A Comparative Study to Understand the Effect of Stress, Type A Behaviour, Optimism and Perfectionism on Rural And Urban Coronary Heart Disease Patients

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Introduction

"Death is just change in lifestyles"

(Stephen Levine)

The definition of health has evolved with the changing conditions of societies, with the changing technologies for identifying abnormalities at finer tissue and molecular levels and at earlier stages of disease, and with the redefinition as health problems various conditions that were previously considered within the range of normality or at least outside the realm of medicine, sickness, and health **(Green, 2015).** Health is a common theme in most culture and in fact all communities have their own concepts of health as part of their culture. There is no single index for measuring health status. World Health Organization **(WHO, 1996)** defines health as "*a complete state of physical, mental and social well-being, and not merely the absence of disease or infirmity*."

Health is something we wish each other on many occasions. It is not a gift of the gods, of stars or of magic. Scientifically, health means a highly complex and dynamic product of interaction of variables viz. genes, eco-social environment and individual health behavior. Thus, health is central to human happiness, well-being and wellness as it is multidimensional issue which sustains to the totality of human existence **(Mohan, 2016).**

Globalization and modernization has brought a change in the face of death. From the communicable diseases it has shifted to lifestyle and non-communicable diseases **(Mohan, 2013)**. Non-communicable diseases (NCDs) are defined as diseases of long duration, and are generally slow in progression. Non-communicable diseases are replacing communicable diseases, maternal and child health as well as malnutrition as the leading cause of death. These are the leading cause of death in the world, responsible for 63% deaths worldwide in 2008 **(World Health Organization, 2013)**.

Presently, non-communicable diseases (NCDs), including heart disease, stroke, cancer, diabetes and chronic lung disease, are collectively responsible for almost 70% of all deaths worldwide. In low - and middle-income countries, 82% of the 16 million people died prematurely due to smoking, being overweight, having high blood pressure and/or high cholesterol, heavy drinking and physical inactivity. They died even before reaching 70 years of age. The rise of NCDs has been driven by primarily four major risk factors: tobacco use, physical inactivity, the harmful use of alcohol and unhealthy diets **(WHO, 2017).** India, with a huge population, has very high-prevalence of chronic disease risk factors, chronic morbidities and mortality. India accounts for over 15% (5.9 million NCD deaths) of the global NCD deaths (38 million) and around 58% of these deaths occurring before individuals attain age of 70 years **(WHO, 2014).** Importantly, early onset of NCDs is a major concern and some earlier studies have noted that about 3-4% of adults (aged 20 and above) in rural areas and 8-10% in urban areas suffer from coronary heart disease. Such high prevalence of NCDs is estimated to cause a total damage of $3.55 trillion. In fact, direct out-of-pocket (OOP) payments associated with chronic disease care have jeopardized the customary living standards of several households **(Joe, 2015)**.

Heart is a life giving wonderful pump. It is a simple machine with a sacred mission. William Harvey termed the heart as "*the sovereign of the body*". In medical terminology i.e. acute myocardial infarction (AMI or MI), and more commonly known as a 'heart attack', is a medical condition which occurs when the needed blood supply to parts of the heart is interrupted. The resulting 'ischemia' or oxygen shortage causes damage and that leads to the potential death of heart tissue. At this stage it is a medical emergency that may lead to unfortunate death **(Hooli, Gavimath & Ravishankera, 2012).**
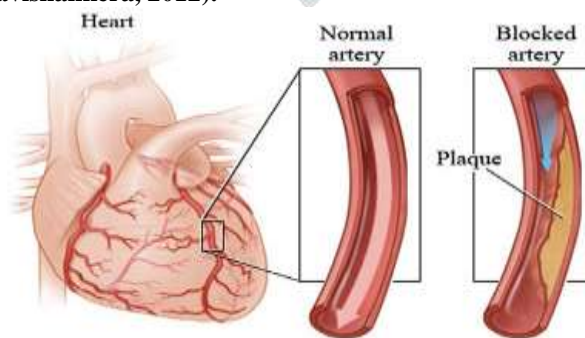

Figure 2: Healthy vs. Unhealthy Coronary Artery

Source: National Heart Lung and Blood Institute (2016)What is Coronary Heart Disease? Retrieved from www.nhlbi.nih.gov/health/health-topics/topics/　　　cad.　　Figure A is an overview of a heart and coronary artery showing damage (dead heart muscle) caused by a heart attack. Figure B is a cross-section of the coronary artery with plaque buildup and a blood clot.

Objectives

As the face of the disease has transformed over the time and coronary heart disease has become the most potent threat to the health. The objectives of the present study are:-

1. To understand the indicators of coronary heart disease.
2. To understand the role of Stress, Optimism, Type A Behaviour and Perfectionism on coronary heart disease.
3. To understand the existence of habitat i.e. Urban and Rural with respect to coronary heart disease.

Etiology of Coronary Heart Disease

Epidemiological studies beginning in the 1950's have identified several traditional risk factors such as – Age, Diabetes, Overweight and Obesity, are associated with cardiovascular diseases **(Mohan, Mahajan & Sehgal, 2006).** However, the interplay of biological and psychological factors in the development of cardiovascular disorders has also been suspected.

Psychosocial Risk Factors For Coronary Heart Disease

A psychosocial risk factor is defined as a "measure that potentially relates psychological phenomena to the social environment and to pathophysiological changes" **(Hemingway & Marmot, 1999).** Psychosocial variables encompass two categories of variables. The first consists of psychological attributes like anger, hostility, depression etc., which exist at the individual level, and are likely to be a result of the process of socialization. The second category is more structural in nature, for example work conditions **(Singh-Manoux, 2003)**.

There have been several studies in India that have categorically implicated psychosocial factors like stress, anger and type A behavior pattern in the development of cardiovascular diseases **(Pasandideh, 2011)**. Following are main psychosocial risk factors:

- **Type A Behaviour and Coronary Heart Disease -** Personality has been found to be playing a crucial role in heart disease. **Friedman & Thoresen (2001)** found that Individuals demonstrating Type A behaviour have an extra awareness of time and therefore walk, eat and achieve most activities quickly and instinctively. Stress related hormones are secreted in huge amount in such individuals which can cause damaging of heart muscle. So it can also be cause of serious instability in cardiac rhythm. Thus, people with Type A personality are more vulnerable to heart disease than Type B personality persons, because they have a substantially greater sympathetic nervous system response to stressful or demanding circumstances that produce more wear and tear on the cardiovascular system **(Rohit, Rajendrasinh & Atul, 2016).**

- **Stress and Coronary Heart Disease-** In addition to the lifestyle behaviours, stress is a psychological factor that plays a prominent role in cardiovascular health. Inability to manage stressful events is associated with heightened sympathetic arousal, which leads to cortisol release. Increased cortisol release is linked to the Cardiovascular Disease process, as well as to other psychological conditions (e.g., depression) associated with increased risk of Cardiovascular Disease **(Dedovic, Duchesne, Andrews, Engert & Pruessner, 2009).**

- **Perfectionism and Coronary Heart Disease -** **Fry and Debats (2009)** found that earlier mortality was more common among perfectionists. They examined 450 adults aged 65 years and older and were followed up for 6.5 years. The participants were initially given a questionnaire to assess their levels of perfectionism, and then researchers observed their health for the follow-up years. Ultimately, they found that those with high perfectionist tendencies were 51% more likely to die earlier than those with lower perfectionist scores. This was mainly due to high levels of stress and anxiety among these people that also lead to the emergence of chronic diseases among them namely coronary heart disease and hypertension. Thus perfectionism is considered as an important psychosocial risk factor. Although being perfectionist sounds like an admirable trait, but it is often a cause of anxiety, depression and heart diseases **(Mohan & Kaur, 2015).**

- **Optimism and Coronary Heart Disease-** Optimism can be defined as a set of beliefs that leads people to approach the world in an active manner **(Peterson &Bossio, 1991)**. People that hold an optimistic outlook on life have demonstrated higher levels of motivation, persistence, and performance **(Taylor & Brown, 1988).** A positive life orientation is believed to be beneficial to health, as highly optimistic individuals appear to attract supportive social relationships, use adaptive coping strategies, and have different health habits than pessimists, who tend to give up and turn away in stressful situations **(Brissette, Scheier, & Carver, 2002)**.

Urban-Rural Habitat and Risk of Coronary Heart Disease

Review by **Chadha, Gopinath, and Shekhawat (1997)** showed that it has been confirmed across many studies that risk factors, such as obesity, hypertension, diabetes, increased intake of energy-rich foods and saturated fats, a relatively sedentary occupation, increased stress, and high LDL cholesterol are more prevalent in urban than in rural areas.

Traditionally, risk factors for Cardiovascular disease have been categorized as behavioural, anthropometric and biochemical. Various studies show that urban populations had higher prevalence of CVD risk factors as compared to rural populations due to higher intake of alcohol, lower consumption of fruits and vegetables and obesity **(Gupta, Joshi, Mohan, Reddy & Yusuf, 2008)**. In a study done by **Das, Pal and Ghosh (2008),** habitat (rural vs. urban) had significant impact on central diposity, lipids, lipoproteins, and blood pressure measures even after adjusted for age and sex. Overall, 84.3% of females had lower HDL level compared with only 20.1% in males. It was also observed that the prevalence of metabolic syndrome was 56.2% in urban females compared with 36.4% in rural females. Further Cardiovascular disease have been shown to have strong relationships with elevated blood pressure, increased levels of lipoproteins, visceral obesity, physical inactivity and subsequent high occurrence of coronary heart disease, type 2 diabetes mellitus.

There are notable disparities in risk for obesity, hypertension, diabetes, and CHD for people living in rural settings, particularly underserved rural areas. These disparities are driven by complex factors such as socioeconomic disadvantage, geographical distances/barriers, social and cultural issues, and limited access to healthcare, healthy foods, and/or physical activity opportunities due to environmental constraints, affordability, and availability **(Seguin et al., 2016).**

Ismail, Kulkarni, Meundi and Amruth (2016) suggested that non-communicable diseases are already the most common cause of death in many parts of rural India. This is plausible, as apart from improvements in life expectancy, the greater interconnectedness increasingly allows rural people to adopt urban lifestyles without migrating to urban areas. As a result there is a growing rate of prevalence of coronary heart disease in rural areas.

Urban - Rural Differences in Prevalence of Coronary Heart Disease

Urban-dwelling seems to be associated with a higher prevalence of coronary heart diseases risk factors. In India, the proportion of the population living in urban centers rose from 23.3% in 1981 to 32.1% in 2001. A further increase to 42.8% is projected for 2021. Urban-dwellers are more likely to be sedentary compared to their rural counterparts, and they have increased access to higher fat and energy-dense diets (**Yusuf, Reddy, Ounpuu & Anand, 2001**), hence they are more prone to developing coronary heart disease.

The prevalence of coronary heart disease (CHD) is now indicated in rural areas also, other than the urban areas indicating that as the disease matures and gets a stronger grip in the country, it will percolate to all categories of the population affecting the whole society. **Ghaffar, Reddy and Singh (2004)** opined that in India individuals with lower levels of income or education are at a higher risk CHD. Thus, the highest prevalence is shifting from the affluent to the less affluent people. There is an increasing trend for reversal in the socioeconomic gradient for cardiovascular diseases (as already manifested in developed nations), with the poor and disadvantaged having equal and sometimes higher, burden of cardiovascular diseases, and its risk factors. This could be due to change in the pattern of dietary habits, lack of healthcare facilities, etc. in the lower strata (**Chauhan & Aeri, 2015**).

Dehghani and Dafei (2016) opined that despite of higher rate of smoking in rural India, coronary heart diseases (CHD) are still about one-half as compared to urban India. There is a significant higher body mass index (BMI) among urban people (BMI 24 in men and 25 in women) compared to rural people (BMI 20 in men and 20 in women). Higher rate of abdominal obesity was also found among the urban population, with urban men having a waist to hip ratio (WHR) of 0.99 as compared to 0.95 among rural men. Thus, the high rates of CHD in urban India compared to rural India suggest the importance of nutrition, nurture and environmental factors.

Apart from a high overall prevalence, there are regional variations in the prevalence of CHD. Unadjusted CHD rates have ranged from 1.6–7.4% in rural populations and 1–13.2% in urban populations. Prevalence rate of CHD in urban areas of Northern states such as Jammu and Kashmir, Delhi and Uttar Pradesh, and Western states such as Rajasthan is reported to be around 6–10%. The rates in the rural areas were 6–7% in Jammu and Kashmir, 3–5% in Himachal Pradesh and Punjab among the Northern states while in Rajasthan it was 3–5%.In Andhra Pradesh, the overall prevalence of CHDs was found to be 5.4% while the age standardized prevalence rate was 5.1% (**Murthy, Prasad, Gopal, Rao & Rao, 2012**).

Uchariya and Punekar (2018) conducted a study to analysis the various risk factors and incidence of CHD in rural patients and to make comparison of risk factors in different socioeconomic classes of a rural to urban patients. History of CHD, diabetes, family history of CHD and alcoholism was predominant risk factors in urban population as compared to rural population. Body mass index (BMI) was significantly higher in urban patients as compared to rural patients.

Balakrishnan et al. (2018) conducted a cross-sectional study in urban and rural field practice area of a private medical college in Dakshina Kannada. It was found that Rural CHD patients used significantly more tobacco products. Most urban patients consumed nonvegetarian and fast food and had higher total caloric intake. Thus, the lifestyle differences seen between rural and urban population have drastically decreased in the recent time because of urbanization and globalization. Health education regarding appropriate lifestyle changes required to reduce the burden of CHD in India is the need of the hour.

Gender Differences in Coronary Heart Disease

Present day, it is considered as a myth that coronary heart disease (CHD) is less common and less severe in women. According to **Tan, Gast and van der Schouw (2010)** there is substantial variation in the rates of age-standardized CHD incidence and mortality across nations. Countries with high rates of CHD among men also have high rates for women. Since women are more likely to develop CHD a decade later than men, they usually have more adverse outcomes than men do. 87% of women were surveyed who failed to cite heart disease as a major threat to their health. These misperceptions may lead women to underestimate their risk for CHD, resulting in a delay in seeking medical care, thus increasing their morbidity and mortality rates. Women are twice as likely to die of a first myocardial infarction (MI), and have a less favorable long-term survival as compared with men. There are certain risk factors like menopause that pertain only to women which may have increased their predisposition for developing coronary heart disease. Additionally, risk factors like smoking, hypertriglyceridemia and low high-density lipoprotein cholesterol levels have greater impact in women than in men.

Sahu, Epari, Patnaik, Lenka and Soodireddy (2015) found that prevalence of risk factors of CHD among males in decreasing order were high LDL (54.4%), low HDL (49.7%), high triglyceride (44.2%), central obesity and BMI ≥23 (43.5%). However, in females they were: central obesity (59.6%) followed by sedentary life style (51.7%), high LDL (49.3%) and high BMI (40.9%). It was evident that prevalence of central obesity and sedentary life style was significantly higher among females. Although awareness about risk factors of CHD was encouraging, high prevalence of risk factors indicates lack of healthful practices among male and female CHD patients. Thus, the rapid transition in life style owing to urbanization resulted in increased incidence of reversible cardiovascular risk factors in females also (**Vamadevan & Prabhakaran, 2010**).

Dehghani and Dafei (2016) found that a positive history of CHD was obtained from 12% of men and 18.9% of women, i.e. 15.3% in the entire sample. Thus, the incidence and prevalence of CHD in women has exceeded that of men over the past four decades (**Davis, Gorog, Rihal, Prasad & Srinivasan, 2017**).

Statement of the Problem

The aim is to study the role of Stress, Type A Behaviour, Optimism and Perfectionism on Rural and Urban Coronary Heart Disease patients.

Hypotheses

Based on the review of literature following hypotheses were proposed:

1. Urban Coronary Heart Disease patients were expected to score higher on Stress i.e. Perceived Stress as compared to Rural Coronary Heart Disease patients.
2. Urban Coronary Heart Disease patients were expected to score higher on Type A Behaviour as compared to Rural Coronary Heart Disease patients.
3. Urban Coronary Heart Disease patients were expected to score higher on Perfectionism as compared to Rural Coronary Heart Disease patients.
4. Rural Coronary Heart Disease patients were expected to score higher on Optimism as compared to Urban Coronary Heart Disease patients.

Method
Sample

The sample comprised of 200 subjects out of which 100 were Rural Coronary Heart Disease patients and 100 were Urban Coronary Heart Disease patients. They were in the age range of 40-60 years. The subjects were taken from OPD'S of Government and Private Hospitals of Chandigarh, Mohali, Panchkula, Patiala and Sangrur. Only those Coronary Heart Disease patients would be included who have not undergone any surgical interventions and those who had the disease for at least 2-3 years.

Tests and Tools

The following standardized instruments were used:

1. Perceived Stress Scale (**PSS, Cohen et al., 1983**)
2. Type A Behaviour Pattern Scale (**Bortner, 1969**)
3. Life Orientation Test (**LOT-R, Scheier, Carver & Bridges, 1994)**
4. Multidimensional Perfectionism Scale (**Hewitt, Flett, Turnbull-Donovan & Mikail, 1991**)

Statistical Analysis

Descriptive Statistics i.e. Means, Standard Deviations (SD's) were calculated. t-test and Inter-correlational analysis were also carried out.

Table

The results obtained have been tabulated as under:

Table 1.1

Means, Standard Deviations and t-ratios comparing Urban and Rural Coronary Heart Disease Patients (n=200)

Sr. No.	Variables	Urban CHD Patients (n=100)		Rural CHD Patients (n=100)		t-ratios
		Mean	SD	Mean	SD	
1	**Type A Behavior Pattern**	97.56	18.50	92.51	12.76	2.25*
2	**Optimism**	14.99	3.16	12.95	2.84	4.80**
3	**Self Oriented Perfectionism**	71.30	9.41	67.09	8.72	3.28**
4	**Other Oriented Perfectionism**	60.01	6.55	60.48	6.15	0.52
5	**Socially Prescribed Perfectionism**	61.06	7.52	62.48	5.71	1.50
6	**Perfectionism**	192.37	16.64	190.05	14.52	1.05
7	**Perceived Stress**	17.36	6.46	20.11	5.00	3.37**

* t-value significant at .05 Level = 1.97
** t-value significant at .01 Level = 2.60

Results

The primary aim was to study the role of Stress, Type A Behaviour, Optimism and Perfectionism on Rural and Urban Coronary Heart Disease patients.

Descriptive Statistics and t - ratios

The raw scores were analyzed using appropriate statistical analyses viz. Descriptive Statistics and t-test. t-ratios were calculated to find out the significant differences between means of groups on the measured variables. Table 1.1 shows means, standard deviations and t-ratios comparing Urban and Rural Coronary Heart Disease (CHD) patients. The comparison revealed the following t-ratios to be significant. Urban Coronary Heart Disease patients scored higher on Type A Behavior Pattern (t=2.25, p<.01), Optimism (t=4.80, p< .01) and Self Oriented (t=3.28, p< .01) in comparison to Rural Coronary Heart Disease patients. Rural Coronary Heart Disease patients scored higher on Perceived Stress (t=3.37, p<.01) than Urban Coronary Heart Disease patients.

Discussion

The primary aim was to compare the role of Stress, Type A Behaviour, Optimism and Perfectionism on Rural and Urban Coronary Heart Disease patients. It was found that Urban Coronary Heart Diseases patients scored higher on Type A Behaviour Pattern and Optimism as compared to Rural Coronary Heart Disease patients. In terms of Stress i.e. Perceived Stress Rural Coronary Heart Disease Patients scored higher than Urban Coronary Heart Disease Patients. Whereas on Perfectionism, Urban Coronary Heart Diseases patients scored higher on the basis of mean scores than Rural Coronary Heart Disease patients.

As per the hypotheses the results were highly significant for Type A Behaviour Pattern but for Perfectionism results were not significant but in predicted direction. Whereas for Stress and Optimism, results were not in predicted direction, but were significant for Rural and Urban Coronary Heart Diseases Patients respectively.

Mohan et al. (2000) found that many cross-sectional and prospective studies generated evidence of link between life stress and Coronary Artery Disease. They found significant differences between cardiovascular groups and healthy controls on Life Events Stress and Daily Hassles. **De et al. (2010)** suggested that Stressful lives, unhealthy diet, lack of sufficient physical activities, pollution are direct consequences of urban life. In rural areas, most men and women are used to working in the agricultural and farming activities, whereas urban men and women used to living a sedentary life compared to rural population. The roles of environmental pollution in the etiology of different disease are important consideration.

Mohan and Singh (2016) conducted a study to compare rural and urban female coronary heart disease (CHD) patients on stress, coping styles and health habits. It was hypothesized that rural female CHD patients would score higher on stress and coping styles viz. emotion focused coping and problem focused coping and lower on health habits in comparison to urban female CHD patients. The sample comprised of 100 subjects out of which 50 were rural and 50 were urban female CHD patients. They were in the age range of 40-60 years. They were administered on tests of Stress, Coping Styles and Health Habits. t-test was applied to compare rural and urban female CHD patients on stress, coping styles and health habits. Results showed that rural female CHD patients scored higher on stress and lower on problem focused coping and health habits as compared to urban female CHD patients.

Opara (1999) found that all the Eysenckian personality dimension viz. Extraversion, Psychoticism, Neuroticism and social desirability were clearly related to Cardiovascular Diseases. Further they also reported that Type A, Speed and Impatience dimensions of Type-A Behavior Pattern played significant role in Cardiovascular Disease. **Kudiella, Von Kanel, Gander and Fisher (2004)** suggested that with increasing urbanization and technological progress as well as increasing density of population, our modern civilization presents uniquely new challenges never experienced earlier- "less time conscious" generations. **Rohit, Rajendrasinh and Atul (2016)** conducted a study to understand the role of Type A personality in the occurrence of coronary heart disease (CHD). It was hospital based paired matched case control study which was conducted in civil hospital, Ahmedabad. The sample comprised of 135 newly diagnosed cases of coronary heart disease and 135 control subjects. Among 135 newly diagnosed cases 70.4% were male and 29.6% were female. Most of the subjects belonged to the age group of 51-60 years. It was found that 28.9% of newly diagnosed cases were Type A personality as compared to 12.6% of controls. On the basis of the results it was concluded that Type A personality was the major etiology behind the occurrence of coronary heart disease. Similarly, **Singh et al. (1997)** also observed that the prevalence of CHD was significantly higher in men as compared to women in both urban (11% vs. 6.9%) & rural (3.9% vs. 2.6%) areas respectively. Thus, males in both the habitats were found to be predominantly affected by the Type A personality.

Ronaldson et al. (2015) conducted a study to understand the impact of optimism on recovery after Acute Coronary Syndrome (ACS). They hypothesized that greater optimism would lead to more effective physical and emotional adaptation after ACS and would buffer the impact of persistent depressive symptoms on clinical outcomes. This prospective observational clinical study took place in London general hospital and involved 369 urban patients admitted with a documented ACS. The results revealed that optimism predicted better physical health status 12 months and reduced risk of depressive symptoms, more smoking cessation, and more fruit and vegetable consumption at 12 months after ACS independently of baseline physical health, age, sex, ethnicity, social deprivation, and clinical risk factors. Persistent depressive symptoms 12 months after ACS predicted major adverse cardiac events over subsequent years but only among those urban patients who were low in optimism as compared to those urban patients who were high in optimism. Thus optimism predicts better physical and emotional health after ACS among all the age groups.

Sehgal and Singh (2015) conducted a study to compare urban and rural male coronary heart disease patients on optimism and coping styles. The sample comprised of 100 subjects out of which 50 were urban and 50 were rural male coronary heart disease patients in the age range of 40-60 years. They were administered on tests of Optimism and Coping Styles. It was found that urban male patients scored higher on problem focused coping and optimism as compared to rural males. Rural male patients scored higher on emotion focused coping as compared to urban male patients.

Razzini et al. (2008) in a study highlighted the differential relevance of self-criticism and personal standards dimensions of perfectionism and dependency in relation to aggression/anger/hostility, Type D personality, and various psychosocial outcomes (e.g., depressive symptoms, worry, coping, support dissatisfaction) that had been established as predictors of outcome in Coronary Artery Disease. **Akbari, Afkhami and Barghandan (2015)** conducted a study to compare the character of Type-D, perfectionism and happiness in cardiovascular disease and normal subjects. The sample comprised of 240 urban subjects (120 patients and 120 normal cardiovascular) from the city of Ardabil. They were administered on personality questionnaire D, perfectionism and happiness index. The results showed that the mean scores of personality Type-D, negative affectivity, social inhibition and negative perfectionism were higher in heart patients. Happiness and positive perfectionism scores were lower in patients with heart problems. Thus, it can be concluded that perfectionism affects the incidence of heart disease.

A study by **Flett, Hewitt and Molnar (2016)** reviewed that people who were holding themselves up to exceptionally high standards and paying a physiological price for it as if self-oriented perfectionism should be regarded as self-imposed or self-inflicted perfectionism. Similarly, it was also evident from the early literature on perfectionism and illness that there was little sense in that perfectionism should be regarded as adaptive or beneficial. Moreover, perfectionists did not typically engage in protective health behaviors and self-care. A picture emerged of people who were excessively striving in ways that reflect their sense of responsibility and obligation, and their efforts get taken too far in ways that exact significant health costs.

Thus we can say that to some extent the results are in line with the hypotheses proposed at the beginning of the study. Although there are differences in the results of the two comparative groups which were not found to be significant, nevertheless they do validate it to the extent that psychological factors play an important role in the origination of Coronary Heart Disease. Also the geographical region in which individual stay plays a vital role for the pathogenesis of the disease.

Conclusion

On the basis of review, it is suggested that in order to overcome this life threating disease various interventions are mandatory that help the individuals to cope. It could be argued that this study may be used for policy making in health promotion and disease control & prevention programs in urban as well as rural areas with equal emphasis. It has been observed that the urban-rural divide is narrowing, therefore, the medical support systems should be made available at rural areas as well as urban areas. CHD emerges as a major health issue embedded with the traditional as well as some important psychological determinants.

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