CHAPTER ONE

INTRODUCTION

Health is the result of living in accordance with natural laws pertaining to the body, mind and environment. It is a quality of life, a process. It is concerned not only with the inner harmony but also with optimal relatedness of person, family and society. Modern medical science is often abused for its preoccupation with the study of diseases ignoring the relation between the sick person and environment and the distortions in the social process of the environment. To the layman health implies only the physical well-being of an individual. And presently the medical personnel are quite busy in concentrating on this aspect with their 'wonder' drugs or other modes of treatment, neglecting the other important aspects related to the health of the person. Though the accepted definition of health by WHO states "a state of complete physical, mental and social well-being, and not merely an absence of disease or infirmity" it is rarely followed and practised in the clinical settings.

We are quite aware that there is a definite bearing of psycho-social implications on ill-health either as a causative factor, a contributory factor or as a consequence. Any therapeutic programme should aim at covering all the areas to achieve positive health. In other words, the disorder is a sick process that takes place partly inside and partly outside the individual. It is unrealistic to compartmentalize mind, body and environment when assessing and treating any ailment.
In a pioneering study of illness in relatively healthy population Hinkle and Wolff (1957) found that persons who had the greatest number of physical illnesses, regardless of kind, were also the ones who experienced the greatest number of disturbances in mood, thought and behaviour. The concurrence of physical, emotional and social aspects should be regarded as natural when we view man as a bio-psycho-social organism.

The essential nature of the relationship between mental, social and physical events in the nervous system remains as much as ever an unresolved mystery, but the amount of knowledge relevant to our understanding has increased vastly in the last few decades. It is only in the present century that psychiatry has begun to break free from the constraints of philosophy.

Neurology deals directly with the apparatus of mind by investigating malfunctions of the brain. Yet paradoxically it has often paid less attention to mental disorders. Psychiatry, on the other hand, deals essentially with mental disorders, yet has had little in relative terms to do with the hardware upon which mind depends. Nevertheless, the fact remains that psychiatry and neurology are wedded together by history and tradition, by the philosophically and scientifically valid assumption that much of human behaviour can be explained by what happens in the brain. Since the brain is the organ of mind, one can state in an analogous way that psychology is the study of mind, and psychiatry is the study of the abnormal mind. Neurology and psychiatry obviously have many fields in
The rich complexity of human behaviour, and the multitude of factors which can shape and distort it, have clearly demanded a multifaceted growth of clinical psychiatry—a subject which had profited from psycho-dynamic, psycho-social and pharmacological approaches to mental disorders—but with the expert neurologist wailing in the wings the factors of brain malfunction has sometimes tended to be eclipsed.

The abnormal behaviour traditionally called psychiatric diseases can result from abnormality in three separate spheres: the organism itself, the environment influencing the organism, and physical disease affecting the organism. Much importance has been given to the environmental factors, neglecting the other two areas. It is obviously important first to be aware of the magnitude and the difficulties of the problem. Neurological disorders, however, account for at least 30% of all first admissions to mental hospitals (Malzberg, 1959).

For most practising psychiatrists, the problems of organic mental disorders, occupy only a small portion of their practice. These, however, are very real problems and almost invariably are difficult to handle.

There is, however, comparatively little literature which attempts to explore the vast border land of psychiatry and neurology. Very few books or journal articles cover these topics. Responsibility of the care of these patients has been dispersed among medical men of different specialities. With little exception, there is a substantial gap
between the quality of care given to organic mental problems and to other medical problems. The psycho-social factors associated with these problems are neglected completely.

The developments in various areas of neurology and behavioural sciences have been inspiring, and so fast that our comprehension has to go a long way before we can think of correlating human behaviour in neurological terminology. This particularly has an immediate relevance in the everyday management of persons with neurological and mental aberrations.

When we consider the different types of neurological malfunctions, we know that not everyone of them is associated 'primarily' with a behaviour disorder i.e., every neurological illness cannot and need not be associated intrinsically with the behaviour manifestations (Geschwind, 1975). Thus a man who has lost the functioning of both lower limbs in an accident may show features of depression. The lesion aetiological for paraplegia (e.g., a lesion at spinal cord) is not intrinsically associated with his depressive feelings state; his past experiences, his personality, his psycho-social environment, his value systems etc., contribute to his viewing of the calamity and hence the reasonable and understandable feeling of depression. This can rather be compared to any other illness such as a heart attack or loss of vision, where the person responds psychiatrically to body illness, the so-called 'functional overlay'.
This can very well be contrasted with certain other illnesses of the nervous system where the involvement is primarily in the behaviour of the person. Thus a frontal lobe tumor might manifest in some odd behaviour of the person, long before any neurological manifestation could be elicited. The patient may lack conation, his social functioning might be adversely affected and he may even show a total unconcern, long before he shows features of raised intracranial tension, or frontal lobe signs.

Similarly among the behaviour disorders, there are many disorders which might have a putative neurological background. Most psychiatric illnesses do not have any definite neurological deficits as aetiological factors — for example, it appears improbable, if not impossible with present knowledge, to even think that the pathology of hysterical personality disorder can be explained through certain neuronal circuits. But there are certain psychiatric illnesses where the disorder of the behaviour is definitely attributable to disordered functions of brain, which may not be demonstrable otherwise. The hallucinations, illusions, the aggressive and violent behaviour of an alcoholic in the delirium tremens can be correlated more as a disorder of the brain functions than through any other psychopathological explanations, though there are no demonstrable neurological changes either grossly or even biochemically fitting enough to be termed as aetiological.
Geschwind (1975) emphasizes "it must be realized that every behaviour has an anatomy". In trying to differentiate illnesses as neurological or psychiatric on the basis of understandability through previously learned experiences he shows that this axiom fits into any behaviour, elementary or complex. He quotes the works of Flynn (1967) that an animal's aggressiveness or docile nature is finally through certain neuronal networks in specific areas of hypothalamus. When a normal animal learns to respond aggressively to some stimulus, it must carry on this learning by modification of a pathway that eventually will fire the lateral hypothalamus. He concludes "a behaviour disorder is functional if it is learning that has modified the brain by normal physiologic mechanisms. In theory, the functional disorder can be reversed by learning. On the other hand, the organic disorder is one in which the brain structures mediating behaviour undergo alterations that reduce partially or completely the effects of past experience or new learning."

Though such a distinction is theoretically possible, when it comes to clinical situations such a division is not easy. This area of overlap between neurology and psychiatry is often disowned by both, as though it is a no-man's land. This gray area is referred to as Neuro-Psychiatry, an equally nebulous term, yet accounting for almost 30% of all first admissions to mental hospitals. Many of these conditions unlike in the past are treatable.
Problems of neuro-psychiatric illnesses affect person's social life in different ways. Being basically the disorder of the nervous system which is the anatomical stratum for mind, the disorders per se can imply a manifestation on the human behaviour, which in turn, can result in social maladjustment. Secondly the nervous system in the adult is incapable of regeneration, thereby implying that the injury to the nervous system is permanent. Hence the sequelae are often long-lasting. And thirdly these patients often with impairment in intellectual activities might be dependent upon the immediate others necessitating a long-lasting and often difficult care.

Thus, among illnesses, those involving the brain have a peculiar play of interacting forces, biological, psychological and social, and the ultimate product though definitely having a biological deficit will be such an amalgam that it is difficult to differentiate the aetiological importance of the other two. Though there are various types of neurological deficits only two categories of patients are taken in our study i.e. Epileptics and those who have had Head Injury. There is a high incidence of these two categories which at the same time pose certain contrasting features.

Epilepsy proves to be a strong social handicap for the sufferers. Onested (1974) says "the impact of this behaviour on society may mitigate all our educational, psychological, pharmacological and neurosurgical manipulations and we must be acutely aware of this". Many epileptic people are for one
reason or another so rejected by society that however normal they may otherwise be, they are denied the chance of a useful and productive life. Epilepsy brings in its train its own personal, interpersonal and social disabilities. In the personal level, the impact of epilepsy brings in more attendant anxiety than any other illness. The suddenness of the onset, the inability to have absolute control often and the unpredictability of the episodes make the problem difficult for the sufferers. Epilepsy particularly might cause intellectual deficits, hyperkinetic behaviour etc., in children. Hutchison (1974) mentions about the personal disadvantages of these patients thus: "the well controlled stable epileptic of good intelligence places himself at considerable disadvantage both socially and in the field of employment, if he divulges his disability. This applies even to the school child". The employment opportunities are often lost due to psychological complications. Parsonage (1974) mentions that rather than epilepsy it is the later complications which give rise to difficulties in employment. In his study of 23 patients, he found that there were only 2 who could not be employed because of uncontrolled epilepsy, the rest being unemployed due to psychiatric disabilities (14 impaired intellect, 4 personality disorder, 3 psychosis). This study probably shows more disability, because it was done in Centre for epilepsy. Among the epileptics in the general population, the disability is probably not this severe.
As Cohen Report (1956) says majority of the epileptics can "live a normal satisfying and useful personal and communal life". Interpersonal problems arise among epileptics partly due to the disease itself, which probably brings about changes in areas of brain concerned with affective behaviour. Ramamurthi and Sivaprakasam (1974) in their study of 410 cases followed up for a year found that 60% of them were well adjusted, particularly in home and social areas, whereas emotional adjustment was seen only in 40%. During the period of follow-up the adjustments rather showed good improvement. They sum up significantly, "It was found that this lack of personality adjustment did not depend either on the type of epilepsy or on the response to treatment. Infact the majority of these had responded well to treatment. The maximum adjustments in the home and social field may be attributable to the widespread home and social acceptance of the handicapped in Indian Society, especially in the rural areas." Thus they rather fix the onus of responsibility for emotional problems on the 'significant others' in the environment. Buchan (1974) mentions that disadvantageous relations built up within the family in early years can make havoc in later life. "Two particularly pathological attitudes on the part of the parents must be carefully watched for, namely rejection and over-protection... An anxious mother can protect a child to such an extent that normal relationships with peer groups may be prevented... Social isolation of an epileptic can arise either from deficient early relationships or from the very nature of
the illness they experience". Hutchison (1968) condemns the same social attitude in the report of Scottish sub-committee on epilepsy "the attitude of the general public towards epilepsy, even of that section which is educated and generally well informed remains unenlightened, fearful and suspicious. As a result, the epileptic is often denied that degree of help and sympathy which the physically disabled can expect in our community. This makes some sufferers from epilepsy resentful and aggressive so that they prejudice their own opportunities" (Reid, 1969).

A study conducted by the American Institute of Public Opinion over a period of 20 years (1949-69) indicated the presence of knowledge of epilepsy in 90-95 per cent of people interviewed. In a country like India, where the literacy rate is still low and hardly any development of mass communication media, it was felt that the old misconceptions about epilepsy would still be prevalent. It is also but natural that with misconceptions the psychosocial problems created by a chronic disease like epilepsy would be many. It is also felt that in India the social handicaps in our patients would be more due to lack of knowledge about the disease.

In Sweden (Juul-Jenson, 1964) the investigation into the social aspects of epilepsy showed that it was not the disease but the severity which caused social handicaps.

Epilepsy, infact, is a common disorder in which the
sufferer is more handicapped by the attitude of society than by his or her own disability. Not only do social factors influence the development of epilepsy, the disease also influences and alters the position of the epileptic in society and these alterations can again affect the development of the disease. The position of the epileptic in society is best described sociologically as a minority status. The term is used for groups or categories of persons who differ from the 'ruling' majority in any respect and against whom this majority discriminates and develops stereotyped and negative prejudice. Those who deal with epileptics know that the 'normal population' has prejudice against epileptics and that the discrimination is not purely theoretical, but that epileptics really are placed at a disadvantage in social reality.

Secondly, the head and brain occupy a special place, both literally and figuratively in a person's evaluation of his own body. Trauma to head poses a great threat to a person's integrity than does trauma to other areas of the body. The lay public know a good deal about head and brain injuries, adding to the great speculations and overconcern about damage from an injury to the head.

Head Injuries are rapidly becoming a social problem. Unlike disability caused by other injuries, head injuries lead to loss of intellectual functions, and the victims
become a burden on family and society. As London (1967) rightly concluded "for the community the burden imposed by permanent stricken victims of head injury is small but for the family of the individual 'a lame brain' it can be crushing magnitude and life-long duration". The burden is much greater as the majority of the head injured patients (mostly, the victims of traffic accidents) belong to young and productive age group in a society. Road traffic accidents form the largest group of the total head injury cases. It was found (Kalyanaraman and Ramamurthi, 1973) that forty two percent of all admissions to the Head Injury Unit at Madras were due to road traffic accidents. Falls form a close second accounting for about a third of the cases. The experience of other workers in India has been similar (Jain and Kankanady, 1969; Sambasivan and Ramachandran 1970).

Experience all over the world indicates a steadily rising incidence of head injuries. Lewin (1967) estimated that in England and Wales 1,200 new head injured patients were added every year to the group of moderately disabled who could not return to their jobs. Such figures are difficult to obtain as yet, in the developing countries. The total number of head injuries treated in the Madras Institute of Neurology, between 1966 and 1972 increased more than fourfold, while their relative percentage with regard to all out-patient cases increased from 14 to 21 percent (Ramamurthi et al, 1973). Niemeyer et al (1966) in Brazil
recorded a steady rising admission rate for head injury.

The great majority of patients suffering from minor head injuries recover in a short time, and a few patients may develop incapacitating symptoms in later life. In severe brain injury cases the prognosis is poor and many patients have to adjust to lower levels of occupational and social functioning, and some may develop impaired intellectual capacity requiring institutionalization. Often, even in some cases where some brain tissue is damaged, patients with stable and well integrated personalities are able to adjust well with the environment.

The most serious sequelae of head injury involve severe disabling mental symptoms resulting from injuries to the brain or neurotic reactions to the injury itself. It disrupts the normal family interactions. Family members are likely to isolate the patients. The relatives do not assume the responsibility of the head injured patient. And many a time the close family members need therapeutic intervention, because of the hardships they face due to the patients problems. These problems will be more intense, if the head injury is severe in nature. The patient's relations with the marital partner may be disturbed. Lezak (1978) while explaining the family patterns and interactions of the head injured patients and the difficulties of the close kins, mentions that "the spouse lives in a social limbo, for he does not have a partner with
whom he can participate in social activities, nor is he free to get one...... The spouse cannot mourn decently. Although he has lost his mate as surely and permanently as if by death, since the familiar body remains, society neither recognizes the spouse's grief nor provides the support and comfort that surrounds those bereaved by death. The spouse cannot divorce with dignity or in good conscience."

Though head injury and epilepsy share certain common features, one notes that in head injury without any other complications, the damage occurs but once and persists for ever. The social complications of epilepsy are probably even more because it is not possible to know with any degree of surety when it is going to recur. The continued occurrence of fits further damages brain, and the social support or lack of it influences what ultimately the epileptic is going to be. Recurrent witnessing of fits by the relatives who have their own culturally accepted misconceptions about it, and their reactions to it decide the social functioning, vocational opportunities etc., of the epileptic, as also his psychosocial status.

These patients form but a fraction of those who suffer from Neuropsychiatric illnesses. Anybody who deals with these patients would admit that medical knowledge addresses itself only to a small part of this Janus-faced problem. A total conception of the problem would probably require taking care of the multiple needs of the
patients and of those related to him too. As rightly pointed by Trimble (1981), the term Neuropsychiatry refers to disorders, which on account of their presentation and pathogenesis, do not fall neatly and clearly into one category, and require multidisciplinary ideas for their full understanding.

The present study is an attempt to understand the social factors that affect patients with neuropsychiatric disorders, delimiting the scope to head injury and epilepsy.

In the following chapter a few significant studies so far made pertaining to the head injured and epileptics are reviewed.