CHAPTER 1

“When we treat one as he is, we make him worse than he is when we treat him as if he already were what he potentially could be; we make him what he should be.”

Robert L. Stevenson

1. 1. INTRODUCTION: The Health and Mental Health

Health and mental health, the concepts which normally laymen surmise about, has always been a matter of concern of thinkers and health philosophers from time immemorial. At times medical as well as psychiatric studies and treatment were dealt with pieces of people – an infected toe, a congested lung, a troubling twitch, a split personality, a brain damage etc. – but empiristic thinking found pieces nonetheless (Park, 2000). Today the holistic concept occupy the place and learning as well as treating of ‘person as a whole’ viz, a physically ill child struggling to find safety in an abusive family, an adolescent coping with eating problems and adjustment etc. are encouraged (Kamalam, 2005). These progresses are the after math of conceptual clarity and progress in scientific understanding. In psychiatric study and research the health and mental health concepts have always been the issues of central importance, but are found very difficult to define precisely. Since it is being very sensitive in nature, any studies in the areas of health and mental health prerequisite the conceptual clarifications and clear understanding of terminologies. The World Health Organisation defines health as a state of complete physical, mental and social well being and not merely the absence of disease or infirmity (Ahuja, 2004). Generic descriptions has to say so much on health and mental health but since these are concepts of central importance in psychiatric theory and practice, expertise and authentic version of understanding of concepts matters much (Kapoor, 1992)

As Dunn (1996) describes, people are not simply ill or well but their degree of health and mental health changes according to their inner or outer circumstances. ‘The Inner Circumstances’, for an individual, is the human biology, which ranges through genetic factors, constitutional factors, sex,
colour physique, health status and physiological elements like puberty, old age etc. And ‘The Outer Circumstances’ are usually the environmental and social elements which surrounds an individual. Thus health and mental health of an individual is an integrated sum of bodily situational and environmental well being for him.

A report of the surgeon general of America states that the health and mental health can be defined as, “a successful performance of mental and physical function in terms of thoughts, physiology mood and behaviour that results in productive activity, fulfilling relationship with others and the ability to adapt to change and to cope with adversity” (Sadock; et.al, 2003). Thus so many theoretical and clinical concepts defining health and mental health prevail but all serve the same wine in different pots. To conclude effectively the heated discussion on health and mental health Daniel Offer and Melvin Sabshin adopted the Methods of models (Offer and Sabshin, 1984). ‘Since health and mental health concepts are difficult to define, it should be well understood through placing them under different models of treatment (understanding).

- **Medical Model** understands health and mental health as absence of physical or psychiatric disease or psycho physiological pathology.
- **Statistical Model** studies health and mental health as a status falls within two standard deviation of the normal distribution curve.
- **Utopian Model** analyses health and mental health as a status falls right at the optimal functioning of the individual.
- **Subjective Model** views lightly different as it analyses health and mental health as an absence of distress, disability and help seeking behaviour thereof.
- **Social Model** believes a healthy and mentally healthy individual behaves in a socially permissible way.
- **Process model** understands normality and abnormality is a dynamic process than a static concept.
• The continuum model believes normality and mental health and abnormality are falling at the two ends of a continuum rather than being desperate entities.

It ultimately concludes health and mental health as a state, which is not merely the absence of disease or infirmity but complete mental physical and social well being integrated with the bodily, situational and environmental factors. A normal individual in Health and Mental health as per these standards would be able to exhibit reality orientation, self awareness, self knowledge, self esteem, self acceptance, ability to exercise voluntary control over behaviour, ability to develop affectionate relationships and pursuance of productive and goal directed activities.

1.2. MENTAL ILLNESS: The Nature and definition

For a long period mystery has surrounded mental illness. Many prejudices and superstitious believes have developed about their origin and causes, in the past (Kapoor, 1992). People thought, for example, that a mentally ill person was under the influence of some evil spirit. With the advancement of scientific knowledge and research, we have now a better understanding of mental illness as emerges in various forms of its symptoms, causes and treatment.

Mental illness is not only a disturbance in the function of a single organ like the brain. “It means the maladaptive and disordered psycho biological functioning” (Bhatia and Craig, 1998). Sadock James, et.al (1995) quoted Scottowe an eminent English psychiatrist that “the hallmark of mental illness is that by reason of understanding of some change in the patient as a person whether that changes be due to physiological disturbances or to experiences of life, he is no longer able to adapt himself satisfactorily to his material, social or cultural environment. This state is intelligible as a disturbance of the relationship between the adaptive capacities of the individual on the one hand and his environmental load on the other.” Tabber’s medical dictionary defines mental illness as any disorder, which affects the mind or behaviour of the individual. (Taber, 1959). The individual, thus in mental illness, due to some factors
inherent in his personality or in the environment or due to both shows inability to adapt to the stress and strain of life.

Thus mental illness brings about conditions of behaviour, which hinder adequate adjustment to life situations. These conditions in mental illness promote a general incapacity in an individual for solving the life problems in a socially acceptable manner. As a result ultimately the individual affected seems to be withdrawn or retracting from reality continuously.

The modern tendency is to regard mental illness as a derailed mode of behaviour or of a living rather than as a disease entity. This derailed mode of living or behaviour is the logical, although socially maladjusted, outcome of the particular individuals original endowment as influenced and moulded by the biological make up, home, the traumatic experience, the stress and the problems that spring to some extent from deep within his emotional and instinctive life. The individual in mental illness may find it difficult to meet the strains in life situations due to the derailment from normalcy on various accounts and ultimately it may impair the integrity or efficiency of his total biological as well as social functioning.

Often people confuse mental illness with mental deficiency due to the lack of conceptual clarity. In mental deficiency a lack of development in psychological functioning or there may be a deficiency of proper organic development. In mental illness the development will be there but it does not operate in a normal way. To make these concepts more clear Dr. Neeraj Ahuja (2004) developed a simple apprehensible formula that help one to deduce mental illness simply from mental deficiency “the simplest way to understand a mental illness is as a disturbance of

- Cognition (that is thought)
- Connation (that is action)
- Affect (that is Feeling)
Any disequilibrium between these three can be understood as mental illness. In other words a mental illness is a clinically significant psychological or behavioural syndrome that causes significant distress (Subjective Symptamatology), disability (objective symptamatology) or loss of freedom and which is not merely a socially deviant behaviour or unexpected response to a stressful life event. Normally conflict between society and the individual are not treated as mental disorder. A mental illness should be a manifestation of behavioural, psychological and biological dysfunction in that person”

1.3. SCHIZOPHRENIA: A Disorder of Cognition Connation and Affect

Schizophrenia is the descriptive term used for a group of psychotic disorders characterized by gross distortion of reality, withdrawal from social interactions and the disorganization and fragmentations of perception, thought and emotion (Norquist and Regier, 1996). The clinical picture may differ in schizophrenic reactions; the disorganization experience that typifies acute schizophrenic episodes has individual case validity. According to American Psychiatric Association, Chronically mentally ill persons having major schizophrenia, Organic psychoses, recurrent affective disorders, long term disabilities, extreme dependency needs, high sensitivity to stress and difficulty in coping with the demands of everyday living (American Psychiatric Association, 1978). Schizophrenia is a devasting mental illness of unknown causes and is probably the most distressing and disabling of severe mental disorders .”( Sadock; et.al, 1995). It impairs an individual in his cognitive, connative and affective areas of performance. Both the patients and their families suffer from poor care and social ostracism because of wide spread ignorance about the disorder. Hence of the entire major psychiatric syndrome Schizophrenia is found much the most difficult to define and describe (Collins and Drever, 1995). The main reason for this difficulty is that it comprises a group of disorders with heterogeneous aetiologies and it includes patients whose clinical presentations, treatment responses and the causes of illness vary. DSM IV (TR) of American Psychiatric Association tries to give a precise picture of this disorder.
“Schizophrenia can be defined as (in terms of symptoms in acute phase and also in course). A mental disorder characterized by delusions, hallucinations, disorganized speech, or behaviour and negative symptoms, which have been present for one-month period unless successful treatment has occurred (Gelder, et.al.1996). Bailers Nurses Dictionary defined Schizophrenia as “ a large group of mental disorders characterized by mental deterioration form a previous level of functioning and characteristic disturbances of multiple psychological process including delusions, loosening of association, poverty of content of speech, auditory hallucinations, inappropriate affect, disturbed sense of self and withdrawal from external world”( Ashby, et.al, 2001). A pocket hand book of clinical psychiatry defines “Schizophrenia is a disorder of unknown causes, characterized by psychiatric symptoms that significantly impair functioning and that involve disturbances of feeling, thinking and behaviour” (Sadock; et.al, 1995).

In short Schizophrenia is such a disabling illness that exhibits symptoms which influences a person in multiple and complex ways of individual functioning like emotions, thoughts, perception, memory, experience of self, movements and behaviour. “More over the individual with schizophrenia will exhibit deficiencies in their overall functioning especially in the expected level of occupation or social functioning since the onset of the disorder” (Gelder, et.al.1996). Schizophrenia thus interferes severely with an individual’s ability to think, feel and to receive and understand sensory information. An individual’s behaviour also may be totally disturbed by the dominant symptoms like hallucinations, delusions, thought disorders and behaviour considered unusual for persons.

1. 4. SCHIZOPHRENIA: A Historical Over View

Schizophrenia is a group of related disorders that are heterogeneous in pathophysiology, predisposing factors, precipitating stressors and related behaviours(Norquist and Regier, 1976). The descriptions of the symptoms of what is called Schizophrenia today are found throughout recorded history and
the magnitude of the clinical picture of this disorder has consistently attracted
the attention of major figures in psychiatry and neurology even. The term
Schizophrenia now is used as the descriptive term for a group of psychotic
disorders characterized by gross distortion in areas of cognition, connotation and
affect (Falloon; et.al, 1984). Specifically over past 100 or more years many
divergent concepts of schizophrenia have been held in different countries and
by different psychiatrists due to the manifestation characteristics of this
disorder. At time this disorder were attributed to a type of mental deterioration
beginning in childhood. The progressive conceptualisations in the ideology
regarding the disorder are always been indebted to the prominent personalities
in the course of psychiatric history.

1. 4. 1. BENEDICT MOREL (1809-1873)
A French expert, psychiatrist by profession first tried to explain and study on
Schizophrenia scientifically (Sadock; et.al, 1995). In 1860 he described the
case of a 13-year-old boy who had formerly been the most brilliant puple in his
School but who over a period of time lost interest in his studies became
increasingly withdrawn, seclusive and taciturn, and appeared to have forgotten
everything he had learned. He talked frequently of killing his father and
evidenced a kind of inactivity that boarded on stupidity. Morel found the boy’s
intellectual, morel and physical functions had deteriorated as a result of
heridity causes and hence were irrecoverable. On account of its onset at the
premature age he called it as the forgetfulness happens at premature age
(Adolescent age) that is “Demence Precoce” Primarily he called so because of
its onset at adolescence (Lalitha, 2000).

1. 4. 2. EMILE KRAEPELIN (1896)
A German, psychiatrist by profession translated Morels ‘Demence precoce’ in
to Dementia Praecox the Latin version of the word, which indicates to express
a group of illness that begins in adolescence and gradually end up in dementia.
He added by describing patients with dementia praecox having long term
deteriorating course and the common clinical symptoms of hallucination and delusions (Sadock, James; et, al, 2003).

1. 4. 3. EUGENE BLEULER (1911)

Although descriptions of the symptoms of what is called schizophrenia today are found throughout recorded history the term schizophrenia was not introduced until 1911 by the Swiss psychiatrist Eugene Bleuler. He found the Kreplein definition is insufficient, actually however Kreplein defined it as Dementia Praecox a group of rather dissimilar conditions that all seemed to have the feature of mental deterioration beginning early in life, however the term was rather misleading since Schizophrenia usually becomes apparent not during child hood but during adult hood and there is no conclusive evidence of permanent mental deterioration. He believed that the schizophrenias were multidimensional and organic in nature and that these illnesses were strongly influenced and could be shaped by psychological factors. He combined the word Schizophrenia by joining two Greek Words “Schizein (to Split) and Phren (Mind)” (Sadock; et, al, 2003). Bleulers reference was not to a split personality, which refers to separate identities but to his believe that split occurred between the cognitive and emotional aspect of personality (Lalitha, 2000).

Schizophrenia occurs in all societies, from the aborigines of the Australian Western Dissert and the remote interior jungles of India to the most technically advanced societies. Apparently mental disorders, especially schizophrenia are not merely specific feature of any culture or societies; though they were present always the recognition of the condition required long period to be made. These eminent contributors added to it much with their additions.

1.5. SCHIZOPHRENIA: The Clinical Picture

Often schizophrenia develops slowly and insidiously (Mueser and Gingerich, 1994). Thus the early clinical picture may be dominated by seclusiveness, gradual lack of interest in the surrounding world, excessive day dreaming, blunting of affect and mildly inappropriate responses. This pattern is referred to
as ‘Process Schizophrenia.’ However, in the majority of cases, Schizophrenia has a sudden onset, typically marked by intense emotional turmoil and a nightmarish sense of confusion. This normally related to certain precipitating stressors and this condition is called ‘Reactive Schizophrenia’ (Stuart and Lararia, 2005). To describe Schizophrenia there are no pathognomonic signs or symptoms (Coleman 1976) instead a cluster of characteristic findings make the diagnoses.

1.5. 1. SCHIZOPHRENIA: The Etiology.

There has been extensive uncertainty over the causative factors behind schizophrenia. There is something known of its cause, but much remains yet to be discovered. Current theories about schizophrenia see it as a diverse condition, possibly reflecting a number of separate underlying causes. Different causes may operate in different people. This may be why there is wide variation in the way the condition develops, in its symptoms, and in its course. However, several theories have been propounded (Mueser and Gingerich, 1994), those including the following.

1.5. 1.1. Biological Theories.

1.5. 1.1.1. Genetic hypothesis.

A wide range of genetic studies strongly suggests a genetic component to the inheritance of schizophrenia (Sadock; et, al, 2003). In the 1930es classic studies of the genetics of schizophrenia reveals interesting findings. About 10%of first degree relatives (and 3% of second degree relative and 2% of third degree relatives ) of schizophrenic patients have schizophrenia, as compared with the 0.5 – 1%prevalence rate in general population. The concordance rate for monozygotic twins is 46% and for dizygotic twins is 14%. If one parent has schizophrenia the chances of the child developing schizophrenia are 10 – 14%. However, if both parents have schizophrenia, chances of the child developing schizophrenia increase to about 46% (Glashan and Fenton, 1993)
This theory propagates genetic factors are the key players in the making of an
individual vulnerable to schizophrenia. In some individuals the environmental
factors are probably important in precipitating an episode in some individuals.

1.5.1.1.2. Bio Chemical Theories.

The cause of schizophrenia is unknown. In the past decade, however, an
increasing amount of research has indicated a pathophysiological elements of
the brain including the limbic system the frontal cortex, cerebellum, and the
basal ganglia and malfunctioning of bio chemical elements of the brain
including dopamine, serotonine, norepinephrine, glutamate, the inhibitory
amino acid neurotransmitter Gama amino butyric acid, glutamate,
cholecystkinin and neurotensin are presumably involved in generating
schizophrenia or play as a causative element in at least some, perhaps even
most, schizophrenia patients (Harvey, 2001).

Illustration I.I.

Above: The Early and Latter Grey Matter Deficits in Schizophrenics. Derived
from high-resolution magnetic resonance images (MRI scans), the above
images were created after repeatedly scanning 12 schizophrenia subjects over
five years, and comparing them with matched 12 healthy controls, scanned at
the same ages and intervals. Red and pink colours indicate severe loss of grey
matter, while stable regions are in blue. STG denotes the superior temporal gyrus, and DLPFC denotes the dorsolateral prefrontal cortex. Note: This study was of Childhood onset schizophrenia, which occurs in 1 of every 40,000 people and is frequently a significantly more aggressive form of schizophrenia than later onset schizophrenia which afflicts approximately 1 of every 100 people. (Weinberger, 2005.).

1.5.1.1.3. Brain Imaging.

Crania CT scan, MRI scan and post mortem studies in search of the causative elements behind schizophrenia showed enlarged ventricles (not amounting to hydrocephalus) and mild cortical atrophy (with an overall reduction in brain volume and cortical grey matter by 5-10% in some patients of schizophrenia. PET (Positron Emission Tomography) scans on patients with schizophrenia shows that hypo frontality and decreased glucose utilization in the dominant temporal lobe. Attempts are being made to localize symptoms of schizophrenia. (Like auditory hallucinations, negative symptoms) to the various brain regions by PET studies in relation to these findings. Experts in these areas of research rationalize the cause of the illness schizophrenia in relation with their findings (Harvey, P.D.2001).

Illustration I. II

Above: MRI imaging showing differences in brain ventricle size in twins - one schizophrenic, one not. (Image courtesy NIH - Dr. Daniel Weinberger (2005), Clinical Brain Disorders Branch.)
1.5.1.1.4. Other Theories.

The following findings also point towards a biological basis of schizophrenia. Antipsychotics, which act by blocking the dopamine receptor, cause significant improvement in schizophrenia and relapse occurs on stopping antipsychotic medication. The newer, atypical antipsychotics (like risperdone) are dopamine antagonists. Drugs like LSD, amphetamines and mescaline can cause schizophrenia like symptoms in normal subjects. Organic mental disorders with schizophrenia like symptoms may be seen in Huntington’s chorea (early stages), homocystinuria, acute intermittent prophyria, Wilson’s disease and heachromatosis. Soft neurological signs, minor physical anomalies, and impaired eye tracking (Smooth pursuit eye movements) are more often seen in patients with schizophrenia than in normal persons. Viral and auto immune factors have been implicated by some, while others have suggested a neurodevelopmental hypothesis for schizophrenia (Marsh, 1992).

1.5. 1. 2. Psychological Theories.

1.5. 1. 2. 1. Stress Theories.

This theory propagates that increased number of stressful life events before the onset or relapse probably has a triggering effect on the onset of schizophrenia, in a vulnerable person. Increased expressed emotion lie hostility, critical comments emotional over involvement of significant others in the family can lead to early relapse (Barrowclough and Tarrier 1992).

1.5.1. 2. 2. Family Theories.

Several theories shave been propounded in the past but are currently of doubtful value. These include Schizophrenogenic mothers, lack of real parents, dependency on mother anxious mother , parental marital schism, or skew, double bind theory, communication deviance, and pseudo mutuality ((Barrowclough and Tarrier 1992).Several other family theories have also been propounded but are currently of doubtful value as theories of causations.
1.5. 1. 2. 3. Information Processing Hypothesis.

Disturbances in attention, in ability to maintain a set, and inability to assimilate and integrate precepts are common findings in schizophrenia. Schizophrenics may at first be overly attentive to stimuli but later may reduce or exclude attention to stimuli. There is possibly a breakdown in the internal representation of mental events (Ahuja, 2004).

1.5. 1. 2. 4. Psycho Analytical Theories.

Psychological and environmental stresses are most likely to trigger psychotic decompensations in a person. According to Sigmund Freud, there is regression to the pre-oral (and oral) stage of psycho sexual development, with the use of defence mechanisms of denial, projection, and reaction formation. There is a loss of ego boundaries with a loss of touch with reality (Sadock; et.al, 1995).

1.5. 1. 3. Socio Cultural Theories.

Although the prevalence of schizophrenia is quite uniform across cultures, it was found to be more common in lower socio economic status in some studies (Sadock; et, .al, 2003). This has now been explained due to a downward social drift which is a result of schizophrenia rather than its cause. Slightly higher rate of schizophrenia have been found among some migrants, not only among the first generation migrants but also among the second generation.

Apart from these theories some other theories are also prevalent which explain the causes of schizophrenia. Most popular among them are the following.

Factors associated with pregnancy and complications at the time of the person's birth can result in a slight increase in risk factors leading to schizophrenia. Factors such as prenatal difficulties like intrauterine starvation or viral infections, perinatal complications, and various nonspecific stressors, seem to influence the development of schizophrenia (Sadock; et, .al, 2003).

- Winter birth is associated with a slight increase in risk (Fortinash and Holoday, 2000).
• Changes in the structure of some parts of the brain are seen in some people with schizophrenia (Barrowclough and Tarrier, 1992).

• Changes to the cells which make up the connections between some parts of the brain occur in some people with schizophrenia (Kelly and Lamparski, 1985).

• Drug abuse can trigger episodes of illness (Frangou and Murray, 2000).

• There are no factors which are seen in all people with schizophrenia.

Normally different causes together make a person more vulnerable to schizophrenia. If a person is particularly vulnerable, milder triggering factors may even generate the illness.

1.5. 2. SCHIZOPHRENIA: The symptoms

When speaking of the symptoms of Schizophrenia there are no single pathognomonic signs or symptoms, a cluster of characteristic findings makes the diagnoses possible. Normally, Schizophrenia is a phenomenological diagnoses based on observations and descriptions of patients in the different areas of individual performance (Kenna, 1994). It may include,

- **Impaired overall functioning.** The patients level of functioning declines or fails to achieve the expected level.

- **Abnormal content of thought.** The thought content carries abnormalities such as delusions, ideas of reference, and poverty of content.

- **Illogical form of thought.** Logical impairment such as thought derailment, loosening of association, incoherence, circumstantiality, tangentiality, over inclusiveness, neologisms, blocking, echolalia (all incorporated as a thought disorder)

- **Distorted perception.** The perceptual experiences will be impaired like affected by hallucinations namely visual, olfactory, tactile and most frequently auditory.
- **Changed affect.** The emotional tome of the affected will be impaired. The affect may be of flattened, blunted, silly, labile, and inappropriate.

- **Impaired sense of self.** The self-knowledge might be impaired such as loss of ego boundaries, gender confusion, inability to distinguish internal from external reality.

- **Altered volition.** Marked volitional impairment such as inadequate motivation or drive and marked ambivalence.

- **Impaired interpersonal functioning.** Impaired areas of social performance such as social withdrawal and emotional detachment, aggressiveness and sexual in appropriation.

- **Impaired psychomotor behaviour.** Psychomotor behaviour may be impaired that is adaptation verses withdrawal, grimacing, posturing, rituals and catatonia.

- **Sensorium.** The Sensorium of the patient will be impaired. Inappropriate orientation time, person, place, intact memory and concreteness will be present (Hamilton, 1984).

- **Positive Symptoms.** An exaggeration of or distortion of normal function usually responsive to traditional anti psychotic drugs. Delusions and hallucinations are better examples (Sadock; et.al, 1995).

- **Negative symptoms.** Decrease or loss of normal function usually unresponsive to traditional anti psychotics and more responsive to atypical antipsychotic. Eg. Affective flattening, anhedonia. Etc (Sadock; et, .al, 2003).

Eli Lilly (1996) had developed core symptoms clusters to conclude on the aspects symptoms of schizophrenia precisely and prehensivly. It can be illustrated as follows. For her, social and occupational dysfunction in Schizophrenia is the aftermath of impaired cognitive, affective area of performance as well as negative as well as positive signs.
The Symptom Clusters of Eli Lilly

**Positive Symptoms**
Delusions, hallucinations, thought disorder, disorganized speech, bizarre behaviour, inappropriate affect.

**Negative Symptoms**
Affective flattening, logia, a volition, apathy, anhedonia, asociality, attention deficit.

**Cognitive Symptoms**
Attention, memory, executive functions, abstraction, concept formation, problem solving, decision making.

**Mood Symptoms**
Dysphoria, suicidality, helplessness.

**Social, occupational Dysfunction**
Work, activity, interpersonal relationship, self-care, mortality and morbidity

Illustration I. III.
1.5.3. SCHIZOPHRENIA: The phases

1.5.3.1. The Prodromal phase

The prodromal phase is the initial stage and most often recognised after it has passed. It is the phase where a person and their family or significant other will have first realised that something is not quite right with the person. It is characterised by non-specific or vague changes in the person's behaviour and functioning in daily life and in their thoughts and feelings (Kenna, 1994). These changes may occur quite slowly over months or years and it is called the insidious onset. In some cases there may be no real prodromal period, and psychosis may begin quite suddenly and it is called the sudden onset.

The prodromal symptoms of schizophrenia are vague and include:

- Loss of interest in schooling or work
- Less attention to personal grooming and cleanliness
- Withdrawal and loss of interest in going out and mixing with others
- Changes in pattern of sleep and difficulty in sleeping
- Mood swings, irritability and inexplicable angry outbursts
- Periods of depression and anxiety
- Loss of energy, loss of interest in doing things and loss of concentration.

Where a person is young some of these changes can be a part of normal adolescence. With our current state of knowledge it is not possible to definitely identify which people with these changes will develop schizophrenia. However, when looking back later, what singles out many people who do go on to develop schizophrenia is the extent of these changes (Kenna, 1994).

As the prodromal phase develops, more unusual symptoms may appear, including:

- Suspiciousness
- Belief that thoughts have speeded up or slowed down
- Perception that the world is different … things have changed
- Preoccupation with religious or philosophical questions
- The development of unusual beliefs and ideas about oneself.

This latter stage may blur into the next phase - the acute phase, where active psychosis develops. However, even at the late prodromal stage, many people will be experiencing changes like these as a result of stress of various kinds. In many cases their symptoms will pass and they will not develop schizophrenia (Kenna, 1994).

1.5.3.2. The Acute phase

Psychotic symptoms that are typical of schizophrenia appear during the acute phase. The first acute phase will be the earliest time that a diagnosis of schizophrenia can be made, even if there has been a long prodromal phase. Usually this is when treatment is first started. During the course of schizophrenia, people may experience a number of acute phases, depending on the severity of their illness and their willingness to seek and continue treatment (Kenna, 1994).

1.5.3.3. The Recovery phase

In this period the acute symptoms are reduced or absent following treatment. However, many people still have a level of symptoms similar to those of the prodromal phase. During this time it is critical that the person, their family or significant others and those involved in their treatment and support are able to work together to promote recovery and to reduce the possibilities of relapse (Kenna, 1994).

Research is currently underway to establish whether people with other risk factors for schizophrenia, such as a family history of serious mental illness, will benefit from early treatment during the late prodromal phase (Wyatt, 1994). This is certainly the first point at which specialist assessment and possibly treatment may be indicated.
1.5.4. SCHIZOPHRENIA: The Subtypes

The classification of schizophrenia is based predominantly on clinical presentations. The variety of the symptoms and course of schizophrenia has led to several attempts to define this disorder into subgroups for therapeutic convenience. This section is concerned mainly with the subtypes.

1.5.4. 1. Paranoid Schizophrenia:

This subtype mainly process preoccupation with systematized delusions or with frequent auditory hallucinations related to a single theme. The hallucinations and delusions are mainly and mostly of persecutory in nature. Paranoic nature of the manifested symptom is the characteristic feature of this subtype. Normally with paranoid schizophrenia incoherence, loosening of association flat or grossly in appropriate affect, catatonic behaviour and grossly disorganized behaviour etc may not be present (Buchanan and Carpenter, 2000).

1.5.4. 2. Disorganized Schizophrenia:

This subtype mainly is characterized with incoherence, marked loosening of association or grossly disorganized behaviour. The affect may be either flat or inappropriate (Murphy, 2005). Also with the disorganized schizophrenia the following symptoms may be present.

i. Marked thought disorder, incoherence and severe loosening of associations. Delusions and hallucinations are fragmentary and changeable.

ii. Emotional disturbances (inappropriate affect, blunted affect, or senseless giggling mannerisms, mirror gazing), dis inhibited behaviour, poor self-care and hygiene, markedly impaired social and occupational functioning etc (Sadock; et.al, 1995).

1.5.4. 3. Catatonic Schizophrenia:

With this subtype at least two of the following dominates the clinical picture. Stupor, or mutism, negativism, rigidity, purposeless excitement, posturing,
echolalia or echoparaxia. Motor immobility is evidenced by catalepsy or stupor, excessive motor activity, extreme negativism and mutism. Peculiarities of voluntary movement can be evidenced from posturing, stereotype behaviour prominent mannerisms, prominent grimacing echolalia, and echoparaxia (Sadock; et al, 2003).

1.5.4. 4. Undifferentiated type Schizophrenia:
This is very common type of schizophrenia and is diagnosed either when features of no subtype are fully present or features of more than one subtype are exhibited. Normally this sub type can be seen with prominent delusions, hallucinations, incoherence, or grossly disorganized behaviour. But does not meet the criteria for paranoid, catatonic or disorganized types (Ahuja, 2004).

1.5.4. 5. Residual Type Schizophrenia:
Residual type of schizophrenia is characterized with absence of prominent delusions, hallucinations, incoherence or grossly disorganized behaviour continuous evidence of the disturbances through two or more of the residual symptoms (Kenna, 1994). According to I.C.D. 10 (Ahuja, 2004), in addition to the general guidelines the following features also characterize it,

1. Prominent negative schizophrenic symptoms.
2. Evidence in the past of at least one clear-cut psychotic episode meeting the diagnostic criteria for schizophrenia.
3. Reduced hallucinations and delusions.

1.5.4. 6. Type I and Type II. Schizophrenia:
Another system proposes classification of schizophrenia in to type I and type II. This system is based on the basis of positive as well as negative symptoms, sometimes referred to respectively, as productive and negative symptoms. Type I patients mostly exhibit positive symptoms and type II exhibits negative symptoms (Sadock; et.al, 1995).
1.5.4. 7. Paraphrenic Schizophrenia:

Sometimes used as synonyms for “Paranoid Schizophrenia”. The term is also used for either a progressively deteriorating course of illness or the presence of a well-systematized delusional system. The multiple meanings the terminology holds reduced the usefulness of the term (Hamilton, 1984).

1.5.4. 8. Simple schizophrenia:

The term schizophrenia was used when schizophrenia had a broad diagnostic conceptualisation. Simple schizophrenia was characterized by a gradual insidious loss of drive or ambition. Patients with the disorder were usually not overtly psychotic and did not experience persistent hallucination and delusions (Kapoor, 1992). The primary symptom is the withdrawal of the patient from social and work related situation.

1.5.5. SCHIZOPHRENIA: The D.S.M. IV. (T.R) Diagnostic Criteria:

The American Psychiatric Association in its Diagnostic and Statistical Manual of Mental Disorders propagated the diagnostic criteria for Schizophrenia (Gabbard, 2003).

1.5.5. 1. Characteristic Symptoms: Two (or More) of the following each present for a significant portion of time during a 1- month period (or less if successfully treated):

a. Delusions
b. Hallucinations
c. Disorganized Speech (e.g., frequent derailment or incoherence )
d. Grossly disorganized or catatonic behavior.
e. Negative symptoms, i.e., affective flattening, alogia, or avolition.

Note: Only one criterion A symptom is required if delusions are bizarre or hallucinations consist of a voice keeping up a running commentary on the person’s behavior or thoughts, or two or more voices conversing with each other (Kavanagh, 1992).
1.5.5. 2. Social/ Occupational Dysfunction: For a significant portion of the time since the onset of the disturbance, one or more major areas of functioning such as work, interpersonal relations, or self care are markedly below the level achieved prior to the onset (or when the onset is in childhood or adolescence, failure to achieve expected level of interpersonal, academic, or occupational achievement)

1.5.5. 3. Duration: Continuous signs of the disturbance persist for at least six months. This period must include at least one month of symptoms (or less if successfully treated) that meet criterion a (i.e., active-phase symptoms) and may include periods of prodromal or residual symptoms. During these prodromal or residual periods, the signs of the disturbance may be manifested by only negative symptoms or two or more symptoms listed in Criterion A present in an attenuated form (e.g., odd beliefs, unusual perceptual experiences).

1.5.5.4. Schizoaffective And Mood Disorder Exclusion: Schizoaffective disorder and mood disorder with psychotic features have been ruled out because either (1) no major depressive, manic, or mixed episodes have occurred concurrently with the active-phase symptoms; or (2) if mood episodes have occurred during active phase symptoms, their total duration has been brief relative to the duration of the active and residual periods.

1.5.5.5. Substance/general medical condition exclusion: The disturbance is not due to the direct physiological effects of a substance (e.g. a drug of abuse, a medication) or a general medical condition.

1.5.5.6. Relationship to a pervasive developmental disorder: if there is a history of autistic disorder or another pervasive developmental disorder, the additional diagnosis of schizophrenia is made only if prominent delusions or hallucinations are also present for at least a month (or less if successfully treated).

Classification of longitudinal course (can be applied only after at least one year has elapsed since the initial onset of active-phase symptoms):
Episodic with inter episodic residual symptoms (episodes are defined by the reemergence of prominent psychotic symptoms); also specify if: with prominent negative symptoms (Frangou and Murray, 2000).

Episodic with no inter episode residual symptoms.

Continuous (prominent psychotic symptoms are present throughout the period of observation); also specify if; with prominent negative symptoms.

Single episode in partial remissions: also specify if: with prominent negative symptoms.

Single episode in full remission.

Other or unspecified pattern.

1.5.6. SCHIZOPHRENIA: The I.C.D.10. Diagnostic Criteria:

The World Health Organisation, The ICD-10 classification of mental and behavioural disorders provides diagnostic criteria for research in schizophrenia (World Health Organisation. 1994) as follows.

1.5.6.1. Either at least one of the syndromes, symptoms, and signs listed under

(1) below, or at least two of the symptoms and signs listed under (2) should be present for most of the time during an episode of psychotic illness lasting for at least one month (or at some time during most of the days) (Kavanagh, 1992).

(1) At least one of the following must be present:

(a) Thought echo, thought insertion or withdrawal, or thought broadcasting;

(b) Delusions of control, influence or passivity, clearly referred to body of limb movements or specific thoughts, actions, or sensations; delusional perception;

(c) Hallucinatory voices giving a running commentary on the patient’s behaviour, or discussing the patient among themselves, or other types of hallucinatory voices coming from some part of the body;
(d) Persistent delusions of other kinds that are culturally inappropriate and completely impossible (e.g., being able to control the weather, or being in communication with aliens from another world).

(2) Or at least two of the following:

(a) Persistent hallucinations in any modality, when occurring every day for at least one month, when accompanied by delusions (which may be fleeting or half-formed) without clear affective content, or when accompanied by persistent over valued ideas;

(b) Neologisms, breaks, or interpolations in the train of thought, resulting in incoherence or irrelevant speech;

(c) Catatonic behaviour, such as excitement, posturing, or waxy flexibility, negativism, mutism, and stupor;

(d) “Negative” symptoms, such as marked apathy, paucity of speech, and blunting or incongruity or emotional responses (it must be clear that these are not due to depression or to narcoleptic medication).

1.5.6.2. Most commonly used exclusion clauses

(1) If the patient also meets criteria for manic episode or depressive episode, the criteria listed under G1 (1) and G1 (2) above must have been met before the disturbance of mood developed.

(2) The disorder is not attributable to organic disease or to alcohol- or drug-related intoxication, dependence, or withdrawal.

Comments.

In evaluating the presence of these abnormal subjective experiences and behaviour, special care should be taken to avoid false-positive assessments, especially where culturally or sub culturally influenced modes of expression and behaviour or a subnormal level of intelligence are involved (Frangou and Murray, 2000).
Pattern of course.

In view of the considerable variations of the course of schizophrenic disorders it may be desirable (especially for research) to specify the pattern of course by using a fifth character. Course should not usually be coded unless there has been a period of observation of at least one year.

Continuous

No remission of psychotic symptoms throughout the period of observation.

Episodic with progressive deficit.

Progressive development of “negative” symptoms in the intervals between psychotic episodes.

Episodic with stable deficit

Persistent but non progressive “negative” symptoms in the intervals between psychotic episodes.

Episodic remittent

Complete or virtually complete remissions between psychotic episodes.

1. 6. SCHIZOPHRENIA: The Epidemiology

The epidemiological factors of a disease are drafted after analysing and studying it very carefully and critically, which gives a clear understanding of the disorder in relation with multi dimensional aspects.

1. 6. 1. Incidences and Prevalence:

The lifetime prevalence is approximately 0.3 to 1%, which means that about one person in 100 will develop schizophrenia during their lifetime. An estimated one million Americans suffer from schizophrenia (Frangou and Murray, 2000). Worldwide two million cases appear each year (Sadock; et.,al, 1995). Prevalence, morbidity and severity of presentation are greater in urban than in rural areas. Furthermore morbidity and severity of presentation are greater in industrialized than in non-industrialized areas. But in Indian context
such data is not available (Lalitha, 2000). According to The world mental health report 2001, 24 million people worldwide suffer from schizophrenia (Ahuja, 2004).

1. 6. 2. Sex ratio:

Schizophrenia is equally prevalent in men and women. The two sexes differ however in the onset and the course of the illness. Onset is earlier in men than women (Sadock; et.,al, 1995).

1. 6. 3. Age of Onset:

Schizophrenia occurs most common between ages 15 and 35. 50% below the age of 25. Rare before the age of 10 or after the age 40. Earlier onset for men than women. Only a one third of all schizophrenia patients are first admitted to a psychiatric hospital before age 25 (Gelder, et.al. 1996).

1. 6. 4. Socio-economic data:

Increased prevalence in lower socio-economic groups but equal incidence across socio-economic classes. Schizophrenia has been described in all cultures and socio-economic status groups. The downward, drift hypothesis (Gelder, et.al 1996) suggests that although those with the disorder originally may have been born in to any socio-economic class they eventually will tend to drift down ward n the lower socio-economic classes owing t their significant impairment.

1. 6. 5. Race and religion:

The study conducted at United States by world Schizophrenic Rehabilitation society found Jews are affected even than Protestants and Catholics (Sadock; et.al, 1995). Prevalence is reported high among blacks and Hispanics than among whites. But this assertion may reflect the bias of diagnosticians or a higher percentage of minority persons living in lower socio economic groups and in industrialized urban areas. No studies in Indian context are available to substantiate these finding (Lalitha, 2000).
1. 6. 6. Seasonality:

It is noticed and reported that higher incidence in both winter and early spring (Sadock; et.al, 1995).

1. 6. 7. Inpatient versus outpatient:

From the data obtained from 1965 to 1955 the number of schizophrenic patients in hospitals decreased by 40 to 50 %. Currently up to 80% of patients are treated out patients (Sadock; et.al, 1995).

1. 6. 8. Cost:

From the available data the direct or indirect cost to U.S. is approximately $100 million every year only towards the treatment for the cognitively impaired and such data is not available at Indian context (Gelder; et.al 1996).

1. 7. SCHIZOPHRENIA: The Patho Physiology

Normally no consistent structural defects that can cause the conditions required for or associated with the onset of schizophrenia are scientifically proved (Gabbard, 2003). Changes noted in researches including decreased number of neurons, increased gliosis and disorganization of neuronal architecture etc. Degeneration in the limbic system, (especially in amygdale), hippocampus and singulate cortex as well as in basal ganglia especially substantial migora and dorso lateral prefrontal cortex are also noted often (Buchanan and Carpernter, 2000). Chances of occurrence of (soft) minor neurological findings are common (50- 100%). increased prevalence of primitive reflexes such as group reflex, abnormal steriogrosis, and tow point discrimination and disdiadocho kinesia (impairment in ability to perform rapidly altering movement.). Proxismal scordic eye movements (inability to follow objects through space with smooth eye movements.) occur in 50-80 % of patients. Resting heart rate levels have been found to be higher in schizophrenic patents than in controls and may reflect a hyper aroused state (Guffin and Murray, 1991).
1.8. SCHIZOPHRENIA: The Psycho Dynamic Factors.

Proper knowledge of patient’s dynamics or psychological conflicts and issues are critical for complete understanding of the symbolic meaning of the symptoms and proper interventions. A patient’s internal experience is normally reported as a state of confusion and overwhelming sensory input and defence mechanisms are the ego’s attempt to deal with powerful effects (Kanas, 1993). Three major primitive defence mechanisms interfere with reality testing of the individual with schizophrenia. They may be of

- **Psychotic Projection:** - attributing inner sensation of aggression, sexuality, chaos and confusion to the outside world as opposed to recognizing them as emanating from within; boundaries between inner and outer experience are confused. Confusion is a major defence underlying paranoia.

- **Reaction formation:** - turning a disturbing idea or impulse into its opposite.

- **Psychotic denial:** - transforming confusing stimulus into delusions and hallucinations.

Individual with schizophrenia generally perform poorly in all the areas of their individual performance. All the cognitive faculties normally will be impaired and functioning of memory, concept formation, vigilance, etc. would be most affected with psychopathology (Gelder, et.al 1996).

1.9. SCHIZOPHRENIA: The Course and Prognoses.

1.9.1. The Course: Prodromal symptoms of anxiety, perplexity, tremor, or depression generally precede the onset of Schizophrenia, which may be acute or insidious (Falloon; et.al, 1984). Prodromal symptoms may be present for months before definitive diagnoses are made. Onset is generally in the late teens and early twenties. Precipitating events, such as emotional trauma, drugs and separation may trigger episodes of illness in predisposed persons (Kenna, 1994). Classically the course of schizophrenia is one of deterioration over time.
with acute exacerbation super imposed on the chronic picture, vulnerability to stress is lifelong. Post-psychotic depressive episode may occur in the residual phase. Over the course of the illness, the more florid positive psychotic symptoms such as bizarre delusions and hallucinations tend to diminish in intensity while the more negative residual symptoms such as poor hygiene, flatted emotional response and various oddities of behaviour, may actually increase. Relapse rate approximately 40% in two years on medication and 80% off medication. Suicide is attempted in 50% of patients and 10% are found successful. Violence is not greater than in general population. These are increased risk of sudden death, medical illness and shortened life expectancy (Anderson; et.al, 1986).

1. 9. 2. The Prognoses: Researchers have proved that the initial years, say over the 5 to 10 years period after the first psychiatric hospitalisation for schizophrenia, very few came up with, some way about 10 to 20 % patients, can be described as having a good outcome and majority, more than 50% have poor out come with repeated hospitalisation (Lalitha, 2000). In terms of overall prognoses some investigations have described a loose rule of thirds; approximately one third of the patients lead somewhat normal lives, one third continue to experience significant symptoms but can function within the society and the a one third are markedly impaired and require frequent hospitalisation. Approximately 10 % of the final third of patients require long-term institutionalisation.

1. 10. SCHIZOPHRNIA: The management

Though the phenomena of mental illness has been recognized for thousands of years, empirical analysis and study regarding the proper management fledged quiet recently only. At one period, all people, who were considered ‘abnormal’ whether due to mental illness, mental retardation or physical deformities, were largely treated the same. Early theories supposed that mental disorders were caused by evil possession of the body and the appropriate treatment was thus exorcising those demon, through various means ranging from innocuous
treatments such as ‘operation trimphening’, exposing patients to certain types of music, deadly means like releasing evil spirits by drilling holes in the patient’s skull (Kapoor, 1992).

The outlook for treatment of individuals with mental illness has changed drastically over the years due to the advancements in research (Ahuja, 2004). Now, while thinking of the treatment profile of schizophrenia three presuppositions are taken in to consideration with much emphasis.

- Primarily regardless of the cause, schizophrenia occurs in person with unique individual, familial, and social psychological profile. Two factors, the extent of the disorder and the outcome of the treatment must shape the treatment approach.

- Secondly the involvement of unknown or even probably specific environmental and psychological factors that have contributed to the development of the disorder.

- And thirdly the fact of the inadequacy of a single treatment module to handle the disorder (Stuart and Lararia, 2005).

Keeping these views in mind the clinical management of Schizophrenia patient of the day may include multimode of treatments covering hospitalisation, anti-psychotic medication as well as psychosocial treatments such as behavioural, family, group, individual and social skills and rehabilitation therapies.

1.10. 1. HOSPITALISATION

Hospitalisation is indicated primarily for diagnostic purpose, for stabilization of medications and for the safety of the patents, to restrict the patients from getting in to activities harmful to self. Hospitalisation helps the patent in establishing an effective association between self and the supportive system (Marsh, 1992). It helps the reduction of symptoms and the associated stress of the disorder and helps the affected to come up to the normal functioning level as maximum possible. The treatment plan primarily oriented towards the reduction of manifested symptoms and aims at addressing practical issues of
self-care, quality of life, employment and social as well as personal relationships. Advanced research advocates different modes of intervention in the mode of hospitalisation and the treatment (Kapoor, 2004).

1.10. 1. 1. Inpatient therapy

Inpatient therapy falls under first line preference in hospitalization since it holds vital role in reduction and proper management of symptoms. Inpatient therapy has vital role in the treatment of schizophrenia since it leads to the provision of emergency attention, treatment and intervention in cases where people become highly symptomatic, unmanageable, suicidal, homicidal, or at a state of diminished realization and personal care that can even endangers their well being (Wyatt, 1994). This becomes especially important during psychotic episodes of schizophrenia. Assessments of the disease and its prognosis are possible during an extended hospital stay. Furthermore, a plan may be established for management of the disease. Here the patients learn about their disorder, its treatment, and its prognosis in a safe, controlled environment.

1. 10. 1. 2. Partial hospitalisation

Only partial hospitalisation is necessary once the symptoms got reduced and in cases of relapse. Partial hospitalisation is mostly used as a follow-up to inpatient care. Other partial-care options include living communities, like supervised housing, where medical professionals oversee daily routine and medication (Murphy, 2005). Partial hospitalisation allow the person to reclaim some autonomy while receiving support, maintenance, and care for their disease. Studies evidenced that supported living situations of this type reduce the need for hospitalisation and encourage recovery, as well as assimilation back into normal life after extended inpatient care (Kavanagh, 1992).

1. 10. 2. PHARMACO THERAPY.

Schizophrenia is a disease condition with multiple episodes and varied symptoms. Its causes are not yet fully known, current treatment methods are based on both clinical research and experience (Ahuja, 2004). The treatment
decision for schizophrenia is taken on the basis of its ability to reduce the symptoms and to lessen the chances that symptoms will return. The first drug to be used with beneficial effect in schizophrenia was reserpine (Rauwolfia serpentine extract), in India by Sen and Bose in 1931. Antipsychotic medications have been available since the mid-1950s to treat schizophrenia after it was formerly discovered by Delay and Deniker in 1952 (Davies and Drummond 1993). They have greatly improved the outlook for individual patients. These medications reduce the psychotic symptoms of schizophrenia and usually allow the patient to function more effectively and appropriately. Antipsychotic drugs are the best treatment now available, but they do not “cure” schizophrenia or ensure that there will be no further psychotic episodes. The choice and dosage of medication can be made only by a qualified physician who is well trained in the medical treatment of mental disorders. The dosage of medication is individualized for each patient, since people may vary a great deal in the amount of drug needed to reduce symptoms without producing troublesome side effects (Sadock; et al, 2003).

1. 10.2.1. The dopamine receptor antagonists.

The dopamine receptor antagonists, the chemical anti-psychotic drugs, which are effective in the treatment of schizophrenia particularly for the management of positive symptoms. However, only a small percentage of patients (perhaps 25%) are helped sufficiently to recover a reasonable amount of normal mental functioning. The paralysing effects like akathesia, parkinsonian symptoms of rigidity and tremor, the potential serious adverse effect includes tardive diskinesia, and neuroleptic malignant symptoms reduce the positive outcome to the minimum (Sadock; et al, 2003).

1.10.2.2. Serotonin dopamine antagonists.

The Serotonin dopamine antagonists (SODA) produces minimal or extra pyramidal symptoms. It interacts with different sub types of dopamine receptors than do the standard antipsychotic drugs and affect both the Serotonin and glutamate receptors. They are found producing fewer
neurological and endocrinological adverse effects and effective in treating the negative symptoms of schizophrenia. It is also called atypical antipsychotic; they appear to be effective for a broad range of patients with schizophrenia (Sadock; et al., 1995).

1.10.3. ELECTRO CONVULSIVE THERAPY

Electro convulsive therapy popularly known as E.C.T was developed by Cerletti and Bini in 1938 (Kuipers; et al., 1992). Although the exact mechanism of E.C.T upon schizophrenia is not clear, one hypothesis states that ECT possibly affects the catecholamine pathways between diencephalon (from where seizure generalization occurs) and limbic system (which may be responsible for mood disorders), also involving the hypothalamus. The passage of an electric stimulus of 70 to 150 millicombs to the brain for the 0.1 to 0.5 seconds to induce a grand mal seizure is the normal procedure of giving the E.C.T (Ahuja, 2004). The amount of voltage and the length of application vary with clientele specification. E.C.T. is used effectively in small percentage of schizophrenic patients particularly those with acute catatonic type. The use of ECT in schizophrenia is not a treatment of first choice and is employed only in the case of the conditions mentioned in the indications for ECT in schizophrenia. A history of good response with ECT and patient preference for ECT also determine the use of ECT. Researches proved that patients in whom the illness has lasted less than one year are most responsive (Sadock; et al., 2003).

1. 10. 4. PSYCHO SOCIAL TREATMENTS.

The advancements in research, in the field of mental health, has changed the outlook of mental health intervention criteria for schizophrenia (Heggarty and Baldessorini, 1994). The schizophrenic treatment has reached the hike of advanced pharmacological interventions with this development. The advancements in treatment criteria initiated various treatment methods and among which drug therapy occupies the crucial role in reducing the psychotic symptoms like hallucinations, delusions and incoherence etc – but are not
found to be consistent in reducing the behaviour symptoms of the disorder (Bauman and Martin, 1981).

Even when patients with schizophrenia are relatively free from psychotic symptoms through drug therapy many still have extra ordinary difficulty with communication, motivation, self-care and establishing and maintaining relationship with others. “More over, because patients with schizophrenia become ill during the critical career forming years of life, they are less likely to complete the training required for skilled work and life.” (Liberman, 1987). As a result many with schizophrenia not only suffer thinking and emotional difficulties but lack of social, work skill as well as experience.

At the state of psychological, social and occupational dysfunctions associated with schizophrenia, anti psychotic medication do not have much to do with the person affected. It was found, when the drugs are coupled with psychosocial interventions, the progressive effects, (the prognoses), are found varied, deep and far reaching (Arieti, 1974). The studies and findings in this area have created an impact in the treatment of mental illness. Now psycho social interventions along with medication become popular and are very well and easily available for people affected with schizophrenia, with most focus on improving the patients’ over all, especially the psychological and social functioning. The psychosocial interventions include a variety of methods to increase the social abilities, self-sufficiency, practical skills and skills in interpersonal, relations and communication. The main intensions of these psycho social interventions are to enable individuals who are severely ill to develop interpersonal, social and vocational skills for independent living (Bauman and Martin 1981). Normally these treatments are carried out in environmental settings such as hospitals, outpatient clinics mental health centres, day hospitals, and homes or social clubs.

1.10. 4.1. Cognitive Behaviour Therapy

Cognitive behaviour therapy is a type of psychotherapy, which aims at correcting the mal adaptive method of thinking, thus providing relief from
symptoms (Sadock; et.al, 2003). The therapy consists of cognitive techniques (recognizing and rectifying negative automatic thoughts), teaching reattribution techniques, increasing objectivity in perspectives, classifying and testing maladaptive assumptions and decentring. The **Behaviour Techniques** in Cognitive Behaviour Therapy include activity scheduling, homework assignments, graded task assignments, behavioural rehearsal role-playing, and diversion techniques and teaching problem solving skills. **Token Economy** is a method used in cognitive behaviour therapy to bring desired behaviour changes and to reinforce positively by rewarding targeted behaviours with specific tokens such as trips or privileges (Liberman, 1987). The intention of cognitive behaviour therapy is to generalize through reinforcing the behaviour which are necessary to survive in the world outside to the hospital.

### 1.10.4.2. Group therapy

Group therapy for persons with schizophrenia generally focuses on support and social skills development which are necessary for the daily living (Liberman, 1987). Groups are especially helpful in decreasing social isolation and increasing reality testing. Groups may be behaviourally oriented, psycho dynamically or insight oriented or supportive. Group therapy is found effective in reducing social isolation, increasing the sense of cohesiveness and improving reality testing for patients’ with schizophrenia, especially the persons with negative symptoms.

### 1.10.4.3. Individual Psychotherapy

Individual psychotherapy involves regularly scheduled talks between the patient and a mental health professional such as a psychiatrist, psychologist, psychiatric social worker, or nurse. The sessions may focus on current or past problems, experiences, thoughts, feelings, or relationships (Ahuja, 2004). By sharing experiences with a trained empathic person – talking about their world with someone outside of it – individuals with schizophrenia may gradually come to understand more about themselves and their problems. They can also learn to sort out the real from the unreal and distorted.
Mental health professionals often do not suggest psychotherapy for individuals with schizophrenia, thinking that it is not effective. That is probably true of the insight-oriented psychotherapies that are non-directive, and rely on the client to spontaneously identify problems and discuss them. However, recent studies indicate that supportive, reality-oriented, individual psychotherapy, and cognitive-behavioural approaches that teach coping and problem-solving skills, can be beneficial for patients with schizophrenia (Murphy and Farrell, 2005)

1.10.4.4. Supportive psychotherapy.

Studies of the effect of supportive psychotherapy in the treatment of schizophrenia have provided data that the therapy is helpful and the effects are contributory to those of pharmacological treatment (Liberman, 1987). Now a day’s traditional insight oriented psychotherapy is not much recommended for the people affected with schizophrenia, since their ego state is very much prone to fragile. Supportive psychotherapy, which may include advice reassurance, education, modelling, limit setting and reality testing, is generally a therapy of choice for individual affected with schizophrenia. The rule is that as much insight as the patient desires and can tolerate is an acceptable goal (Donahoe, and Driesenga, 1988).

1.10.4.5. Psychiatric Rehabilitation

“Psychiatric rehabilitation is the range of social, educational, occupational, behavioural and cognitive interventions designed to increase the role performance of persons with serious and persistent mental illness and to enhance their recovery (Sadock; et.,al, 2003).” W. H. O. defines psychosocial rehabilitation as a process that offers opportunity for individual who are impaired or handicapped with mental disorder to reach their optimal level of independent functioning in the community. It improves individual capabilities, capacities, and introducing environmental changes (Park, 2005). Actually psychiatric rehabilitation for schizophrenia grew out of a need to create opportunities for people diagnosed with severe schizophrenia to live, learn and
perform satisfactorily in their living situations. It proposes that schizophrenia should be treated and understood as a disability similar to that of individual with physical disabilities. Individual with mental illness and schizophrenia need a wide range of services to come up to the optimal level of normal individual functioning, often this needs intervention for extended period of time (Murphy and Farrell, 2005). Psychiatric rehabilitation for schizophrenia uses a person centred people to people approach that makes the intervention unique and effective which help the individual affected to come up to the optimal level of normal individual functioning.

Rehabilitation programs for schizophrenia in normal understanding emphasize social and vocational training to help patients and former patients to overcome difficulties in the areas of individual and social functioning. The rehabilitation programme may include the activities comprising vocational counselling, job training, problem-solving and money management skills, use of public transportation, interpersonal and social skills training (Mueser and Gingerich, 1994). These areas of preferences for intervention will be normally designed after the need assessment and disability assessment of the person affected and facilitates the affected to overcome the disabilities which are essential for the success of the personal, professional and social life. The psychiatric rehabilitation facilitates the community oriented intervention of schizophrenia, since the rehabilitation provides the discharged patients with the skills necessary to lead productive lives outside the four walls of a mental hospital. Partial Hospital or Day treatment programs provide a broad array of rehabilitation activities. The program activities of psychiatric rehabilitation for schizophrenia fall into several possible categories of activities such as activities of daily living, vocational training and social skill training (Moller and Murphy, 2000).

One must first understand, before initiating with any mode of interventions, as much as possible about the schizophrenic patients and their life struggles. They should be well described of the schizophrenia patients so as to establish such a
contact with them in a manner that allows the affected for maintaining a tolerable balance of autonomy and autonomy of interactions. The psycho social treatments are best means to attain these objectives. As people having extremely fragile ego structures, which leave them open to unstable sense of self esteem, victims to primitive defences and severely impaired ability to modulate external stresses, the schizophrenia patients to be taken care of extensively. The critical task for the persons dealing with the affected is to help them to overcome their disabilities to the maximum to gain skills for the success of the personal, professional as well as social life.

1. 10. 4.6. Family Therapy.

The family therapy is another mode of intervention designed to provide for the family members of the person affected with schizophrenia. Studies and literature are extensively available stating that the therapy provided to the family of the affected significantly influences the treatment outcome (Halford, and Hayes, 1991). Since the patient with schizophrenia often gets discharged in an only partially remitted state from the hospital, a family to which the patient comes should be well prepared and organized to receive and handle the patient. A patient comes to an organised and prepared family environment will be often facilitated and integrated strainlessly well to the environment around him. Family therapy can very well facilitate the integration and facilitation process of the person affected with schizophrenia to his immediate environment (Crowther, 1998). And high expressed emotional family interactions are also proved to be diminished through a well designed family therapy. In initial stages, normally the family therapy is conducted in multiple family groups in which family members of schizophrenic patients discuss and share issues that have been particularly helpful in the management of individual patients. The ultimate end of the family therapy is to prepare the family to adopt and accept the patient as he is through conscious, cognitive adaptation methods (Heggarty and Baldessorini, 1994).
1.11. FAMILY INVOLVEMENT: The Significance

The families of patients with schizophrenia were for many years considered to be part of the problem not part of the solution (Halford, 1991). However during the 1990es professional perceptions of families and its significance in the treatment of mental illness have changed dramatically. Many controlled studies brought forward the benefits of involving the family members in the care of their loved ones with mental illness (Halford, 1991). Research confirms that family input in the treatment decisions improve treatment outcome of the person affected with mental illness (Zastowny; et.al.1992) It was found with maximum benefits occurring when the families are supported and educated for taking part in the treatment partnership roles while dealing with mentally ill patients. In the case of schizophrenia in India, very often, the patients are discharged from the hospital directly into the care of their family; and it is not necessary that the family know anything about the mental illness. So it is important that family members have an idea about mental illness especially of schizophrenia and understand the difficulties and problems associated with the illness. It also will be helpful for the family members to learn the ways to minimize the patient’s chances of relapse—for example, by using different treatment adherence strategies – and to be aware of the various kinds of outpatient and services available in the period after initial hospitalisation. The family involvement in the controlled clinical studies with a believe that schizophrenia is a brain disorder found responsive to the social and familial environments and have shown a considerable reduction in annual relapse rates for medicated, community based patients of as much as 60% (Tarrier; et.al. 1988). The involvement of family in the treatment process reported the attitudinal variations in the family members as well as the attainment of outcomes as disease based medical model to health based developmental model, pathological, pathogenic, dysfunctional attitude to basically fostered recovery model, which is potentially competent with attitudes and changes in derailed emphasis of weakness, liabilities and illness to strength the resources and wellness of the individual affected (Smith and Birchwood, 1987).

With the recognition of the families of patients with schizophrenia as part of the solution, the mental health professionals started extending their services to the families, at all the levels of their functioning, with the realization of the reality that patients are or have been the members of a family system and the past and present family relationship may affect a patient’s treatment process through influencing his self concept, behaviour, expectations, values and beliefs. Understanding the principles of family dynamics is very important as far as schizophrenic treatments are concerned (Garfield, 1981). Since it may help the professionals involved to make acute observations of the individual patient as well as the family, which can contribute much towards the treatment and gradually the treatment outcome. Because most people with mental illness are living with the family members and approximately 65% people with schizophrenia are completely dependent to the family. Therefore family resources must be assessed when a treatment plan for schizophrenia designs (Donahoe and Driesenga, 1988).

As far as the schizophrenic treatment is concerned the family have an important role to play. Although the patent is the most important focus of the treatment, family members can help by taking part in the treatment programme and with appropriate training they can accompany the patient getting through the irresolvable symptoms. The family can offer support and encouragement, which is contributory in the treatment process. Not only that with their cooperation they can create a homely environment which can promote the faster positive outcome. They can impart help in treatment process by

- Recognizing and accepting small achievements of the patients.
- Modifying patient’s expectations during stressful situations.
- Measuring progress on the basis of the improvements made by the individual not set against some rigid external standards.
• Bring flexible and trying to maintain a normal routine.

Family members can often play an active role in the treatment process of the individual with schizophrenia (Horen and Toran, 1995). The precise type of assistance they can provide will vary depending on the nature of the illness, the nature of manifested symptoms and the relationship between the patient and the family members. In addition to providing psychological theory and drug treatment doctors and mental health experts are increasingly recommending treatment programmes that include family members in developed countries (Joys, 1996) and improvements needed in this area in Indian context. In general the more severe the manifested symptoms, the more likely that the family and the significant others can contribute to the management.

1.13. FAMILY PSYCHO EDUCATION: The Role and Effect

Normally the prominent experienced hurdle for involving the family members in the treatment procedures is the lack of adequate knowledge with the significant others in the family of the affected person. “An area where the provision of any advanced psycho social services to the patient is reported that the difficulty in providing clear understanding of the symptoms, causes, prognosis and treatment of mental illness, especially of schizophrenia to the family members.” (Vaughn and Lef, 1976 ) orienting the families about the mental illness especially schizophrenia have shown much greatly reduced parental guilt and improved understanding of many of the patients difficulties (Vaughn and Lef, 1976 ).

Psycho-educational programs for the families of the schizophrenics should be designed primarily for the education of the families and gain their support in the therapeutic intervention for better outcome. The family self-help movement in psychiatric rehabilitation for the schizophrenics conceptualized this notion and is found with multiple positive outcomes (Zastowny; et.al.1992). A variety of psycho education programs have been developed and prevalent for the families of the people affected with mental illness. Although these programs
vary in their matter and content they share certain features. This can be well integrated in the treatment programmes of schizophrenia as well.

Psycho educational programs for the families of the schizophrenics, if designed, should be educational as well as pragmatic in approach (Smith and Birchwood, 1987) their ultimate aim should be to improve the course of the affected family member’s illness, enhance the treatment outcome through reduced relapse rates and improved individual as well as the family functioning of the patient. These goals can be achieved well through properly educating the family about the illness, its nature and symptoms, relapse signs, management techniques and teaching the families of the affected person with schizophrenia the techniques that may help them to cope with symptomatic behaviour, and reinforce the family strengths.

1.14. CONCLUSION

The journey through the areas of health and mental health, once were a difficult task due to conceptual deficiencies and technological backwardness. But the emergence of empirical thinking revolutionized the concept and the handicapped notions (the dominant and prevalent hence) of the history are replaced with new ideologies. The conceptual upgradation from the treatment of particles to the organized whole is thus resulted from this scientific advancement. Health and mental health concepts even changed and reached at its peak of status parallel to these scientific advancements where this concept changed from the prejudiced notion of mere absence of disease or mental illness to complete mental, physical and social well being integrated with bodily, situational and environmental factors.

Changes and advancements in the ideology of mental health upgraded the attitude towards the mentally ill and the modern tendency is to regard mental illness as a derailed mode of behaviour or of a living rather than a complete disease entity. This derailed mode of behaviour or living is the logical, although socially maladjusted outcome of the particular individual’s original endowments which are influenced and moulded by the biological make up,
homely environment, the traumatic experience, the stress elements and the problem that spring to some extent from deep within his emotional and instinctive life. The individual in mental illness due to the disability imparted upon him normally happens to be unable to meet the strains in life situations and thus it may impair the integrity or efficiency of his biological organism. Since mental illness affects an individual in the cognitive connative and affective areas of performance, it in its all the forms require special intervention. It creates long term disabilities, extreme dependency needs, high sensitivity towards stress and difficulty in coping with the demands of everyday living. These elements in mental illness normally create inability in individual in securing job, earning steady income, obtain self support and housing. Due to their mental disorders and the society’s inability to compensate for their handicap, the chronically mentally ill suffer from social isolation, lack of daily living skills unemployment, poverty and quiet often homelessness. This state necessitates the intervention in the field of cognitively challenged individuals like schizophrenics with modes of intervention strategies for their better placements in the society.

Schizophrenia is one among the most disabling among the mental illness with symptoms which affect a person in multiple and complex ways of individual functioning like emotions thoughts, perception, memory, experiences of self, movement and behaviour. It is a disorder characterized by delusions, hallucinations, disorganized speech or behaviour and negative symptoms, which have been present for a considerable period of time. Along with performance deficiencies the disorder interferes severely with the individuals’ ability to think feel and to receive and understand sensory information. The advancement in medical research, diagnoses and treatment criteria provided with blessings upon this status and resulted with the initiation of various treatment methods and among which pharmacology proves to be crucial in reducing the physical symptoms and disabilities. But the behaviour aspect further required intervention because the patient experience extraordinary difficulty in the areas of communication, motivation self care and establishing
and maintaining relationship with others even after the reduction of physical symptoms after the pharmaco therapy. That is why the people affected with schizophrenia left with thinking and emotional difficulties along with the lack of social, work skill as well as experience.

The role here can be effectively played by the family members through helping the affected to remediate the psychological, social and occupational retardation caused by the illness. Numerous interventions strategies are available and are well practiced with this intension namely psycho social rehabilitation, half way homes, foster homes, day hospitals, therapeutic interventions etc.

Majority of these interventions necessitates the support of the family where the affected individual is a member. The family should be oriented and educated well to ensure the necessary support. The family has major role in the process since they act as the potential source of help in the treatment process. The advanced scientific studies proved the vital significance of family support and attitude in enhancing the treatment outcome. But it was found that the ice breaking sessions of the family intervention is often hurdled with the lack of adequate knowledge of the significant others regarding the nature and course of the disorder. Many cases of relapses are the aftermath of ignorant handling of cases. If provided effectively and properly the psycho education given to the family can be resulted with good general positive outcome up on the body, mind and the areas of functioning of the schizophrenic patients who undergoes the treatment process designed for him. This good general positive effect of having healthy impact, for sure, upon the mind, body and the areas of functioning of the schizophrenic patient who undergoes the treatment process will be attained only with the dedicated self less interventions at the family level and this selfless dedicated intervention at the family level requires well planned, well moulded psycho education program. Thus and more suggestive statements are there on family psycho education and its significance on the relapses and improving the patient functioning as well as family well being.
But most of the studies on family interventions in the psychosocial treatment have been found cross sectional in nature. (Liberman(1987), Vaughn (1976), Lef (2002), Reiss (1990), Coleman( 1976) etc. ) and there has been virtually no research on the impact of family psycho education in the treatment of individuals with schizophrenia. Existing researches and literature on family role in the treatment of schizophrenia suggest that there is supportive relationship and positive effect of family interventions and treatment of schizophrenia. (Liberman((1998), Strachan(1986), Stuart(2005), Crowther (1998), Amenson (1998) etc.). But more research is required to find out the critical ingredients and evaluate the range of outcomes of family psycho education in the treatment of individual with schizophrenia. By carrying on with these concepts in mind the researcher explored the topic eventually in the study.