CHAPTER - I

INTRODUCTION
STRESS IN NURSING PROFESSION:
A PSYCHO-SOCIAL STUDY
CHAPTER - I
INTRODUCTION
SECTION - A

STRESS - The Concept, Meaning and the Scope

...
which act on the individual in various dimensions and degrees. These forces may be called as "Stress".

Commonly, most individuals experience stress from a milder to an extremely high degree during their life-time. So, stressful situations are encountered every day and at every stage of human development. There are evidences to show that stress before birth can influence both the mother and the foetus leading to obstetric complications and defects. From foetal age to old age an individual faces stress.

Analysing the ancient Indian classics Sankhya, Yoga and Ayurveda, Rao (1983) pointed out two Sanskrit words, namely "Klesha" and "Dukkha", which mean stress and strain respectively. The concept of Klesha is equipment to noxious stimuli. Hence, stress is generally assumed to be painful.

**Types of stress** : The stress can be classified into three categories, namely Job Stress, Environmental Stress, Psychosocial Stress, depending upon the nature of work, environment in which the work is performed and the types of people with whom interaction takes place in our day-to-day work.

**Effect of stress** : There are two types of effect which are observed among the individuals exposed to any kind of stress, Acute or short-term effect and chronic or long-term effect. Acute
effect may be at times severe, if the intensity of stress is very high and difficult to sustain long period of time. This may lead to excessive strain on the body and mind depending on the nature of work and intensity of stress leading to fatigue, and decrement in ability, agility and alertness and increased accident potentiality. Such phenomenon developing in biological system under any kind of stress can be well-understood by the well-known Hook's Law, which states that stress is proportional to strain with certain limit in a metallic wire. If the wire is further subjected to stress beyond a certain limit, the elastic property of the wire is completely lost, plasticity develops and wire will finally break. This is referred to as 'the breaking point' or 'the fatigue in metallic wire'.

The biological system also has the elastic properties which can be stretched when subject to any kind of stress within a limit. Which, when exceeds will lead to fatigue in man. Fatigue in biological system can also occur, even if the stress is not much excessive but beyond the acceptable limit of the individual for sustained activity extending over a period of eight hours which is the usual working time in any occupation.

If the intensity of stress remains within the acceptable limit, strain produced can be recovered within a short period of time after the withdrawal of stress. If, however, the intensity exceeds the limit for day-to-day work, individual can not recover
fully and a certain degree of strain is always left over, which with subsequent exposure accumulates in the system and develops a stage called 'chronic fatigue', which is very difficult to remove. Persistence of such chronic fatigue finally lead to impairment of health, reduced efficiency and increased accident potentiality.

Factors affecting health problems under stress: As stated earlier, stress connotes both intrinsic and extrinsic factors which acting on the human system, either singly or in combination, may adversely affect body and mind causing many serious health problems in the long run. Age, sex, body build, nutrition and training determining the level of physiological and psychological fitness, adoption and individual capabilities and limitations from the physical, physiological and psychological point of view and anthropometric characteristics and personality are some of the attributes referred to as the 'intrinsic factors'. 'Extrinsic factors' include temperature, humidity and ventilation, noise and vibration, illumination, atmospheric pollution, work load and posture, inter-personnel relationship, socio-economic status, prejudice, attitude, aptitude and interest, etc. Both these intrinsic and extrinsic factors together are known as "Stressors".

When an individual subjected to any kind of stressors, internal or external, responds in different ways by modifying the
functioning of the body mechanisms, both physiological and psychological, and as a result a certain degree of strain is produced, which is proportional to the intensity and duration of the stressors.

Stress and Modern Life:

Conflicts of modern life, maintenance of the standard of living, material possession, comfort of living and comparison between individuals lead to anxiety in modern living in our culture. Most of the individuals use the projection (defence mechanism) method to release most of the distress. However, too many conflicts and distress can not be channalized as the individuals are constantly exposed to them.

As the society advanced from the stone age to the computer age, the individual faced rapid social changes. Scientific and technological changes brought immense tension and anxiety and he could not cope up with the rapid advancement and its demands. Toffler (1970) has proposed the term future shock to describe the results of social change. The early study by Murphy (1965) indicates that social change is likely to be particularly stressful when certain conditions are present. It involves new roles or values. Glass (1970) studied marital partners in sexual adjustment and concluded that marital partners are expected to live together for much longer period despite the multiplicity of
changes like jobs, sexual patterns, leisure-time pursuits, values and life styles, etc.

Since these multiplicity of changes take place rapidly, the marital partners can not adjust with the environment. Uncontrolled technological and social change can have perversive effects on the individuals. In the modern world, it has become essential for us to update our knowledge of the rapid social change and technological advancement so as to prevent anxiety and frustration in our day-to-day life.

Toffler (1970) and Lipowski (1974) supported this view, and in his social study Lipowski concluded that social change contributes to mental hazards. White (1970) pointed out that the world leaders encounter enormous pressure while decision making on key issues, which decisions ultimately affect the citizens and the related countries.

Stress in Relation to Insecurity:

Insecurity is a feeling of helplessness and inadequacy in the face of anxiety about one's place, future and goal. Right from the foetus development in the mother's womb to old age, every individual needs security in life and if it is thwarted the individual becomes insecure and is bound for stress and strain. Children at the time of emotional disturbances and physiological
discomforts undergo a sense of insecurity. A lonely child, an orphan, an uncared for and ugly child develop insecurity. In the process of biological and psycho-social changes everyone in their lifetime at various stages interact and secure life. During this phase, if the individual is deprived of security, he goes into emotional disturbances. Man is a social animal. He needs interaction with his fellowman to share his feelings and to converse. Thus, the person's emotional disturbances get relieved and he feels secured.

Insecurity is one of the factors influencing a stressful life. The insecure individual manifests an anti-social personality trait like delinquency, drug addiction or alcoholism. Lack of self-esteem and well-being, divorce, marital conflicts, death of spouse, having financial set-backs are said to be the foremost causes of insecurity.

A study by Arnetz (1991) on neuroendocrine and immunologic effects of unemployment and job insecurity finds that the insecured has changes in cardiovascular risk factors observed at least 2 years following the loss of his job.

Causes of Stress:

Most of the abnormal behaviour is caused by faulty development or severe stress or a combination of both. Commonly, stress is caused by bio-psychosocial factors and recently it has also been understood to be caused by socio-cultural factors. Various causes of stress arising in our day-to-day life are given in the following stress model.

Biological and environmental factors: Various organic factors could influence and impair the brain's functioning. Apart from various diseases caused by virus and bacteria, external trauma and faulty genes also influence the impairment of brain functioning from mild to severe brain pathology. The above factors cause threat to an individual and therefore manifest anxiety. If the individual copes effectively with the stress situation with appropriate and adequate medication, anxiety could be eliminated. Most of the patients admitted in the general hospitals experience invariably the same amount of stress in them. A majority of them have anxiety and depression as long as they stay in the hospital. But as we know, still many diseases can not be conquered by modern medicine and thus the individual stress conditions continue to be a threat to the patient's ego defence mechanism such as denial and rationalization.

Genetic factors like chromosomal abnormalities give rise to deformities and disabilities. More recently scientists have found
that chromosomal abnormality could cause various organic diseases like diabetes mellitus, coronary heart disease, some forms of cancer, schizophrenic and some other mental disorder.

In addition to the above, researchers are engaged to single out the causitive genes in deliquents, criminals and socio-pathological deviants. Further, constitutional liabilities such as handicaps, are vulnerable to stress due to influence of genetic environmental factors. In the early work of Sheldon and his associates (1954), they have concluded that there are three types of body build and each associated with particular temperamental and other personality characteristics. Gluek and Gluek (1968) reported higher incidence of individuals with muscular physique among juvenile delinquents and adult criminals. Hurlock (1968) has pointed out adolescents find it difficult to accept the changes in their bodies and are dissatisfied with their images as they change.

The physically-disabled person may face enormous psychosocial stress apart from the physical stress. Other common and undesirable reactions to physical handicaps are feelings of inferiority, self-pity and hostility which develop psychological handicaps. The effects of severe physical impairment on children are described by Minde et al (1972).
Psycho-social factors: Although psycho-social factors causing stress have been little studied, a good deal has been learned about psychological and inter-personnel roles in maladaptive behaviour. Maternal deprivation, pathogenic family patterns, early psychic trauma and distorted inter-personnel relationships are the significant psycho-social factors contributing to the abnormal behaviour of the individual.

Children who get a distorted and inadequate maternal care have a faulty development. The early work of Ribble (1944, 1945) showed that rejecting, indifferent or punishing mothers may cause tense, unsatisfied and negative behaviour in children. Hurely (1965) found parental rejection to be associated with diminished intelligence during the early school years. Numerous studies on parental rejection tends to foster low self-esteem, feeling of insecurity and inadequacy retarded conscience and general intellectual developments, increased aggression, loneliness and inability to give and receive love, are the common psychological manifestation among children and later on in adult life.

Sears (1961) found that high permissiveness and low punishment in the home were correlated positively with anti-social aggressive behaviour, particularly during middle and later childhood. Faulty discipline, harsh, overly severe discipline and inconsistent discipline play a typical effect on a child's personality development. Further, faulty communication also leads to emotional disturbances.
Faulty patterns of communication have been found to be more common in the backgrounds of emotionally disturbed adolescents and young adults than in those of young people more adequately adjusted (Hurlock 1968). According to Alexander (1973), normal families tend to show a much higher incidence of supportive interactions and communication which tend to foster the unity of the family and well-being of the family members. A study on disturbed families of all socio-economic level revealed that the individual developed aggressive behaviour (Lefkowitz, et al, 1973).

Emotional disturbances in the individual is developed due to undesirable parental model. Jenkins (1966) found that nearly half of a group of children diagnosed as "over anxious - neurotic" had mothers who were described as neurotic because of anxiety. Nervousness and related symptoms characterized by habitual delinquent behaviour tended to come from a background combining poverty, parental neglect, a bad neighbourhood and an inadequate father figure. The studies by Anthony (1969) and Green, et al (1990) supported this concept.

People differ markedly in their ability to give and receive love. Nevertheless, marital and other intimate relationships do represent a major source of need fulfilment in the lives of most of us. Marital instability and other damaging inter-personal relationships lead to maladaptive behaviour. Today marriage is likely to be viewed as mutual understanding between the partners. Due to modern urbanization and rapid mobility of people, good inter-personal relationship, declines. In addition to the above factors, there are many frustrations that lead to self-devaluation like failure, losses, personal limitations, high aspiration and lack of resources, guilt and loneliness contribute to additional life stress in day-to-day life.

Losses include material and personal loss. According to Holmes and Holmes (1970), personal loss like death of spouse, divorce and marital separation seem to be the most stressful events in our society. Furthere, he concluded that guilt is the foremost cause for mental suffering. Most people experience painful feelings of isolation and loneliness at some time in their lives. Becker (1962) pointed out that loneliness is the greatest poverty of the human being and thus it is highly stressful.

Varied Forms of Stress:

Stress is classified as frustration, conflicts and pressure. All these varied forms of stress are inter-related. Frustration occurs when one's strivings are thwarted by obstacles that block progress towards a desired goal. A wide range of obstacles, both environmental and internal, can lead to frustration. Group prejudice, discrimination and death of loved ones are common frustrations stemming from the environment. Apart from this physical problems, lack of competence and inadequate self-control are sources of frustration that can result from our own personal limitations. Perhaps, frustration arises out of psychological barriers in the form of ethical or moral tolerance. The factors such as age, personal characteristics, the society in which we live and conflicts often result in frustration.

Pressures of modern life increase the multiplicity of conflicts. The individuals are somehow or the other encouraged in solving these conflicts one by one. During this period, rapid advancement in the form of social change takes place. And thus, they might lag behind the advancement which in turn may cause frustration.

Various Elements and Components Of Stress:

Several factors influence stress severely. These are relatively independent of the individual involved or the
situational context in which the demand occurs such as importance, duration and multiplicity of demands. In terms of importance it has been shown that certain stresses, such as the death of a loved one, serious personal illness, etc., tend to be highly stressful for most people (Holmes & Rahe, 1967). This has been supported by Cochrane and Robertson (1973). Usually the longer a stress operates, the more severe it becomes. A prolonged exhaustion imposes a more intense stress than does temporary fatigue.

In some instances the multiplicity of demands taxes our adjustive resources, and if they become excessive, it may lead to a break-down of organised behaviour. Apart from this, the strength and equality of conflicting forces related to multiplicity of demands involving stress conflicts between strong motives such as one requiring a choice between self-esteem and social approval are likely to subject the individual to considerable stress.

Persons anticipating a stress situation such as major surgery have experienced that the severity of the stress increased as the time for the stressful situation approached. At the same time, once the individuals reach the stressful situation, their fear and anxiety usually decreases according to Fenz and Epstein (1969). Unfamiliarity or suddenness of a problem, often leading to new adjustive demands that have not been anticipated and for which no readymade coping patterns are
available, would place an individual under severe stress. In addition to this, individual characteristics such as perception of the problem, degree of threat and stress tolerance of the individual would contribute to severity of stress.

Since stress beyond a minimal level threatens the well-being of the individual, it engenders automatic persistent attempts for its resolution. It forces a person to do something about it. It depends on many factors including one's frame of reference like motives, competences, stress tolerance, environmental limitations and supports and social demands. Apart from this, inner factors play the dominant role in determining one's stress reactions. Any stress reaction reflects the interplay between inner and outer determinants. An individual reacts to stress as an integrated unit.

As Miller (1965) has pointed out that organisms that survive whether they are low or high on the evolutionary scale tend to employ first those defences that are least expensive. If these are ineffective, then additional and more expensive resource are brought into operation. The tendency to revise change in established ways of perceiving and acting has been referred to as inertia on the individual level and as cultural lag on the social level. These concepts help us to understand the tendency of maladaptive behaviour patterns to persist long after few more effective patterns have become available.
In general, an individual's potentiality for conscious and automatic functioning represents complementary resources for meeting adjustive demands on a biological level, and the repair of damaged tissues and immunological defences against disease and other defensive processes take place naturally. The natural way of functioning can be useful for processing routine stresses. However, it is apparent that natural behaviour can also impair effective adjustment.

Reaction to frustration may vary from person to person. The reactions are restlessness, anger, fear, anxiety, aggression and hostility characterized by feelings of wanting to hurt or destroy the person viewed as the sources of frustration. The perception of danger tends to arouse fear and direct the individual towards withdrawal or flight. However, the nature of the stress situation and the degree of fear elicited have much to do with the direction and quality of resulting behaviour. In the case of extreme danger, the individual may panic and become unable to function in an organized manner. Threat tends to elicit anxiety. Stress situations inducing anxiety are often difficult to cope with. Fears are usually actual or potential sources of frustration. The specific emotions that occur are heavily influenced by past learning and by the perceived significance of the stress situation to the individual.
Stress reactions are task oriented reactions and defence oriented reactions. Task oriented reactions tend to be based on an objective appraisal of the situation. It involves making changes in one's self or one's surroundings or both, depending on the situation. Attack, withdrawal and compromise are the three task oriented reactions to stress.

Defence oriented reactions to stress are aimed at protecting the self from hurt and disorganization. They are two types. The first consists of responses such as, crying or repetitive talking, which play as repair mechanism. The second type is ego or self-defence mechanism, such as denial and rationalization that function to relieve tension and anxiety and to protect the self from hurt and devaluation.

The individual undertakes various coping measures in attempts to meet the emergency. During this stage maladjustment such as continuous anxiety and tension, gastro-intestinal upset or other bodily manifestations occur. If the stress continues, the individual is often able to find some means for dealing with it and thus to resist it psychologically. During the stage of resistance, there would be indications of strain including manifestation of physical symptoms. At the stage of resistance the individual tends to become rigid and to cling to previously developed defences rather than to try to re-evaluate the stress situation and work out more adaptive coping patterns.
At the last stage of exhaustion the individual's adaptive resources are depleted and involves delusions and hallucinations. Further, metabolic changes impair normal brain functioning which leads to complete psychological disintegration.

**Ramifications of stress:**

Failure to cope with the stress may lead to various psychological deviations such as anxiety neurosis, psychosis, etc. A few among them are described below:

**Anxiety neurosis:** Anxiety is one of the psychological disorders induced by stress. Anxiety neurosis is the most common of the various neurotic patterns, constituting 30 to 40% of all neurotic disorders like inability to concentrate, difficulty in making decisions, extreme sensitivity, discouragement, sleep disturbances, excessive sweating and sustained muscle tension. The anxiety neurotic lives in a relatively constant state of tension, worry and diffuse uneasiness.

The psycho-neurotic is over sensitive in inter-personal relationships and freely feels inadequate and depressed. He commonly complains of muscular tension, especially in the neck and upper shoulder region, chronic mild diarrhea, frequent urination and sleep disturbances that include insomnia and nightmares. He perspires profusely and his palms are often clammy. He may show cardiovascular changes such as elevated blood pressure and increased pulse rate and he may experience heart palpitations for no apparent reason.
Anxiety neurotic symptoms vary from person to person but typically they include palpitations, shortness of breath, profuse sweating, faintness and dizziness, coldness, pallor of the face and extremities, urge to micturate, gastric problems and effable feelings of imminent death.

Studies of a large number of anxiety neurotics also reveal that many of them suffer from mild depression as well as chronic anxiety. Prusoff & Klerman (1974) and Downing & Rickels (1974) supported these findings. This is not unexpected in view of their generally gloomy outlook on the world, nor is it surprising that excessive use of tranquilizing drugs, sleeping pills and alcohol often complicates the clinical picture in anxiety neurosis. It reflects the individual's acute feelings of inadequacy in the face of inner and outer stresses perceived as threatening.

In our present highly unsettled world, many of us feel uneasy, even experience occasional mild anxiety attacks. Similarly, severe financial reverses, loss of employment and other unusual stresses may activate rather severe but perfectly normal feelings of anxiety. In neurotic reactions the anxiety is considered as pathological, because it tends to be chronic and is elicited by stress situation that the average individual handles without too much difficulty.

Jenkins (1966, 1968, 1969) found that overanxious children tend to have neurotic mothers who are themselves anxious. Jenkins (1968, 1969) also pointed out that anxiety neurotics often come from families in which parents have high expectations for their child while at the same time rejecting his actual accomplishments as substandard. An individual reared in such a setting often appears to adopt perfectionist parental standards for himself and to become self-critical and anxious if he fails or thinks he is in danger of failing to meet them. Handling of hostility is difficult for the neurotic, who typically feels forced to take a compliant, subservient, self-suppressing attitude towards others as the price of security, love and acceptance.

In a study of 32 anxiety neurotics, Beck, Laude and Bohnert (1974) found unrealistic expectations and fantasies of harm associated with these patients heightened levels of anxiety and anxiety attacks. The degree of anxiety was related to the severity of anticipated harm and to its probability of happening as perceived by the patient. Repressed sexual desires may threaten to break through existing defences and elicit intense anxiety. Under certain conditions such as conflicts involving moral values or possible loss of security and status, there may be acute anxiety and paralysing indecision.

Life often poses problems in which the pursuit of increased satisfactions involves giving up present hard-won security and
taking new risks. For the neurotic, this is likely to prove a difficult and anxiety arousing conflict situation. A stressful situation that parallels some earlier trauma may elicit intense anxiety in an individual who is basically insecure. The anxious person often puts up a good battle in view of his family evaluations of himself and his environment. As Portnoy (1959) has pointed out, "To the picture of an anxious individual apprehensively coping with life in the face of inner and outer dangers must also be added to the picture of a human being with courage, able to endure this much anxiety without the more massive defences and character distortions which characterize the other psychiatric syndromes".

Although anxiety neurotics often find some relief in mild tranquilizers, such medication is not likely to modify their basic life style. Anxiety neurotics usually respond well to treatment although it appears that their chronic anxiety is seldom completely removed.

Psychosis: Psychosis is a behavioural term designating a withdrawal from reality or an active attempt to reconcile reality with an inner world of disorganized thinking and feeling. Restitution is attempted by means of delusions and hallucinations. There are many types of psychosis including

schizophrenia, mania, depression and the organic psychosis (senile), arteriosclerotic, alcoholic, toxic and traumatic.

Many factors may contribute to the psychosis like biogenitics, child rearing, early physical disease, traumatic experiences, family patterns and systems of communications life stresses, socio-economic and culture; which of them is most significant is not known. Some psychiatrists believe that psychosis and neurosis represent degrees of the same process. But schizophrenic psychosis shows a most of behavioural symptoms not seen in neurosis. For psychosis, purely psychological approaches are inadequate.

The causes may be biological, psychological or environmental. Most of the sociologically oriented studies have demonstrated that lower socio-economic strata or group has prevalence of schizophrenia. There are relationships between the occurrence of stress and depression and schizophrenia. The relationship of social classes to mental disorders is attributable not merely to differences in the amount of stress that people endure but also to social class differences in how effectively people deal with stress. The paranoid type of psychosis is derived from paranoid type of personality. The individual suffering from paranoid type of psychosis is common among migratory, immigrant and minority groups than among the native and permanent population. The
adaptational stresses of a new language, a new job, and the feelings of loneliness and isolation may partly explain the appearance of paranoid delusions.

The major effective disorders of depression are only a century or two old, and although major advances in treatment have been developed, research has yet to clarify fully the nature and causes of this complex disorder. For the neurophysiologist, depression refers to any decrease in electrophysiological activity. For the pharmacologist, depression refers to the actions of drugs that decrease the activity of the target organ.

For the psychologist, depression refers to any decrement in optional cognitive perceptual or motion performance. For the clinical psychiatrist, however, depression covers a wide range of changes in the affective states. The affective changes may vary in severity from the normal mood swings of everyday life at one extreme to the severe psychotic state called involutional melancholia. The concepts of a bipolar continuum in affective states were correlated with Pavlovian conditioning theory and psychoanalytic libido theory. The early version of the catecholamine hypothesis implied a similar concept postulating that excessive catecholamines would produce depression.

When the mammal mother infant bond is broken by separation or loss, typical behavioural patterns emerge. The initial pattern is characterized by anxiety, agitation and protest. This pattern
is followed by withdrawal, decreased social participation and decreased motion activity. Intensive psychological studies have convinced most observers that these characteristics of animal depression are similar to, if not identical, with normal emotional states in humans.

In an intensive study of 40 depressed patients, Leff Roatch and Bunncy (1970) found that each patient had been subjected to multiple stressful events prior to early depressive symptoms. The cluster of such events during their lifetime resulted in fatigue, and later on to depression. These results were similar to the findings of Paykel, et al (1969) in the study, which involved 185 depressed patients.

It was found that comparable stressful events preceded the onset of the depressive breakdown, in order of significance these events were categorized as : (a) marital difficulties, (b) work moves or changes in work conditions, (c) serious personal illness, and (d) death or serious illness of an immediate family member. More recent reports have supported these findings (Brown, 1974).

Depressive Neurosis : In neurotic depressive reaction the individual reacts to some distressing situation with more than the normal amount of sadness and dejection and often fails to return to normal after a reasonable period of time. Neurotic depressive reactions appear to have increased during recent years.
and are now estimated to constitute some 30 percent or more of neurotic disorders. The incidence appears to be higher in females than males. The depression would have high level of anxiety and apprehensiveness together with diminished activity, lowered self-confidence, constricted interests and a general loss of initiative. The person usually complains of difficulty in concentration, although his actual thought processes are not slowed up. In many cases he has somatic complains and experiences feelings of tension, restlessness and hostility. Most persons suffering from depressive neurosis can describe the traumatic situation that led to their depression. The neurotic depressive usually showes greater depression as well as lowered levels of activity and initiative. In very severe cases the person may be unable to work and may sit alone helplessly staring into space, able to see only the dark side of life.

Most of the people have probably felt depressed at one time or another as a result of a disappointment in love, an accident, a hurtful failure or the death of a loved one. Neurotic depressive reactions, however, occur in a personality predisposed to overact to such stresses and lacking the resiliency most people show. The neurotic depressive usually reveals low stress tolerance together with rigid conscience development and a proneness to guilt feelings.
Usually the feelings of anxiety often complicate the clinical picture in neurotic depressive reactions (Prusoff & Klerman, 1974, Downing & Rickles, 1974). Often in depressive neurosis the picture is complicated by hostility towards the loved one. This hostility is typically repressed because of its dangerous and unethical implications.

According to the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM IV, 1994), depressive neurosis is manifested by an excessive reaction of depression to an internal conflict or to an identifiable event such as the loss of a loved object or cherished possession.

**Functional depression**: The clinical picture in mild depression includes many of the same symptoms as the early stages of psychotic depressive episodes, especially loss of appetite, sleep disturbances, markedly lowered sex drive, difficulty in concentrating and making decisions and lowered productivity. The individual drives little or no enjoyment from life, even from being with the loved ones or in leisure time activities, he formerly entered into with enthusiasm. Instead, he focuses on the negative or over-size aspects of his life situation and has a devaluated self-image. In essence, he has a "lousy view of himself and his world".
The complex rate of technological and social change in our society, economic problems and uncertainties and the unhappiness and instability of many marriages and other intimate personal relationships are among the many stresses which apparently take their toll in episodes of depression as well as in other physical and mental disorders. According to Briscoe & Smith (1973), often a vicious circle is established in which the individual's marital or other problems lead to the depression and are in turn, intensified by it. Episodes of depression are affecting an increasing number of people of all ages, including teenagers. In fact, among teenagers the suicide rate, the ultimate expression of the aversiveness of one's life experience, has shown a significant increase in recent years.

In depressive reactions researchers had observed psychomotor retardation accompanied by some feelings of dejection and often of guilt and self-recrimination. Such depressive reactions appear to provide some relief from overwhelming stress through the admission of defeat and giving up but take their toll in a catastrophic loss of self-esteem.

**Psychosomatic disorders**: Traditionally, the medical profession has been concerned with physical illness and has concentrated research efforts on understanding and controlling the organic factors in disease. Psychopathology, on the other hand, is
concerned primarily on uncovering the psychological and emotional factors that lead to the development of mental disorders. Today we realize that both of these approaches are limited, although an illness may be primarily physical or psychological, it is always a disorder of the whole person. Fatigue or a bad cold may lower our tolerance for psychological stress and emotional upset may lower our resistance to physical disease.

In short, the individual is a psychobiological unit in continual interaction with the environment. A pioneer in the field of psychosomatic medicine, Dunbar (1943) concluded that it is often "more important to know what kind of patient had the disease than what kind of disease the patient has".

In contrast to neurosis, psychosomatic disorders involve a clinical picture dominated by maladaptive changes in bodily systems rather than overt maladaptive behaviour. The incidence of psychosomatic disorders is indicated by the estimate that at least half of those who seek medical aid suffer from physical illness directly related to emotional stress. Psychosomatic disorders are classified according to the organ system affected and it seems that no part of the body is immune.

With American Psychological Association classification, ten categories of these disorders are listed. These disorders are caused by psychological and emotional factors rather than organic ones. Some of the specific disorders are given below:

1. Skin disorders - Neuro dermatosis, atopic dermatitis, eczema and some cases of acne and hives.

2. Musculo-skeletal disorders - Backaches, muscle cramps, tension headaches and some cases of arthritis.

3. Respiratory disorders - Bronchial asthma, hyperventilation syndromes, coughs and recurring bronchitis.

4. Cardiovascular disorders - Hypertension, paroxysmal tachycardia vascular spasms, heart attacks and migraine headaches.

5. Hemic and Lympatic disorders - Disturbances in the blood and Lymphatic system.

6. Gastro-intestinal disorders - Peptic ulcers, chronic gastritis and mucous colitis.

7. Genito Urinary disorders - Disturbances in menstrual cycle and urination.

8. Endocrine disorders - Hyper thyroidismobesity and other endocrine disorders in which emotional factors play a causative role.

9. Disorders of organs of special sense - Chronic conjunctivitis.

10. Psychophysiological disorders of other types - Disturbances in the nervous system in which emotional factors play a significant role such as multiple sclerosis.

Apart from the above, Galen et al. investigated causes of psycho-somatic disorders many centuries ago. It is unrealistic to compartmentalize 'mind, body and environment' when assessing and treating maladaptive pattern, whether such patterns are primary, physical or psychological in nature. This view is supported by the striking correlations which a number of investigations have found between the incidence of physical illness and emotional disturbances.

In their pioneering study of illness in a relatively healthy population, for example, Hinkle and Wolff (1957) found that persons who had the greatest number of physical illness, regardless of kind, were also the ones who experienced the greatest number of disturbances in mood, thought and behaviour. Matarazzo and Saslow (1961) concluded that the incidence of physical illness in a population is a good predictor of mental disturbances and vice-versa. The correlation between physical and emotional disturbances is well brought out in the reports of Jacobs, et al. (1970, 1971) of the initial and follow-up evaluations of 179 college students in the Boston area. 106 of whom sought medical help for respiratory infections.

A follow-up study revealed recurrences of illness seeking treatment, and it was concluded that a direct association could be made between maladaptive coping styles and physical illness as well as psychiatric complaints. Schwab (1970) observed that there is often a vicious circle in which emotional disturbances adversely affect the body's functioning and lower its resistance to disease, tending to elicit feelings of anxiety, depression, and often helplessness.

From the foregoing it is apparent that psychosomatic disorders cover a wide range of disturbances in which life stress (style) plays a major role in manifesting them.
Some of the psycho-somatic disorders normally manifested are given below:

- Migraine and tension headaches
- Asthma
- Hypertension

Although headache can result from a wide range of organic conditions, the vast majority of them (about 9 out of 10) seem to be related to emotional tension. The research in this area has focussed primarily on migraine, an intensely painful headache that recurs periodically.

Although typically involving only one side of the head, migraine was extensively described by Galan and other medical writers of antiquity. By dilating the arteries with an injection of histamine, researchers found it possible to reproduce the pains of migraine. It has also been shown that a variety of experimentally induced stresses, frustrations, excessive performance demands, and threatening interviews, cause vascular dilation among migraine sufferers but not among other persons.

The vast majority of headaches are so called "simple" tension headaches. This too involves stress and vascular changes, but the changes are different from those in migraine headaches. As a consequence of emotional stress, muscles surrounding the skull contract these contractions in turn result in vasoconstrictions, which the person commonly experiences as "a band of pain that seems to circle his head".
Both tension and migraine headaches usually make their appearance during adolescence and reoccur periodically during periods of stress.

Asthma: The actual attack occurs when airways become restricted, making breathing difficult. In some cases the individual may become extremely distressed, fight for air and suffer convulsive coughing. Between attacks, he is relatively symptom-free. The actual incidence of asthma is unknown.

There are 3 types of asthma:

- Allergic asthma initiated by something in the environment to which the individual becomes sensitized to some of the allergens (Ellis, 1970).

- Other cases of asthma are associated with infectious conditions and

- Other cases asthma appears to be intrinsic, i.e. there is no apparent sensitization to any given allergen. This kind of asthma may be triggered by emotional stimuli and may occur in infancy as well as in later part of life.

Hypertension: Of the various organ systems, the heart, probably is the most sensitive to emotional stress. During the state of calmness, the beat of the heart is regular, pulse is even, blood pressure is relatively low and the viceral organs are well supplied with blood. Under emotional stress blood pressure tens
to rise but returns to normal upon withdrawal of stress. But when stress continues, it develops a chronic state of hypertension and remains at a high level.

Hypertension is a risk factor in kidney failure, blindness and a number of other physical ailments. The incidence of hypertension is about twice as high among blacks as among whites (Edwards, 1973; Mays, 1974). Most persons suffering from hypertension receive no warning symptoms. In fact, Nelson (1973) reported in one survey encompassing three middle class neighbourhoods in Los Angles which revealed that one-third of the adults tested had high blood pressure; only half of them were aware of it.

As Mays (1974) has pointed out, "In most instances the disease comes as silently as a serpent stalking its prey. Someone with high blood pressure may be unaware of his affliction for many years and then, out of the blue, develop blindness or be stricken by a stroke, cardiac arrest or kidney failure." But a number of investigators following the lead of Wolff (1950) have shown that chronic hypertension may be triggered by emotional stress, for example, a highly stressful job markedly increases the risk of high blood pressure (Edwards, 1973) and the stress of ghetto life as well as dietary factors have been identified as playing a key role in hypertension among black people (Mays, 1974).

Heart attacks are often referred to as "the twentieth century epidemic". Although there are various types and causes of heart attacks, the common denominator is hypertension itself, a leading psychosomatic disorder.

Rahe and Lind concluded that biological factors were found to play a direct relationship between life stress and heart attacks. In one type of heart attack, it was found that common background factors included heavy work responsibility, time urgency coupled with hostility when showed by others, and dissatisfaction with the achievement of life goals (Romo, et al, 1974). Again, it would appear that severe stress and heart attacks are tend to be inter-related.

Much remains to be learned about the psychological and socio-cultural variables in predisposing an individual to psychosomatic disorders as well as in precipitating and maintaining them. However, the cause that underlies all of these disorders is life stress. In essence, chronic emotional tension elicited by life stress perceived as threatening can cause profound changes in the physiological functioning of the human body. These changes, in turn, can play an important causal role in the various disorders referred to as psycho-somatic.

The development of psychosomatic disorders appears to involve the following sequence of events: (a) The arousal of
negative emotions in response to stress situations, (b) the degree of arousal depending not only on the nature of the stress situation, but also on the individual perception of the situation and his stress tolerance.

The failure of these emotions to be dealt with adequately either through a changed frame of reference or improved competence with the result that the emotional arousal continues on a chronic basis and the response stereotype. The damaging effects of chronic arousal become concentrated in a specific organ system. The present study is concerned with the possible significance of particular physiological and psycho-social factors/variables in contributing to this chain of events, which are as follows:

Causes of psycho-somatic disorders: Various factors are responsible for causing psycho-somatic disorders in man. The most important among them are (a) biological, (b) psycho-social and (c) socio-cultural.

Biological factors: A number of biological factors have been implicated in psychosomatic disorders, directly or indirectly. These include genetic factors, differences in autonomic reactivity, somatic weakness, and alterations in corticovisceral control mechanisms.
Gregory and Rosen (1965) have demonstrated that the brothers of ulcer patients are about twice as likely to have ulcers as comparable members of the general population. Increased frequencies of asthma, hypertension, migraine and other reactions have also been reported for close relatives and their frequencies are specific to given reaction that is, the relatives of bronchial asthma cases show an increased frequency of bronchial asthma but not of other psychosomatic disorders.

More recent studies of learning the automatic system, however, indicate that increased incidence of specific psychosomatic conditions in given families could result from common experience and learning.

The findings of Lilgefors and Rahe (1970) on identical twins identified the important role of life stress in coronary heart diseases among twins.

Further, the findings states that twins suffering from heart disease were more work-oriented, took less leisure time and had more home problems. In general, they experienced greater dissatisfactions in their lives. Wolff (1950) suggested that people can be classified as "Stomach Reactors", "Pulse Reactors", "Nose Reactors" and so on, depending on what kinds of physical

changes stress characteristically triggers in them. For example, a person who characteristically reacts to stressful situations with a rise in blood pressure will be particularly vulnerable to hypertension, whereas one who reacts with increased secretions of stomach acids will be more likely to develop ulcers.

Rees (1964) and Bulatov (1963) found persons with weak systems likely to develop asthma and stomach ulcers due to emotional stress. Halberstam (1972) and Labedev's (1967) explanations focussed on the role of cortical control mechanisms in regulating autonomic functioning. A combination of response stereotype and faulty visceral control mechanisms appear to predispose the individual to psychosomatic disorders in the face of continued stress. On the other hand, efficient corticovisceral control mechanisms can prevent psychosomatic reactions even in the face of response stereotypes and severe sustained stress.

In assessing the role of biological factors in psychosomatic disorders, most investigators would take into consideration each of the factors that were described. Perhaps, the greatest emphasis at present would be placed on the characteristic autonomic activity of given individuals, the vulnerability of affected organ systems and possible alteration in cortical control mechanisms that normally regulate, autonomic functioning.
Psycho-social factors: The role of psycho-social factors in psychosomatic disorders is still not altogether clear. Factors that have been emphasized include personality characteristics, including failure to learn adequate coping patterns, kinds of stress, inter-personal relationships, and learning in the autonomic nervous system.

The work of Dunbar (1954) and many others raised the hope of identifying specific personality factors associated with particular psychosomatic disorders. The characters such as rigidity, high sensitivity to threat were found to be important personality characteristics on those who suffer from hypertension. If it were possible to delineate ulcer type, hypertensive characters, accident prone personality and so on, such findings would, of course, be of great value in understanding, assessing and treating psychosomatic disorders and perhaps even in preventing them. Kidson (1973) found hypertensive patients to be significantly more insecure, anxious, sensitive and angry than a non-hypertensive control group. A sizeable number of control group members also showed these characteristics.

In addition, in cases where people already suffering from a chronically painful and disabling disease like rheumatoid arthritis are studied, the personality similarities found may be the result rather than the cause of the disorder (Robinson, et al., 1972). This point seems particularly important, since Crown
and Crown (1973) failed to find a definite personality type in early rheumatoid arthritis.

A related approach has focused on the possible relationship between an individual's attitudes towards stressful situations and the coping pattern he develops. Graham (1962) found the following attitude and coping patterns to be fairly typical.

- **Ulcers**: feel deprived of what is due to him and wants to get what is owed or promised and to get even.
- **Migraine**: impulsion to achieve something and drives self to reach a goal, and then feels let down.
- **Asthma**: feels unloved, rejected, left out in the cold and wants to shut the person or situation out.
- **Eczema**: feels he is being frustrated, but is helpless to do anything about it except take it out on himself.
- **Hypertension**: feels endangered, threatened with harm, has to be ready for anything, to be on guard.

Although the work of Graham (Loc.cit) has evolved a great deal of interest, and considerable acceptance, there is still a lack of definitive follow-up studies to support his findings.

Araujo et al (1973) studying a sizeable number of asthmatic patients found a lack of essential competencies and psycho-social assets, resulting in limited coping ability. Undoubtedly, many psychosomatic disorders are largely the result of faulty learning, failure to learn needed competencies and the learning of maladaptive behaviour instead.

Many individual suffering from psychosomatic disorders also appear unable to express their emotions adequately by verbal means, nor have they learned to use various ego defence mechanisms such as rationalization, fantasy and intellectualization to alleviate their emotional tension. In general, it would appear that the possible role of attitudes, coping patterns, and other personality factors merit further exploration.

Alexander (1950) hypothesized that each type of psycho-somatic disorder could be associated with a particular kind of stress. He concluded that peptic ulcers, for example, are typically associated with frustration of the needs for love and protection. Payne (1975) found that long standing physical and psychological health problems were related to higher life change values. Often it appears that some stress, regardless of the kind serves to pave the way to precipitate or aggravate a physical disorder in a person already predisposed to the disorder.

The individual who is allergic to a particular protein may have his resistance further lowered by emotional tension (Brown 1974). This emotional tension may interfere with the body's normal defensive forces or immunological system. In like manner, stress may tend to aggravate and maintain certain specific disorders, such as rheumatoid arthritis (Robinson, et al 1972) and Brown G.B. (1974) while Day (1951) pointed out that unhappiness was among the stress factors that could lower resistance.

Sociocultural factors: The incidence of specific disorders, both physical and mental varies in different societies and in different strata of the same society. In general psychosomatic disorders, including ulcers, hypertension, rheumatoid arthritis, tension headaches and asthma occur among all major groups. On the other hand, such disorders appear to be extremely rare among primitive societies.

A number of early studies found a disproportionately high incidence of psychosomatic disorders at the two extremes of the socio-economic scale (Faris & Dunham, 1939; Pasamanick, 1962; Rennie & Srole, 1956). For example, arthritis was most commonly found in lower socio-economic levels, while ulcers and cardiac problems were believed to be most common among executives. Similarly, Kahn (1969) found that only a small number of executives develop peptic ulcers.
In general, it would appear that any socio-cultural condition that markedly increases the stressfulness of living tends to play havoc with the human organism and leads to an increase in psychosomatic disorders as well as other physical and mental problems.

General socio-cultural patterns, such as severe stresses associated with rapid social change, are directly related to the nature and incidence of psychosomatic disorders.

**Stress in Occupational Environment:**

Various causes of stress arising from occupational environment are given in the following model (Occupational Stress Model).

Stress among the nurses can be well understood from the nature of their duties performed with different types of people, doctor, patients, public, etc. And their duty hours, actually eight hours in changing shifts, affect their biological rhythm (circadian rhythm). The above factors responsible for causing stress are outlined in a model given in the following page (Nurses Stress Model).
OCCUPATIONAL STRESS MODEL

PRESSURES!
TENSION |
SOCIAL ISOLATION!

PAIN AND!
DISEASE!

INTER- ATTITUDES
PERSONAL AND RELATION OPINIONS

ENVIRONMENTAL POLLUTION
NOISE AND ILLUMINATION
VIBRATION

PSYCHO-SOMATIC DISORDERS
HYPERTENSION & GASTRIC PROBLEMS!

ROLE | ROLE | ROLE | LIFE | ECONOMIC | STRESS | STATUS
OVER LOAD | CONFLICT | AMBIGUITY

MENTAL WORK

PHYSICAL | PSYCHO-SOCIAL

LIFE
ECONOMIC

STRESS

DECREASED EFFICIENCY AND PRODUCTIVITY

ACCIDENTS
NURSING PROFESSION - STRESS MODEL

STRESS IN NURSING

- WORKING CONDITIONS AND ENVIRONMENT
  - DUTY
  - HOURS & RHYTHM
  - SHIFT
  - WORK
  - LEAVE
  - RECREATION
  - PATTERN
  - FACILITIES
  - TELEVISION
  - RADIO
  - MAGAZINES

- PHYSIOLOGICAL
  - POSTURE
  - FATIGUE
  - AMBIGUITY
  - CONFLICT
  - ANXIETY
  - NEUROSIS
  - DEPRESSION
  - HYSTERICAL
  - CHRONIC
  - PHYSIOLOGICAL FATIGUE

- PSYCHO-SOCIAL
  - ROLE
  - ATTITUDES
  - STYLE
  - TOWARDS
  - DOCTORS
  - PATIENTS
  - PUBLIC
  - TRAVEL LEAVE PATTERN

- SOCIO-CULTURAL

- WORKING CONDITIONS & ENVIRONMENT

- SOCIO-CULTURAL

- PSYCHO-SOCIAL

- PHYSIOLOGICAL

- IMPROPER/INEFFICIENT NURSING CARE

- LOWERED SOCIAL STATUS
Nursing Occupation: Orem (1980) defined nurse as one trained to care for and wait upon the sick, injured or infirm under the direction of a physician.

Kind (1973) views of nursing as "a process of action, reaction, interaction and transaction whereby nurses assist people of any age group meet their basic needs in performing activities of daily living and cope with health and illness at some particular point in the life cycle".

The word 'Nurse' is mostly associated with that of hospitals where the sick or the injured are treated back to normal conditions. In the hospitals the role of a nurse is as a care provider, keeping herself too busy in meeting the immediate physical needs of the patient and shouldering managerial responsibilities. In such situations the nurse's relations with the patient are opt to remain impersonal. In ward situations the doctor is keen that the nurse should assist him in carrying out his therapeutic functions, investigation procedures, administration of fluids and drugs, surgery and so on.

The patient and relatives expect the best possible care and do not wish to stay a day longer in the hospital if they have a choice. The modern drugs and advanced medical technology help to shorten their hospital stay. Thus, the public at large views the

nurse as a mere provider of physical care, ignoring the most important psycho-social aspects.

This is in violation of humanisation of nursing care services. An analysis of the present nursing services would show that certain factors in the working situation hinder the nurse in her efforts to humanise her care. So nursing requires a high degree of technical skill, knowledge and ability to meet crisis situations.

Young women take up nursing for all sorts of reasons, some because they wanted to be nurses since childhood, others because their parents wanted them to be. Some are sure of getting a job soon after the training. Some have the idea of getting employed abroad in order to earn more money. Some have only vague general ideas about wanting to help people, others have definite plans. Most girls plan to marry and raise a family at some point in their career.

Nurses, like policemen, have a public image irrespective of their personal qualities. Over the past century the image of the nurse has been deteriorated in their professional behaviour. Every new nurse inherits the public goodwill which has been built up for her over the years by her predecessors, and she in her turn adds something to the total picture of what nurses are like and how they behave.
It is at first both exciting and challenging for a young woman to find that the mere donning of a uniform dress and a white cap and apron makes her a person whose advice is sought by other people. She finds that lay people assume that all nurses are able to deal confidently with any situation from street accidents to emergency operations and give advice on subjects ranging from matrimonial difficulties to the choice of baby foods.

The first time a nurse enters a ward she feels very inadequate. She knows so little and so much seems to be expected of her. She feels that every patient in the ward must be aware of the pounding of her heart and the knocking of her knees. Gradually, however, the realization comes that she is not expected to know everything about nursing on her first ward and there are always more senior people to help and guide her until she in her turn becomes a trained nurse.

The actual art and practice of nursing techniques is taught and knowledge of first aid is useful. Because the patient is a person with a family and a home, his illness can not be studied and treated in isolation, the mental and emotional needs of the patient have a profound bearing on the whole situation. These different subjects are, therefore, taught in the school to enable nurses to understand the problem of illness as a whole. This knowledge is necessary in order to meet the mental, emotional
and physical needs of the patient more fully. Compassion and common sense enrich knowledge to produce a skillful and competent nurse.

Nearly all potential nurses have realised that they have much to learn about patients but they do not realize how much they are in contact with other people. A hospital employs a large number of people other than nurses and doctors. Physiotherapist, radiographers, occupational therapists, speech therapists all have direct contact with the patients. Secretaries, clerks, orderlies, porters and domestic workers all have duties essential for the running of the hospital.

A highly trained staff works in the biochemical and pathological laboratories. In many of the larger hospitals there are other specialised departments all managed by skilled personnel. With some of these people the nurse has daily contact. All of them are colleagues and must be treated as such, kindness and courtesy forming the basis of behaviour. From the day she first enters the ward the nurse is in close contact with her patients.

A young nurse who is spotless and well groomed in immaculate uniform is a most attractive sight. The nurse feels at her best and patients respond to her appearance. Physical hygiene is a great asset, but equally important in the mental and emotional
stability of the nurse. The care of patients is founded on discipline and as nurses learn more, the both visualise and accept the necessity for this.

It is not easy for the junior nurse to appreciate the total situation and she may feel resentful when orders are given without explanation.

Another set of relationships is established between nurses and their patients. During illness patients tend to revert to the pattern of their childhood. If this has been a happy one then the situation is quite straightforward; the patient depends on the nurse just as he depended on his mother and as he recovers so he regains his independence. But if the patient's childhood was unsatisfactory or unhappy the nurse finds herself unwittingly in a more difficult situation which she may not at first understand.

The patient's behaviour in the present is related to the events in his past. Nurses know that all patients are treated with kindness and patience, they grow to realize that some need tact and wisdom as well. After admission in the hopital, the nurse makes her observations on the patient including checking the pulse, temperature and respiration, weight, blood-pressure and obtaining a first specimen of urine.
The patient and his relatives will ask a great many questions and the nurse must answer them as freely as she can. Doctors and nurses should remember that the surrender is both voluntary and temporary and that they should respect the dignity of the patient as a fellow human being and not take advantage of being set in authority over him.

Twenty years ago a nurse tended to a patient's needs, making him comfortable, inspiring confidence and calmness in creating an environment which gave him the best possible chances of recovery. Advances in medical science and particularly in technology during the past few decades has in no way diminished this valuable function of a nurse but has made nursing more, not less important.

Nursing is a most essential service. The present generation of nurses has grown up entirely in the technological age of this century. The modern nurse, like the modern doctor, is the product of an evolutionary process, nevertheless, her compassionate approach to patients remain unchanged. She is developing a new role in order to assist physicians and surgeons in a closely knit patient centred team. A highly scientific and technological one with opportunities of participating in medical progress in the prevention and cure of disease.
A satisfying type of service to be rendered according to the circumstances and needs of each patient. Whether a patient is in a hospital bed, with conscious or unconscious, delirious or disoriented, their basic human needs must be satisfied.

The nurse is almost exclusively the interpreter of the hospital. She will explain every treatment, its purpose, result anticipated and the value of the patient's co-operation. Her explanations must carry the weight of her responsibility as the nurse function vis-a-vis the patient is unique in the team. Her training asks for making decisions and using discretionary power in providing with the other members of the curative team, the best possible care of the patient. Nurses soon learn to realize the value of a pleasing professional approach and that the occasional glance in passing, nod of the head or smile takes no time and makes a valuable contribution to good relations. Communication need not always be verbal, and the nurse by the exercise of her skill can convey sympathy and assurance to a patient who may be too worried or ill to listen to much conversation.

The training of a nurse is an exciting one and her calling demands the utmost she can give. She has to acquire scientific knowledge, exercise the exquisite judgement only achieved by experience, and develop her skill to the highest degree. This is
only obtained by practice. Above all, she has to give these services not at any self chosen moment but daily at the needs of others.

An alert observant nurse may notice a change in a patient and avoid a crisis by summoning medical help and initiating immediate treatment in an endeavour to safeguard his life through vital minutes until help comes. She must remain calm and active in any emergency situations. In less dramatic circumstances a nurse may realise the pressure needs of a patient; she may think intelligently to interpret his needs.

A patient's relatives and sometimes his friends should whenever possible be integrated into the programme of his care and treatment. It is useful to talk with the relatives of a patient just as a good hostess would do. Both sides are helped if the nurse can learn many things about a patient which may assist in her care of him, the relatives are put at ease by a nurse who will keep them informed of his progress and his needs. However, this depends entirely on the doctor taking the nurse fully into his confidence as to what it would be wise for the relatives to know and the best way of conveying it.

Nursing, though full of thrilling opportunities, is primarily a simple life where one is brought face to face with sickness and suffering. There must be kindness and emphasis on many personal
qualities. These include sincerity, integrity, tolerance, sympathy, understanding, tact and above all a real liking for people.

Code of ethics: Nurses minister to the sick and assume responsibility for creating a physical, social and spiritual environment which will be conducive to recovery, prevention of illness and promotion of health. They render health services to the individual, the family and the community and co-ordinate their services with members of other health professions.

Service to mankind is the primary function of nurses and the reason for the existence of the nursing profession. Need for nursing service is universal. Professional nursing service is based on human need and is, therefore, unrestricted by considerations of nationality, creed, colour, politics or social status. Inherent in the code is the fundamental concept that the nurse believes in the essential freedom of mankind and in the preservation of human life. It is important that all nurses be aware of the Red Cross principles and of their rights and obligations under the terms of the Geneva Convention, 1949.

International Code of Ethics (Nursing)

1. The fundamental responsibility of the nurse is to conserve life to alleviate suffering and to promote health.
2. The nurse shall maintain at all times the highest standards of nursing care and of professional conduct.

3. The nurses must not only be well prepared to practise but shall maintain knowledge and still at a consistently high level.

4. The religious beliefs of a patient shall be respected.

5. Nurses hold in confidence all personal information entrusted to them.

6. Nurses should recognize not only the responsibilities but the limitations of their professional functions; do not recommend or give medical treatment without medical orders except in emergencies and report such action to a physician as soon as possible.

7. The nurse is under an obligation to carry out the physician's order intelligently and loyally and to refuse to participate in unethical procedures.

8. The nurse sustains confidence in the physician and other members of the health team. Incompetence or unethical conduct of associates should be exposed but only to the proper authority.
9. The nurse is entitled to just remuneration and shall accept only such compensation as the contract actual or implied provides.

10. Nurses do not permit their names to be used in connection with the advertisement of products or with any other form of self advertisement.

11. The nurse co-operates with and maintains harmonious relationships with members of other professions and with nursing colleagues.

12. The nurse adheres to standards of personal ethics which reflect credit upon the profession.

13. In personal conduct nurses should not knowingly disregard the accepted pattern of behaviour of the community in which they live and work.

14. The nurse participate and shares responsibility in the other citizens and other health professions in promoting efforts to meet the health needs of the public-local, state, national and international.

With regard to the Geneva Conventions, 1949, nurses are advised to approach either the local Red Cross authorities or the International Red Cross Society for advice where in any situation they may need their rights and responsibilities defined.
The Triangular Stress in nursing profession: Nursing professionals deal with too many personnel in their day-to-day life. But to the specifications they quite often deal with patients and doctors. In the process the nurse is expected to cooperate mainly with doctors and patients. There are various speciality doctors and their expectations from nurses are to follow the advanced technique of their speciality in the shortest duration and with quick understanding. Each specialist demands certain behaviour from the nurses in relation to patients as per the doctors personality. But the nurses of limited knowledge in the medical field need specialization in each field to cope up with this problem.

Generally, the nurses in the civil hospitals and private sector hospitals and nursing homes in India are expected to deal with all sort of techniques. Due to inadequacy and various inter-personal conflicts the nurse could not follow the expected instructions from the specialised doctors.

From another angle the patients of multiple linguistic group; with individual differences of diseases have also to be dealt with by the nurses appropriately. In the ward situation the nurses are expected to behave as a surrogate mother with bedside rapport to each and every patient. They have to treat the patients without discrimination of creed or colour, but the nurse as an ordinary human being can not give the satisfactory care to all patients admitted in the ward.
Each patient needs specialized kind of care as the disease and physical needs of the patient varies. Hence, the nurse should have a multifaceted personality to deal with the patients and doctors in a most acceptable pattern of behaviour. But such behaviour has not been found in the recent past. Because of various problems nurses are under stress from all angles, in particular, from doctors and patients. And this, in ergonomics term, can be called the "Stress Triangle", as illustrated below.

**STRESS TRIANGLE**

Nurse's inter-personal conflicts and physical and physiological stress and strain and the doctors' high expectation and intra-personal conflicts lead to stress in them. Demanding patients, and chronically ill and dying patients also contribute to stress in nursing personnel. In addition, the doctor's demands and instructions to nurses towards the patient's care lead to stress in them.
Some of the areas identified are concerned with doctors. Many of the instruction to nurses in relation to patients are only verbal and some of the life saving instructions in relation to patient care are not furnished in the case sheets. And if at all such instructions are given they are written in the case sheet illegibly which the nurses could not understand. This is one of the primary stresses for nurses coming from doctors.

Doctors expect the nurses to strictly follow the instructions in all stages of patient care and they also expect the nurses to perform various procedures in addition to their regular nursing procedures. In many cases the doctor's late instructions for non-acute cases posted for surgery are conveyed to nurses at the last moment. These late instructions have quite often irked the nurses while preparing the patients for surgery.

Indifferent attitude towards nurses, insulting and rebuking the nurses in the presence of the fellow para-professionals and patients contribute to enormous stress in them. This sort of behaviour of doctors differs from person to person. However, generally the doctors too have the burden which mostly comes from the content of the work. The personality and emotional factors are significant in such doctor's behaviour towards nurses.

The key element of the doctors stresses are personal dynamics, defusing defences and ensuring confidentiality.
Competitiveness, mistakes, anger, difficult patients, death, fear of malpractice and family work tensions are the different stressors to the doctors. These stressors are responsible for the doctors in different attitudes towards nurses. Those who cannot cope up with these problems carry over these stressors and transmit them to their immediate subordinates who happen to be the nurses.

In addition to the organizational climate, doctor's behaviour and work group relations directly influence role perception. Increased role ambiguity leads to decreased job satisfaction and increased perceived stress in nurses (Revicki and May, 1989). The organizational environment directly influence job stress. This exerts strong direct influence on the development of depressive symptoms in nurses. This ultimately leads to decreased patient care and indifferent attitudes towards patients.

On the other hand, nurses do get stress from patients of different kinds of personality and various types of diseases. Many researchers have studied the work environment factors which contribute to stress in nurses. They are nothing but the different wards and hospitals where the nurses are working. Such wards are general, medical, surgical, psychiatric, operation theatre, intensive care unit, paediatric nursing, gynecology and obstetrics, onchology and taboo wards like Leprosy, Tuberculosis and Aids.
Though the impact of stress is similar in all the nurses working in different ward environments, the dimensions or factors vary from ward to ward. It also depends on the classifications of disease and the patient's attitudes towards nurses.

The foremost physical factors contributing to stress from patients is ambulating and positioning of patients like lifting and turning patients from time to time. Apart from this, maintaining appropriate posture at the time of various procedures give rise to enormous ergonomic stress. A study by Garg and Owen (1992) of the University of Wisconsin on nurses working in nursing homes found them to be suffering from back pain from manual patient handling methods.

The other sources of stress in nursing professionals are psychological and socio-cultural factors. Tyler and Ellison (1994) studied the sources of stress and psychological well-being in high-dependency nursing. The study reveals that, four areas (like theatres, liver/renal haematology/oncology and elective surgery) in the medical field contribute stress. The result further indicated that the amount of stress experienced was similar across all four departments, but the sources varied.

Theatre nurses experienced less stress while coping with patients death and dying more frequently compared with ward nurses. Other factors which influenced both the level and sources
of stress, post-graduate trained nurses perceived higher level of stress. Nurses who were living with a partner or were married experienced fewer stress symptoms than those with no partner. Reactions to stress elicited a range of adaptive and maladaptive coping styles.

A similar study was conducted by Hinds et al (1994) on pediatric oncology nurses at Tennessee. The oncology nurses experienced a variety of occupational stresses. Among them are the new and experienced nurses. The new nurses developed few coping styles, whereas the experienced nurses had a greater number and different types of coping reactions and positive consequences. A similar study conducted by Nash (1989) indicates that nurses working in cancer wards experienced a higher level of stress than the nurses working in other wards.

The chief sources of stress in oncology wards and hospitals would be nursing the patients who are dying and the agony experienced by the oncology patients. Further, the nurses experience physical stress in cancer wards which lead to psycho-somatic complaints and inter-personal difficulties. For doctors, dissatisfaction with the job and working conditions related to general malaise and of the institutional environment are linked with the stress and the psycho-somatic complaints as reported by Ullrich and FitzGerald (1990). This again was reflected on the nurses.
Various other studies on nurses and nursing professions show that nurses and doctors are under constant stress. Herschbach (1991) study results show that the most important stress situations concern the environmental working conditions and identification with the patient.

Most of the studies accept that nurses and other medical professionals experience stressful situations, the impact of the stress least likely developing somatic distress. But many study results show that job stress manifests itself as job dissatisfaction, organizational stress and negative attitudes towards patients (Hammer et al, 1986).

Occupational stress in nursing has been a popular topic for investigation, mainly because of the different nature of the diseases and the persons who are afflicted with these diseases and their behaviour toward nurses and doctors. Surgical ward nurses specifically working in neuro-surgical and cardiovascular surgical wards experience high degrees of occupational stress. Cavaragh et al (1992) attempted a similar study. The findings suggested that patient care, communication, work load, management and supervision, organizational and personal circumstances are the major sources of stress.

In addition to the routine pressures associated with their demanding roles, prehospital emergency respond can suffer severe
stress as a result of exposure to a critical incident. Such an event overwhelms the individuals ability to emotionally adjust and can lead to symptoms which cause suffering in emergency personnel, their families and their patients (Linton et al., 1993). In general, nurses working in various speciality surgical units, like cardiovascular, neuro surgery, paediatric surgery, orthopaedic surgery, trauma and emergency situations are under severe stress. They are the first persons who receive the patients and give timely intimation to the concerned doctors for needful action. During this period the nurse has to use her presence of mind to establish rapid communication with the other professionals as well as to deal with the patients family and other attendants. During this time, an incompetent nurse could complicate the situation by committing errors in nursing procedures while attempting first aid.

Further, as far as the stress is concerned with the general medical condition, nurses are less likely to experience stressful situation as assumed by the nursing administrators wards like those of psychiatry, aids, and other taboo disease afflicted patients are potential sources of stress among nurses.

Psychiatric nursing is invariably assumed to be a stressful area of nursing practice. Empirical evidence to support this proposition is limited. However, few researchers like Sullivan' (1993) studied extensively the contributing factors of stress in psychiatric nursing and their coping procedures. Collaguan (1991)
studied organizational stress among nurses in mental wards. The nurses who get frustrated caring psychiatric cases are highly responsible for negative patient care and consistency (Furnham, 1991). Handy (1991) argue that the occupational stresses facing psychiatric professionals cannot be fully understood without a clear understanding of the ambivalent role of welfare institutions within our society. His empirical research reveals that staff attempts to ameliorate the chronic personal insecurities engendered by these contradictions often have the paradoxical effect of augmenting the problems of the psychiatric system and intensifying the very feelings they are struggling to avoid.

Another study by Bai and Suh. (1989) states that the degree of perceived stress among psychiatric nurses was considerably high. Among the stressors, inadequate staffing, hospital administration problems, and the conflicts of nurse-patient relationships rank high in degree of stress. In addition to this, there is a significant relationship between the degree of stress and the demographic variable of nurses such as marital status, educational level and the motivation for working in a psychiatric ward. Although there are very few studies available in this field for further survey, the psychiatric nurses try their level best to cope with the stress (Bai and Suh). The manner in which stress is coped with remains the responsibility of the individual herself. To be in the nursing profession today, is highly demanding. The psychiatric nurse experiences
more stressors, because she is involved in a specialised area where she uses herself as a therapeutic instrument on a scientific basis (Nieuwoudt et al., 1993).

Nurses working in taboo wards and hospitals experience greater limitation of their work usage. They are expected to give emotional support to these patients. The taboo wards include Tuberculosis, Leprosy and Aids wards. These diseases are contagious and some are extremely personal. The nurse needs to take extra care while working in these wards. Caring for these patients actually consumes time and energy. During this time, the nurses develop impatience and emotional conflicts between her own safety and service to patients of such a chronic disease. For leprosy and tuberculosis, however, effective drugs have been discovered and cure is possible but the stigma related to leprosy and tuberculosis still persist in the community.

The most devastating and challenging of recent diseases for health professionals is AIDS (acquired immunodeficiency syndrome). The impact of case of Aids patients is more severe in cities and health facilities are taxed severely. The study by Brennan (1988) concludes that public hospitals bear a greater brunt of hospital care and cost than private hospitals, which means that the impact will be greatest on hospitals serving the poor. Another aspects of the Aids crisis is its effect on health care professionals. He states that as Aids spreads, more and more
nurses are ambivalent in terms of their own and their families safety related to the work with Aids patients and also in terms of the dim prognoses for their patients.

A survey of staff nurses in AIDS wards remarks indicate the following:

- That "Caring for people with AIDS consumes time and energy, but that the rewards are just as great (Brennan, 1988).

- Three nurses are needed for every ten AIDS patients, and that ratio could change to one-to-one at any instant.

- Nurses want more information about their own risks pertaining to the disease, and the patients whom they are treating.

All the above are the predisposing factors for the nurse's deviant behaviours with patient in relations to taboo wards situation.

And, thus, the nursing profession must continue to deserve recognition as a powerful and innovative forces in health care, by first "caring for themselves" at the bedside, for the goal of continuing of patient care. The negative effects of stress, both internal and external, on major, minor and adaptive are rooted in the occupational stress level, and how that level influences the
continuing of care. As per Grant (1993) stress assessment and unit specific stress management sessions need to become ingrained within the health care environment by instituting comprehensive stress management programmes, so that communicative 'healing' can be restored.
In the early part of the 20th century, Cannon (1936) first worked on stress and its physiological processes. According to him, stress is a response to threat in which it depends on individual adaptation. Followed by Cannon, Yets (1936) in his animal studies concluded that an organism subjected to stress develops rigid and stereotyped behaviour. Further, he found that individuals who are subjected to experimentally induced stresses tend to seek the company of others who share the same stress. Thus behaviour of the individuals under stress can become very disorganised, inefficient and unskilled.

Although Cannon's contribution to the understanding of stress was not so popular at that time, the Canadian Physiologist Hans Selye's (1976) theories of stress have received more acceptance by biological scientists. Of course, Selye observed these symptoms of stress in response to a variety of noxious stimuli, namely, shrinkage in the thymus gland, enlargement of the adrenal gland and appearance of peptic ulcers. Thus, Selye defined stress as a non-specific response to some evocative stimuli.

Further, Selye's (1956) pioneering work on stress gave the understanding of the concept of stress in a manner relevant to social sciences. But, Selye's ultimate biological concept of stress was the "General Adaptation Syndrome". Whereas Mason's (1975) series of animal studies demonstrate that awareness of threat is the only necessary condition for the stress symptoms to appear. But, Mason has not integrated his findings with stress research in the psychological tradition.

Lazarus (1966) studied stress in general life setting and defined stress as a human and animal phenomenon. Michigan University researcher Harrison (1978) provides a comprehensive "Person-environment fit" model which can integrate research into both general life stress and occupational stress.

Further, Selye's (1956) research on animal experiment has clearly shown that each exposure of stress leaves a scar, in that it uses up reserves of adaptability, which cannot be replaced. Later studies on stress have clearly supported Selye's concept and definition of stress. Coleman (1973), Holmes and Rahe (1967) and Cox (1980) have supported Selye's findings. Holmes and Rahe (1967) have studied extensively life stress, and defined stress as a stimuli, i.e. psychosocial demand leading to a personal strain. French, et al (1972) made a study on occupational stress and defined it in terms of a misfit between a person's skills and abilities.
Whereas Cooper and Marshall (1976) suggest that by occupational stress is meant the negative environmental factors or stressors associated with a particular job. They defined stress as any circumstance that threatens or is perceived to threaten one's well-being and thus, tax as one's adaptive capacities. Further, they perceive stress as a general term which includes situations that threaten the adaptation of an organism and the physiological and psychological responses of an individual to threat to his or her integrity.

After Selye's and Lazarus pioneering research on stress, many others have attempted to study the various dimensions of stress like biological stress, psycho-social stress and occupational stress and viewed stress in various dimensions of thoughts and understanding. But a majority of scholars described stress as negative stimuli which cause some disease and change of behaviour in the organism. Selye (1956, 1976) described stress as "eustress" and "distress" which correspond to good stress and bad stress. But in the context of stress research, stress always refers to distress only.

However, milder degree of stress is always adaptable to the majority of the population, and it induces aspiration in the individual to complete a given task and achieve many things; otherwise, the individual potentiality would be gradually lost.
So, the stimuli of a milder degree of stress is always essential for positive behaviour of the individual and the strain would be negligible. In this context, Selye (1980) has rightly pointed out that everything depends not only on what actually happens to people, but also on how people appreciate the events.

**Occupational stress:**

Work occupies a major portion of our lives in terms of both time spent and importance. It contains the potential for many forms of gratification and challenge and harm. It is not surprising that many people at times find work life stressful. Indeed stress at work is so common that one tends to accept it as part of the necessary frustration of daily living. Several researchers have examined the effects of certain personality variables as the cause of work stress. McLean (1977) has studied the personality of a manager under stress. Indian researchers have discussed stress at work empirically while dealing with subjects like absenteeism, leadership, motivation, quality of working life and participative management. However, the study of work stress is a recent phenomenon in India, and researchers primarily dealt with physical hazard stressors (i.e. effect of stressors like dust, noise, temperature, etc.) and neglected psychological hazards like role conflict, role ambiguity, role overload and other organisational role stressors which were equally important.
Harigopal (1980) reported that in the case of non-technical supervision a negative relationship exists between role ambiguity, job involvement and performance. Nathan (1980) showed that role conflict is experienced more frequently at the middle management rather than at the lower management level; supervisors manifest relatively higher role conflict than managers, whereas both managers and supervisors manifest higher role conflict than workers.

The study further demonstrated that role conflict decreases with an increase in job tenure in an organization. Kumar (1981) emphasized the harmful consequences of stressors like divergent objectives of individuals, organisations, lack of communication, general socio-political and economic environment as well as poor inter-personal relationships. Srivastava & Singh (1981) have demonstrated that high job-related anxiety is associated with lower satisfactory social relations and adjustment.

Das (1982) has reported that the work group/climate is an important cause of managerial stress, and the perceived power the second most potent cause. Negative group climate powerlessness may be the dominant causes of stress experienced by Indian managers.

With regard to administrative and organizational services, Bhagat (1983) found that the impact of stress on valued work
outcomes generally has been conceptualised in terms of work organisation and occupation-related factors. Surti (1982) offers an insight into the different styles of coping used by eight professional groups of working women in dealing with occupational role stressors.

The major conclusions of Surti's study are:

- Defensiveness is used more as a style to cope with role stress by professional working women, followed by intrapersonal style. The reversed pattern is found in women entrepreneurs; and

- Avoidance oriented coping styles have a positive and approach-oriented coping styles have a negative relationship with role stress.

The literature reviews of the stress field in general and work stress in particular both in India and elsewhere in the world along with factors like organisational commitment and workaholism clearly indicate that body of work has been inadequate and deficient in certain ways. Few studies deal with these three factors, viz: work stress, organisation commitment and workaholism, comprehensively. In the case of work stress typically the focus is on a small range of potential stressors, e.g. role conflict and role ambiguity or job content.
While in organizational commitment the focus is on the affective aspect of commitments, much of the research on these factors has been internally self-validating. Potential items are decided on by investigators and included in questionnaires which are then used as measures of stress or commitment. Little attention has been paid to finding out if the constituent items really are sources of stress or commitment. Beehr and Newman (1978) define job stress as a condition arising from the interaction of people and their jobs and characterised by changes within people that force them to deviate from their normal functioning. Kahn et al (1975) has established that the turnover, absenteeism and sickness would follow from experienced tension and adjustment on the job.

The effects of occupational demands become manifest in such forms like job dissatisfaction, anxiety, depression and in cases even serious mental and physical disabilities ranging all the way to heart diseases. It was reported that stress and low organizational commitment contribute to voluntary turnover (Parameswaran, 1984; Jagdish, 1989). It was also found that stress reduced one's potentiality to perform and stressors in the work environment were much less potent than those encountered in personal life (Sayeed, 1985; Paykel et al, 1971).

Stress within the elasticity range is positively related to job satisfaction and adjustment, but a high level of stress is
found to be responsible for poor performance (John and Michael, 1980). Persons with physical and physiological disorders, and persons with inadequate stress management and need gratifying skill must work in a stressful and frustrating work environment. (Friedman and Rosenman, 1974, Lipowski, 1977)

Stress is an important and dominating factor for burnout. Stress is a combination of factors within the individual, the organization and wider society which lead to lowering this feeling of personal self-worth, achievement, effectiveness and coping within one's personal role (Trendall, 1987).

Stress at work resulting from increased complexity of work and its divergent demands has become a dominant feature of the modern organisations extending impairing effects on employees. Though a moderate degree of stress has been noted creating as well as promoting employees inclination towards the job, excessive and consistent job stress results in job dissatisfaction, tension, anxiety, depression and in some cases even serious mental and physical disabilities ranging all the way to coronary diseases. Job stress has its roots in work environment, and its effects on job attitude and behaviour and mental health of the employees are determined by various coexisting organizational and personal characteristics. In recent years, a new trend of assessing the modifying effects of these variables on stress-strains relationship and job attitudes on the relationship of job
stress and consequent strains has been observed by Srivastava, (1989) and Beehr, et al (1978). Besides the above mentioned variables, the mode of coping a person adopts to deal with the perceived stress is also very likely to moderate the relation of stress and consequent strains. Some clinical psychologists have studied the relationship between mode of coping and strains of various psychosomatic illness (Jenkins, 1979; Lazarus, 1981).

Social scientists studying approach coping strategies in the recent past, found that coping behaviour is associated with increased distress and non-productivity worry, whereas avoidance coping behaviour can interfere with appropriate action when there is possibility of affecting the nature of threat. Mullen and Suls (1982) found avoidance strategies to be effective when outcome measures were immediate or short term, whereas approach strategies were more effective when outcomes were long term. Lazarus (1983) concluded that effectiveness of coping strategies depends on controlability of the situation.

Stress among railway drivers and guards: The importance of behavioural analysis to elicit maximum efficiency of workers was not recognised till the 1960's. The magnitude of railway accidents was the major concern and special committees of enquiry into accidents such as Kunzru (1962) and Wanchoo (1968) committees were set up to assess the situation. Later in 1989, the Railway Accident Enquiry Committee reported failure of railway staff or 'human-element' was the prime responsible for the largest number of serious accidents.
Further research in this field particularly on locomotive drivers has pointed out that the ageing process is being considered as an important variable vulnerable to operational lapses, specially with reference to disregard for railway signals owing to difficulties in perceptual and visual discrimination of forms and delayed reaction time inspite of adequate cognitive function after the age of 45, a lapse which leads to serious catastrophe.

Added to this is the absence of adequate feedback between managing staff and the loco running staff resulting in improper and erroneous communications. Further, operational lapses due to the quality of attention, inadequate sleep, leading to delayed breaking or manipulation of controls have also been observed specially during mid-night and early morning hours.

The operational staff have also reported greater incidence of diabetes and accident proneness, so also hypermetropia in bispectacled drivers in steam locos, who have a tendency to disregard the signals. Psychological variables such as mental pre-occupation and involvement in one's personal affairs and problems have resulted in lack of concentration and forgetfulness. Alcoholism, nervousness, monotony and boredom, fatigue, depression and inadequate rest periods hasten the contributing factors for operational lapses (Sah, 1984).
Barnes (1992) studied occupational stresses on adjustment in Western Railway personnel. There was no significant differences between different job level groupings in their adjustment to stressors. However, the guards manifested greater anxiety and impaired health status. The severe consequences of stress and coping with the stress situation have been the dominant research focus in books, articles and various other studies. Although stress harms health, the eccentric cannot escape it. However, individuals can counteract it by the relaxation response. Singh and Sinha (1986) studied empirical dimensions of coping strategies with job-related stress.

Recently, Indian researchers have attempted to explore the relationship of job involvement with demographic variables. Sharma and Sharma (1987) perceived the importance of job factors, occupation levels, anxiety, role conflict and ambiguity, (Madhu and Harigopal, 1980), perceived satisfaction of employee needs (Kanungo, Misra and Dayal, 1975). Mishra (1987) found that the effect of occupational stress and job satisfaction have significant negative relationship on first line industrial supervisors.

In India Kahn, et al (1964) were the earliest to draw attention to organizational stress in general and role stress in particular. Pareek's (1983) definition of role as the significant persons, including the role occupant, indicates that there are
inherent problems in the performance of a role and, therefore, stress is inevitable. They have classified role stress under three categories: expectation generated stress, which includes role conflict and role ambiguity, expectation resource discrepancy, which includes role overload, responsibility, authority dilemma and inadequate technological information, and role and personality. Pareek (1983) has proposed and classified role stress under two categories of role space and role set.

Five main role stresses or conflicts in the role space of an individual have been identified, viz, self role distance with role conflict and role stagnation; inter-role distance and role boundedness; role set conflicts which include role ambiguity and role overload; role isolation which includes role erosion and role inadequacy. Pareek proposed two types of coping strategies. The passive or avoidance strategy in which the person accepts or denies the experienced stress or puts the blame on self or others.

The others are active approaches and termed as functional styles of coping. In this the person faces the realities of stress consciously and takes some action on solving the problem. Emotional coping mechanisms are said to increase under high stress (Anderson, 1977). High affective copers use perspective taking to a great extent and depression to a less extent. High trait anxious individuals are characterized by preoccupation of lack of coping strategies in stressful situations.
Singh and Malhan (1979) in their study of managerial role stress found it was associated with withdrawal. The correlation between the various role stress dimensions and the coping styles helps to identify the strategy used for coping with each kind of the role stress experienced. The results on the relationship between various role stresses and coping styles are consistent with the work of several investigators.

Surti (1982) found that high stress was positively related to avoidance coping styles. Lazarus (1966) illustrated the more severe conditions of threat as causes of extreme cognitive levels of coping process. Avoidance as a form of coping under conditions of high stress has been reported by Sen (1982).

Stress in Police Work: Because of the very nature of their work, policemen have become the favourite subject of scientific studies of occupational stress. Current research has not only shown that the work of policemen is extremely stressful (Heiman, 1975; Kroes, 1976; Cooper et al., 1982), but also helped to identify various sources of stress in them like work overload, role conflict and ambiguity, (Bruke et al. 1974), lack of participation in decision makings, limited opportunities for promotion and inflexible roles, political pressures and interference, disruption of dates due to emergency situations, physical danger, shift work, problems with courts and poor
community relations, boredom, shortage of manpower and longer work issue (Cooper et al., 1982) and poor supervisor subordinate relationships.

Some of these studies have attempted also to examine the consequences of the stressors upon the psychological and physical well-being of individual police officers and the impacts of the stresses and strains upon their family, social and work levels. Negative consequences such as poor mental health (Kroes, 1976; Cooper et al., 1982; Burke et al., 1974). Job dissatisfaction and intentions to turnover, high prevalence of psychosomatic disorders and adverse effects on family and home life have been frequently reported in different studies. Data that come from comparative studies on stress and strain among different occupations also provide evidence for the high cause of stress in police service. For example, out of the twenty-three occupational groups studied by Caplan et al. (1975), it is the group of police that was found most frequently to visit the dispensary at the work place.

There are also instances of higher incidence of suicide among police than among other occupational groups. Again, in comparing the twelve dimensions of stress, i.e. role overload, role ambiguity, role conflict, intrinsic impoverishment, strenuous working conditions, unprofitability, political pressures, powerlessness, poor-peer relations, low status, under
participation and responsibility of persons among the different occupational groups, Dharmangadan (1988) found that the group of police scored significantly more than the other groups in most of these dimensions. Joseph & Varghese (1988) studied the stress in manufacturing organizations and concluded that the occupational stress as well as perceived stress were significantly related to different job-related stress, affective strains and psychosomatic complaints.

Information with regard to occupation or which category of employees in an occupation is at more risk is essential to the formulation of strategies for instigating health effects of high stress occupations. But, as pointed out by Colligan et al (1977), the selection of specific occupations for intensive research, by and large, has been based upon personal preferences or educated masses of the research community for want of objective criteria for comparing occupations in terms of inherent job stress factors and their resultant health impacts.

For instance, mortality patterns across occupational groups show that physicians, police officers, nurses and health technologists have higher than expected rates of suicide, while teachers, lawyers and judges have lower rates. Guralnick (1963), Milham (1983), Colligan, et al (1977) rank health-care workers, labourers, warehousemen and telephone operators in that order. According to the incidence of mental health admission, several
cross sectional studies have also reported large occupational differences in morbidity, mortality and accidents (Russek, 1965; Sales & House, 1971; Caplan, 1972; Cobb & Rose, 1973). Empirical studies that compare different occupations in terms of stress and associated strains also have revealed differences among occupations.

According to Powel (1972), the nature of work of certain professional groups has special features creating problems for them that differ from the problems experienced by other workers. The results of the study concerning working conditions and health among 17 job groups show that members of the armed forces, policemen, teachers and nursing staff are particularly troubled by such conditions of job as confinement to work, too much control of work by others and so on. Excessive demands for decision makings and responsibility are found to contribute to strain in administrative personnel, firemen, nursing staff, armed forces, policemen and journalists.

Again, administrative staff, teachers, engineers and policemen are found by these investigators to cluster in the group reporting high marital stress arising from work overload. There are two other studies in the literature which are relevant to this context. One is the off-quoted study by Caplan, et al (1975) which reports large differences in varied measures among 23 occupations. Assemblers and relief workers on the machine
paced assembly line, for example, were found to show highest stress compared to other occupations.

The other is an Indian study by Sutri (1982) which investigates the prevalence of different role stresses among women workers in eight different professional groups. Sutri finds differences among these groups in measures of self-role distances (high among bank employees, low among teachers).

Inter-role distance (highest for doctors, gazetted officers, researchers, lowest for teachers), role stagnation (highest among nurses, followed by bank employees and researchers), role overload (almost the same for all, except for teachers), role isolation (more among bank employees, followed by nurses, doctors and gazetted officers), role erosion (more among nurses and bank employees than among others) and role inadequacy (more among bank employees and researchers). Total role stress is experienced most by nurses followed by bank employees, while teachers are found to experience the least.

Dharmangadan (1988) made a comparative study of five occupational groups for stress. The police are found to experience the highest degree of stress, the teachers, the lowest, the other occupations (viz. the administrative officers, the bank managers and supervisors/foremen) do not show any consistent tendency to differ from one another.
The important role played by coping in reducing the ill effects of stress on physical, psychological and social well-being has been popularised by health professionals (Class, et al, 1980; Obrist, 1981). Coping broadly refers to the efforts to manage environmental and internal demands and conflicts among the individuals (Lazarus, 1981). Musil & Abraham (1986) covers a wider area which involves problem, emotion or perception.

Management efforts directed towards real or imagined tasks in the process of dealing with impact and consequences of a difficult situation. Srikanth's (1992) study on coping with "On the Job Stress of Older Executives" revealed that there was more stress in the areas of relationship with colleagues, role in the organisational working conditions and home work interference. There was low stress in areas in organizational structure and development and relationship with boss. Older executives have used more of problem and focussed their attention on coping.

Stress in driving and piloting: The quality of life of transport workers and pilots has immensely improved according to their merits with the passage of time by the active involvement of trade unions and international Labours Organization, wherein maximum emphasis has been given to occupational health, safety and welfare of workers. Side by side, World Health Organization has periodically conducted researches on the gravity of health problems among transport workers.
Other relevant researches on stress have highlighted the contributory stress factors detrimental to health. These are factors intrinsic to job (Cooper, et al 1982), structural and design problems, poor physical environment (Cooper and Smith, 1985), noise pollution (Kelly & Cooper, 1982), job overload (French & Caplan, 1972), repetitive work (Cox, 1980), role conflict and ambiguity (Cooper and Marshall, 1976), lack of career development (Erickson, Pugh and Gnderson, 1972), dual career stress (Wilby, 1985), home and work pressure (Phal, 1981) and poor inter-personal relationship (French and Caplan, 1972).

There are certain occupations that have been isolated as being high risk in terms of potential dangers (Cooper & Payne, 1980) in which the transport industry is included. There is no single causative factor that poses as a stressor. Often it is the cumulative effect or the effect of one variable on the other.

It is usually more complex, involving a number of factors interacting at the same time. Some jobs are acknowledged as potentially stressful by virtue of the intrinsic nature of their pace, technology and hours of work. (Cooper and Payne, 1980). Barness (1992) studied health adjustment and job stressors in the transport industry like aviation, railway and roadways personnel.

The contributing factors for the fleet personnel were jet lag, noise pollution, occupational health hazards, inclement
weather in aviation personnel. Among the railways, it was air and noise pollution and maintenance of tracks and transport. In the roadways employees most prevalent stressors were poor maintenance of roads and transport, rash driving, air and noise pollution, fear of accidents, traffic jams, breaking offences.

Tachibana et al (1994) studied arrhythmias coinciding with alteration of consciousness in air crew during stress. On the review of accidents that took place in the past, findings reveal that physical stress like heat contribute to the major cause of pilot error.

Froom et al (1993) studied 500 helicopter accidents and found heat stress contributes to error in piloting and result in major helicopter accidents. Similarly, truck drivers stress related psycho-physiological reactions of truck drivers lead to more accidents.

**Stress in Arts**: Professional artists and musicians run risks of stress related to health problems. The performers should work under enormous stressful conditions. The dancers, artists and musicians play according to the audience's expectations and demands. They also should perform before the public under constant scrutiny. They are expected to perform perfectly.

Thus, the artists are under constant stress. Various studies on artists reveal that the artists are under stress and thus
develop various psycho-somatic symptoms. Sternback (1993) addressed stress-related illness in professional musicians. Hamilton et al (1989) study reveals that the ballet dancers excellent qualities that lead to success in their profession may contribute to injuries if carried to an extreme.

**Stress in the medical field:** Occupational stress in the medical profession is known to be a major cause for negative attitude towards patients.

Studies indicate that stress is very severe in dental practice. Older dentists show less stress than the younger ones. Bourassa (1994) identified important situations like dental procedures and office organization to inter-personal relationships involving patients and office personnel responsible for stress in dentists. Similar studies by Wong (1989) indicate burnouts in dentists. It is a syndrome of emotional exhaustion depersonalization and reduced personal accomplishment that can occur among individuals who work with people. Health care personnel including dentists are at high risk because their occupation often requires intense interaction with fearful, demanding patients on a daily basis.

Under conditions of contemporary highly developed medicine and allied disciplines of the new scientific concepts of health care, it is essential that doctors and other health workers
should be developed hormonous personalities. They should have overall health potentials. In many instances, paradoxical behaviour in relation to their own health is found. At present, the majority of occupations is associated with neuropsychic stress. In the medical profession neuropsychic stress is much greater than in other occupations (Filip, 1989).

A study by Richardson (1993) on a sample of 303 woman physicians found that physician showed high stress such as time pressures and their low satisfaction was related to wanting higher income and changes in practice procedure; stress and satisfaction were also related to attitude towards health care. In the recent past there are cries in the medical profession against few suits for the error in skill by the court of law. Although in India such things do not exist and the country is just developing, a law suit against a doctors would bring grave consequences on poor patients. Studies by Strasen (1989) support this view, as he says in his editorial "law suits must be curbed or medical profession will suffer".

A study by Green et al (1990) on stress in surgeon reveals that the major individuals stresses for surgeon is in the interference of the job with personal life, general administration and the number of patients in the clinics.

Therefore, prevention of negative stress in the medical profession must ensue from an endeavour to neutralize these negative factors, i.e. to create optimal working conditions and optimal inter-personal relations, and improving the standard of the personality profile of doctors.

Stress in nursing profession: Functions of nurses were that of 'mother surrogate and bed side psychologist roles for patients inclusive of all kinds of personal care and motherly affection and advising, counselling, comforting, serving and feeding and so on. Owing to the inclusive nature of her functions, several other non-nursing functions like co-ordination, administration, teaching, assisting the doctors and system integration functions are added in a bureau- cratically organised hospital from time to time. And during certain periods stress is laid on certain functions. But, throughout, the nurse has been associated with the patient care function.

Technological advancement resulted in great inventions in the field of medicine and treatment. So the physician may leave some of his functions to the nurse for want of time. Most of the nurses are women and they are best suited for doing expressive functions, because generally women have the qualities of patience, sympathy, service mindedness, etc. So, the expressive function of a nurse is very important for the quick recovery of the patient.
But in the modern general hospitals, however efficient she may be, the nurse is not in a position to discharge her expressive function in an effective way on account of many reasons. When patient's expectations are contradictory, the nurse finds herself in a role conflict. Dogmar (1964) made an explorative study of the role of the neophyte nurse (i.e. recently graduated and registered nurse).

This explorative study demonstrates the existence of role conflict as there is incompatibility in the expectation of the three counter-positions, nursing supervisor, nursing instructor and the senior nursing students. The effects of this conflict may lead to ineffective role fulfilment by the neophyte nurse, confusion within and between the counterpositions and consequently decreased efficiency of patient care.

For a woman, the problem may also come from the confusion of sex roles with occupational roles, or from attitudes which usually carry a deep emotional charge. According to the Nightingale's principle of nursing "it may seem a strange principle to enunciate as the very first requirement in a hospital that it should do the sick no harm".

Nurse in a Vienna hospital slowly killed 48-old patients during a span of 5 years for the reason that they were troublesome chronic patients. According to Hilgard Pack (1989), the Head of the Nurses Trade Union Association said in a television interview, "the problem lies with the system, with the fact that nurses have no psychological training whatsoever, they are overworked, badly paid and there is no place where they could discuss their needs, their worries and their general problems".

Many nurses were upset about their increasing load of paper work. Personnel shortages were forcing them to neglect. But what especially irked them was the indifference of doctors to nurses' opinions about patients. So far as the nursing personnel are concerned, there would be three grades of them.
- Auxillary nurse midwife with 1 to 2 years training.
- Basic nurse with 3 1/2 years training inclusive of midwifery and public health nursing.
- Nurse with a university degree of 3 1/2 years training.

Traditionally, the nurse in her highly visible white uniform and cap has tended the sick and been responsible for the general well-being of her patients while working under the explicit instructions of physicians. Most nurses were trained in hospital based diploma nursing schools which required only a three year training period. They were instructed in the art of bedside care and the arts of assisting the physician. As the field of medicine became more complex, nursing skills became more specialized and

"Many nurses recognized the need for further education with the development of advanced education programmes. Nurses entered a new era and a crisis of identity which has yet to be fully resolved. Increasing number of students are seeking an advanced education to prepare them for a major position in the healthcare network and abandoning the role of the "Hand maiden to the Physician".

Nurses most often function in one of four major roles with regard to patient care:

- The instrumental role includes the coordination of intra-professional and inter-professional team efforts in helping the patients towards health. The nurse is the only member of the professional health team who has the experience of hourly physical and emotional care.

- Nurse's function as a collaborative therapist with the primary therapist being of another discipline, the nurse is able to utilise the awareness of physical and emotional needs of families as well as those of the identified patients.

- The nurse therapist role is one in which the nurse functions as the primary therapist for individuals, families, and groups. In this role, the nurse is responsible for the direction of the therapeutics process. In order to function adequately in this particular therapeutic role, the nurse should have advanced training in techniques.
In the community action role in which the nurse moves within a framework of the local community and socio-economic, political, educational and health systems for the purpose of bringing about desired changes which can facilitate health or and in the treatment and rehabilitation of those who are ill, nurses are trained as helpful members of the health team. The nurse is usually viewed as the most accessible professional in the health network.

The nurse assumes responsibility for consultations with health and social agencies and intervention to help individuals, families and groups to cope with any crisis related to catastrophic life experiences. The nurse also may become involved with the political structure to bring about changes in the social system which can facilitate health. She may also be involved in health maintenance services such as routine multiphase screening examination to ascertain an individual's health status.

Particular social role, the nature of the work itself, expectation as to its proper outcome, the availability of suitable rewards or satisfaction, general atmosphere of the institution, environment or work situation all have much to do with the presence or absence of professional stress. In many professions that depend upon team work, stress arises from conflicting views of obligations partly showed or inadequately articulated.
There are various misconceptions of society towards nursing profession. The important one behind this is misdemeanours and immorality. A nurse undergoes various dimensions of stress right from her entry into the school of nursing. Shifting from medical to surgical wards student nurses reported more symptoms of stress when working in the condition that they judged as more stressful and less satisfying (Parker, 1982). From this it seems logical to conclude that stressful condition of work can play a part in causing neurotic symptom/syndromes.

Certain circumstances in personal life can make a person more vulnerable to stressors. Edelwick and Brodsky (1980) have described four stages of disillusionment in the process of burnout enthusiasm, stagnation, frustration and apathy, and attention has recently been given to implication for nurses and other professional caregivers. Dysfunctional stress is most likely to be revealed in emotional, behavioural, physical and social manifestations.

Nurses may have particular reasons to be legitimately concerned about dysfunctional stress. They frequently come into contact with disability, loss and dependence, they may work in contexts that too often engender a sense of frustration and often they are idealistic and have a high personal need to serve.
Stress arises out of three principal sources for nurses and other care givers, viz.

- Intra-personal relations.
- Interpersonal (or) social relationship.
- Systematic (or) professional role.

Many nurses have joined nursing courses in the late adolescent period and majority of them are of the female sex, who are not mature enough to cope with the nature and nurture expectations. Stress is generated when one cannot achieve an appropriate balance between the private and the public dimensions of one's life. Everyday activities and ordinary social intercourse became causative sources for stress.

An empirical study by Christopher (1989) in stress and work attitudes among Australian nurses found that daily hassles could easily be coped with by the Australian nurses. As such, he found that nurses did not suffer from any stress. According to Christopher there were many factors which could be identified as variables that generate stress in specific settings such as hospitals.

Most studies of stress among nurses have concentrated on the impact of major stressors, events like coping with emergencies, dealing with death, nursing difficult patients and handling demanding doctors. (Marshall 1980, Vrederberg and
Trinkans 1983). These studies have typically ignored the effect of the "daily hassles" other than the major stressors (Lazarus et al, 1985).

Nurses working in private organization are paid low wages compared with the public sector nurses. Poor environment of the hospital and substandard administration gives rise to stress in them. Lack of child care facilities and frequent change in shifts induce stress in them. Nurses also encounter multiple roles like domestic work such as looking after children, cooking, washing clothes, looking after the sick and the old people in the house. Low social status because of the low wages and the societies misconceptions about the nursing profession are contributory factors to stress.

As defined by the American Nurses Association (1991) standards of nursing practice has three components.

- Professional standards of care defined diagnostic intervention and evaluation competence.
- Professional performance standards, identify roles and functions in direct care, consultancy and quality assurance.
- Specially practised guidelines are protocols of care for specific population.

Nurses who work with traumatic children must not only be knowledgeable but also be emotionally able to support the child.
and family through a variety of painful phases in the recovery process. Many male and female nursing students as well as professional nurses themselves are the survivors of childhood sexual and physical abuse (Reid, 1989). As survivors they have developed various defences and strategies for coping with traumatic events in their own lives. Undoubtedly, they have developed a sense of self awareness conducive to health.

Nursing educators perceive a high degree of stress in the profession caused by role conflict, role overload and role ambiguity compared to non-nursing faculties. (Brown, 1991). Excessive job-related stressors result in decreased motivation for perfection and increased feelings of emotional exhaustion. Workplace environment and decrease in the nursing staff ratio are additional contributing factors for stress in nursing.

In recent years nursing rules have been modified. Job descriptions are not properly defined. Nursing educators experience confusion and role strain. Nurses are quite often engaged in physical work such as bed making, handling of patients, etc. and they often develop back stress. Garg and Owen's (1992) study on reducing back stress to nursing personnel, an ergonomic intervention in a nursing home, suggested various methods of postures which reduce the back stress.
Tyler (1994) studied sources of stress and psychological well-being in high dependency nursing. He specified some of the major stressors such as death and dying of patients and postgraduate training. Number of children and relationship with partner are significant factors. Silva (1992) identified administrative work being the major stressor for nurses working in the central supply unit of the hospital. Further, nurses do have occupational stress in hospital environment. Their perceived work pressures and keeping track of many things cause stress in them. Bai (1989) studied work stress perceived by clinical nurses and found that hospital administration and nurse-patient relations were the major stressors for the nurses. Similar study by Ullrich et al (1990) on nurses working in cancer wards found that interpersonal difficulties and physical work load were the major stressors and these nurses invariably suffered from psychosomatic disorders.

Apart from professional conflicts and expected role behaviour of the nursing profession, the nurse being a woman undergoes physiological changes in her body such as menstrual cycle, menstrual irregularities, pregnancies, child care, etc., which are contributing physiological stress in day-to-day life. The nurses may work with tolerance, even though they may have a sense of frustration. However, such sustain frustration may lead to psychological problems. Parker (1982) in his study concludes that stressful conditions of work can play a part in causing neurotic syndromes.
In addition to the studies on nursing profession referred to above, many Indian researchers focussed their attention towards the nursing profession. Gupta & Guelford (1962) made a temperament survey in nursing profession job roles. Joshi & Dubey (1976), Mohan & Sujatha (1986), Sharma & Dubey (1975) studied the nurses job satisfaction, commitments, responsibility and ideal personality make-up as necessary requirements in this profession. Suriyamani (1986) highlighted the expressive role of a nurse and the conflicting factors hindering the role. Rayner (1984) and Salvage (1983) have studied distorted image of nurses. Benne (1959) studied the role of confusion and conflict among nursing professionals Barnes and Sosale (1988) studied the hazards of working in mental hospital and concluded that the mental state of nurses and ward attenders is adversely affected by working in the mental hospitals. Thus, job demands, job specifications and expectations in such a set up have adverse effects on the nurses health adjustment and they creating stress among them.