It is found in a review directed in 45 rural towns in India, 32% of all deaths were expected due to CVDs. Then, again, irresistible ailments were in charge of 13%. It demonstrates that the plague has achieved its propelled stage even in country India. Neglecting of this situation, especially overlooking the financial setting, will further fuel the fast increase of CVDs among Indians.[14]
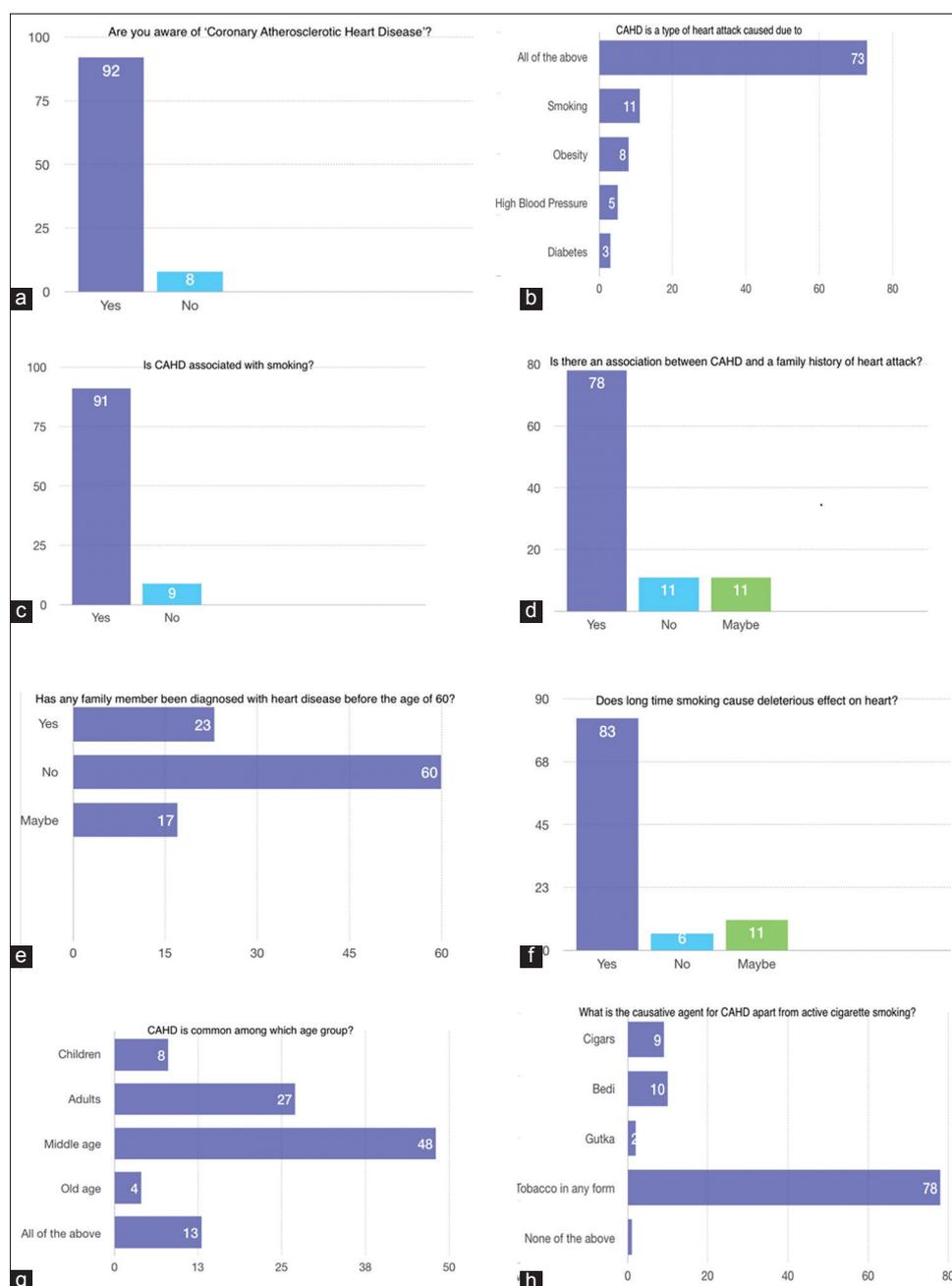

Figure 1: (a-h) Responses obtained through various survey questions are analyzed and represented in graphical form on the knowledge and awareness of coronary atherosclerotic heart disease

MATERIALS AND METHODS

This is a self-prepared questionnaire which was passed onto a sample size of 100 people between the age groups of 18 and 35 years. To test the knowledge of the young adults, the questions were about the signs and symptoms of CAHD and causal agents of the same. There were also certain questions about their family history (if any of them were affected by CVDs), and if there was any, a relation between the CVD and smoking. The results of the questionnaire were then complied and the graphs were prepared.

RESULTS

From the survey, it is evident that from the 100 sample space, 92% of the young adult populations are aware of the CAHD. 72% of the sample size strongly agreed that there is an association between CAHD and a family history of heart attack. The responses obtained through various survey questions are analyzed and represented in graphical form for easy interpretation in Figure 1.

DISCUSSION

From the above graphs that were derived from the questionnaire, it is evident that from the 100 sample size, 92% are aware of "CAHD," whereas only 8% suggested otherwise.[15] The basic knowledge of the disease was tested and majority of the young adult population answered correctly for the questions asked which showed the existing knowledge and awareness on the effects of CVD among them.

For the association between smoking and family history of CVDs, many agreed that there is an association. This meant that if the maternal or paternal generation of the individual was or is currently affected by CAHD or any CVD for that matter, there are chances that the individual also is at high risks of being diagnosed with the disease.[16] Smoking, on the other hand, is a direct causative agent in terms of CVD.[17,18] Excessive smoking of tobacco, cigars, and even chewing of tobacco in any form are causative agents. This being said, people who quit smoking by the age of 30 years have almost as low a risk of death as never smokers.[19,20] Apart from smoking, sedentary lifestyle, age, diet, and even sleep are said to cause CVD.

CONCLUSION

From the results it is observed that bike riding has a great impact over the cervical spondylosis. 48% of people had heard about cervical spondylosis. 47% of people go for a long ride in motorcycle. 61% of people do not have any back pain due to long ride in motorcycle. 42% of people feel that the type of motorcycle has an influence over the neck pain. 59% of people think that the type of road that they are using has an influence over the neck pain.

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