

# **Mental Health**

*A Guide for Primary Care Doctors*

**Edited**

**By**

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## Preface

Mental Health is the integral part of the general health. In many developing countries, the mental health facilities are far less in number and far away from the people. The people are not aware about the concept of mental health. For public, the mental health is a branch in medicine, which deals with mad men as portrayed in lay press and media. Even many of the educated are not aware of the mental hygiene and positive mental health. It is not surprising that the medical personnel are also to certain degree are unaware of these concepts as their training in mental health science is inadequate.

Public ignorance and professional apathy about mental health has resulted in mental health services not reaching the villages. The fact that there are only 1 to 2 psychiatrists per million populations in India highlights the need for involving the primary care doctors in the identification and management of mental health problems at the community level. As observed earlier the training in psychiatry during undergraduate medical education is inadequate to identify and treat the mental illnesses.

District Mental Health Program under the National Mental Health Program has embarked on training the medical and para medical personnel in mental health care. The Institute of Mental Health, Chennai which is the nodal centre for implementing this Govt. of India funded DMHP has conducted several training programs in mental health care. The current book is the outcome of such training programs. The contributors of this book had actively participated in these training programs. Their rich experience in training the medical personnel has been fully utilised to bring out this book on mental health.

We have selected the topics keeping in mind that practical use of this book is of paramount importance rather than the theoretical deliberations. We hope this book gives some knowledge and confidence in handling patients with mental health problems. I sincerely thank all the contributors for their effort and prompt response. We are also grateful to clerical staff Mrs.V. Premalatha and steno-typist Mr. M.George Fernandez for their help in preparing the manuscript.

**Dr. M.Soundara Rajan**

**Dr. N. Solayappan**

**Dr. Vivekanandan**

## Chapter I

# District Mental Health Program -Trichi

**Dr. M. Soundara Rajan**

**G**oldberg & Huxley (1980) reported that out of a population of 1000, about 250 people each year experience symptoms, which may be regarded as psychiatric or psychological in nature. Out of these 250 persons only 17 are referred to psychiatrists and 6 are admitted to hospitals. This data highlights that there are three groups of patients, a small group that requires admission in a psychiatric hospital, another group treated by psychiatrists and a group of large number of patients either managed by family physicians or not treated at all.

It is estimated that about 1% of the population suffers from severe mental illness and 10 to 15 % suffer from minor mental disorders. It means that there are about 9 million suffering from severe form of mental illness in India. In developed countries there are 50 to 150 psychiatrist for every million population whereas in India there is only one to two psychiatrist for one million population. Other mental health professionals are far below in number. There are only 42 mental hospitals in the country with 20,000 beds. These mental hospitals situated far away from the people. It is evident from the above figures that mental health professionals and facilities are inadequate for the magnitude of the problem. In addition to poor manpower and facility, the ignorance about mental illness contributes to the under utilisation of mental health services in our country. There are many mentally ill persons who are unreached and unattended by the mental health services. Following are the reasons for under utilisation of mental health care services in the country

1. Mental Health Care facilities are situated far away from the people.
2. There are not adequate mental health professionals and para professionals in the country.
3. People are ignorant about mental illness

These factors should be taken into consideration in any program, which tries to reach the unreached mentally ill population. The community psychiatry aims to cater to this large group of unreached and unattended mentally ill in the community. National Mental Health Program (NMHP) was launched in 1982 to achieve the above said aim of community psychiatry.

### **National Mental Health Program**

With the help of Government of India and the World Health Organisation, a series of meetings were arranged with specialists in the field of Mental Health, Education, Social welfare, Law, Labour and leaders engaged in various national

development programs. As a result of these meetings, a proposal for national mental health program for the country has been formulated. This program has been designed keeping in view, the magnitude of mental health problem in the country, existing resources, advances in mental health technology, particularly in the field of delivery of health care to the people in rural and far-flung areas and outcome of research studies in various fields. Under this program it is envisaged that at least 200 million people particularly belonging to the socially and economically backward areas of the country are likely to benefit.

The program thus has been formulated with the following objectives.

1. To ensure availability of minimum mental health care for all, particularly to the most vulnerable and under privileged section of the population.
2. To encourage application of mental health knowledge in general health care and in social development.
3. To promote community participation in mental health service. In order to achieve the above objectives the program has been designed to have the following approaches
  - a. Integration of mental health services with existing general health services
  - b. To utilise the existing infrastructure of health services and also to deliver the minimum mental health care services.
  - c. To provide appropriate task oriented training to the existing health staff.
  - d. To link mental health services with existing community development programs.

The program has three components namely treatment, rehabilitation, prevention of mental illness and promotion of positive mental health. National Mental Health Program was initiated in Tamilnadu during the year 1986. Since then several training programs and workshops were conducted. Following the successful performance of the state unit of the National Mental Health Program, the State of Tamilnadu was selected to participate in the District Mental Health Program (DMHP) under the National Mental Health Program.

### **District Mental Health Program (DMHP)**

District Mental Health Program envisages implementing the aims and objectives of the National Mental Health Program. The program is based on the district mental health program of NIMHANS, Bangalore in Bellary district of Karnataka with suitable modifications.

### **Objectives of the district mental health program are**

- ◆ To provide sustainable basic mental health services to the community and to integrate the health services with other health services.
- ◆ Early detection and treatment of patients within the community itself.
- ◆ To see that the patients and their relatives do not have to travel long distances to go to hospitals or nursing homes in the cities.

- ◆
- ◆ To reduce the stigma attached towards mental illness through change of attitude and public education
- ◆ To treat and rehabilitate mental patients discharged from mental hospitals with in the community.

Govt of Tamilnadu has selected Trichi district to implement the district mental health program. Centrally situated district in the state with well established health care delivery system and connectivity by rail and road are some of the reasons for selecting Trichi for the implementation of DMHP.

### **Health care delivery system of Trichi**

Government and Non-Governmental agencies provide health care needs of Trichi. District Government Hospital, Taluk Hospitals, Panchayat Dispensaries and Primary Health Centres are the government agencies involved in the health care delivery system. There is one District Head Quarters Hospital, 6 Taluk hospitals, 4 dispensaries, 1 Tamilnadu special police hospital and 32 Primary Health centres including 2 upgraded primary health centres. Govt Head quarters Hospital at Trichi has 603 beds with 12 speciality departments including psychiatry. 76 Asst. surgeons including one psychiatrist, 107 nurses, one extension educator and one social worker are posted to the Headquarters hospital. Total number of bed strength of Taluk hospitals is 378. In addition Trichi district has central Govt hospitals like Railway hospital, Ordinance factory hospital, and BHEL hospital which also cater for the health needs of the industrial population. Private practitioners of medicine including Psychiatrists and private hospitals are the non-governmental agencies involved in the health care delivery system of Trichi.

DMHP, a pilot program of five years duration sponsored by Ministry of Health & Family Welfare, Government of India has commenced from the year 1997. *Institute of Mental Health is the nodal agency identified by the Government of India for implementing the program.* The program is divided into two phases. First year of the program is the phase I and rest of the years are phase II. Training of the medical and paramedical staff, patient care at the community and hospital level and conducting information, education and communication (IEC) programs are the different components of the DMHP. During the phase I of the program training of the personnel and creation of infra structure will be given priority. Patient care and Information, education, and Communication will also be done during the first phase depending on the feasibility. Second phase of the program will include training, patient care, rehabilitation, IEC activities and research. Both the first phase and the second phase will be evaluated periodically at different levels.

The DMHP has three components namely training of medical, personnel para medical and community leaders, Mental health care and information, education and

communication activities (IEC activities). Implementation of the program is being carried out jointly by Director of Medical and Rural Health Services and Institute of Mental Health under the guidance of Director of Medical Education. Services of the Director of Public Health and Director of Primary Health Centres are also utilised.

The program is implemented as per the guidelines prescribed by the Govt of India. Creating the infrastructure, manpower recruitment, conducting training program for various medical, paramedical, & non-medical personnel, rendering psychiatric health care services in addition to the existing facilities by opening in-patient services satellite mental health clinics, monitoring the program and conducting community surveys are some of the components of DMHP

The Directorate of Medical & Rural Health Services with the help of the nodal centre has identified and recruited the in-service personnel for this project. As per the instructions of Ministry of Health, Govt of India program has been started with one psychiatrist, one nurse, one driver and one nursing assistant and rest of the posts will be filled in a phased manner. In case of non-availability of in service personnel, direct recruitment will be made by the Director of Medical and Rural Health Services. A District Mental Health Team (DMHT) has been formed with the personnel available. The district mental health team will function from the office of the Joint Director of Medical Services, Trichi and render the services.

Director of Medical and Rural Health Services and Institute of Mental Health have formed a team of Medical Officers who in addition to their routine hospital work will implement and monitor this program. This program is unique as it involves all the three directorates of medical services in Tamil Nadu. The Director of Medical Services is the controlling and reconciling officer for this program. Institute of Mental Health, which comes under the Director of Medical Education, is the nodal agency for implementing this program. Directorate of Public Health and Preventive Medicine is involved as the PHC medical officers and Health workers form the backbone of this program.

### **Training Program**

Training is imparted at three levels. Initially medical officers, para-medical workers of govt. Taluk and primary health centres will be trained in basic mental health diagnosis and care. District psychiatrists and faculty members from Institute of Mental Health will take part in the training of medical officers.

Training consists of registration, pre-training evaluation, lectures, discussions, case demonstration by faculty members and case presentation by the trainees, post-training evaluation and feed back from trainees. Field visits to a Temple at Gunaseelam where mentally ill are treated by religious methods were arranged to demonstrate the plight of mentally ill.

So far totally 62 medical officers, 330 para-medical personnel and 135 non-medical personnel were trained. During the next phase of the training rest of the medical officers and para-medical workers of the PHCs will be trained.

### **Mental Health Care Delivery**

The Mental Health Care Delivery under the DMHP has been planned taking into consideration the Governmental and Non Governmental agencies into account. Govt. Annal Gandhi Memorial Hospital, Trichi will have the in-patient services for the district mental health program. Psychiatrist attached to this hospital will be called DMHP psychiatrist and the psychiatrist recruited for the District Mental Health Team will be DMHT Psychiatrist. The Joint Director, Medical Services will be in charge of the whole program at district level. The DMHP psychiatrist with the help of DMHT psychiatrist will carry out liaison activities. In addition to his routine duties the DMHP psychiatrist will guide the district mental health team, attend the inpatients and conduct review meetings to monitor the program. Whenever possible he will also take part in IEC activities of the district mental health program.

District Mental Health Team is a multidisciplinary team exclusively recruited for Mental Health Care Delivery of the DMHP. It consists of one psychiatrist, one clinical psychologist, one psychiatric social worker, four nurses, and one male nursing attendant and a driver. The Psychiatrist recruited for the district mental health team will be called as DMHT psychiatrist and he will lead the Mental Health Team under the guidance of DMHP psychiatrist. For the purpose of mental health care, the district is divided into six units belonging to six Taluks of the district. Six to eight primary health centres have been allotted to each Taluk. The existing psychiatric ward at the Annal Gandhi Hospital Trichi has been strengthened with additional 10 beds and equipment with the funds from DMHP. The DMHP psychiatrist will be in charge of the psychiatric ward. Cases requiring admission in the ward may be referred by DMHT psychiatrist from Taluk and villages to the psychiatric out patient room at Annal Gandhi Hospital, Trichi.

District mental health team with one psychiatrist, one nurse, one psychiatric social worker, and one male nursing attendant will visit satellite Psychiatric clinics at one Taluk hospital a day for six days a week. Medical officers and paramedical staff of Taluk hospitals will collect cases to be shown to the DMHT on prescribed days. Exclusive psychiatric case sheets and nominal registers (Refer Appendix - I) are printed for the satellite clinics. Other than these cases, PHC medical officers and health workers of the respective Taluk will bring the cases to be treated by mental health team. The follow-up of cases treated at The Satellite Clinic will be done at the primary care level. Whenever necessary mental health team will also make visits to villages to deliver mental health care subject to feasibility of the visit. In addition to mental health care, the team will also engage in IEC activities with the help of the local health workers

and community leaders.

### **Role of Medical Officers and Health Workers in the District Mental Health Program**

The medical officers of Primary Health Centre and Para-medical personnel have a vital role in the successful implementation of the program. The goal of reaching the unreached can be achieved only with help of PHC medical officers and health workers. They have various roles to play in the effective implementation of the DMHP. Following are some of the salient tasks of medical officers and health workers.

#### ***Responsibilities of Medical Officers***

1. Medical officer will lead the mental health activities at PHC level
2. He will be the link between District Psychiatrists and health workers
3. He should be able to diagnose mentally ill persons and initiate appropriate treatment. Whenever difficulties arise in diagnosis or treatment he will consult the District Mental Health Team Psychiatrist who will be available at the nearest Taluk Hospital on prescribed days
4. He should use the referral form (Refer Appendix - 2) provided to him under DMHP while referring cases to Mental Health Clinic at Taluk hospital
5. He will also follow up the patient with the help of health workers
6. Whenever possible he will also create awareness about mental health among the patients and relatives who attend the PHC
7. He will review mental health related activities in his regular weekly review meetings

#### ***Responsibilities of Health Workers***

1. The health workers will identify patients, mobilise them to health care facility, follow them up and also create awareness among public about mental health.
2. They are expected to refer cases with the help of the referral forms (Refer Appendix - 3) provided to them
3. They will identify mentally ill persons in the population allotted to them
4. They will mobilise the mentally ill patients to PHC or mental health clinic at Taluk hospitals for treatment
5. They should follow up the patients at sub centre level
6. They should ensure that relatives are taking adequate care of the mentally ill persons.
7. They should also monitor whether medicines are properly administered to the patients by their relatives

8. As the treatment drop out rate among mentally ill is high, the health workers should ensure that mentally ill persons remain in treatment
9. They will educate the public about various mental illnesses and maintaining mental health with the flip chart provided to them

#### ***Following is schedule of Taluk level satellite Psychiatric Clinics***

Monday	Srirangam	10 AM to 1 PM
Tuesday	Manapparai	10 AM to 1 PM
Wednesday	Thuraiyur	10 AM to 1 PM
Thursday	Musiri	10 AM to 1 PM
Friday	Lalgudi	10 AM to 1 PM
Saturday	Manachanallur	10 AM to 1 PM

#### ***Following table shows the no. of patients treated at the satellite clinics from June, 98***

No.	Month	No. of New cases	No. of old cases	Total
1.	June, 98	69	87	<b>156</b>
2.	July	142	243	<b>385</b>
3.	August	94	184	<b>278</b>
4.	September	102	333	<b>435</b>
5.	October	101	373	<b>474</b>
6.	November	56	430	<b>486</b>
7.	December	72	398	<b>470</b>
8.	January '99	49	565	<b>614</b>
	<b>TOTAL</b>	<b>685</b>	<b>2613</b>	<b>3298</b>

### ***Information, education and communication activities (IEC Activities)***

IEC activities will be utilised to educate the lay public about different aspects of mental health and mental illness. Main thrust will be on identification and prevention of mental illness. Public lectures, short plays, exhibitions, school awareness programs are some of the IEC activities planned in DMHP.

By imparting training in mental health to medical and para-medical personnel, the DMHP has created manpower to handle mental health problems. The establishment of satellite clinics in all the Taluk hospitals, formation of mental health team and supply of psychiatric medicines have created enough infra structure to launch the mental health care. In marketing parlance the outlets have been established and stocked well but the success of the program lies in people's awareness about the program. Hence IEC has been planned to educate the public about mental illness and the services available for mentally ill persons.

### ***Mental Health Festival***

Mental Health Festivals were conducted to create awareness among the public. The mental health festivals are based on the principles of any village festivities. As in any other festival, entertainment is given importance to draw the crowd and create awareness. A cine music troupe was hired to play cinema songs. In interior village these music troupes played cinema songs which have mental health messages. The musical performance was interspersed with small skits depicting different aspects of mental illness and its treatment. In addition, psychiatrist from Trichi and Chennai answered question from public about mental illness. Totally six mental health festivals were organised so far in interior villages.

### ***Flip Charts***

Multicolour flip chart depicting eleven mental illnesses and its symptoms were printed for the para-medical personnel. Flip charts carried artwork depicting different mental illness. Care has been taken to maintain the cultural relevance in the pictures. All the Village Health Nurses were provided with the flip charts. A demonstration and training has been imparted to VHNS in using the flip charts. During the next phase of the program all the para medical workers in the Trichi district will be provided with the flip chart

### ***Newsletter***

A four pages quarterly newsletter is published to disseminate information among medical and para-medical personnel. The newsletter contains both English and Tamil articles.

### ***Evaluation***

Evaluation of the program is the most important component of the project as it will highlight the deficiencies in the planning and give feed back about the effectiveness and efficiency of the project. Evaluation will be an on-going process, which will begin from first day of the program. Program will be evaluated at different levels.

Team members from nodal centre will make periodic surprise visits to the fields depending on the advanced tour program submitted by the DMHT Psychiatrist. During these visits, the inspecting team will elicit information based on structured printed proforma. The team would also interact with village community leaders to assess the effectiveness of the program. Evaluation forms (Refer Appendix - 5) are printed for evaluation of the program and are available with the DMHT psychiatrist. The inspecting team officers are expected to fill the evaluation form in triplicate and send the copies to Director, Institute of Mental Health, and Director of Medical and Rural Health Services and retain a copy for him.

The District Psychiatrist will conduct weekly review meeting to assess the performance of the project. He will send monthly report about the program in the prescribed form printed (Refer Appendix - 4), to the Institute of Mental Health and Director of Health Services with his comments.

The DMHT Psychiatrist will conduct monthly review meetings at Taluk level to assess the performance of other health workers involved at Taluk and primary health centre level. He will submit the monthly report to Director of Health services with copy marked to Institute of Mental Health.

Periodic meeting of medical, para-medical, non-medical personnel and community leaders will be organised at different levels to get the feedback about the effectiveness of the program.

Once in three months a review meeting will be conducted jointly by Director of Medical Services and Institute of Mental health at Chennai or at Trichi to assess the overall performance of the program. Every six months a meeting will be held at Chennai with the representatives of the Govt. of India to monitor the progress of the program. Depending on the results of the review meetings suitable modifications will be made to District Mental Health Program.

Evaluation will also be done by an external agency. It has been proposed to hire the services of a consultant with experience in psychiatry for the midterm evaluation of the program.

## Chapter II

# Brain and Behaviour

Dr. B. Sivachidambaram

**T**o understand behaviour a working knowledge of structure and function of brain is essential.

### Gross anatomy of Brain

Maclean (1969) used the term “triune” to describe three brains essentially working as one

1. A Neomammalian brain (Neocortex)
2. A Paleomammalian brain (Limbic or visceral brain)
3. An ancient reptilian brain (“R-complex”)

### Neocortex

The adult human brain weighs about 1350g and contains over 10 billion nerve cells. The surface of the four cerebral lobes frontal, parietal, temporal, and occipital is irrigated by three major blood vessels the anterior, middle and posterior cerebral arteries.

The longitudinal (inter hemispheric) cerebral fissure separates the left and the right hemisphere at midlines. The central sulcus (fissure of Rolando), separates the frontal from the parietal lobe and the lateral cerebral sulcus (fissure of Sylvius forms the superior margin of the temporal lobe). The cortex consists of motor, sensory and association areas. The motor cortex lies anterior to the central sulcus and is divided into motor, premotor, supplemental motor and frontal eye field areas. The sensory cortex receives projections from thalamic relay nuclei. Auditory, visual, somato sensory input reaches their respective areas. In the dominant hemisphere the receptive association cortex for language, known as Wernicke’s area is located in the posterior third of superior temporal gyrus.

### Limbic System :

The sensory information reflecting experience in the “outer world” is communicated to the “inner world” of emotions and drives, governed by the limbic system. Limbic system refers to a group of structures anatomically situated between the diencephalon and telencephalon.

Learning is a process whereby sensory experience achieves meaning or attains permanence in memory by being paired with the experience of pleasure or pain.

Papez circuit involves the transfer of information from hippocampus to mammillary bodies via fornices and then to the anterior thalamus cingulate gyrus and back to the hippocampus. Three lateral cortical regions, the orbito-frontal cortex, temporal pole and insula also play an important role in motivation with two sub-cortical structures amygdala and dorso medial thalamus in addition to the medial structures described

by Papez - known as basolateral limbic circuit (Yakovlev 1948).

In 1952 Maclean explicitly linked the medial limbic circuit of Papez with the basolateral limbic circuit of Yakovlev referring to them as the limbic system or visceral brain.

### “R complex “ - reptilian brain

Coursing through the brainstem are dense networks of inter neurons known as the reticular activating system. From here fibers ascend to thalamus and to cortex.

The septal region (the most anterior portion of the reticular activating system) the hypothalamus and the midbrain form the R complex.

The septal area consists of a group of nuclei when stimulated produces pleasure sensation. The hypothalamus and out flow pathway for autonomic discharges is central to the expression of drive states and maintains homeostasis. The midbrain is the site of origin of two major dopaminergic pathways nigrostriatal path way and mesolimbic pathway.

### Neurophysiology

The structural and functional unit of the nervous system is the neuron or the nerve cell. The typical nerve cell has three main parts the cell body, the dendrites and the axon. The dendrites are usually shorter than the axon and numerous. The axon is single and of varying length.

### Function of the neuron

Neuron is an excitable cell, it has two basic properties, excitability and

conductibility. The response of a nerve to any stimulus is the nerve impulse. The nerve impulse is transmitted along the length of the nerve fiber through electrical activity. Nerve impulses are transmitted from one nerve to another across a synapse. The passage of a nerve impulse from activated neurons across the synapse to other nerve cells is by Neuro transmitters (Biogenic Amines). Neurotransmission within the brain occurs with catacholamines dopamine, nor epinephrine and epinephrine as well as serotonin gamma amino butyric acid and acetyl choline at the synaptic level. The synapse comprises of pre synaptic nerve terminal, the synaptic cleft and the post synaptic nerve membrane.

### **Behaviour:**

Man acquires a number of reflex responses to stimuli known as conditioned reflexes (Pavlov). The sight or smell of food produces salivation in animal (unconditioned response) when a sound of bell is frequently associated with food, mere sound of bell before food also (conditioned stimulus) produced salivation (conditioned response) after associating these stimuli with food. This is known as classical conditioning.

Skimmer used another type of conditioning called operant or instrumental conditioning. In this conditioning the positive consequence of an action (reward) itself acts as the conditioning stimulus motivating further response of the same kind

These two types of conditioning phenomenon underline the paradigms of human learning.

### **Learning**

Learning is the process of modification of responses to stimuli. Learning involves growth of new synaptic connections. The simple stimulus response learning is integrated sub-cortically (involving the reticular formation). Abstract learning and complex forms of learning involve the entire association areas of the neocortex. Ability to learn new information is affected in lesions of these areas particularly the prefrontal cortex.

### **Memory**

Memory is the registration, storage and subsequent recall of learned experiences.

Short term memory: The first stage of memory is the registration i.e. processing of sensory input from the very brief immediate past to be held in the short term memory.

Long term memory: The second stage of memory is the storage i.e. conversion of short-term memory to a stable long-term memory. The conversion occurs possibly in the hippocampus. In this conversion, the acoustic coding is transformed into semantic coding. Amnesia is loss of memory. Lesions in hippocampus mamillary bodies and dorso medial thalamus produce loss of memory.

Like this all the human behaviour have basis in the neuroanatomy and neurophysiology basis.

## **Chapter III**

# **Classification, Signs and Symptoms of Mental Disorders**

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**T**he term “mental illness” usually evokes in the layman a picture of an individual who is unkempt, disheveled, restless, aggressive, and talking irrelevantly. All mentally ill persons are assumed to present with a more or less similar picture. Though this description possibly and appropriately describes some of the severely ill psychotic patients, it obliterates the fact that just as there are numerous physical disorders there are different varieties of mental disorders. Since these disorders vary in their clinical features, severity, response to treatment, there is need to classify them. Classification facilitates therapeutic decisions based on accumulated experience, exploration into possible etiological factors, prediction regarding outcome and advice on long term management and rehabilitation.

There are limitations in the current methods of diagnosis and classifications of psychiatric disorders. While diagnoses in other branches of medicine are based on symptomatology, advances in recent years have now made it possible for many physical disorders to be classified on the basis of etiology or specific pathological changes in organs or alterations in biochemical parameters. However, our understanding about etiology of most psychiatric disorders is extremely limited and there is no consistent changes in the tissues or body fluids. So diagnosis and classification in psychiatry are still highly dependent on symptoms.

Psychiatric diagnosis and classifications based on past and present symptoms reported by the patient and behaviour observed by the interviewer and reported by the patient’s relatives also has its limitations. The elicitation of symptoms can be unreliable and may vary from interviewer to interviewer and also from one time to another with the same interviewer. There is no symptom, which can be considered to be pathognomonic of any particular disorder. So the diagnosis is made on the presence of a group of symptoms and this increases the unreliability of the diagnostic process. The absence of any external validating criteria for symptom based diagnosis makes it impossible to assess the veracity of such a diagnosis. Thus diagnosis and classification are of great importance in the understanding and management of psychiatric disorders.

Since psychiatric treatment methods are not specific for any particular disorder and the same treatment may be useful for several disorders (e.g. efficacy of antidepressants in depressive disorder, obsessive compulsive disorder and panic disorder), treatment response is not a useful criterion for diagnosis. Inclusion of the

course and outcome as criteria for diagnosis has also been suggested, but this results in the diagnosis being made only retrospectively which defeats the whole relevance of it. Thus one is left with no choice but to rely on clinical features alone for diagnosis and classification. The most significant steps which were taken in the past towards making this symptom - based diagnosis process more reliable are the introduction of structured interview schedules like present status examination and the introduction of clear cut criteria for diagnoses, along with operational definitions for the various criteria.

#### **FOLLOWING ARE SOME OF THE BROAD CATEGORY OF PSYCHIATRIC DISORDERS**

##### **MAJOR MENTAL ILLNESS**

###### ***Psychosis***

- Organic
- Functional
- Schizophrenia
- Paranoid Disorders
- Mood Disorders
- Mania
- Psychotic Depression

###### ***Minor Mental Illness - Neurosis***

- Anxiety Neurosis
- Panic Disorder
- Phobia
- Obsessive Compulsive Disorder
- Depression
- Hysteria
- Hypochondriasis

###### ***Others***

- Alcohol and Drug Dependence
- Personality Disorders
- Psycho Physiological Disorders
- Childhood and Adolescent Disorders

#### **SYMPTOMS AND SIGNS IN PSYCHIATRY**

Psychiatric disorders result in abnormalities affecting the patient's motor behaviour, thinking, mood, perception, volition, insight, judgement, attention, concentration, memory and orientation. Eliciting these symptoms and signs is very essential in arriving at a psychiatric diagnosis. Following are some of the important signs and symptoms of mental illness.

##### **I. DISTURBANCES IN MOTOR BEHAVIOUR**

###### **1. *Retardation, (Slowness and Under Activity)***

The person walks very slowly, sits very still or takes a long time to initiate any activity. The slowness may be seen in speech also.

###### **2. *Stupor***

A state in which the subject is conscious but makes no spontaneous movements and responds slightly or not at all to stimuli.

###### **3. *Stereotypes***

Repetitive and apparently purposeless movements which are more complex than tics and bizarre than ordinary mannerisms.

###### **4. *Negativism***

The patient opposes passive movements initiated by the examiner. In severe forms he may do exactly the opposite of what is asked of him.

###### **5. *Posturing***

Posturing is voluntary assumption of inappropriate or bizarre postures.

###### **6. *Ambitendency***

Patient's movements fluctuate between two opposite or alternative activities e.g. when the examiner offers his hand the patient makes a tentative movement as if he is going to hold it, but then withdraws and then again puts it forward.

###### **7. *Waxy flexibility***

The patient allows the examiner to put his body into uncomfortable positions and maintains the posture for prolonged periods.

###### **8. *Echopraxia***

The patient imitates the examiners movements without being asked to do so. Motor behaviour may also be disturbed in the form of over activity and characterized by restlessness, agitation and excitement.

## II. DISORDERS OF THOUGHT, LANGUAGE AND COMMUNICATION

### (A) DISORDERS OF SPEECH

#### 1. *Pressure of speech :*

Characterized by an increase in the spontaneous speech, patient talks rapidly and it is difficult to interrupt him. Even when interrupted, he often continues to talk.

#### 2. *Circumstantiality :*

Many unnecessary details are brought in as a result of which the speech is delayed.

#### 3. *Loosening of association :*

Flow of thought in which, ideas shift from one subject to another that are completely unrelated to the original one. When severe it could make the speech incoherent.

#### 4. *Derailment:*

Gradual or sudden deviation in train of thought as evident in spontaneous speech, sometimes used synonymously with and loosening of association.

#### 5. *Tangentiality :*

Patient answers questions in an oblique and irrelevant manner. The reply may be related to the questions. In some it may be totally unrelated.

#### 6. *Incoherence:*

The speech is essentially ununderstandable because words and phrases are strung together without any logical connection, disregarding rules of grammar sometimes referred to as “word salad”.

#### 8. *Preseveration:*

Response to one stimulus is persistently given even after a new stimulus has been presented.

#### 9. *Neologism:*

New words created by the patient often combining syllables from existing words. Though not understandable to others, the patient may have his own private meaning for these words.

#### 10. *Clang association:*

Use of words, which sound similar but not related in meaning. May lead to rhyming and punning.

#### 11. *Thought Blocking:*

Abrupt interruption in train of thought before a thought or idea is finished - as evident from sudden silence lasting from a few seconds to minutes and the speaker admits that loss of thoughts is the reason for the pause.

#### 12. *Echolalia:*

Patient echoes or repeats the words or phrases of the interviewer.

### B. DISTURBANCES IN THE CONTENT OF THOUGHT.

#### 1. *Poverty of content of speech:*

Speech is adequate in amount but conveys very little information and language tends to be vague, repetitive and stereotyped.

#### 2. *Over-valued ideas :*

Unreasonable false belief maintained less firmly than delusions.

#### 3. *Delusion :*

Unshakable false belief and not corrected by reasoning; the person's belief is not in keeping with his intelligence and educational background and not ordinarily shared by other members of his cultural group.

a) *Primary delusion :* A delusion suddenly enters into the patient's mind like a bolt from the blue.

i) *Delusional mood :* The patient feels something strange is going on around him but is unable to elaborate this feeling.

ii) *Delusional perception :* An object is perceived normally but is given a new and delusional meaning (e.g. the paperweight on the interviewer's table is put there to indicate that patient is a spy).

b) *Secondary delusion :* A delusion understandable in terms of the patient's psychopathology (e.g. the husband with erectile dysfunction believes that his wife is having an affair with a man she is found talking to)

Based on their content, the delusions may be grouped as

a) *Delusion of persecution :* (also called paranoid delusion)

b) *Delusion of jealousy :* (delusion that one's lover or spouse is unfaithful)

c) *Delusion of Love :* (delusion that a person usually superior in social status is deeply in Love with the patient).

d) *Delusion of grandeur*

f) *Delusion of guilt*

g) *Delusion of reference :* Other people's statements, totally unrelated to patient or

even comments in the radio, television or newspapers are believed to be referring to the patient or giving special messages to him. In ideas of references the patient may have similar beliefs, but are held less firmly.

- h) **Somatic delusions** : Delusions involving functioning of one's body (e.g. all his internal organs have melted away)
- i) **Nihilistic of delusion** : False believes that self, others or the world are non-existent or ending
- j) **Delusions of control** : False believes that his thoughts, emotions or even body are being controlled by other people or external forces.
- i) **Thought withdrawal** : Delusion that one's thoughts are being removed from one's mind.
- ii) **Thought insertion** : Delusion that thoughts are being implanted in one's mind.
- iii) **Thought broadcasting** : Delusion that one's thought can be heard by others as if they are being broadcast.
- 4) **Obsession** :  
Recurrence of a thought, image or impulse in spite of the person's effort to get rid of it.
- 5) **Phobia** :  
Persistent, irrational and exaggerated fear of an object or situation resulting in a compelling desire to avoid the object or situation.

### III. DISORDERS OF PERCEPTION

- A. **ILLUSION** : Misinterpretation of a real external stimulus
- B. **HALLUCINATION** : The individual has a perceptual experience without any external stimuli. Hallucinations may be.

- i) **Auditory**
- ii) **Visual**
- iii) **Olfactory**
- iv) **Tactile, or**
- v) **Gustatory**

Hallucinations occurring while a person is falling asleep are called hypnagogic hallucinations.

#### C. **ABNORMAL EXPERIENCE OF SELF AND ENVIRONMENT:**

- 1) **Depersonalization** : A subjective sense of being strange, unreal or unfamiliar about oneself

- 2) **Derealization**: The subjective sense of the environment is strange or unreal.

### IV. DISORDERS OF EMOTION

#### A. **Disorders of affect:**

Affect refers to the experience of emotion expressed by the patient and observed by others. Affect may vary from time to time depending on the changing emotional state. Disorders of affect which occur in psychiatric disorders include -

- 1. **Incongruous affect** : The manifested affect is not in harmony with the idea, thought or speech accompanying it.
- 2. **Blunted affect** : A severe reduction in the intensity of the expressed feelings or mood.
- 3. **Flat affect** : Total or near total absence of any signs of expression mood.
- 4. **Labile affect** : Rapid and abrupt change in affect unrelated to external stimuli.

#### B. **Disturbances of mood :**

Mood refers to a pervasive and sustained emotional state subjectively experienced and reported by the individual disturbance of mood include:

- 1. **Elated mood** : Patient experiences and expresses a sense of confidence and enjoyment and more cheerful than normal.
- 2. **Euphoria** : Intense elation often associated with feelings of grandeur.
- 3. **Ecstasy** : Feeling of intense rapture.
- 4. **Dysphoric mood** : An unpleasant mood
- 5. **Depression** : A pathological state of sadness
- 6. **Anhedonia** : Loss of interest in and withdrawal from all pleasurable activities.

### V. DISTURBANCES IN PRIMARY MENTAL FUNCTIONS

#### A. **DISTURBANCES OF CONSCIOUSNESS**

- 1. **Clouding of consciousness**: The sensorium is only partially clear.
- 2. **Delirium** : A state of bewilderment, restlessness, confusion and disorientation associated with fear and hallucinations
- 3. **Coma** : Profound degree of unconsciousness
- 4. **Somnolence** : Abnormal drowsiness

## B. DISTURBANCES IN ATTENTION

1. **Distractibility** : Inability to sustain attention because of the tendency to be distracted by irrelevant external stimuli.
2. **Selective inattention** : Blocking out only those matters which generate anxiety.

## C. DISTURBANCE IN ORIENTATION :

Disorientation could either be of time, place or of person

## D. DISTURBANCES IN MEMORY :

This could affect ability to recollect recent or remote past events -

1. **Amnesia** : partial or total inability to recall past experiences.
2. **Paraamnesia** : Falsification of memory, by distortion of recall. This may manifest itself in the form of
  - a) **Retrospective falsification** : Patient adding false details to recollection of a true memory.
  - b) **Confabulation** : Unconscious filling of gaps in memory by imagined or untrue material.
  - c) **Deja vu** - Incorrect recognition of a new experience as repetition of a past one.
  - e) **Jamai vu** - Feeling of unfamiliarity or newness about a familiar situation.

## Chapter IV

# Examination of a Mentally Ill Person

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**P**urpose of Psychiatric examination is to categorize the mentally ill into the known group of diagnosis, to understand the origin and evolution of the illness and to plan the management and follow up strategies. Like in any other branches of medicine the examination of a mentally ill follows certain methods. The examination involves taking a detailed history, examination of patient's physical and mental condition and planning of investigations and management. Psychiatric examination starts the moment the patient enters the room. Observational and inferential skills are the most important tools of psychiatric examination.

### Psychiatric Interview

Psychiatric Interview is based on the clear understanding of the underlying psychological mechanism. Psychiatric interview is not the random meeting of the examiner with the patient. It is purposeful and planned exercise. The skill of the examiner is demonstrated in the questions he asks and also the questions he avoids. The interview may be complicated by the unwilling and uncooperative patients. Fostering of doctor patients' relationship is paramount to the success of the interview. Success of good doctor patient relationship is reflected in the degree to which the patient and the doctor develop a shared feeling of understanding.

Interview setting is as important as the interaction, which take place during the examination. Adequate privacy should be ensured. Prepare in advance for the interview and read any available information about the patient. Always start and end the interview on a pleasant and positive note.

### History Taking

Meticulously taken history is the foundation for diagnosis and further management. History should reveal comprehensive picture of patient's development from early years to the present days. The patient should be allowed to narrate his history in his own words with skillful guidance from the interviewer. An experienced interviewer will be able to recognize the relevant points in the history and guide the patient through the history taking. Following are some of the areas which need emphasis during history taking

### Personal identification

Personal details like height, weight and identification marks and socio-demographic particulars should be recorded here. The personal details will be helpful in identifying the patient during follow-up and also if there any any medico-legal problems.

### **Presenting complaints with duration**

The complaints given by the patient and the informant should be recorded in chronological order with the duration of the symptom. This will help in analyzing the symptomatology and also in understanding the evolution of the illness.

### **Details about the onset of the illness**

This is also termed as history of presenting illness. Under this heading detail history about how the illness evolved should be taken. The account should be descriptive and try to give vivid picture of development of the illness. An attempt should be made to elicit the precipitating and maintaining factors of the illness.

### **History about the previous illness with treatment details**

Details about previous illness of similar kind and the response to its treatment will be helpful in diagnosing the present illness and also in its management.

### **Family details especially about parents and siblings**

As the family plays the major role in a person's development, a detail history eliciting details about parents, their health, their attitude, sibling's details and their attitudes should be recorded. The details about the family will help us in understanding the patient and also in planning the management strategies.

### **Details about birth, early, middle and late childhood including schooling**

For effective diagnosis it is imperative that the examiner has a comprehensive knowledge about the patient from his childhood to present day. As far as possible details should be elicited about patient's birth, childhood, schooling, studies, etc.

### **Personal details**

Personal details like habits, attitudes and preferences should be recorded under this heading. In case of woman patient details about menarche, reaction to menarche, periods, pregnancies, miscarriages and menopause should be elicited.

### **Psychosexual history**

Any study of life pattern is not complete without understanding its sexuality. Details about early sexual experiences, masturbation, sexual preferences, sexual practices and dysfunction should form part of the patient's history

### **History about occupation**

Occupation can be a major source of stress in certain individuals. The treatment strategies might have to be tailored to ones occupation. Hence details about the nature of occupation, satisfaction in the occupation, incidents of frequent changes in the occupation, difficulties in the occupation and interpersonal relationship at the work place should be elicited.

### **Marital History**

Marriages can make a man or break a man. Information about nature of marriage, marital partners details, interpersonal relationship with spouse, any history of extramarital relationship and marital satisfaction should form part of the history.

### **Current social situations like family structure, liabilities and assets**

Patients family structure whether nuclear or joint family, number of members in the family number of dependents and earning members, housing conditions, financial position including assets and liabilities should be recorded.

### **Pre-morbid personality**

Premorbid personality is the personality make up of the patient prior to the onset of the patient. It can be elicited from patient and his close relatives. A descriptive account of patient's attitude, beliefs, convictions, appearance, value systems, etc. should be made in this section

### **Physical Examination**

Physical examination is as important as mental status examination. No psychiatric examination will be complete without the physical examination. General nutrition and health of the individual should be assessed during the physical examination. As some of the organic disorders especially neurological conditions may present with psychiatric manifestation it is important to have high degree of suspicion about physical cause for mental disorder. Detailed neurological examination including primitive reflexes and examination of fundus is essential in assessing the mentally ill persons.

### **Mental Status Examination**

Mental status examination is the central feature in the assessment of a mentally ill person. It aims to detect abnormal features in patient's behaviour and state of mind at the time of assessment. Mental status examination consists of systematic observation of the patient and specific inquiries into various aspects of thinking, perception, feelings and cognition. The boundary between history taking and mental status examination are not well defined. Most of the time certain aspects of mental status examination will be completed during history elicitation. As general physician examines a patient system wise psychiatrists examines the patient in the following categories.

- ◆ Behaviour and appearance
- ◆ Speech
- ◆ Mood
- ◆ Thought
- ◆ Perception
- ◆ Primary Mental Functions
- ◆ Insight

Even though the above categories appear distinct units, the mental status examination is not compartmentalized. The interviewer should be able maintain a smooth conversation with the patient and try to elicit different aspects of mental status examination as he converses with the patient. If necessary he may note down the points elicited during the examination.

### **Behaviour and Appearance**

The examination of a mentally ill person starts the moment he enters the examination room. His appearance, walk, gestures and mannerisms should be noted. A note should be made about the patient's level of consciousness and alertness. Patient's dress and tidiness, its appropriateness to the situation should be observed. Patient's activities whether they are within normal limit or otherwise should be noted. For example the manic and catatonic excitement patient will have increased activities whereas the depressive and catatonic withdrawal patients may exhibit decreased activity. The examiner should be able to make a comment about the rapport established with patient. Finally it is customary to note whether the patient is in touch with the surroundings and happenings.

### **Speech**

Speech is an important function of the mind. It reflects the patients thought process. A persons thought is expressed in speech hence a careful examination of the speech structure and content will reveal the abnormalities in the thought process. Volume, tone and pitch of the speech should be observed. Most important points to note during examination of the speech are relevancy and coherency of the speech. In markedly psychotic patients speech may be irrelevant and incoherent. In manic patients speech will be excessive and they may start talking spontaneously. Another feature of manic patient is pressure of speech where the patient tries to convey many things in short time. Speech will be retarded in depressives.

### **Mood**

Mood is pervasive and sustained emotion that colors the patient's perception of the world. Depth, intensity and fluctuations of mood should be noted. Mood may vary from extreme happiness to extreme sadness. Disgust, apprehensions, irritability, suspicion are different expressions of mood. The emotions felt by the patient is subjective mood and the one observed by the examiner is called objective mood. Remarks about both subjective and objective moods should find a place in the mental status examination. Next the interviewer should note whether the mood is appropriate to the situation around the patient and congruent with the thinking process of the patient. Suicidal ideation and intent should be elicited under the examination of mood.

### **Thought**

Thought is a flow of ideas initiated by a problem and ends in a solution. The examination of thought consists of making inferences about stream, possession, progression and content. Stream of thought can be examined by noting whether there is connection between one thought and the other. If the link between one thought and other is lost then the patient will exhibit loosening of association, which in turn will result in irrelevancy of speech. Some patients may claim that their thoughts are controlled by others or withdrawn by some forces. This kind of disturbances would fall under disorders of possession of thought. Most important aspect of examination of thought are assessment of content of the thought. Predominant disturbance in the content of the thought is delusions and obsessions. Examiner should try to categorize the delusion and elicit information whether the patient is acting on the delusion. Details about different kinds of delusions are given in Chapter III

### **Perception**

Man uses all the five senses to perceive the world. The perception may be disordered in mental illness. Hallucinations and illusions are two kinds of perceptual disturbances seen in mentally ill persons. Hallucinations are false perception in the absence of external stimuli whereas illusions are misinterpretation of external stimuli. Hallucinations are commonly associated with psychotic illness. Auditory Hallucinations are the most common hallucination. Examiner should elicit information about modality, timing, intensity and patient's reaction to hallucinations.

### **Primary Mental Functions**

Certain functions of the mind are called primary mental functions since they form the foundation on which other components of the mind develop. These functions are required for gathering information and retaining them for developing the thought, feelings and perceptions. Orientation, Concentration, Attention, Memory and Judgement are some of the primary mental functions. Primary mental functions are impaired in organic mental disorders.

### **Orientation**

Orientation refers to the patient's awareness around him about the time place and person. These three areas of orientation can easily be tested by asking questions and the present date, day, time and persons around. Disturbances in orientation should evoke the suspicion of delirium, confusional states or organic mental disorders.

### **Attention and concentration**

Attention and concentration refer to the patient's ability to focus on certain portion of an experience. This faculty can be tested by asking the patient to subtract 3 from 20 or 7s from 100. Making the patient to tell the days or months in reverse order is another test for attention and concentration.

## **Memory**

Memory is a function by which information is stored in the brain and later recalled to consciousness. There are three types of memory namely Remote, Recent and Immediate. Each type of memory has its own functions. Disturbance in memory indicates organic cause for the mental illness. During testing of memory one should give adequate consideration to the patients educational and social background

Remote memory can be tested by making the patient to recall the remote events like childhood experiences and old family details. Ability to register the information given during the interview and later recalling it demonstrate the recent memory. During the early part of the interview patient should be given an information (an address). Later the patient should be asked to recall the information given to him. Correct recall of information indicates intact recent memory. Asking the patient to tell what he had taken for breakfast or last dinner is also a simple test for recent memory.

Immediate memory means the ability to retain the information for a short period. Immediate memory is required to retain information for a short period, which are not required after sometime. This memory can be tested by asking the patient to repeat the four to six digit numbers in reverse order. In this test the examiner gives a four to six digit number to the patient and asks to repeat the numbers in reverse order after some time.

## **Judgement**

Judgement refers to the patient's perception of likely outcome of his behaviour in the social and personal context. During the course of history taking and examination the examiner can assess the judgement of the patient. For testing purpose patient's response to simple hypothetical situation are elicited. For example patient may be asked what he would do if he finds a stamped, addressed and sealed cover on the road or what would he do if he finds a house on fire. The answer to the hypothetical questions should be judged keeping in mind patient's educational and social background

## **Insight**

Insight refers to the patient's awareness and capacity to understand his illness. The insight may range from total denial of the illness to complete understanding of the illness. Usually insight is expressed in continuum of total lack of insight to presence of insight. Insight is lost in psychotic illnesses

'Interviewing and mental status examination' is an art, which can be mastered by repeated practice. Each examination of a patient will sharpen the examination skills in psychiatry. Since each psychiatric patient is distinctly different from other, the psychiatric examination is a very rewarding experience. The chapter III on signs and symptoms and the Psychiatric case sheet in the Appendix I will be of great help to the

beginners in examining the mentally ill persons.

## **While handling mentally ill patients.....**

- Be kind to the patients, as they require your attention, word of reassurance and kindness. These things work as effectively as your medications
- Do not forget to involve family members in the process
- Do not over promise the patient or his relative beyond your capacity
- Do not criticize or blame others for patients illness
- Do not examine a violent patient in privacy
- Do not interview an opposite sex patient in privacy
- Leave the decision making to relatives, but help in their decision making
- Do not make them dependent on you.

## Chapter V

# Major Mental Disorders

Dr.R.Rajkumar

**M**ajor mental disorder is the term used to denote a more severe psychological conditions affecting the person's behaviour, his thinking and feeling and his relationship with others. These illnesses are usually long standing. They also affect the person's work, personal sphere, and family life. These persons usually have problem with their sleep, appetite, and their personal cleanliness in extreme cases. One of the characteristic features of these diseases is the lack of awareness about their illness. Their behaviour is so odd and strange that others are able to identify their behaviour as abnormal though they may not be able to identify it as a product of illness. In extreme cases they may found to be wandering in the streets, hardly caring for their dress or personal cleanliness. But in most of the instances their illness may be milder in the initial stages and they may be able to perceive that some thing is going wrong with them. In the initial stages and in milder cases it may not be possible to identify the illness and hence treatment is usually delayed and so the prognosis becomes worse.

Some of the persons with this disorder fulfill the common man's concept of a "madman". These illnesses are identifiable in to different groups. Their treatment and management has now become effective, in the last 50 years, due to the use of drugs grouped as antipsychotics. It is usually more difficult to eradicate the stigma attached to this problem than the disease itself. Severely mentally ill persons are now effectively treated by modern medicine and in some cases they have been completely all right for years together. These illnesses affect about 4-5% of the population at any given time and these persons suffer and make their family members also to suffer. Persons with severe degree of illnesses are sometimes seen on the roads as vagabonds, wandering beggars and some times as dangerous lunatics.

These disorders are divided in to three major groups of illnesses.

- 1) **Schizophrenia and Paranoid disorders**
- 2) **Mood disorders.**
  - a) **Mania**
  - b) **Depression.**
- 3) **Organic Psychosis**

### Schizophrenia

This type of major mental illness is more typical of madness. It affects about 1% of the general population at any given time in any society. This disease affects both

the sexes though men are affected at an earlier age as compared to woman and they also have more complications as compared to women. Women are able to have a better social functioning.

#### Causes:

- 1) **Biological :**
- 2) **Genetic :**
- 3) **Biochemical :**
- 4) **Psycho-Social :**

#### 1. Biological

Schizophrenia is a group of disorders that are presently believed to occur due to abnormalities in the limbic lobe, the frontal lobes or the basal ganglia. Reduction in the size of the brain in chronic schizophrenia is a commonly noted abnormality in CT and MRI scan studies. Positron emission tomography, a procedure measuring the function of brain activity has shown hypoactivity of the frontal lobe, impaired functioning of certain areas and hyperactivity of the basal ganglia.

#### 2. Genetic

Psychotic illnesses have been noticed to run in the families. This alone does not mean that the disease has a genetic cause, but the characteristics of genetically mediated illness are seen in Schizophrenia. More number of family members of schizophrenic patients is seen to suffer from this disease. Even among the relatives closer relatives suffer more from the illness as compared to the more distant relatives. The frequency of incidence is proportionately lesser as the degree of relatedness is farther from the patient. Twin of a patient has the highest incidence and next come the siblings, and next is the parents. This is not due to the fact of being in close contact or being brought up in the same environment as the twin brought up by adopted parents with out any contact with the other sibling or the biological family also has almost the same incidence as when they are brought up together.

#### 3. Biochemical

One of the reasons for implying a role for abnormality in the function of neurotransmitter is that drugs that act in treating the psychotic symptoms also produce extra-pyramidal symptoms and these parkinsonian symptoms are due to reduction of function of the dopamine receptors in the strio-nigral system. This hypothesis is further strengthened when it was seen that drugs, which act on the dopamine system in experimental conditions also, have efficacy in treatment of psychosis in clinical conditions. This made researchers conclude that dopamine to a large extent and other neurotransmitters such as norepinephrine and serotonin have a role to play in causation of psychosis.

#### **4. Psycho-social**

Psycho social theories have lost their importance after the advent of biological theories to explain the cause of schizophrenia, however it should be understood in some cases. Early childhood influences and faulty parenting have been thought to be the cause of schizophrenia. Urban areas account for a large number of cases and western studies have shown that the incidence of schizophrenia is double in large cities as compared to rural population. Incidence of schizophrenia is more in urbanized and industrialized areas as compared to rural areas.

#### ***Clinical Features***

This disease starts mostly in the late teens or early adulthood. Since it is the most productive part of a person's life the complications of the disease is quite severe. Men and women are equally affected. Start of the illness in our country is sometimes acute but usually it takes about 6 months for the disease to be noticed by the family members, as the onset is so gradual.

#### ***Symptoms :***

##### **1. Behaviour**

Persons with schizophrenia may be aloof and non-communicative or irritable and troubling others. Dress may be inappropriate or disheveled. They might become irritable for no reason and abuse or assault their own family members.

##### **2. Work**

In the early stages quality of work suffers, and later being irregular in attending to work, abstaining from work or disturbing co-workers at the work spot and creating problems may be seen.

##### **3. Relationships**

Relationships are strained due to the patient's odd and unreasonable behaviour. Withdrawal from relationships makes the patient a loner. Suspicions about others also make the patient quarrel with the family members and neighbors.

##### **4. Talk**

Speech is affected in its speed and what is being talked. Speed may be increased if excited and slowed if withdrawn. Talk is at times irrelevant and it appears as though the patient is talking to some imaginary persons even when no one is around him. It becomes very difficult to understand the persons talk.

##### **5. Perceptions**

Some patients may hear imaginary voices or see imaginary visions, which they think as true (Hallucinations).

Hallucinations are false perceptions occurring pathologically, in the absence of an external stimulus. The affected person hears voices of people who are not in the vicinity or sees figures of persons who are not there. This is one of the characteristic and striking feature of schizophrenia.

The person, who has schizophrenia, has behavioral disturbance affecting his work, his relationship with his family members and colleagues. His personal hygiene and grooming deteriorates markedly. He usually withdraws from social situations and becomes more aloof and in some cases there may be a change towards alteration of interests and activities. Generally there is a marked decline in productive functioning and loss of interest in social and work related activities. Medical personnel are able to identify and classify the symptoms and signs that are seen in the sphere of thought and perception.

#### **6. Thought disorders**

Experts say, that schizophrenia is a disorder of the thought process. Disturbed thought make the person's talk quite irrelevant. Some times patients might harbour false beliefs which makes them think that they are being watched or someone has done harm to him or they are against him etc. These false beliefs are known as DELUSIONS. They might quarrel with others believing it so.

Thought is disturbed in the form leading to loosening of association. This is seen as irrelevant or incoherent talk. The listener is unable to understand the speech of the patient. The patient also may complain that his thoughts are not his own or some one else comes to know of his thoughts from his mind.

Delusions: Delusions are false, pathological beliefs, which the person believes completely and over acts on it. So he may suspect others of plotting against him, or he may have a grandiose idea in which he thinks that he has extra-ordinary powers or has lot of wealth, etc. These beliefs are unshakable even when he is proved that they are not true, either by his own experience or by logical arguments.

In cases when they become chronic these symptoms may not be so predominant and they may have lack of initiative, lack of self-care and grooming. Some authors have noted that in a group of cases patients may lack the motivation or drive to do anything, and they may have poor self care, have blunted affect (they lack emotional reactivity), poor speech output, and have social withdrawal.

This disease is divided in to four sub-groups:

- 1) Disorganized
- 2) Catatonic
- 3) Paranoid

## 1. Disorganized type

In this type, patients have an earlier onset of disease. They have pronounced thought disorder, which makes it difficult to understand. Emotional flattening or blunting of affect, or inappropriate and incongruous affect is a hallmark of this subtype.

## 2. Catatonic

In this sub-type most of the disturbance is in the motor sphere. The patient has either increased activity manifesting as excitement or decreased activity seen as stupor. Patients may assume odd and uncomfortable postures, which are maintained for a long period. Negativism is the name given to the feature of uncooperative and opposing behaviour seen in these cases.

## 3. Paranoid

This sub-type is characterized by the predominant delusions and hallucinations. They have a later age of onset, and the personality deterioration is less as compared to the other types of illness.

### *Course*

These distinctions are not so important when the illness becomes chronic. When the disease has affected a person for more than two to five years, most of the florid symptoms of the disease subside or remains suppressed in the face of symptoms, which affect different aspects of the person's behaviour.

Persons with these illnesses become chronic and unmanageable if unidentified and untreated. They lose their work, initiative and become unmotivated to be productive. They might leave home and wander in the streets or leave their place and wander off to distant places. There they might survive by begging or working in odd jobs.

Treatment is available in all the district headquarters hospitals by qualified psychiatrists and medicines are also stocked. Early identification of the disease increases the chance of recovery and patients thus treated are able to become productive. Even when identified at later stages they can be treated and rehabilitated to be a member of the society.

### *Treatment*

A group of drugs, which are called anti-psychotics, have revolutionised the treatment of psychoses in the last 45 years. Recent advances with newer antipsychotics have helped patients who were resistant to treatment with the conventional drugs. The first drug to be used in the treatment of schizophrenia was "Chlorpromazine" which still is used in a majority of cases. List of drugs and recommended doses are given below.

1. Chlorpromazine – 100 – 400 mg/day

2. Haloperidol - 1.5 – 10 mg/day
3. Trifluoperazine – 5 – 15 mg/day
4. Fluphenazine decanoate- 25 mg i.m a long acting drug given once in 2-3 weeks
5. Risperidone – 1 to 4mg twice a day

## Mood Disorders

Mood disorders are diseases consisting of 1) Mania and 2) Depression. Unlike Schizophrenia Mood disorders are usually episodic which means patients with these diseases can become normal after suffering for a few weeks or months.

## MANIA

### 1. Mood

This condition is characterized by unduly happy or elated mood. In milder stages patients may be happy and expansive, but their behaviour may not be abnormal, but in severe stages they become irritable when things are not happening as they expect or if they are prevented from doing what they want.

### 2. Thinking

They have an exaggerated opinion about themselves. They believe it so strongly that they start behaving like rich men or persons with power.

### 3. Activity

This is accompanied by increased activity. These people are restless and appear to be so full of energy but their activities are purposeless and disorganized. They start so many works and projects but they are left half way and some other work is taken up in earnest. They are quick to become angry and may abuse and assault people if they are prevented or checked in their activities. These patients are very distractible, so it is very difficult to keep them quiet.

### 4. Talk

These patients keep on talking. They have so much to say and their speech is loud. In severe conditions speech becomes disturbed and incoherent shouts or jumble of words are produced.

### 5. Sleep

They sleep for few hours or at times they become totally sleepless. They do not feel that they have to sleep and keep on running around to the point of exhaustion. Appetite also becomes increased.

Sexual appetite is also increased. They usually lose their inhibitions, and so behave very inappropriately with their spouses or other members of the opposite sex.

These patients are not aware of their illness or the inappropriateness of their

behaviour. They may remit and become normal in a few weeks or months but have the tendency to have repeated episodes. When they are not treated they may alternate between depression and mania very frequently.

These patients can be identified quite easily when the behaviour is very abnormal and disturbing, but they must be identified at the early stages by their inappropriate moods and excessive talk.

### ***Treatment***

On identification they are best treated as inpatient. Admission and management facilities are available in almost all the district head quarters hospitals in the government sector. Treatment is by antipsychotic medications.

## **Chapter VI Neurosis**

**Dr. M.Thirunavukarasu**

**I**t was believed in the earlier days that mental illnesses were incurable, but now it is well known that all types of mental illnesses are treatable and many of them are even curable. Only some mental illnesses are not fully curable. Psychotic illnesses are usually difficult to treat. Some mental illnesses are known as minor mental disorders or “Neuroses”. Person’s with neurotic illnesses are aware that they have a psychological problem and they are not a disturbance to others but suffer themselves due to their illnesses, though the intensity of the suffering may be much more than the so called major mental illnesses or even many physical illnesses.

Neurotic illnesses usually occur due to psychological reasons. What is meant by the term “Psychological”? It is the term used to mean that upsets and unrest in the mind due to factors ranging from chemical changes in the brain to social and environmental stresses. Our behaviour basically arises from influences from childhood to our reactions to the perceived stresses from the environment. The norms of the behaviour are in relation to the society and others. If you were the only person in the world, whatever you do and however you behave will be the norm as there is no one to compare with or no one even to comment or correct. The field of psychology has been in existence since ages but systematic and scientific study of the mind has been going on only since the end of last century. This behaviour is the window through which we study the inner most organ called the “Mind”. Mind when affected by inner or external stresses also react in various ways one of which is the neurosis.

Neurotic disorders can be divided in to the following categories.

- 1) **Anxiety Neurosis**
- 2) **Phobic neurosis**
- 3) **Obsessive Compulsive neurosis**
- 4) **Hysteria**
- 5) **Hypochondriacal neurosis**

### **ANXIETY NEUROSIS**

Anxiety is a common feature of everyday life. It is commonly known as tension. It the price one pays for being the part of modern world. We feel tensed up when we have to finish an important task or when we are uncertain about the outcome. So anxiety is a usual feeling which all of us have felt at one time or other. Conflicts in our life also make us anxious. These situations are normal, but when we start having such feelings without a valid reason, then it becomes an abnormal and a pathological phenomenon.

It is usual for us to be anxious when we have to face an examination or an

interview. But when anxiety is felt even in normal situation or if the anxiety is so much that our performance is affected then we call it abnormal. In most of the situations of abnormal anxiety the person is not able to find a reason and more over his performance is affected so badly and he even avoids the situation. Though the person knows that his anxiety is baseless, he is unable to avoid the feeling.

### **Symptoms of anxiety**

Symptoms of anxiety are partly physical and partly psychological. The psychological symptoms are basically a sense of an uneasy expectation of an unpleasant event. The person does not know what exactly is that event. He becomes restless, confused and lacks concentration. He tends to forget day to day events or even important events. Physical symptoms are from head to foot. Sometimes head is so heavy or in some cases it feels empty and light headed, giddiness, sweating, dry mouth, a sense of lump in the throat, heaviness in the chest, palpitation, gasping respiration or even restlessness. A feeling of butterflies in the stomach may be experienced. Sometimes there is an urgency to pass urine or even motion. Sleep disturbances is another common complaint seen in anxiety neuroses. These people typically have difficulty in falling asleep and tend to wake up in the middle of the night with a sense of apprehension. They also may have frightening dreams, which are called nightmares. Tremors and a feeling of restlessness or jitters which may be experienced by the patient and even observed by others. Physicians and paramedical workers tend to mistake this for cardiac, respiratory or gastrointestinal diseases and hence unnecessary investigations and treatment is carried out. In our culture our patients are usually not aware of psychological nature of the symptoms. They also tend to feel that doctors are meant for treating physical symptoms only and so do not complain about the mental problems.

### **Treatment :**

#### **Medical Methods**

It is important to understand the psychological nature of the illness. The physician must listen to the problems patiently and reassure and support the patient. Medications are available to treat the psychological symptoms. These are called as minor tranquilizers or anxiolytics. Mere prescription of Anxiolytics does not solve the problem and tend to end in abuse of medication. So Anxiolytics must be used only for a short time and care should be taken to avoid self-medication by the patient. Physical symptoms like palpitation may be treated with beta-blockers. Most common beta-blocker used is propranolol.

### **Psychological Methods of treatment**

- 1. Relaxation methods**
- 2. Bio-feedback**
- 3. Yoga and meditation**
- 4. Autogenic training**

These psychological methods require specialization and training. Hence, it is best done by a trained mental health professional.

### **PHOBIC NEUROSIS**

Phobia is a fear. This is abnormal condition in which the fear is pathological, in excess of the demand to the situation, illogical and the person tends to avoid the situation. Under normal condition we might become afraid of any situation or an object. But with repeated exposure and familiarity we tend to overcome it. Even in dangerous situations we tend to fear but with reason and we try to overcome it. This is not seen in persons with phobias. These phobias may be for specific objects, which ordinarily doesn't evoke fear, or may be for social situations like meeting people, and attending social functions. A special category called agoraphobia is seen where the person avoids leaving their house and going out doors. Symptoms of the disease are that seen in anxiety neurosis but it is object specific or situation specific. The important factor noticed is the persons tend to avoid the situation even at the cost of personal loss.

#### **Treatment Methods**

##### **Medical Method**

Anxiolytics medications are advised to control the psychological symptoms.

##### **Psychological Methods**

When the symptoms are controlled with medications the person may be exposed to this situation or object under supervision (flooding/exposure and response prevention) or the patient may be asked to imagine the situation (implosion).

### **OBSESSIVE COMPULSIVE DISORDER**

Obsessions are recurring or repeatedly occurring intrusive thoughts, ideas or image. The person knows that his thoughts are illogical and unwanted but is unable to control the thoughts. Classically these thoughts might be doubts about cleanliness, sexual thoughts or aggressive ideas of hurting or harming people. Persons with obsession do not act but are highly apprehensive about losing control and yielding to the impulses. They might have some magical numbers (i.e.) they might think a thought or perform an act a particular number of times which makes them ward off some ill or some harm.

Either in response to the thoughts or in an effort to control them these people might perform some silly acts, or rigid rituals. These are known as "compulsions". In

their opinion these acts may prevent some untoward event or prevent the thoughts from occurring and becoming troublesome. A lot of time is spent in thinking obsessive thoughts or being distressed by it. Time is also wasted in performing rituals. These thoughts and actions markedly interfere with the persons work and other activities. It also causes emotional distress. Some people have what are known as contrast ideas. These might be imagining about sexual aspects of respected persons or even Gods. Obsessive doubting may be about totally unnecessary things like philosophical or religious ideas.

Usually children have lot of illogical obsessions and compulsions. They usually outgrow the symptoms. In some obsessions may be at a personality level when they rigidly maintain life styles, time schedules and high moral values. They are unable to adapt and adjust to the environment. When it becomes a disorder there is a subjective distress, rigid adherence of thoughts and rituals to the extent of interfering with their daily routine, interpersonal relationship and their work. It takes many years for the persons and his family members to realize that they have psychological problems. Many times they are mistaken for persons of high values or cleanliness. Only when the symptoms markedly interfere with everybody's routine and when the patient and the relatives realize the absolute illogicality of the symptoms they are brought for treatment.

#### **Treatment**

#### **Medical Methods**

A particular group of anti depressants called the selective serotonin reuptake inhibitors has revolutionized treatment in the last five years. Administration of these drugs induces a dramatic change in the behaviour and functioning of persons afflicted with obsessive compulsive disorders.

#### **Psychological Methods**

These are best done by trained specialists. The person is taught relaxation technique followed by “ thought stopping and aversive techniques ”.

### **HYSTERIA**

Though this name has been removed from the present psychiatric nomenclature, general medical personnel and other specialists are aware of this term. From the other physician point of view hysteria is simply patients complaining of symptoms for which there is no physical basis. Some times they produce odd and abnormal behaviors like possession; fainting attacks so called fits, which the physician realizes that it does not conform to his concept of such diseases. From the psychiatric point of view it is felt that persons have deep-seated psychological conflicts which are manifested as physical symptoms and abnormal behaviors. One important sub category is the somatoform or somatization disorders. In this disorder, physical complaints are brought to the notice of the physician, which do not pertain to one organ or one system. Usually pain, gastrointestinal symptoms, sexual symptoms and neurological

symptoms are complained off. It is differentiated from the physical diseases by their chronicity apparent well being in the presence of such severe symptoms and persistent treatment seeking behaviour. Many times a stressful environment, life situation or emotional conflicts may be elicited with proper history taking. Frequently depression may be an underlying disease or an accompanying symptom.

#### **Treatment**

#### **Medical Methods**

Though physician are comfortable in prescribing medicines for all those who come to them with complaints, this disease is one of the rare exceptions where drugs do not help and these patients have a tendency to become addicted to Anxiolytics. Underlying depression may be treated with antidepressants.

#### **Psychological Methods**

Long term psychotherapy, emotional support system is carried out to this kind of patients. Usually these patients require crisis management type of treatment when they have environment problems and distressing life events.

### **HYPOCHONDRIACAL NEUROSIS**

Its quite common for the general physician to have a few patients who frequent his consultation with complaints of a serious nature for which there is no corroborating evidence in physical examination or laboratory investigations. They are different from somatisation disorder in that they have a morbid fear of having a disease or concerned about the normal bodily functions. Typically they might seek medical help if they do not pass motion even for a single day. They are so aware of their usual unnoticed functions like respiration and heartbeats. A slight breathlessness may mean a serious respiratory disease. A mild pain or even a possibility of pain anywhere in the chest is heart attack for these people. He is not convinced by the absence of any signs or any abnormality in the investigations. These patients have chronic problems and are well known for doctor shopping. They visit many doctors and many specialists and subject themselves to costly and time consuming procedures to rule out a disease. A certificate of good health does not please them but on the contrary they visit a different doctor to confirm the findings.

This people have psychological conflicts, which are manifested as physical symptoms. Frequently anxiety and depression may be a reason or an accompanying symptoms in this patient.

#### **Treatment:**

#### **Medical Methods**

Anxiolytics and anti depressants are used. If and when necessary usually long-term use of anti depressants may be required.

#### **Psychological Methods**

These patients are having an underlying anger towards the physicians because

they think that the doctors have not given enough importance to their suffering. First thing that is to be done is to give a patient listening to all the symptoms and also probe for psychological conflicts. An insight oriented psychotherapy or a behaviour therapy may be attempted.

### **DEPRESSION**

Emotions are normal accompaniment of a person's life. Emotions can be pleasant or unpleasant. But these are usually transient and changing due to internal or external events. That does not mean emotions are just reactions but they may arise and be felt without reason also. Mood is a more long drawn, permanent and a pervading state. Mood can colour our perceptions of the external events and make us react normally or otherwise. Though there are many emotions most important and commonly perceived emotional state is the continuum from sadness to happiness. For example when we face reversals and losses we feel naturally sad. This sadness makes us have thoughts, which are negative, and actions, which may be self-destructive. But we usually recover from the state and spring back to a sense of optimism and hope. Luckily for the mankind the sadness is remembered but not re-experienced. We can re-experience and remember our happy events. These are normal variations in our moods.

There are a set of abnormal mood states beyond the range of sadness and happiness. These are known as mood disorders with the continuum extending beyond the normal range of sadness to depression and happiness to mania and elation. These disorders occur mostly in adulthood and have a tendency to recur.

Depression can be a normal mood or a symptom of abnormality or a disorder with typical accompanying features of change in thought, words, will and action. In depression, which is a disorder, the predominant mood state is sadness and inability to come out of the mood in response to pleasurable external events. The persons thought is negative with a negative about self and a pervasive feeling of loss of hope and worth. The persons thought process itself is slow. They experience guilt over trivial sins and mistakes. Suicidal ideations are quite a common accompaniment of depression. The vegetative functions like sleep appetite and sex is disturbed. They complain lack of appetite, uninterested in food or inability to taste. They complain of insomnia and typically have early morning awakening. They may fall asleep when they go to bed but wake up around 2-3 am and remain awake thereafter. Sexual needs are not felt and may complain of decreased desire or inability to perform. They also complain of inability to concentrate and forgetfulness. When observed this persons have a sad faces and slowed mentation. Their thoughts, speech and acts are slow. They may talk in low tone, blaming themselves and expressing lack of hope. In general practice this patients may complain of physical symptoms like feeling tired, having aches and pains, loss of appetite and inability to sleep. The physician should look for mood changes and elicit the typical symptoms. All this patients must be assessed for the possibility of suicidal attempts in the past and suicidal plans for the

future. Sometimes the patient is associated with problematic alcohol use or drug use.

General physical conditions like hypothyroidism, addison's disease may produce depressive symptoms, which should be ruled out clinically.

### **Treatment :**

#### **Medical Methods**

Depressive episodes are treated with antidepressants. Tricyclic antidepressants (Imipramine, amitryptiline, nortryptiline) and SSRIs (Fluoxetine, Fluoxamine, Paroxetine and Sertraline) are used. Hospitalization may be necessary in severe depression and in-patients with suicidal ideation. Electro convulsive therapy is a specialized procedure for severe depression and in-patients with suicidal ideation.

#### **Psychological Methods**

Medicines alone may not be enough for handling depression on a long-term basis. Initially when the person was withdrawn and cannot be reached, medicinal and emotional support may be required. For some depressive conditions cognitive behaviour therapy is found to be useful. Family and group psychotherapy may also be tried.



In India, the different drug abuse surveys have shown the prevalence of alcoholism as 5 to 20% there are more than 100 million users of alcohol in the United States out of this 2-15 million experience episodes of absolute use of alcohol and are labeled alcoholics

### **Definition of Alcoholism**

Alcoholism is defined as chronic Dependence State characterized by compulsive drinking of Alcohol to such a degree that produces mental disturbances and interferes with social and economical functioning. Major signs of addiction are increasing compulsion, alcohol seeking, morning drinking, excessive drinking when alone, confusion and tremors, uninhibited behaviour and severe withdrawal symptoms.

**Etiology** (Predisposing Factors for Drug Addiction).

#### **(A) Biological Factors**

Alcoholism runs in families. Children of Alcoholics become Alcohol dependents about 4 times more often than those of non-Alcoholic. Many research studies have developed the concept of 'Familial Alcoholism' which differs from non familial Alcoholism that there is always a Family history of Alcoholism, it develops at an early age and is severe, often requiring treatment.

#### **(B) Bio - Chemical Factors**

A Genetically determined deficiency of Brain neuro-transmitters (Endorphins) predisposes an individual to Alcoholism.

#### **(C) Psychological Causes**

Anger  
Rejection  
Low frustration tolerance  
Drinking is used to cover the guilt felt over anger expressed towards others  
Feeling of isolation  
Depressive feeling  
Sensation-seeking  
Anti- social personality traits  
Hostility  
Curiosity  
Presence of various Psychiatric disorders (Depression, anxiety neurosis etc)

#### **(D) Socio-Cultural Causes**

Problems within the family.  
Peer-group influence.  
Unemployment, Low income  
Climate condition  
Festive attitudes

Lax Legal System

Abundance of information about drug effect or sources

Abuse of Socially acceptable drugs.

#### **(E) Characteristics of drugs**

Ready availability and cost.

Public acceptance of the drug.

Pharmaco-dynamic characteristics of the drugs (stimulants are preferred)

Amount and frequency (drugs needed in less quantity are preferred)

Routes of administration (drugs which can be ingested or inhaled are preferred)

### **Classification of Alcoholism**

#### **Types of Drinking**

1. **Social Drinker** : They drink alcohol in functions and celebrations.
2. **Binge Drinker** : (Dipsomaniac Phase) They take large quantity of alcohol in one episode and stop drinking for few weeks or months.
3. **Regular Drinker** :
4. **Pathological Drinker** :

#### **Early Warning**

Increased consumption, frequent desire, uninhibited behaviour (performing acts under the influence of alcohol, which leave him guilty and embarrassed the next day).

#### **Complications of Alcoholism**

Alcohol has been associated with over half of the death and major injuries suffered in automobile accidents each year and with about 50% of all murders, 40% of all assaults, 35% or more of all rapes and 30% of all suicides.

#### **Medical Complications**

##### **A. Gastro - Intestinal System**

1. Fatty liver, cirrhosis of liver, hepatitis, liver cell carcinoma
2. Gastric and peptic ulcer, carcinoma esophagus.
3. Mal-absorption syndrome, protein - losing enteropathy.
4. Pancreatitis: Acute and chronic.

##### **B. Central - Nervous System**

1. Peripheral neuropathy
2. Delirium Tremens
3. Rum fits
4. Cerebellar degeneration
5. Alcoholic dementia
6. Wernicke - korsakoff psychosis

7. Head injury and fractures

**C. Miscellaneous:**

1. Atherosclerosis
2. Palmar Erythema
3. Alcoholic hypoglycemia and keto-acidosis
4. Cardiomyopathy
5. Alcoholic Myopathy
6. Anaemia, Thrombocytopenia, Vit. K factor deficiency
7. Risk of coronary artery disease
8. Malnutrition
9. Accidental hypothermia

**Psychological Complications :**

1. Alcoholic Hallucinosis
2. Alcoholic paranoia
3. Morbid Jealousy
4. Anxiety
5. Depression
6. Organic mental disorders
7. Suicidal tendencies
8. Loss of memory (confabulation in Korsakoff Wernicke Psychosis.)
9. Idiosyncratic intoxication
10. Withdrawal,
11. Alcoholic dementia.
12. Delusion of guilt
13. Delusion of infidelity
14. Disorientation
15. Phobia
16. Intellectual deterioration.

**Social Complications**

1. Getting Loans from everyone
2. Marital disharmony.
3. Antisocial activities.
4. Divorce.

**Legal Complications**

1. Frequent police arrest
2. Smuggling of Drugs.
3. Homicidal tendencies.

**Work related complications**

1. Absenteeism.
2. Inefficiency in work.
3. Quarreling with superiors.
4. Mistakes in work.
5. Loss of self-esteem in society and in working places.

**Laboratory Markers of Alcohol Dependence**

- i. GGT (P - Glutyl transferase) is raised to about 40 IU /L in 80% of alcohol dependent individuals. GGT returns to normal rapidly (within 48 hours) on abstinence from alcohol. An increase of GGT of more than 50% in an abstinent individual signifies a resumption of heavy drinking.
- ii. MCV (Mean Corpuscular Volume) is more than 92ft (normal = 80-90FU in 60% of Alcohol dependent individuals MCV takes several weeks to return to normal after abstinence.
- iii. Other lab markers include alkaline phosphatase, AST, ALI, Uric acid, blood triglycerides and CPK.
- iv. GGT and MCU together can identify 3 out of 4 problem drinkers in addition; BAC (Blood Alcohol Concentration) and breath analyzer can be used for the purpose of identification.

For detection of problem drinkers in the community several screening instruments are available. MAST (Michigan Alcoholism screening test) is frequently used for this purpose, while CAGE questionnaire is the easiest to be administered and it takes only about 1-2 minutes to administer.

**The CAGE questionnaire consists of 4 questions:**

1. Have you ever had to cut down on alcohol (amount)?
2. Have you ever been annoyed the people's criticism of alcoholism?
3. Have you ever needed Eye opener drink (early morning drink)

**Management of Alcohol Dependence**

Management of Alcohol Dependence consists of Detoxification, Treatment of Alcohol Induced physical and psychological complications, short term management and long term management.

**Detoxification**

Detoxification is a process in which patient is weaned from alcohol under medical supervision. The withdrawal of alcohol in a dependent person can produce a withdrawal state characterized by simple tremors, insomnia and restlessness to full blown Delirium Tremens. Since the Delirium Tremens carries a high mortality rate the patients who are withdrawing alcohol should be medically managed.

Chlordiazepoxide 50 to 100 mgs in divided doses orally will be helpful in controlling the mild to moderate withdrawals. In case of severe withdrawal symptoms parenteral benzodiazepines either diazepam or lorazepam may be given. Other complications like seizures, gastroenterological complications should be managed symptomatically. It is not necessary that all the patients with withdrawal symptoms should be given intravenous fluids. Only patients with dehydration should be given IV fluids. Since chronic alcohol dependence produces malabsorption and depletion of vitamins adequate doses of oral and parenteral vitamins should be given especially Thiamine to prevent Wernicke's Korsakoff Psychosis. The psychiatric complications of alcohol dependence like depression, paranoid disorders, psychosis should be treated with appropriate medications

### **Short Term Management**

The psychological methods of intervention should be used to strengthen the patient's motivation to remain abstinent. Individual Counseling, Psychotherapy, Behaviour Therapy, Family Therapy and Disulfiram (Antabuse) therapy are some of the interventions which have to be initiated depending on the individual needs. The disulfiram therapy should be initiated with proper assessment of the patient. The patient should be explained about the Disulfiram Therapy and a written consent should be obtained from the patient.

### **Long term Management**

Long term management consists of teaching the patients the necessary social skills to stay away from alcohol. Since Alcohol Dependence is a relapsing disorder the patients should be started on Relapse Prevention Therapy, where the relapsing situations are analyzed and individuals are made to understand their weakness and strengths in handling a potentially relapsing situation.

## **Chapter VIII Mental Retardation**

**Dr.V.Dayalan**

**M**ental Retardation is a condition of arrested or incomplete development of mind especially characterised by subnormality of intelligence. Mental Retardation is a subnormal state of intelligence. It is not an illness but a condition of poor development of the brain.

Level of intellectual functioning is determined by assessment with intelligence tests. During the normal development of the child physical growth i.e. the chronological age will have a corresponding mental growth which is also known as mental age. For example 8 year old child will have a mental age of eight years. In other words eight year old child will be able to do the tasks of majority of the eight old children. Intelligence of a child can be measured in terms of Intelligence Quotient (I.Q.). IQ is measured with Chronological age and Mental Age as follows

$$I.Q = \frac{\text{Mental Age}}{\text{Chronological Age}} \times 100$$

Six year old child with three years of mental age will have I.Q of 50. An average person has an IQ of 90 to 110. I.Q less than 70 is considered as Mental Retardation. There are several psychological tests which will measure a child's IQ.

### **Classification of Mental Retardation:**

Mental Retardation is classified into Mild Mental retardation, Moderate Mental retardation, Severe Mental retardation and Profound Mental retardation. Following are the IQ and adaptive levels of different categories of Mental retardation:

#### **1. Mild Mental Retardation: IQ 50 to 70**

Majority of patient under this type will manage to work and marry and are easily identifiable. They will be able to carry out a non demanding work.

#### **2. Moderate Mental Retardation: IQ 35 to 50**

Patient of this group will achieve success in personal hygiene, develop sufficient language to communicate with others. They will be able to participate in everyday living activities. They may require stimulus from family to maintain their skills. Person suffering from mild to moderate mental retardation may come under educable category which means that they can be educated in special schools.

#### **3. Severe Mental Retardation: IQ 20 to 35**

Person belonging to this group may develop skills to maintain self care, dress and feed but may not develop sufficient language and academic skills. They can not be educated but they can be trained.

#### **4. Profound Mental Retardation: IQ 20 and below**

Profound mentally retarded persons require total care and supervision to maintain life.

### **Causes of Mental Retardation:**

Causes of mental retardation are many. They can be broadly classified into Genetic causes and Environmental causes. Many of the environmental causes can be controlled to prevent mental retardation. Following are some of the causes of mental retardation.

#### **1. Genetic Causes**

##### ***Single abnormal gene***

- Autosomal dominant
- Autosomal recessive
- Sex linked recessive

##### ***Chromosomal***

- Autosomal addition
- Autosomal deletion
- Sex chromosome addition
- Sex chromosome deletion

#### **2. Environmental Causes**

##### ***Pre-natal***

- Infection
- Exposure to toxic substances or drugs

##### ***Peri-natal***

- Infection
- Asphyxia
- Cerebral damage
- Trauma

##### ***Post-natal***

- Infections
- Tumours
- Trauma
- Toxins
- Endocrine

Mild mental retardation can be caused by several interacting factors like genetic, educational and social. In about 60% of moderate to severe mental retardation, it will be possible to detect a specific cause leading to mental retardation.

### **Assessment of Mental Retardation:**

Assessment of mental retardation can be done by eliciting history from the parents regarding development of the child, by observing the child and by carrying out certain relevant investigations. The assessment aims at the following objectives:

1. To determine the causes of mental retardation
2. To diagnose underlying medical condition which may contribute or perpetuate the condition (eg. hearing deficit)

3. To assess the degree of intellectual development and developmental delay
4. To assess the family's coping skills
5. To plan management mental retardation can be diagnosed from a history of delayed milestones. Following are some of the important milestones in a child. In three months a child should be holding his neck erect, in 6 months he should sit with support, at age of nine months to one year child will start walking and at one and half years he should start uttering few words. When these milestones are delayed then a diagnosis of mental retardation should be made.

### **Management of Mental Retardation:**

Mental retardation is a deficit and not a disease. It can not be cured but can only be managed. Management strategies will depend on the severity of the retardation. Mild to moderate mentally retarded persons can be trainable or educable in a special schools, whereas the severely mentally retarded may require supervision and guidance in the activities and profoundly mentally retarded persons would require assistance for their daily living and survival. The parents of mentally retarded will require emotional support, guidance and advice. Following are some of the components of management:

1. Elicit mentally retarded persons capabilities and liabilities
2. Assess the mental development of the child
3. Develop a list of target activities to be trained as per the mental age of the child is bathing then divide it into smaller activity like holding the mug, holding the soap, pouring water, applying soap, etc.
4. Advise the parents to repeat one activity several times a day for few weeks. Once the child has learned the activity then they can go to the next activity.
5. The parents should perform the activity with the child rather than instructing the to carry out the activity.

### **Management of special problems:**

#### **Physical illness:**

Persons with mental retardation will be at greater risk of developing physical ailments. It is important to diagnose and treat physical problems early to prevent any complications. The prevalence of Epilepsy among mentally retarded persons are 30 to 70%. The risk of epilepsy increases with the severity of mental retardation. Epilepsy associated with mental retardation should be diagnosed and adequately treated.

#### **Psychiatric illnesses:**

About 30% of the mentally retarded can develop disorders of conduct and behaviour, mostly in the form of aggressive or impulsive behaviour. A small percentage of mentally retarded can develop mood disturbances like depression.

Mentally retarded can also present with psychosis. The psychiatric disturbance in a mentally retarded should be treated like any other psychiatric disorders.

### **Treatment for the care providers:**

Often the parents of the mentally retarded persons can develop depression or 4. Devide the identified activity into smaller steps for example if the targeted activity adjustment problem due to the stress involved in managing a mentally retarded person at home. Such problems in parents should be treated with medications and counselling

### **Care of Mentally retarded in the community:**

Most of the mentally retarded persons can be managed in the community. The primary care physician can play a crucial role in identifying and managing the mentally retarded persons in the community. Following are some of the activities which can be undertaken at the primary care level:

1. Training the health workers in identifying the mentally retarded in the allotted population
  2. Assess the cases of mentally retarded brought by the health worker
  3. If necessary refer the cases to speciaslist for opinion
  4. Educate the parents about the mentally retardation and need for their role in managing the patient
  5. Treat the associated conditions like epilepsy in the mentally retarded persons
  6. Utilize the services of Health workers in follow up of patients
  7. Teach the health workers in training the mentally retarded persons
  8. Conduct awareness programs about prevention of mental retardation
- All the cases of mental retardation need not be referred to psychiatrist or psychologists. Most of the cases can be managed at the community. Cases may be refered for specialist opinion when there is associated neurological or psychiatric disturbance or there is need for investigation. The cases with multiple handicap may be refered to specialist for diagnosis and treatment. Families requiring genetic counselling may be refered to specialist.

## **Chapter IX Organic Mental Disorders**

**Dr.M.Murugappan**

**O**rganic Mental disorders are psychiatric disturbances caused by the damage to the structure and functions of the brain. The organic mental disorders have distinctive signs and symptoms. The underlying pathology may be in the brain itself or in other parts of the body which affects the brain. It is essential not to miss a underlying organic cause in psychiatric patients. Early diagnosis and intervention in an organic condition may be life saving. Hence the primary care physician should be able to suspect an organicity and refer the patient to appropriate speciality for intervention. Organic states such as acute confusional states or dementias are easy to diagnose when they are well stablished. The importance lies in diagnosing the organic states at the earliest so that intervention is effective.

### **Signs and symptoms of Organic Mental disorder:**

Organic psychiatric signs and symptoms may be found in any part of mental status examination. But most important are the orientation, memory, attention and concentration. These function are also called primary mental functions. Disturbances in any one or many of the primary mental functions should evoke suspicion of organic mental disorder. Examination of orientation, memory and concentration are dealt in Chapter-IV. The organic state can also present with disturbances in behaviour, speech, mood and thought. Following are some of the manifestations of organic states:

**Restriction of activity:**

The patient may restrict his activity to a limited area within which he will be able to cope. He would avoid new and unfamiliar situations. He may become extremely orderly which is often called 'organic orderliness' which may resemble obsession.

**Repetitive activity:**

Due to restriction of activities and memory deficits, scope of activity becomes restricted which leads to repetition of same activity several times. Unlike obsessive patient the organic patient may repeat the activities without knowing that he is repeating the same activity.

**Persevaration:**

It is an inability to stop one activity or topic and move on to the next. The patient may repeat the last part of the last activity several times.

**Streotypies:**

Streotypies are frequently repeated, purposeless voluntary movements. Eg. plucking at the bed cloths.

**Repetition and persevaration of speech:**

Speech, like behaviour can be repetitive. For example the patient may try to answer the previous question while the examiner had asked a new question.

Mood:

Patients emotional response may lack depth and are poorly sustained.

Emotional incontinence:

Inappropriately excessive laughing or crying precipitated by trivial reasons are suggestive of organic etiology.

Catastrophy reaction:

Sudden and explosive outburst of aggression or distress precipitated by trivial stimuli are called catastrophic reaction which is characteristic of organic states.

Delirium, Acute Confusional States, Alcohol or drug induced organic syndromes are some of the commonly seen organic mental disorders.

### **Delirium**

Patient may present with confusion or agitation and uncooperativeness. Clouded thinking or awareness may be seen. The delirium are often accompanied by poor memory, emotional lability, poor attention, agitation, disorientation, illusions, visual or auditory hallucinations, and sleep disturbances. Symptoms may be acute in onset and fluctuating in nature.

Following are some of the causes of Delirium:

1. Alcohol or drug withdrawal States
2. Severe Infections
3. Infections of brain
4. Metabolic changes
5. Head injury
6. Hypoxia

### **Management**

Delirium is a medical emergency. In most of the cases hospitalization may be necessary. Avoid sedatives and hypnotics except in cases of alcohol or drug withdrawal. Major tranquilisers in lower doses will be helpful. Haloperidol 5 to 10 mg in divided dose may be tried. Actively investigate and treat the cause for delirium. Following measure may be taken to control the disorder:

1. Prevent patient from harming himself or others
2. Patient's contact with the family will reduce confusion
3. Provide reminders of time and place to reduce further confusion
4. Keep them in a well lit and calm room with minimal distraction
5. Look for signs of dehydration and treat accordingly
6. Attend to bladder
7. Monitor temperature and if the patient is febrile initiate measures to control the fever
8. Patient may be physically restrained if he is violent or aggressive.
9. Educate the patient's relatives about the patient's illness
10. Patient may be referred to a hospital with facilities for investigations and further management

### **Dementia**

Dementia is characterized by progressive degeneration of brain. It usually starts gradually and is progressive disorder. Most of the cases of dementia are irreversible. It is usually associated with elderly patients.

Patient may present with complaints of memory disturbances, change in personality, behavioural disturbances, and confusion. Clinical picture will be of progressive deterioration of intellectual functions like memory, attention, concentration, orientation and judgement. Emotional lability, disinhibited behaviour, aggressive behaviour, incontinence, perseveration are some of the other features of Dementia. On examination marked disturbances in the primary mental functions of the patient can be made out.

### **Causes of Dementia:**

1. Degenerative disorders of brain like Alzheimers disease, Huntingtons disease, Parkinsonism, etc.
2. Infections of brain
3. Head injury and subdural hematoma
4. Cerebral hypoxia or anoxia
5. Metabolic encephalopathy
6. Endocrine disorders
7. Brain tumours
8. Alcohol dependence
9. AIDS

### **Pseudo-dementia:**

Severe depression may present with features of dementia which will improve with treatment of underlying depression. This condition is termed as Pseudo-dementia.

### **Treatable Dementias:**

Majority of the cases of dementia are due to progressive degeneration of brain and are not treatable. But there are few dementias which are caused by specific cause and on treating the underlying pathology the patient will improve. These categories of dementia are called treatable dementias. Following are some of the treatable dementias:

1. Subdural hematoma
2. Normal pressure hydrocephalus
3. Hypothyroidism
4. Syphilis
5. Infections

### **Management:**

Patient may be referred to speciality hospital for investigations. Since the condition is a progressive disorder symptomatic treatment and counselling for the relatives should be taken up. Aggressive cases may be treated with Haloperidol in 5 to 10 mg. in divided dose. Chlorpromazine and sedatives can be used judiciously. Since most of the patients with dementia are elderly caution should be exercised while giving medications. Nutrition and hygiene should be maintained.

## Chapter X Epilepsy

Dr. S.Rajarathinam

**E**pilepsy is a disorder due to excessive and temporary neuronal discharging, which results from intracranial or extracranial causes and is characterized by discrete and recurrent episodes in which there is a disturbance of movement, sensation, behavior, perception and or consciousness.

### Epidemiology

It is estimated that about 8 to 10 persons in 1000 population have this problem at any given time

### Age of onset

It can start at any age. In majority of cases, it starts in childhood and adolescence.

### Causes of Epilepsy

- a) Intracranial causes
- b) Extracranial causes

#### *Intracranial Causes*

1. Cerebral Birth injury
2. Congenital Anomalies
3. Sequel to meningitis or encephalopathy
4. Head injury
5. Mesial Temporal lobe sclerosis
6. Cerebral Tumor
7. Arteriovenous malformation
8. Cerebrovascular disorder
9. Cerebral Atrophy

#### *Extracranial Causes :*

Heart or Respiratory arrest :	Anoxia
Endocrine disorders :	Hypoglycemia, Hypocalciuremia
Renal Disorder :	Uremia
Pregnancy :	Eclampsia
Poisons :	Alcohol, Lead, and Insecticide

### Type of Epilepsy

There are three common types of Epilepsy

1. Grandmal or Generalized Epilepsy
2. Focal Epilepsy (Including Temporal Lobe Epilepsy)
3. Focal Epilepsy becoming generalized.

### Recognition of Epilepsy

The most important aspect of diagnosis is very good and clear history. It is always not possible to see an actual fit in a patient. So you have to talk to the family members who have seen the fit.

### Grandmal Epilepsy

The attack occurs suddenly, the Individual falls down unconscious and has a loud cry. The eyeballs roll up. It is followed by stiffness of whole body lasting for few seconds. Soon there is convulsive movement of body involving both sides. At this stage, there is frothing of the mouth and at times there is urinary incontinence. Gradually the jerky movements become less and subside totally. The patient, then goes off to sleep and on waking up he is not aware of what has happened to him during the attack. He might have bodyache, fatigue and prefers to take rest. Some times, after a fit, the patient remains confused and behaves abnormally for a short period

Before the onset of Fits some patient may develop changes like becoming dull, irritable, staring at blank space and complaining headache. These are called prodromal symptoms, which can be utilized to prevent harm during the fit, by reaching a safe place on experiencing these symptoms.

### Focal Epilepsy

The convulsions start in one part of the body like hand or leg or a side of face and are either confined to that part only or are followed by Generalized Epilepsy.

### Temporal lobe epilepsy (TLE)

In Temporal Lobe Epilepsy there is no loss of consciousness but only impairment of consciousness, Patient behaves in an abnormal manner for a few minutes in which he appears to be angry or apprehensive and carries out repetitive purposeless activities, for which he has no memory. He may also experience hearing voices, see visions or smell foul odors. In between the attacks, he is normal. It is often mistaken for psychoses but can be recognized as TLE by its brief duration and normality in between the attacks and repetitive nature of the behavior. It is also known as psychomotor epilepsy.

### Questions helpful for the diagnosis

- a. What is the duration of fits?
- b. What is the frequency?
- c. How does it start?
- d. Describe the attack step by step?

### *Differentiation from Hysterical Fits :*

PARTICULARS	EPILEPSY	HYSTERIA
1. History of fall and injury	Present	Absent
2. Fits when alone/during sleep	Yes	No
3. Every fit same as the other	Same	Different
4. Movement of Limbs	Regular	Irregular
5. Tongue Bite	Yes	No
6. Incontinence of urine and feces	Present	No
7. Inducing an attack by strong suggestion	Not Possible	Possible
8. Pupils and plantar reflex during an attack	Up going plantar Dilated pupils	Normal

### **Role of Investigations**

X-Ray skull, EEG, CT Scan etc. can help to find epilepsy foci in some cases.

These Investigations are essential in cases of focal fits, late onset Epilepsy and epilepsy with neurological findings on clinical evaluation.

### **Pattern of presentation of patients**

- Patients may be brought to you with history of fits
- Patient may be brought with attacks of abnormal behavior with or without history of fits.
- Repeated burns and injuries
- Children with poor mental development with history of fit.
- Children with poor school performance
- Persons taking treatment from traditional healers for being “possessed by evil spirits” may be having epilepsy.

### **First aid in acute attack**

When you come across a patient during a fit, make the person to lie down comfortably in a safe and open place. Avoid over crowding. Remove sharp or dangerous objects, found near the patient. Loosen the clothes of the patient, place a rolled cloth between the teeth to prevent tongue bite and turn the face to one side which will bring out the secretion from the mouth. Do not give water or anything else to drink during the fit. Similarly don't try to over power the patients when there is jerky movements. The fit will usually last for 2 to 5 minutes and then the person will go to sleep. He may become confused for about 30 Minutes. Both these conditions will improve by themselves in a short time, usually with in an hour.

### **Management**

#### *Instructions to the patient and family members:*

- Take the medicine, as prescribed, regularly not missing even a single dose.
- Patient may feel drowsier in the beginning of drug treatment and it will subside totally over a period of time.
- Missing dose can result in a fit. Hence keep adequate stock of tablets.
- Keep the medicines in a safe container to avoid accidental use by others, especially children.
- Record all the fits.
- Regular follow-up is essential for adjustment of doses and assessment of any side effects.
- Don't work near fire, water, machines, don't drive vehicles and

### **Drug Treatment**

#### *Only one attack :*

Wait; ask the patient to report to you if he gets the second attack

#### *Two attacks:*

- Start the treatment with one drug.
- Start Phenobarbitone, which is inexpensive and effective
- 3 Year - 15mg/Bed time dose, 3-10 Years - 30mg/Bed time dose, Above 10 years 60mg/Bed time dose
- Drugs have to be given for a minimum period of 3-5 years after the last fit.
- If a patient reports that he had a fit while on treatment
  - Check whether he is on regular medication in the adequate dose.
  - Look for precipitating factor like fever, Alcohol intake, sleepless night, and missing a meal and advice accordingly.
  - Rule out hysterical fit
- When clarified that the patient gets fit inspite of regular medication, step up the dose gradually upto 180 mg in an adult.
- If attack are not controlled add Diphenyl Hydantoin 100mg a day and increase it gradually, if necessary upto 300mg, <r> in adults
- It attacks are not controlled, add Carbamazepine 100mg day, and increase it gradually upto 600mg.
- While adding Carbamazepine, taper the dose of Phenobarbitone gradually and stop it
- When a patient is free form fits for 3 to 5 years continuously, then taper the dose and stop the medication over 6 months period.
- In case of relapse of fit, drugs are restarted and continued for another 3 to 5 years.
- It is not advisable to give more than 4 weeks supply of drugs at a time.

**Role of specialist opinion :** If fits are not controlled in spite of the above regime for 3 to 6 months and patient develops some neurological findings like paresis, ataxia, diplopia, nystagmus, confusion or forgetfulness.

2. **Complication with Drugs:**

- a. **Phenobarbitone:** Sedation, Irritability and restlessness in children.
- b. **Diphenyl hydantoin:** Gum hypertrophy, Hirsutism may develop after long term medication. Ataxia and Nystagmus may occur in a few patients and disappear after reducing this dosage or stopping the drug.
- c. **Carbamazepine:** Allergic skin reactions, Sedation, Gastrointestinal disturbances and rarely aplastic anemia.

**Status Epilepticus**

Status Epilepticus is a condition where patient develops repeated and uncontrolled convulsion without regaining consciousness.

Hospitalize the patient immediately. Follow the first aid procedure mentioned already. Give injection diazepam 5-10mg / iv/slowly.

This can be repeated if the seizure recurs. If fit is not controlled, 50-100mg of injection phenytoin may be given intravenously as a single dose.

In case, the attacks are not controlled, the patient should be referred to a specialist. Once the fits are controlled the parental anti-epileptics will have to be replaced by regular oral antiepileptic medication.

**Febrile Convulsion**

At times, children of age group 6 months to 3 years are brought with a history of fever and fits. If the child has frequent attacks of fits with mild fever, and family history of epilepsy, start the treatment. Reassure the parents. Advise them to bring down future episodes of fever by antipyretics, tepid sponging and report to you. If the child gets an attack without fever, start treatment.

**Individual and Social problems**

1. Epileptic patient is looked upon differently by the society and it gives rise to inferiority feelings in the patient which in turn, affect him at family, work, and marriage
2. Successful control of fits minimizes harm to the individual, prevents social stigma, minimizes brain damage and improves the social functioning.

**Family/Individual counseling in Epilepsy**

When a person in a family is suffering from epilepsy, the patient and the family members become anxious and depressed. The guidance, education, advice, suggestion and counseling to the patient and family help a long way in the management and rehabilitation of the Epileptic patient.

## Chapter XI

# Psychiatric Emergencies

Dr. N. Solayappan

**P**sychiatric emergencies differ from medical emergencies in the sense that the former ones are emergencies for the self, others, and the environment. Psychiatric emergency is due to disturbance in thought, feelings or actions and requires immediate treatment. This can occur anywhere including medical or psychiatric wards or in the community.

Common examples are like violent behaviour of any etiology, suicidal attempts or ideas, self-mutilating behaviour, extreme and unbearable distresses and may be a public nuisance with or without violence.

### Interventions & Management

A brief history of the illness should be obtained from relatives or the patient. Physical examination to the extent possible should be done to ascertain vital parameters. Except in excited patients privacy is preferable while interviewing. Avoid restraint as far as possible. Do not confront the patient, unless absolutely required. Do not hide your identity.

Some of the important emergency situations we come across are suicidal attempt, excitements due to functional illness like schizophrenia or mania, post partum psychosis, organic brain disturbances or systemic illness. A brief history will help to differentiate. In acute brain syndrome, fluctuation in the level of consciousness, disorientation, impairment of memory etc. will distinguish from other excitements. Stupor is an emergency. Nutritional status is of prime importance in the management of stupor and always one should anticipate sudden excitements in a stuporose patient.

Drug Induced Emergencies may be due to acute side effects, in the initial stage like Extra-pyramidal symptoms dystonic spasms, oculo-gyric crisis or while the patient is on therapeutic dosage developing symptoms of toxicity, especially while the patient is on Lithium. Tremors severe vomiting, diarrhea, drowsiness, ataxia, altered sensorium are to be identified at an early stage. Another important condition is Neuroleptic Malignant Syndrome patients while on psychotropic drugs combinations especially Lithium and Haloperidol may developed-Hyper pyrexia, Hypertension, Hyperventilation, Hypertonia. Unless identified early the result may be disastrous. Overdosing with the prescribed drugs with or without suicidal intent is another situation.

Hysterical conversion or dissociation reactions, due to their dramatic onset of symptoms and disability may give a picture, which may be termed as “Pseudo Emergency”. Here management is to mainly alleviate the anxiety of the relatives and

reassure the patient. Rarely acute treatments like Electrical Aversion Therapy may be used.

Drug withdrawal states mainly with drugs of addiction like Alcohol, Cannabis, Brown Sugar etc.

Alcohol withdrawal may lead to Acute Delirious State, which is both medical and psychiatric emergency. In Heroin withdrawal state, patient may experience excruciating pain, rhinorrhoea, sialorrhoea, lacrimation, abdominal cramps etc. which may be tackled with painkillers, I.V. fluids, sedation etc.

While on treatment for Alcohol Dependence with Disulfiram, emergency situation may arise when alcohol is consumed, which may require urgent hospitalization.

In case of behaviour disturbance with suspected history of Head Injury, avoid sedation and prefer physical restraint until proper diagnosis is made.

### Some Important Strategies in Management

1. Physical Restraint. Use Rubber straps or soft clothes, avoid joints
2. Sedate with injection chlorpromazine 50 to 100mg. IM or Haloperidol 5 to 10 mg. slow I.V./i.m, which may be repeated every half an hour as necessary, monitoring vital signs.
3. Hospitalization
4. Management of medical problems
5. Crisis Intervention
6. Supportive Psychotherapy, Environmental manipulation, Dealing with “Significant Others” in the family and providing information social service agencies and referral centers.

### While dealing with the patient.

Protect yourself

Prevent harm to self, others and objects in the surrounding. Always anticipate impending danger. Keep away more than the arm's distance. Do not confront or threaten, especially the paranoid patients.

In suicidal patients assess the risk. Elderly, single, divorced, widowed, recent attempts, violent methods used, diagnosis of major depression, commanding suicidal auditory hallucinations, medical history of chronic painful, terminal, totally dependant conditions (e.g. hemiplegia, paraplegia) malignancy, recent stressors (eg. death of spouse), family history of suicides etc. increase the risk of suicide.

Prevention of violence towards others

During examination assess the risk of violence, if significant risk is made out.

Approach in a non-threatening manner

Reassure and calm the patient

Offer medication

Inform restraint, or seclusion will be used if needed.

Show of force. Keep security personnel ready for restraint.

#### **When the patient is restrained**

Watch for vital signs

Isolate in a calm atmosphere

Plan further approach

## **Chapter XII**

# **Treatment Methods in Psychiatry**

**Dr.C.Kumar Babu**

**T**reatment of psychiatric conditions varies. Since causes of psychiatric disorders are varied, the treatment methods also vary greatly. The treatment methods can broadly be classified as biological and psychological. Use of drugs and Electro-convulsive therapy are biological methods of treatment. Psychotherapy, behaviour therapy, hypnosis etc. forms the psychological methods of treatment.

### **Drugs in Psychiatry**

Primary care physicians are likely to deal with psychotic patients. For these patients the commonly employed antipsychotic drugs are Chlorpromazine and Haloperidol.

#### **Chlorpromazine**

Chlorpromazine is a phenothiazine derivative. It acts by blocking D2 and D3 postsynaptic Dopamine receptors in the mesolimbic system. It is readily but incompletely absorbed from the GI tract. In addition to Dopamine receptors, it also blocks 5HT, and alpha-adrenergic receptors.

These drugs are widely used to treat patients suffering from Schizophrenia, Schizoaffective psychosis, Mania, Paranoid psychosis and organic psychosis associated with excitement and violence. It produces emotional quietening, psychomotor slowing and affective indifference. The sedative action wears off on prolonged treatment. Adverse effects are mainly classified as neurological and non-neurological.

Neurological side effects include acute dystonia, drug induced Parkinsonism, (Characterized by rigidity, tremor and slowness of movement), akathisia (subjective restlessness), acute dystonia, Tardive dyskinesia and rarely seizures.

Dystonias are best treated with Diazepam, Parkinsonism with benzhexol and Akathesia with diphenhydramine.

Non neurological effects include orthostatic hypotension, Impotence, weight gain, amenorrhoea, galactorrhoea, loss of libido, impotence, impaired ejaculation and infertility.

Toxic reactions (allergic) include. Agranulocytosis, Cholestatic jaundice and Skin eruptions.

Ocular side effects include cornea and lens opacities.

An important life threatening complication is Neuroleptic malignant syndrome, characterised by marked muscle rigidity, fever, altered blood pressure and pulse rate. Creatinine kinase enzyme is elevated reflecting muscle damage. Leucocytosis is also seen. Treatment consists of administration of Diazepam and symptomatic treatment, after immediately stopping the drug.

#### **Management of over dosage:**

The clinical picture may consist of drowsiness progressing to coma, intervening agitation, and neuromuscular excitability, which may lead to convulsions. Pupils are constricted and deep tendon reflexes are increased. Hypotension and hypothermia are the rule, though fever may develop later.

Patient should be monitored in Intensive care unit. The vital signs are to be watched regularly. Electrolytes and blood gases are to be monitored. Gastric lavage is a must. I.V fluids should be started. Seizure can be managed with Diazepam or phenytoin.

**Dose :** The average adult dose Chlorpromazine varies from 100mg to 1000mg / day orally. Intramuscular injections of 100mg doses can be given, to acutely excited patients.

### **Haloperidol**

The other commonly used antipsychotic is Haloperidol. Its action and side effect profile is almost similar to Chlorpromazine. Unlike Chlorpromazine, which is highly sedating, Haloperidol is less sedating in its action although it is of high potency in its antipsychotic action. The average oral dose is 5-10 mg/day. This can also be administered I.M or IV. Postural hypotension is quite rare.

The next groups of patients encountered at primary care are the depressive patients. They are to be treated with Antidepressant drugs. The antidepressants are classified as:

1. Tricyclics : Imipramine, Amitriptyline.
2. Tetra cyclics : Amoxapine, Maprotiline, and trazodone
3. SSRI : Fluoxetine. Sertraline

#### **Tricyclics**

The Tricyclics drugs are incompletely absorbed from the GI tract. They act by blocking the Norepinephrine reuptake pumps. So NE stays longer at the synapse

**Dose:** Amitriptyline : 75-200 mg/day orally  
Imipramine : 75-200 mg/day orally.

**Adverse effects:** sedation, tremor, blurred vision, dry mouth, urinary hesitancy, seizure weight gain and sexual disturbances.

**Over Dosage:** Present with Coma and shock, metabolic acidosis, agitation or delirium. Respiratory depression leading to apnoea. Neuromuscular irritability leading to seizures, hyperpyrexia, bowel and bladder paralysis, cardiac conduction defects and arrhythmia.

**Management :** Lidocaine or propranolol for arrhythmia, continuous cardiac monitoring, PCO<sub>2</sub>, Po<sub>2</sub> Measurements along with pH. Sodium bicarbonate to reverse acidosis. Potassium Chloride to correct hypokalaemia. Otherwise only symptomatic management is warranted.

**Fluoxetine :** This drug is a selective serotonin reuptake inhibitor, It is well absorbed from GI tract Dosage: 20-40 mg/day orally.

**Adverse effects :** Anxiety, Insomnia, asthenia, tremor, sweating, Nausea, vomiting, rashes.

**Overdose symptoms :** Death can occur if taken with other drugs. Only Supportive treatment is possible. Seizures respond to Diazepam.

It is always advisable to instruct the relatives to keep all antidepressant drugs under their care and never give it to the patient in large quantities for storage purposes, as suicide is an inherent risk in depressive patient.

### **Lithium**

Some depressive patients may be exhibiting depression as a part of a manic-depressive Psychosis. For these patients, Lithium should be considered. Lithium is a mood-stabilizing drug. It prevents mood swings. It is an inorganic monovalent cation. It acts by substituting for Na. in generating action potential. It decreases Norepinephrine, Dopamine turnover. It also increases the synthesis of Acetylcholine. It is well absorbed from GI tract. Lithium is used mainly in the treatment of the manic phase, in the maintenance treatment and in the prophylactic use for preventing Manic or Depressive episodes.

**Dosage :** 900 mg/day in divided doses after meals.

Periodic blood level monitoring is essential. Therapeutic level is 0.6 to 1.4 M.Eq/L.

#### **Adverse effects**

**Neurological :** Tremors (managed with Propranolol) Chorea athetosis, motor hyperactivity, ataxia, dysarthria, aphasia.

**Endocrinal :** Hypothyroidism.

**Renal** : Polyuria, Nephrogenic diabetes insipidus, polydipsia, nephritis, nephrotic Syndrome. Lithium should be used with great caution in pregnancy.

### **Diazepam**

The other common drug, which will be needed at primary care is Diazepam. This drug is used in the management of anxiety. It is well absorbed from duodenum. It binds with the GABA receptors to cause an increase in the frequency of chloride channel opening events. It causes reduction in anxiety, sedation, and sleep. Muscle relaxation and anticonvulsant action. Tolerance develops easily. Psychological and physical dependence may occur. Toxic effects are due to CNS depression leading to respiratory depression.

### **Anti convulsants**

Patients suffering from Epilepsy may come for treatment to the PHC. Two drugs employed commonly in the management of Epilepsy are Phenytoin Sodium and Carbamazepine. Phenytoin is a Diphenyl hydantoin molecule. It is well absorbed from the GI tract. It acts by inhibiting Na<sup>+</sup> conductance, and by blocking the post-tetanic potentiation. Phenytoin is used, mainly in the treatment of generalized tonic clonic seizures (Grand mal epilepsy). Dose is 100-300 Mg/day in divided doses.

Adverse effects are Ataxia, Gingival hyperplasia, hirsutism, peripheral neuropathy, osteomalacia and skin rashes.

Carbamazepine is a Tricyclic compound. It is used mainly to treat psychomotor epilepsy otherwise known as Temporal lobe epilepsy (TLE). It is also used for treating grand mal epilepsy. It acts by blocking Na<sup>+</sup> channels and Inhibiting high frequency repetitive firing by neurones. It also decreases synaptic transmission. Dose is up to 1000mg/day orally in divided doses. Adverse effects are diplopia, ataxia, aplastic anemia and agranulocytosis.

### **Psychotherapy**

Physicians need to establish rapport with their clients and approach them with concern, empathy and uncritical attitude. The main objective of psychotherapy is to offer the client the necessary emotional support he /she requires. Supportive Psychotherapy has the following component.

#### **Reassurance**

Clients require to be reassured about their recovery. The reassurance has to be firm, positive, and realistic and should not unduly raise the hopes of the client.

### **Explanation**

Educating the client about the nature and basis of the symptom is very important. For example, one need to explain that the headache experienced by the patient is due to muscle tension resulting from anxiety and not due to brain disease.

### **Guidance**

Persons who are in conflict about specific issues need to be guided by the therapist who understands the conflict and the solution. For example, the adolescent may be guided about choosing a career or education that is appropriate to him

### **Emotional Support**

Clients in emotional distress require support to combat the distress and reduce the suffering.

### **Ventilation and Catharsis**

Ventilation literally means “Taking it off the chest” and this facilitates reduction of Psychological distress. Through the process of Catharsis, one aims for emotional comfort and in this, one relives the traumatic experiences with accompanying emotion.

### **Environmental Manipulation**

Clients faced with environmental stress may be requiring change in the environment. Hospitalization may help to reduce the impact of environmental influences on the client’s problem and recovery.

One of the important problems of the psychotherapy is that it fosters dependence on the therapist and creates transference. Sometimes the therapist becomes attached pathologically to the client which called as counter transference.

Supportive Psychotherapy is mainly indicated for patients with significant psychological problems and includes the following disorders. Adjustment disorders, Anxiety disorders, Reactive depression and other Neurotic disorders.

Therapists who show concern, understanding and empathy for their clients can effectively administer psychotherapy with good success.

## Chapter XIII

# Women and Mental Health

Dr. S. Arunagiri

There is growing recognition that the stresses imposed on women affect their physical, emotional and mental wellbeing. Major changes are occurring in the women's roles and identities in the context of individual family work and community life. A wide range of studies has found that women are disproportionately affected by mental health problems and their vulnerability is closely associated with marital status, work and roles in society. There is also recognition that the physiological response to stress by women is qualitatively different. Women respond with lower levels of epinephrine than do men. However the subjective reports of women's perceptions of stress aroused tend to be greater in terms of emotional discomfort and lack of confidence than the actual levels of circulating epinephrine would suggest. This finding could indicate that women respond with greater emotional arousal to hormonal activation than men do or that they have a lower tolerance threshold for experience of physical arousal.

A woman is put to greater stress during menarche, periods of fertility, pregnancy, abortion, delivery and menopause. In almost all the above conditions psychiatric illness of milder or severe degree are common occurrences.

Commonly occurring psychiatric disturbances during this period which deserve mention are premenstrual tension, puerperal illness and menopausal syndrome.

### Premenstrual tension

Other terms used are premenstrual changes, premenstrual syndrome etc. The physical symptoms would include, dermatological, gastro intestinal symptoms including food cravings, constipation, diarrhea, pain and swelling in the breast, headache, difficulty in concentration and poor memory. Emotional symptoms include mood swings, irritability, anxiety, violence, depressive symptoms with suicidal ideas increased or decrease levels of energy and sexual desire.

Various causes have been propounded like changes in estrogen progesterone ratio, water retention, disturbance in the pituitary adrenal systems, decreased level of tryptophan or tyrosine etc.

Management includes relevant laboratory tests, psychiatric evaluation and medical examination particularly emphasizing possible endocrinological, metabolic, neurological and gynecological disorders and nutritional assessment. Underlying emotional difficulty should be treated with appropriate psychiatric drugs.

### Puerperal Disorder

Puerperium is undoubtedly a period when a woman has an increased risk of developing a psychiatric disorder. Psychiatric disturbance during puerperium could be from transient mood disturbances to puerperal psychosis.

Mood disturbances occur during third, fourth or fifth day after childbirth. Symptoms consist of brief bursts of tearfulness, irritability lability of mood, elation and insomnia.

The dramatic onset of puerperal psychosis following childbirth in normal mothers has been recognized. Schizophrenic features like thought disorders, delusion, auditory hallucination, affective blunting and social withdrawal can occur. An organic state like confusion and delirium may be present.

The etiology of puerperal psychosis is not clear. Genetic studies have shown a positive family history of mental illness. Epidemiological studies show that the relative risk is higher in primiparous women. Some have suggested that complication of pregnancy may play a role. A sudden fall in reproductive hormones after the delivery has been put forward by some.

Management involves careful explanation to the patient and family and reassurance. The mother should be encouraged to look after the baby as she recovers. Antipsychotics are useful. Electro convulsive treatment is effective in some cases. Associated physical illness if any requires treatment. The prognosis is good but the risk of recurrence during subsequent pregnancies should be borne in mind.

### Psychiatric aspects of menopause

Menopause has been defined as the cessation of menstruation for one year and is thus a retrospective diagnosis. Menopausal age ranges from the late 30's to the middle or late 50's. The Median age is 50 years with considerable variation. The vagueness of the generally recognized definitions of the menopause, the ambiguous nature of signs and symptoms and wide range of age at which it can begin contribute to the varied nature of symptoms.

Etiological factors are biological, psychological, cultural, social and family factors. Biological factors are changes in the level of prolactin, leutenising hormone, cortisol and thyroid stimulating hormone. Psychological factors are women's reaction to earlier events in her life such as puberty and pregnancy. Women who have experienced psychological difficulties like low self-esteem, low life satisfaction are prone to develop distress. Concern about aging, loss of childbearing capacity, change in appearance all may focus social and symbolic significance attached to the physical changes of menopause.

Socio culturally determined attitudes can certainly influence how a woman copes

stress. Major family changes and the emptiness experienced by women at this period when their children leave home can contribute to the causation of psychiatric illness. Lower socio economic class with poor educational level experience more symptoms.

Physical symptoms include hot flushes, sweats, headache, paraesthesia, vertigo, arthralgia, myalgia, atrophic changes in the skin, vagina and mucosal surface and subcutaneous tissue. In some osteoporosis occurs. Psychological symptoms are anxiety, fatigability, tension, emotional lability, irritability, insomnia and depression.

Anxiety symptoms are palpitations, breathlessness, chest pain, trembling, frequency of micturition, headache, paresthesia, sweating, dry mouth etc.

Depression presents with dysphoric mood or loss of interest or pleasure, agitation or retardation, loss of energy or fatigue, loss of interest or pleasure, loss of sexual desire, feeling of worthlessness and self reproach. Inappropriate guilt, morbid thought, suicidal ideation, poor concentration, indecisiveness, poor appetite and weight loss or increased appetite or weight gain and insomnia or hypersomnia are other symptoms of depression.

Management includes an assessment of menopausal women's entire life situation, which is crucial for appropriate treatment. The extent and the amount of discomfort created by symptoms must be evaluated and a thorough history must be taken with attention to stress and support in woman's life, her family and work situation and her pattern of adaptation.

Estrogens can be used to relieve hot flushes bearing in mind that prolonged use may result in endometrial cancer. Hot flushes may be treated by a variety of non-pharmacological approaches such as relaxation technique, hypnosis or support group.

Vaginal mucosal dryness can be treated with intermittent use of local estrogen cream. Exercise and remaining physically active preserves muscle tone. Psychiatric symptoms can be managed by anti-psychotics, anti-depressants and minor tranquilizers.

Psychotherapy should include encouraging the development of new activities, interest and gratification as well as attending to family dynamics and enlisting family and other support system when necessary.

## Chapter XIV Psychiatric Disorders in Old Age

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All over the world people are living longer. Declining mortality rates, improvements in health and medical services and control over infectious disease have initiated changes in the age structure of world population. In the developed countries the rise in the number of people surviving beyond the age of 65 years is more striking where they already constitute approximately 15% of the population. Though the annual growth rate of elderly people in the developed countries has reached a plateau. Yet they are expected to represent 25% of total population by the year 2025. Currently there are more than 55 million elderly people in India constituting 6.5 percent of the total population. By the turn of the century this number is likely to swell beyond 75 million representing 7.7 percent of the population.

### Prevalence of Mental Morbidity in the Elderly

In India Epidemiological studies have yielded mental morbidity rates of 349 per 1000 population among people above 50 years of age (Ramachandran et al 1979) and 89 per 1000 among those above 60 years of age (Venkoba Rao 1983). In the west, mental morbidity among aged above 65 years is 263 per 1000 (Kay et al) and 193 per 1000 (Copeland et al 1987).

The Principal mental disorders of later life are the Dementia and Mood Disorders. Others which are clinically important but about which there are no precise epidemiological data are neurotic disorders, personality disorders, chronic psychosis, and drug and Alcohol Abuse.

### Depression in old Age

The Point prevalence of depressive symptoms in general population has been estimated in different surveys to range from 13 to 20 percent. It has to be conceded that recognition of depressive disorders in elderly population is important for various reasons. Depression is the most common psychiatric disorder in old age. Various studies show 10-15% of the population above the age of 65, suffer from significant depression. Only a small proportion of depressed elderly seek psychiatric help. Inadequate management increases the risk of morbidity and mortality in this age group as is clear from the high rates of suicide among elderly in western population.

### Etiological Consideration

Besides the gradual loss of adaptive capacity and generally lowered resistance to stress with advancing age various biological and psychosocial changes increase vulnerability to depression in old age.

### Psychosocial Stresses

Ageing individuals are aware of ageing as a stress because at that time it also

means losing vigour, strength, physical health, mental power and opportunities. Often one's work and social as well as financial status in life, death of spouse, friends, separations and loneliness is added to boredom. The degree to which older persons can adopt successfully to life event changes is determined to a large extent by numerous mediating factors including the timing of events, preparation, sense of control personality and physical health, coping skills, physiological as well as psychological responses to stress.

Busse and Post cite approximately 80% of the elderly reporting life changes preceding a depressive episode. The two events most often referred to are retirement and death of spouse. Busse finds a significant relationship to financial status and continuing employment. Unemployed and retired are commonly depressed than who continue to do work. Having a hobby or activity valued by others is also an important factor among those who are not depressed.

In Indian studies Ramachandran et al report following bereavement some of the cultural practices such as loud crying and other rituals may reduce the incidence of depression. He also finds that social isolation and the feeling of loneliness related to physical disability, restricting movement and to widowhood state are significantly associated with depression. Venkoba Rao reports higher percentage of depression from the nuclear family.

### **Physical illness**

According to Rossman and others over 80% of the individuals above the age of 70 and more suffer from significant physical illness. Majorities of these illnesses interfere in the independent functioning. Cerebrovascular accidents such as stroke, parkinson disease carcinoma of the pancreas precede clinical depression. According to Winokur et al in certain individuals depression could be a direct cause of subsequent physical illness. However Murphy, Post and others using retrospective designs are not able to estimate the role played by physical illness causing geriatric depression. But Physical illness does influence the course of geriatric depression. Chronicity and relapses of depression are associated with debilitating physical disorders and onset of new physical illness. Thus the relevance of physical health to the pathogenesis of geriatric depression is obvious and complex.

### **Biological variables**

Ageing brain Hypotheses invoked by Post is that the failing CNS increases the vulnerability of the elderly to the development of depressive illness. This explains why elderly individuals succumb to trivial life events. Further this is supported by diminished choline, choline acetyl transferase, dopamine and nor- epinephrine and an increase in monoamine oxidase in the brain with advancing age. Lipton and Nemeroff have shown age-related decrease in tyrosine hydroxylase, tryptophan hydroxylase, which are compatible with a monoamine deficiency theory for the origin

of geriatric depression.

### **Clinical Features**

Clinical features of a major depressive disorder in old age are generally the same as in younger age. However there are some features which are more commonly seen in old age. Concomitant physical illness and its treatment further complicate the presentation and diagnosis.

Major Depressive illness in the elderly frequently presents itself in florid agitated form. The early diagnosis is missed and by the time patient comes to the attention of psychiatrist, he is markedly agitated with significant weight loss, sleep disturbance and delusional thinking. Such constellation of symptoms was at one time believed to represent a separate diagnostic entity, involuntal melancholia. However this entity has been omitted from the recent classificatory systems since it was indistinguishable on clinical grounds from other depressions.

Another common presentation of depression is in the form of poor memory and fears of intellectual decline but on psychometric testing they do not differ significantly from normal elderly people. This feature of so-called pseudo dementia has to be differentiated from true dementia. Other common presentation of depression could be milder forms of depressive illness, hypochondriasis, chronic pain and behavioural disturbances.

Management is by psychological approaches, drugs and electro convulsive therapy singly or in combination.

### **Psychosis of Late Life**

In some patients Schizophrenia which started in early life may continue in old age. With increasing age the symptoms become less florid and behaviour more subdued. In few patients schizophrenia occurs first time in later life.

Late onset Paraphrenia was described by Kay and Roth on the basis of a clinical study in which females and unmarried patients predominate. The clinical picture is characterised by thought disorders, mood and volitional disturbances and hallucinations. Intellectual functions and personality are relatively well preserved and the course becomes chronic. Before making a diagnosis of schizophrenia for the first time in late adult life one must first rule out commoner conditions like depression and dementia.

The principles of treatment remain the same as in younger patient. However one must be careful about the doses of neuroleptics in old age. Resperidone is advocated since the side effects are minimal. Elderly psychotic patients would usually require one fourth to one third of the adult dose.



**Family History of:** Mental illness/Mental retardation/Epilepsy/Suicide/  
Absconding behavior /Others (Specify) .....

**Family H/O Physical Illness :** Diabetes/Hypertention/Asthma/Cardiac illness/  
Tuberculosis/Others (Specify) .....

**PERSONAL HISTORY :**

**Birth :** Full term/normal/premature/complicated labour/birth injury/birth asphyxia/  
ceaserian/ Others (Specify).....

**Miles stones:** Normal / Delayed

**Education :**

**Schooling** : Started : Completed :

**Performance** : Very good / good / average / bad / very bad  
If discontinued, reason for discontinuation:  
Highest standard reached

**College** : Started : Completed

**Performance:** Very good / good / average / bad / very bad  
If discontinued, reason for discontinuation :

Highest standard reached :

**Occupation** : Number of Employment :  
Reasons for Change :  
Nature of present employment :

**Marital History** : Unmarried/Married Related/Unrelated  
Consanguineous / Non Consanguineous  
Love marriage / Arranged marriage  
Spouses Age : Age difference Between the spouses :  
Spouse's Education : Spouse's Occupation :  
Duration of the marriage :  
Marital Harmony :  
If separated, state the reason :

**Sexual History** : History of Masturbation :  
Attitude towards masturbation :  
Adolescent sexuality :  
Premarital Sexuality :  
Extramarital Sexuality :  
H/O Sexual dysfunctions :

**Premorbid Personality :** Introvert / Ambivert / Extrovert  
Any other information:

**Home Situation :**

**Housing :** Urban/Semi urban/ Rural Independent/Apartment  
Owned/Rented/Quarters/Others(specify) .....

**Family Structure :** Nuclear/Extended/Joint/Single parent

Financial status of the family :  
Number of dependent :  
Number of earning members :  
Details about financial liabilities :

**HISTORY OF PRESENTING COMPLAINTS :**

**PAST HISTORY :**

**PHYSICAL EXAMINATION :**

Pulse : B.P :  
Cardio Vascular System :  
Respiratory System :  
Abdomen :  
Central Nervous System :  
Fundus :

**MENTAL STATUS EXAMINATION:**

Appearance and behaviour :

Speech :

Mood :

Thought :

Perception :

**PRIMARY MENTAL FUNCTION :**

Orientation :

Attention :

Concentration :

Memory :

General Information :

Abstract Thinking :

Intelligence :

Insight :

Provisional Diagnosis :

Treatment Given :

**Appendix II**

Code No.

**DISTRICT MENTAL HEALTH PROGRAM - TRICHI**

*Referral Forms for Medical Officers*

Referring Medical Officer's name and designation :

Taluk hospital / PHC name and address :

Area Health Workers name :

Name of the Patient : Age : Sex :

Date : Father / Husbands Name :

Address :

Marital Status : Education :

Occupation : Income :

**Presenting Complaints:** ( Tick (3) the appropriate items)

- ◆ Sleeplessness      ◆ Loss of Appetite      ◆ Loss of Weight      ◆ Irritability
- ◆ Crying Spells      ◆ Loss of Interest      ◆ Suicidal Thought      ◆ Aches & Pains
- ◆ Palpitation      ◆ Tremors      ◆ Sweating      ◆ Uneasiness
- ◆ Headache      ◆ Giddiness      ◆ Sense of Fear      ◆ Repeated Thoughts
- ◆ Weakness      ◆ Body aches      ◆ Sexual problems      ◆ Excessive activity
- ◆ Withdrawn & dul      ◆ Excessive speech      ◆ Delusions      ◆ Hallucination
- ◆ Aggressive acts      ◆ Sadness      ◆ Loss of memory      ◆ Disorientation
- ◆ Abnormal behaviour      ◆ Alcohol/drug abuse      ◆ Any other complaint (Specify).....

**DURATION OF THE COMPLAINTS :**

**Family History:** Mental illness / Suicide / Mental retardation / Epilepsy / Addiction others (Specify).....

**Past history :** Mental illness / Attempted suicide / Fits / Addiction /

**Associated events:** Fever / Head injury / Fits / Alcohol or drug abuse / Stress

**Physical illness** Diabetes/Hypertention/Asthma/Cardiac illness/Tuberculosis/  
Others (Specify).....

**PHYSICAL EXAMINATION :**

Any other Information .....

**Dignosis :** Psychosis / Anxiety / Depression / Hysteria / Obsession / Epilepsy/  
Mental Retardation / Alcohol or Drug Addiction / Others.....

Treatment given:

Signature

**To be filled up by Psychiatrist attending the patient :**

- Complaint :
- Signs and Symptoms :
- Physical Examination :
- Relevant family history :
- Relevant past history :
- Associated events :
- Diagnosis :
- Treatment Given : In-patient / Out-patient/ Referred to.....
- Drugs prescribed :
- Any other remarks :

Signature

**Appendix III**

**Code No**

**DISTRICT MENTAL HEALTH PROGRAM - TRICHI**

**Referral Forms for Health Workers :**

Referring Health workers name and address :

Taluk hospital / PHC name and address:

Area Medical Officers name:

Name : Sex : Age : O.P.No :  
Address : Marital Status : Date of Reg. :

Occupation : Income :

**Presenting Complaints:** ( Tick the appropriate items)

- ◆ Sleeplessness
- ◆ Crying Spells
- ◆ Palpitation
- ◆ Giddiness
- ◆ Weakness
- ◆ Withdrawn & dull
- ◆ Aggressive acts
- ◆ Abnormal behaviour
- ◆ Loss of Appetite
- ◆ Loss of Interest
- ◆ Tremors
- ◆ Sense of Fear
- ◆ Body aches
- ◆ Excessive speech
- ◆ Sadness
- ◆ Alcohol/drug abuse
- ◆ Loss of Weight
- ◆ Suicidal Thought
- ◆ Sweating
- ◆ Repeated Thoughts
- ◆ Sexual problems
- ◆ Delusions
- ◆ Lss of memory
- ◆ Any other complaint (Specify) .....
- ◆ Irritability
- ◆ Aches & Pains
- ◆ Uneasiness Headache
- ◆ Excessive activity
- ◆ Hallucination
- ◆ Disorientation

**DURATION OF THE COMPLAINTS:**

**Family History :** Mental illness / Suicide / Mental retardation / Epilepsy / Addiction

**Past history:** Mental illness / Attempted suicide / fits / Addiction / .....

**Associated events:** Fever / Head injury / Fits / Alcohol or drug abuse / Stress/

Others (Specify).....

**Physical Illness :**Diabetes/High B.P/Fever/Tuberculosis/ Others (Specify).....

Any other Infirmination.....

**Dignosis :** Psychosis / Anxiety / Depression / Hysteria / Obsession / Mental Retardation/  
Alcohol Or Drug Addiction / Epilepsy/ Others(Specify).....

Signature

**Appendix IV**

**Format for the monthly report  
from DMHP, Trichi**

1. Number of cases registered in each Taluk hospital satellite clinic under DMHP with diagnostic break up :
2. Number of cases referred by PHC medical officers/paramedical personnel to Taluk hospital satellite psychiatric clinic with diagnostic break up :
3. Number of cases referred to Govt. Hospital from the satellite clinics for In-Patient treatment with diagnostic break up :
4. Number of cases referred back from satellite clinics to PHCs for follow up :
5. Details about any visit made to made to villages :
6. Details about IEC activities of the month :
7. Any difficulties encountered during this month :
8. Any other requirement :

Date : Signature of DMHT/DMHP Psychiatrist

**Appendix V**

**District Mental Health Program - Trichi**  
***Program Evaluation Form (Confidential)***

Inspecting Officer's name and designation:

Date and time of inspection:

Place of inspection: Head Quarters Hospital / Taluk Hospital / Primary Health Centre / Community / Others (specify).....

Personnel available during the inspection:

Records inspected during the visit :

Remarks :

Equipment verified during the visit :

Remarks :

Information gathered from patients :

Information gathered from public :

Remarks about :

Effectiveness of training program :

Efficiency of the Health Care delivery :

Effectiveness of the IEC programs :

Comments about overall performance of the personnel involved in the program:

Signature

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### FOREWORD

The District Mental Health Program which is being implemented at the Trichy District with Govt. of India's assistance is a standing example of how the health care can be taken to the community. The book 'Mental Health' contains valuable information regarding Epilepsy, Major Mental Disorders, Neurosis and treatment methods. The readers will also appreciate the information contained in the chapters on Women and Mental Health and Psychiatric Disorders in Old Age. It is essential that all the health care personnel should have a working knowledge in Psychiatry. I hope the book titled 'Mental Health' published by District Mental Health Program and the faculty of Institute of Mental Health will achieve this purpose. I appreciate the team behind the publication of this book and wish the District Mental Health Program a success.

**(Dr. C.S. Jayachandran)**

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