Abstract
Cardiologists and general physicians focus on immediate and lifelong medical treatment in patients with any cardiac ailment. During the course of treatment, the patient's mind undergoes physical and mental turmoil wherein the brain starts infusing with soaring levels of anxiety, fear and depression. These factors start impacting the patients concerned with mental, emotional, social, physical, financial, sexual and occupational domains of life. So, while the patient receives medical treatment, a well-balanced psychological setup should be considered to keep levels of anxiety, fear and depression at the minimum levels which will in turn fasten the impact of all modes of treatment. The treatment is not accomplished until the psychological, behavioural and personality components are all addressed. This achievable goal will enable the patients to cope with various issues in life with a strong mental and physical attitude.

Keywords: Anxiety, Fear, Depression, Cardiac patient, Cardiologist, Chest clearance.

Introduction
Anxiety is apparent inability to forecast, manage or increase desired results when confronted with a risk. Fear is a feeling which involves forceful anticipation of threat which is accompanied by the need to get away from the situation or defend one's self. Depression is a grave medical sickness that negatively affects person's emotion, way of thinking and mode of action. Together, anxiety, fear and depression are psychological components that influence a person in respect to mental, emotional, social, physical, financial, sexual and occupational domains of life.

Cardiac diseases refer to conditions which affect one or more sites of the heart due to which oxygen supply to heart is reduced, making it less competent with reduced ability in filling and pumping blood which ultimately results in a de-regularised harmonisation of the heart function. Cardiac diseases include myocardial infarction (MI), stroke, heart failure, cardiomyopathy, valvular heart disease, carditis, thromboembolic disease, rheumatic heart disease etc. These diseases can be short-term, constant or evolving in nature, representing wide range of symptoms like dyspnoea, arrhythmia, radiating angina pain, fatigue, nausea, cough, dizziness, pedal or ankle oedema, syncope and anxiety. Everyone experiences feeling of anxiety at some or the other point in a lifetime. Anxiety has functionally suitable and unsuitable consequences. Fear is extremely complex. Since ages, fear is a common phenomenon seen in all age groups across the globe. A large number of people suffer from it, either in their early, middle or later stages of life. People have fear of objects, animals and situations like bugs, snakes, spiders, heights, social rejections, failure, public speaking, blood, and air travel. When a person is subjected to fear, the experience can even be devastating, leading to significant changes in one's daily life. When a person is in fear, an intricate mechanism comes into action via the central nervous system (CNS) and the endocrine system so that the body may survive the threat. In some cases, an exposure to fear stimuli can lead to a panic situation. Till the panic situation prevails, inclination of heart rate, tremor, suffocation, sweating, chest pain, dizziness, abdominal discomfort and fear of death are seen which reach their maximum level by 7 to 10 minutes. Similarly, an individual can develop fear of cardiac diseases. Recent studies have addressed depression also as a symptom in patients suffering from cardiac diseases.

Thus, the current study was planned to highlight the effects of anxiety, fear and depression in patients suffering from cardiac diseases and to devise ways to improve quality of life in these patients by improving their mental, emotional, social, physical, financial, sexual and occupational domains of life.

Patients with Cardiac Disease
Cardiac diseases are leading cause of mortality in the world. They take lives of nearly 17.9 million people every year, accounting for nearly 31% of total global deaths. When heart functions constantly at a greater frequency, it experiences problems which, if not treated in the early stage, tend to accelerate with time. Individuals suffering from cardiac diseases experience a wide range...
of fears which has dramatic implications primarily for themselves and secondly to their surrounding environments. They suffer from anxiety which act as a warning sign for the body about possible dangers around them and, hence, prepares them to mobilise their defence system to cope with the threat or run away from it. In particular, patients with cardiac disease who already have acute MI (AMI) are greatly exposed to secondary psychosocial issues. In other words, these problems alter the psychological balance of the patient and create emotional disturbances in terms of self-relationship on the one hand and interpersonal relationship on the other i.e. sex, family, professional colleagues etc. The transformation of a healthy individual to a diseased stature follows a gradual development. Most of the patients in cardiac units, especially MI units, are afraid and presume that their future will no longer be happening and glorious as it was in the past. For most of them, even the thought of multifaceted angiographic inspection initiates feeling of fear. This thought increases the heart rate even before the diagnostic test is commenced and, thus, doubles the risk of death due to MI in later life. In addition, periodic visits to the doctor are accompanied with anxiety, stress and panic which together cause dysfunctional penalty in their everyday life. Any individual who has experienced any kind or kinds of cardiac illness usually becomes depressed in life. They get anxious frequently and gradually go down in their personal activities. Their overall profile alters due to spontaneous episodes of anxiety and fear of death. It is also noticed that women have greater incidence of cardiac diseases than men which is attributed to changes in the oestrogen level and neuro-endocrine functions.

A major and imperative element neglected so far, or not discussed in the context of cardiac patients, is their sexual life following a cardiac disease. These patients start losing face as negative thoughts turn in the mind regarding inabilities with respect to frequency and insufficiency in intensity to carry out intimate relationship for the rest of their lives. As sex is a biological need of every individual, it should be included as a major topic while counselling cardiac patients with the aim of motivating them to consider it a normal act even after they are discharged from hospital.

**Role of Healthcare Professionals in Dealing with Anxiety, Fear and Depression in Cardiac Patients**

The treatment for an individual suffering from anxiety, fear and depression following a cardiac disease depends on the extent of involvement of his psychological status. Pharmacological, self-help and physical therapy strategies are found to be effective in treating these patients. Greater the active participation from the patients, more easily they are able to attain control over their psychological emotions. These factors are brought to existence by a competent team of healthcare professionals who work collectively to develop a patient's positive attitude towards emotional, mental and social mindset, thus improving the overall health status of the patients (Figure).

Cardiologists and general physicians are the first line of defence which comes in contact with an individual complaining of pain and discomfort in and around the chest. These patients are handled calmly as it is reasonably understandable that any person after knowing about a cardiac disease in one's own self tends to get scared. So, these patients are gently handled from day 1 till their complete course of treatment which plays a vital role in reducing anxiety, fear and, ultimately, depression.

The nursing staff is a major component of health professional team who remain in contact with patients for majority of time in cardiac units. They are experts in smooth and professional handling of patients, fixing cardiac monitors and performing blood sample on a routine basis. As they spend bulk of their time with these patients, their polite verbal communication skills and calm nature help in reducing anxiety, fear and depression.
Psychotherapist and speech therapist assist patients from day 1 of hospitalisation which continues till the day of discharge from the hospital. They work towards reducing negative implications in the mind following a cardiac disease, and developing positive goals for life which help the individual to live a healthy and prosperous life.\(^{23}\)

Physical therapist develops a rapport with patients in cardiac unit. Physiotherapy is a long term treatment. In hospitals, as therapists come in contact with patients on a regular basis, this contact develops a friendly zone between the two wherein the patients are comfortable discussing their various issues of life, thus relaxing them psychologically which helps in reducing anxiety. In addition, chest physiotherapy is an important treatment regime used for hospitalised patients with cardiac diseases. Conventional physiotherapy has been practised since the 1930s as an adjunct to medical intervention. In the early years, when there were few known facts, a conventional mode of chest physiotherapy was practised to improve oxygenation.\(^{24}\) As time passed by, research developed and confirmed facts evolved, it replaced the conventional mode to "Airway Clearance Techniques" or "Chest Clearance Techniques" i.e. active cycle of breathing technique (ACBT), forced expiratory techniques (FET) and positive end-expiratory pressure (PEEP) devices. These new technologies helped physiotherapists to quantify and biofeedback in measuring and strengthening respiratory muscles. By using these techniques, patient recovery period could be reduced and physiotherapists’ work became efficient and, hence, over the years they have started publishing original articles in the development of new concepts due to which medical fraternity started to accept and appreciate physiotherapy as an essential part of treatment regime in cardiology. A physiotherapist works with the patient to help him overcome anxiety, fear and depression. The concern of anxiety and fear among these cardiac patients is because of hospital environment, beep sounds from different monitoring machines, physical presence of doctors and nurses around them, cardiac monitoring and blood sampling investigations being performed repeatedly on them. This anxiety leads to pounding of heart, racing heartbeat tachycardia or slow heart beat bradycardia and / or skipped beat arrhythmia. Occasionally other factors also play a significant role which should be a matter of concern to look into i.e. sleep deprivation and irritability due to enormous exposure to room-light in intensive care units (ICUs). Studies have reported anxiety due to disruption of sleep because of repeated exposure to unnatural light during daytime and artificial lights (flush mount ceiling light) at night, hence, confusing the patient and leading to anxiety.\(^{25-27}\)

All health professionals dealing with cardiac patients should be sensitive regarding their language and actions while assessing and treating patients as these patients are depressed in life. Even slight misconduct of speech or actions further deepen their sorrow and push them towards severe depression. It takes massive time for these patients to overcome depression. If necessary, only then should anti-depressive medications be prescribed to patients as these medications on regular use bring about side effects like insomnia, blurred vision, constipation, agitation and, most significantly, sexual problems of erectile dysfunction in males and reduced orgasm in females. Finally, professionals dealing with cardiac patients should be encouraged to work as a team with the aim of taking the patient’s health to the highest level of well-being.

**Conclusion**

Any cardiac disease has a great impact on patient’s psychology. The extent of involvement should be evaluated separately for each patient. This evaluation should commence from day 1 of the diagnosis till discharge from the hospital. From the commencement of therapeutic programme, the closest family members should be given importance and counselled to create a stable and healthy environment for the patient at home. Patients should be encouraged to meet relatives and friends as it may help in regaining the lost self-esteem and motivation in life. They should be encouraged to develop a normal and healthy lifestyle towards professional goals and take it to their best performing levels. If necessary, colleagues should be counselled as that fastens recovery in the patient by boosting him psychologically and thus, motivating him for active participation in professional life. Not the least, these patients should be asked to develop a fearless sexual life to develop confidence as a normal individual. If possible, the patient’s healthy partner should be asked to keep an open communication with the patient regarding sexual issues. These conversations relax the patient, and motivate him for future steps in life which, as a reciprocal benefit, reduce anxiety, fear and depression.

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**References**


