To Study the Coronary Heart Disease on Type A Behaviour Pattern of Men

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ABSTRACT

Aim and Objective: The present study investigates that Type A Behaviour pattern among Men with Coronary Heart Disease (CHD) and Men without Coronary Heart Disease (CHD). The level of Type A behaviour pattern would be high in men with CHD than Men without CHD.

Method: The current study has an aim to examine a sample consisting of 60 individual subjects. That includes Men with CHD and Men without CHD belonging to Akola district in Maharashtra. The two group 30 Men with CHD and 30 Men without (CHD) with an age range between 30 to 50 years. The tool that I will be using for this study is Type A/B Behavioural Pattern Scale (ABBPS) and it is developed by Upinder Dhar and Manisha Jain. Result: We analyse the data by descriptive statistical method for this we used Mean, SD and t-test of Men with and Men without CHD. The Mean of Men with CHD was 54 and Mean of Men without CHD was 49.1 and t-value was 7.61. Both level (.01 and .00) are significant. There was a significant difference regarding Type A behaviour pattern between Men with CHD and Men without CHD. In this study we discover that men with CHD face more stress related issues that increases blood pressure and impacts the heart. This study also shows how the type A behaviour pattern is related to our heart.

Keywords: Coronary Heart Disease, internal electric pathways, plaques, Type A behaviour, Angina.
INTRODUCTION

Heart is a key organ of our body. It is a muscle that pumps blood throughout our body. Heart is the organ that delivers oxygen and nutrients to our cells and removes waste products. Heart disease point out to the condition that involve the heart, its vessels, muscles, valves or internal electric path ways responsible for muscular contraction. Common heart disease conditions may result in Coronary heart disease, Heart valve disease, Heart failure, Cardiomyopathy, Arrhythmias. The main cause of heart attack is coronary heart disease or artery disease. An area of heart tissue losses its blood supply, when a coronary artery is blocked. This type of blood reduction can be damaged heart tissue quickly. When the coronary arteries become too narrow it leads to coronary heart disease or coronary artery disease. The supply of oxygen and blood to the heart is carried out by the coronary arteries that are the blood vessels. Cholesterol gathers up on the artery walls, creating plaques. The arteries are narrowed due to plaques which reduces blood supply to the heart. When the arteries narrow it become difficult for the heart to receive oxygen rich blood especially while performing physical activity.

SIGNS AND SYMPTOMS

i. Chest pain - You may suffer the pain called Angina. It is the type of pain in which you fill pressure or tightness in your chest, just like a person is standing on your chest. Generally the pain occurs on the middle or left side of the chest. Usually Angina is triggered by physical or emotional stress.

ii. Shortness of breath - Under the condition when your heart can’t pump enough blood to meet your body’s needs it leads to shortness of breath.

iii. Heart attack - a heart attack is caused due to a completely blocked coronary artery. The commonly observed signs and symptoms of a heart attack are extreme pressure in your chest and pain in shoulder or arm along with shortness of breath and sweating. Heart attack may also occur without any sign and symptoms. In this way by any chance is the heart related to our personality?

Personality An individual is recognized by the combination of behaviour, emotion, motivation and also thought patterns which are known as personality. Personality encircles a persons’ attribute such as mood, attitude, opinion and interactions with other people is in which it is most clearly expressed. A person can be distinguished from another through their personalities that includes behavioural characteristics, both inherent and acquired. There are two types of behavioural pattern i.e. Type A and Type B. The characteristic of type A
behaviour pattern typically consist of individual who are highly ambitious, impatient, anxious, work driven, time conscious, aggressive, highly status conscious, concern with time management. When it comes to competitiveness, the type A form of individual seems to be extremely competitive and self critical. These individual struggle towards their goals with no feeling of sense of joy in all their efforts or any kind of accomplishment. Connected with this is the presence of noteworthy life imbalance. This is distinguished by high work participation. So the type A individuals do get easily nervous and angry that is they get easily wound up and have a tendency to overreact. They have high blood pressure (hypertension) are prone to it due to their emotional response. Individual with type A behaviour pattern feel a constant sense of instance. Those people seem to be in never ending struggle against the clock. It is often observed that they are quite prone to became agitated with delays and unproductive time. The individual of type A behaviour pattern tend to be easily stimulated to anger or hostility, which they may or may not express openly. In 1950 Meyer Friedman and Ray Rosenman stated that Type A behaviour pattern was a risk factor for coronary heart disease.

**REVIEW OF LITERATURE**

1. **Ray H. Rosenman, Richard J. Brand, C. David Jenkins, Stephen J. Zyzanski, Moses Wurm (2004):** The study of coronary heart disease was started in the year 1960-1961 in the age group between 39-59 year old men. A mean four and a half year of follow up, it is discovered that Coronary heart disease (CHD) found in 3182 subjects. CHD was associated with parents. Elevated systolic or diastolic blood pressure, smoking, higher serum levels of cholesterols, triglyceride and beta lipoproteins and the Type A behaviour pattern were the results. Type A behaviour pattern significantly related to CHD. This association could not be explained by association of behaviour pattern with any single predictive risk factor or with any combination of them.

2. **John Gallacher (2008):** With follow up of 86361 Japanese over 10 years found association of type A in men, not found in women. With interest in cultural context this large scale study of an Asian population sample studied to find association of type A behaviour with heart disease. If evidence men with lowest type ‘A’ score had 32% and 35% greater risk of heart disease and Myocardial Infraction respectively. Greater risk of same magnitude was also shown for other indices of heart disease but it didn’t have statistical importance, main limitation in study assessment of type A behaviour.
3. Ai Ikeda, Hiroyasu Iso, Ichiro Kawachi, Manami Inoue, Shoichiro Tsugane (2008): Even though several studies of type A behaviour and risk of coronary heart disease have been reported in the west, there have been some studies carried out in Asian population. In this study the association between type A behaviour and risk of CHD incidence within a group of 86361 Japanese men and women aged 40-69 years has been examined. So, in conclusion, the study suggests that there is no association between type A behaviour and CHD incident in the Japanese population, type B behavioural pattern among males have been seen to confer increased CHD risk. This study additionally suggests that the cardio toxic effect of type A behaviour is gender specific and culturally contingent.

4. Mark P. Petticrew, Kelley Lee, Martin Mckee (2012): In the 1950’s, cardiologists Mayer Friedman and Ray Rosenman described the type A behaviour pattern. Mayer Friedman and Ray Rosenman also argued that TABP was an important risk factor for CHD. The positive findings from the western collaborative group study and the Framingham study supported this theory. The study found that the tobacco industry was a major funder of TABP research through the analysis of tobacco industry documents with selected result used to counter concern regarding tobacco and health. The inconsistencies in the findings of epidemiological studies of TABP have also been explained through this study. These ‘decline effects’ have been partly explained by tobacco industry involvement in TABP research, as per the study.

OBJECTIVE OF STUDY

To study and compare the type A behaviour pattern of men with CHD and Men without CHD.

HYPOTHESIS

Type A behaviour pattern would be high in Men with CHD than Men without CHD.

VARIABLES

1. Independent Variables
   i. Men with Coronary Heart Disease (CHD)
   ii. Men without Coronary Heart Disease (CHD)

2. Dependent variable
   i. Type A Behaviour pattern
METHODOLOGY

The present study aims to examine a sample consisting 60 individual subjects, Men with CHD and Men without CHD ranging age between 30 to 50 years of Akola District of Maharashtra. There are two groups (30 Men with CHD and 30 Men without CHD)

TOOLS

Type A/B Behavioural Pattern Scale (ABBPS) is developed by Upinder Dhar and Manisha Jain. This test includes two parts. Part I consist of 17 statements and Part II consist of 16 statements. Every statement has 5 alternative answers. (Strongly Agree, Agree, Uncertain, Disagree and Strongly Disagree)

STATISTICAL METHOD

Descriptive Statistical Method used for (Mean, SD and t-test) out for analysis of the data.

RESULT AND DISCUSSION

Table I – showing the Mean score and ‘t’- value of the analysis of the Men with and Men without CHD

<table>
<thead>
<tr>
<th>Status</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>‘t’ value</th>
<th>Sign</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men with CHD</td>
<td>30</td>
<td>54</td>
<td>2.65</td>
<td>7.61</td>
<td>S</td>
</tr>
<tr>
<td>Men without CHD</td>
<td>30</td>
<td>49.1</td>
<td>2.24</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Pie Chart

Mean

- 54 (Men With CHD)
- 49.1 (Men Without CHD)
The mean of men with CHD was 54 and SD was 2.65 whereas the mean of men without CHD was 49.1 and SD was 2.24 and ‘t’ value was 7.61. Both level (.01 and .00) are significant. Our hypothesis was accepted. Type A behaviour pattern would be high in men with CHD than men without CHD. The similar result was found (Judith Blackfield Cohen and Dwayne Reed (1985)) in the Honolulu Heart Program Cohort held among 2187 Japanese men. In 1970 the Jenkins Activity Survey determined the Type A behaviour. Type A behaviour was significantly associated with the prevalence rate of total CHD and other major risk factors were independent of this association in multivariate analyses.

CONCLUSION

There was a significant difference regarding Type A behaviour pattern between men with Coronary heart disease (CHD) and men without Coronary heart disease (CHD). Men with CHD are comparatively under much stress than others and thus lead to anxiety and anger. Stress raises blood pressure (BP) that can increase the risk for heart disease i.e. Coronary Heart Disease.

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