

# Understanding the Impact of Psychosocial Issues and Significance of Health Promoting Factors for Coronary Heart Disease

Dr. Sukhmani Singh\*Dr. Simplejit Kaur Dhanoa\*\*

## Correspondence Author:

**\*Dr. Sukhmani Singh**

Assistant Professor

Dept. of Psychology

Chandigarh University, Gharuan, Punjab, India.

e-mail:

Sukhmani.uila@cumail.in

Sukhmanisingh013@gmail.com

**\*\*Dr. Simplejit Kaur Dhanoa**

Associate Professor

Dept. of Psychology

Chandigarh University, Gharuan, Punjab, India.

## Abstract

Cardiovascular diseases are major among the health problems. It is affecting people both in developed and in developing countries. The prevalence as well as risk factors of Coronary Heart Disease (CHD) have been gradually increased in India. Earlier it was considered that only men were predominantly affected by CHD, but as per latest researches it has been found that women are also no longer be considered immune from the manifestation of heart disease. There are various psychological factors that deeply affecting the condition of heart. Many researchers have also identified various factors namely stress and Personality that have huge impact on holistic health of the individuals. The present review paper is focusing on the numerous other psychosocial issues or factors that have compromising or deteriorating effects on the functioning of heart. Furthermore, it shed light on the importance of promoting factors that can be beneficial and provide strength or resilience to the functioning of heart.

## INTRODUCTION

Talking about health it means an extremely multifacet and active collaboration and functioning of dynamic variables namely genetic factor, social situation and persons healthy behavioral aspects. Thus, human happiness, well-being and wellness is the central aspect of health. It is the comprehensive matter which endures to the excellence of man's life (Mohan, 2016).

Health is something that is the most popular theme in different cultures and in fact all communal groups have their own perceptions of health or wellbeing as part of their ethnicity. World Health Organization (WHO, 1996) opined that health is a complete state of

physical, mental and social well-being, and not merely the absence of disease or infirmity.”

William Harvey opined heart as “*the sovereign of the body*”; considered heart as a mechanical motor structure and a eternal symbol. Our heart is safeguarded in a chest cavity. It further connects body to the soul and further heart is also attached to a seat of mind through thoughts and sentiments (Hooli, Gavimath & Ravishankera, 2012).

## PREVALENCE

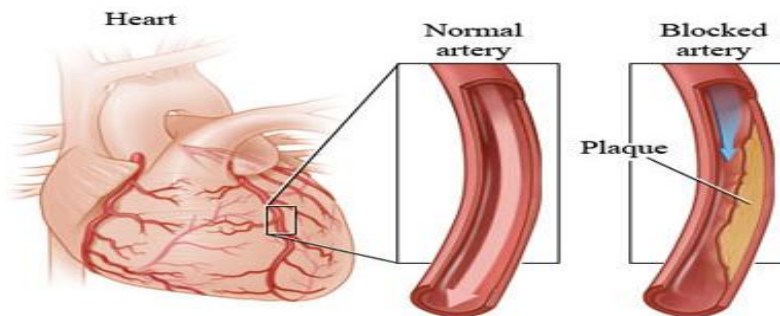
Cardiovascular diseases are among the key health difficulties in developed and developing countries. They are also known as health epidemic of the 21st century. In the last two decades, the occurrence of factors related to

worsening of heart health has been rising in developing nations (Celermajer, Chow, Marijon, Nicholas & Woo, 2012).

However, WHO (2017) estimated that NCDs, including heart problems are accountable for almost 70% of overall casualties universally. In under-developed countries, many people approximately 82% of the 16 million people died early because of smoking, obesity, hypertension, excessive drinking and sedentary lifestyle. Usually they died even before the age of 70 years.

### **DYSFUNCTIONING OF HEART**

Coronary heart disease (CHD) resulted due to the reduced flow of blood to the heart (Healthy People, 2000). Cardiovascular diseases comprise a large variety of problems and conditions that disturb not only heart functioning but working of blood vessels too. Cardiovascular system is defined as the system which consists of heart, blood, and vessels. Each day thousands of people fall prey to heart attack or become victims of such diseases that lead to heart attack (Lloyd-Jones et al., 2010).



**Figure 1: Healthy and Unhealthy Heart**

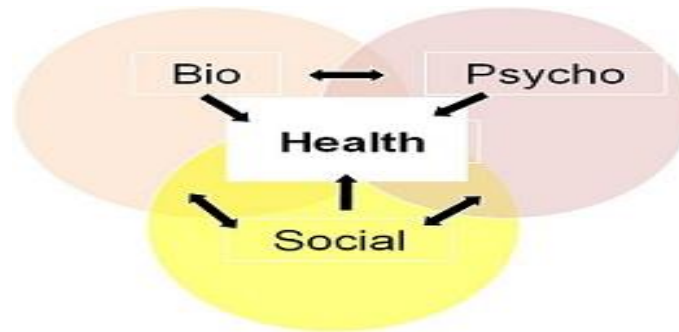
**Source: National Heart Lung and Blood Institute (2016)**

### **MODELS OF HEALTH: BIOMEDICAL TO BIOPSYCHOSOCIAL MODEL**

Earlier the *biomedical model* was used. The model attributes its focus on biological elements of disease. It didn't focus on social, psychological and behavioral attributes of disease. As per views of Baggott (2004), this model focuses on persons bodily performance and explains ill health as a result of physical reason such as injury or infections and attempts to oversight social and psychological aspects. The biomedical model is reductionist in nature and focus on mind-body dualism (Rosen, 1972). Thus the extended or advanced version of biomedical approach come into existence that gives equal importance to psychosocial factors too in order to disease control. This has given rise to '*Biopsychosocial Model*' of health. This model of health focuses on the holistic views

about health. Sarafino (2002) referred to the biopsychosocial model is an expansion of the (bio) medical model that combines 3 factors namely -social, psychological and biological. *Biological factors* refer genetics and our physiological condition and systems. *Psychological factors* refer to the way we act, how and what we think and how we feel. *Social factors* refer to the concern of the fact that we as social beings need to build interpersonal relationships. For eg: communities and societies.

Thus, the approach of this model is comparatively more significant as its focus on combination of three important aspects i.e. biological, psychological and social factors and how these are relevant in the assessment, prevention and treatment of problem. (Havelka, Lucanin & Lucanin, 2009).



**Figure 2: The Biopsychosocial Model**

**SOURCE:** Engel, G.L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196, 129-136.

**CHANGING INDICATORS FOR HEART DISEASE** – On the basis of review of literature there are various psychosocial risk factors that adversely affect the human heart:

● **Type A Behaviour**

Sir William Osler (1960), known as the father of British Medicine opined, “It is many time much more important to know what patient has the disease than what kind of disease the patient has.”

Meyer Friedman and Ray H. Rosenman (1950) talked about Type-A personality type and link it with heart problems. Individuals behavior was categorized by competitiveness, the desire to achieve, hostility, irritation, short-tempered and excess obligation (Morys, Bellwon, Jeżewska, Adamczyk & Gruchała, 2015). Based on various researches studies it has been found that people with Type A personality are usually highly prone to heart related problems in comparison to Type B personality. They react towards stressful or demanding conditions in very harsh manner that produce more challenges for normal functioning of heart (Rohit, Rajendrasinh & Atul, 2016).

● **Stress**

The relationship between stress and illness is multifaceted. The vulnerability to stress differs from individual to individual. Among the numerous elements that influenced the vulnerability to stress are genetic susceptibility, managing style, type of temperament and

community support. When individuals are challenged by problem, they assess the seriousness of the problem and regulate whether or not they have the resources essential to cope with problem. Thus, it is our way of responding and countering to the circumstances that makes alteration in our sensitivity to illness and our whole well-being (Salleh, 2009).

● **Lifestyle**

Psychiatrist Alfred Adler used the term style of life as one of several constructs explaining the dynamics of the behavior. Life Style/Health Habits usually means a form of person practices and individual behavioral selections that are related to raised or reduced health risk. Lifestyle of populations have altered intensely in the 20th century. New advances in scientific and technological domains now touches every aspect or facet of human life. Many people have shifted from normal healthy diets and active lives to junk foods and inactive lifestyle, resulting in epidemic of heart disease (Prabhakaran & Yusuf, 2010).

● **Hostility**

Buddhism denotes anger as one of the ‘Three Poisons of the Mind’, along with greediness and silliness. *Hostility* is considered as a negative, destrucutive approach or adverse thinking directed towards others. On the other side, *Anger* is considered as an emotional or expressive state that differ in strength from mild anger to profound ferocity (Chida & Steptoe, 2009).

Further, hostility and anger have been linked with the extensive range of undesired health consequences. Assari (2016) opined hostility is the feeling of anger in and anger out.

They both have alike and particular health outcomes (Assari, 2016).

#### ● **Perfectionism**

Shafran, Cooper and Fairburn (2002) established a model related to perfectionism. According to them, perfectionism is a unidimensional concept which intensifies the risk for psychopathology. Fry and Debats (2009) opined in their research that death rate was much more common among perfectionists. Further, they found that 51 percent of people with elevated perfectionist desires were more expected to die earlier than others. They concluded that main reasons for elevated death rate were excessive levels of stress and anxiety among people that had adverse effect on the heart condition. Thus, perfectionism is of utmost significant psychosocial risk factor (Mohan & Kaur, 2015).

#### ● **Lack of Social Support**

There are different ways to support namely instrumental support, tangible support, informational support, and emotional support are among different types of social support. This exerts constructive effects on various health issues (Schroder, Schwarzer & Endler, 1997). Also advanced levels of social support have various health benefits, including defense against cardiac morbidity and mortality. Having someone around to talk out and share feelings protects them from the physical damage caused due to stress. Thus social support has a very strong and significant impact on patients with cardiovascular diseases and how they are able to deal with their illness.

### **GENDER DIFFERENCES IN CORONARY HEART DISEASE**

On the basis of review of literature, earlier it was studied as a myth that coronary heart diseases are less affected among women. In line with this viewpoint, Sahu, Epari, Patnaik, Lenka and Soodireddy (2015) reviewed and found that women can also have equal chance for heart problem. They found that there is high frequency of risk factors of CHD among males. Usually, males had high LDL, low HDL,

high triglyceride, central obesity and BMI. However, among females they found that central obesity followed by sedentary life style, high LDL and high BMI play vital role. Based on their research it was quite clear that prevalence of central obesity and sedentary life style was considerably higher among females, while TG and LDL were high among males. Sedentary lifestyle plays a significant role in deteriorating the health conditions. Despite all, awareness about risk factors of CHD was quite favorable. It was advised that prompt changeover in life style lead to reversible cardiovascular risk factors especially among females (Vamadevan & Prabhakaran, 2010).

### **SIGNIFICANCE OF HEALTH PROMOTING FACTORS**

Health Promoting factors impacted positively on the individual's health and wellbeing. Being regularly physical active, proper diet including plenty of fresh fruits and vegetables, good social support network or having satisfactory level of income, are some of the factors which protect health. Other health promoting factors are listed below:

- **Optimism** - Optimism is considered as a set of ideas that guide people to use positive attitude towards diverse situations (Peterson & Bossio, 1991). Having positive attitude is linked with various benefits like highly positive people appear to appeal caring social associations, using progressive coping techniques, and having healthy routines than negative people. They are usually in habit of not giving up easily and turn towards strenuous situations with solution-oriented approach (Brissette, Scheier & Carver, 2002). Thus, optimism has constructive impact on the health and well-being of our heart.
- **Resilience** - It is a personality characteristic that help individuals to overcome the health difficulties. In medicine and health sciences, it is stated as an person's capacity to cope with difficulties without succumbing to them, and to beat the unconstructive effects of

stressful life events (Edward, 2013). Being resilient have direct effect on the health of the individuals. Further it helps in overcoming several long-lasting diseases and medical ailments too (De Lemos, Moraes & Pellanda, 2016).

- **Healthy Diet** - “You are what you eat” determines the fact that healthy diet is very important for good health. Pereira et al. (2004) suggested that the consumption of fibre from healthy food is negatively associated with heart problem. On the basis of the obtainable evidence, a daily intake of at least 400 g of fruit and vegetables is suggested. Thus, the relationship between the intake of vegetables and fruits encourages good health.
- **Physical Activity** - Sedentary lifestyle is extremely associated with risk of heart disease, whereas, physical activity boosts our health by reducing risk for same in case of both men and women. Hence, doing regular light or moderate physical exercise in middle or older age considerably decreases cardiovascular disease and increases the quality of life (Lee, Folsom & Blair, 2003).

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## CONCLUSION AND IMPLICATIONS

In today’s scenario, India being no exception in context to increase prevalence of heart disease. Several factors have been acknowledged for heart disease. Based on various studies, it has been advised that for tackling life-threatening problem, there is the need for awareness regarding heart health. Counseling practices can be done and minimum education can be delivered in order to help people to know about modifiable factors for heart diseases like modifying lifestyle and cultivating positive emotions. With these, positive changes in life, patients gain control over their behaviour. Henceforth, awareness is required among the overall population about these risk factors which can be dealt by following healthy diet, doing physical exercise and abstaining from indulging in detrimental health habits, namely, excessive use of alcohol and drugs. The science of health psychology has also been concerned about the growth in human health, which needs multidimensional help from community. Using interdisciplinary approach is also essential in order to have good health. Our management and medical science should also work hand in hand to make comprehensive policies that can be used to promote excellence and quality in health (Sehgal, 2016).

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