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Original Article

A Study on Cardiovascular Risk Behaviour among Teaching Doctors

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ABSTRACT

Aims: 1) To know the life style approach of teaching doctors working in various departments of a medical college. 2) To assess cardiovascular risk among the teaching doctors. **Material & Methods:** The study was conducted among 183 teaching doctors working in various departments at Dr.PSIMS & RF, Chinoutpalli. Data was collected with pre-tested, semi-structured and self administered questionnaire. **Results:** Among the study subjects 19.12% were known hypertensives and 25.68% were known diabetics. Past history of CAD was found in 9.28% of the doctors. Majority (82%) were having some amount of risk behaviour but only 21% of the subjects were found to be having high risk behaviour according to the study scale. It was observed that the difference in the risk behaviour between the doctors working in Non-Clinical and Clinical departments was statistically significant (p value < 0.05). Risk behaviour among vegans was less and when it was compared to the doctors on mixed diet high statistical significance (p value < 0.001) was observed. **Conclusion:** The study recommends that doctors should protect their health by improving their life style behaviour.

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1. Introduction

Cardiovascular diseases are the leading causes of morbidity and mortality worldwide. By 2010, cardiovascular disease is projected to be the leading cause of death in developing countries. By 2020, WHO estimates there will be nearly 20 million CVD deaths worldwide every year, and the number will increase to 24 million by 2030 [1].

The ability to exercise and enjoying vigorous activity is one of the best ways of achieving cardiovascular health. People who prove and maintain their fitness live long. Smoking, hypertension, diabetes mellitus, obesity, hypercholesterolemia and reduced physical activity are considered as conventional risk factors for CAD. The CAD rate in the developing countries is expected to rise in parallel with increase in life expectancy. CAD is truly a lifestyle

disease of multifactorial origin and the role and relationship of these factors can be best understood through the risk factor concept [2].

In developing countries standards of living improved but detrimental shift towards inappropriate dietary patterns was observed. These changes in dietary and lifestyle patterns in both developing and newly developed countries are increasing the burden of diet related diseases including obesity, dyslipidemia, diabetes mellitus, hypertension, and eventually CAD. Cholesterol lowering diet with a low fat, low cholesterol content and preference for polyunsaturated fatty acids decrease the incidence and mortality of myocardial infarctions [3]

Basic lifestyle habits should be considered fundamental risk factors for CVD [4]. Doctors often busy with restoring health of their patients and may neglect their own health. The present study was conducted to assess the CV risk behaviour among teaching doctors.

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2. Materials and Methods:

2.1. Study Design: Institute based Cross- Sectional Study

2.2. Study Setting: Dr.PSIMS & RF, Chinoutapalli, AP.

2.3. Study Population

All the teaching doctors (Professors, Associates, Asst. Professors & Tutors) working in various departments of the college. Data was collected from 183 faculty, which was 82 p.c. of the total faculty.

2.4. Study Period: December' 2011

2.5. Data Collection:

Obtained permission prior from the Principal and Ethical committee to conduct the study among all the teaching doctors working in the institute. Then the data was collected with pre-tested, semi-structured and self administered questionnaire (25 questions) based on WHO- STEPS approach and CV risk was estimated using the study scale.

2.6. Analysis:

Data was analyzed using Graph pad soft ware V.5 in proportions and chi-square test.

3. Results & Discussion:

Among the doctors 35 (19.12%) were found to be known hypertensives and 47 (25.68%) were known diabetics and all of them were taking medication. These figures were definitely more than the prevalence in general population which were 7% and 11% respectively [5], thus indicating high prevalence among doctors community.

Seventeen doctors (9%) had history of CAD previously and out of them only 6 were on regular checkups indicating that even teaching doctors neglect the medical care.

Twenty five doctors (13.67%) have family history of CAD. 37 (20%) faculty members were strict vegetarians, 39 (21%) were smokers and 75 (41%) were alcoholics. They were classified into three grades basing on their alcohol consumption i.e., regular (3%), occasional (26%) and social (12%). The association of smoking, especially cigarette smoking with CHD is very well documented by population studies [6]. Avoidance of high alcohol consumption appears advisable for its total effect and especially through effect on obesity [7].

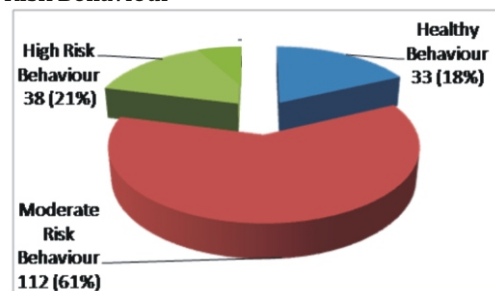
Despite their knowledge on habitual risk factors, still the teaching doctors were found to be practicing unhealthy habits. Only 58 (31%) of doctors consuming fish atleast two times a week which was suggested in CAD prevention by Steps approach. Only 128 (70%) were having a habit of walking regularly. Regular yoga done by 48 (26.22%). A regular physical exercise is likely to result in weight reduction, reduction of lipids and of blood pressure [8]. 77 (42%) of the doctors were not having adequate sleep. Only 38 (20.76%) were taking three or more fruit servings a day.

Table: 1 Study Scale for Risk Behaviour

≤ 10 points	Low Risk (Healthy Behaviour)
11-15	Moderate Risk
16-25	High Risk

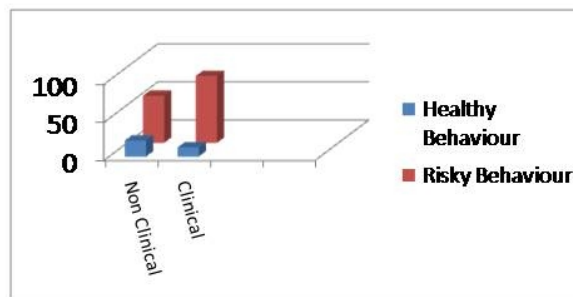
A single point was counted for every answer if it was found to be detrimental to cardiovascular health and all the twenty five questions were considered in calculation of the score.

Fig 1: Risk Behaviour



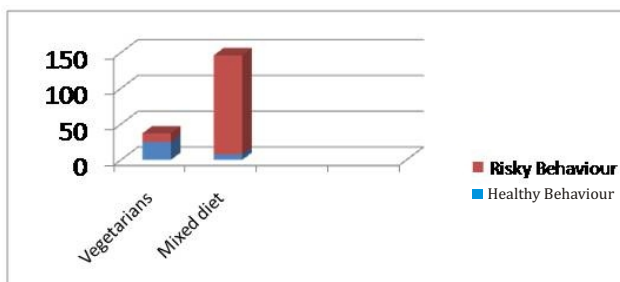
According to the study scale 150 (82%) were having some amount of risk behaviour. But in total 38 (21%) were having high risk behaviour.

Fig.2: CV Risk - Clinicians Vs Non Clinicians



Among the non-clinical doctors 62 out of 83, i.e., 74.69% were having risk behaviour in comparison to 88 of 100 clinical doctors, i.e., 88% which was relatively high and the difference was statistically significant (P=<0.05).

Fig.3: CV Risk- Pure Vegetarians Vs Mixed Diet



Out of 37 vegans only 12, i.e., 32.43% were having risk behaviour and among those on mixed diet, 94.92% (138 out of 146) were having risk behaviour. The difference was extremely significant (p value < 0.001).

Although pharmacological events successfully reduce the coronary events, the overall reduction in risk is relatively modest and could be greatly improved by addition of life style modifications [9].

4. Conclusions:

This study found that majority (82%) of the teaching doctors (both clinical and non clinical) were having some amount of risk behaviour. But only 21% of the total subjects were found to be having high risk behaviour.

It was observed that the difference in the risk behaviour between the doctors working in Non-clinical (83) and Clinical departments (100) was highly significant ($P = <0.05$) thus indicating negligence of clinical doctors on their own health.

Among the Vegetarians (37) a majority (25) were having low risk score and when compared to doctors who take mixed diet (low risk among only eight) which was extremely significant ($P = <0.001$). This explores the advantage of being vegetarian once again by this study.

The doctors' community must realize the importance of their own health before thinking of their patients. They must adopt and practice healthy life style habits to lead a more productive life.

Acknowledgements:

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