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FOREWORD

Mental health is fundamental to health and is paramount to personal well-being, family relationships, and successful contributions to society. It is related to the development of societies and countries. Mental ill-health impedes people's ability to learn and to engage productively in their economies. Mental health inherently affects physical health and physical health affects mental health. The two are inseparable in terms of achieving a more complete state of wellness. The sheer numbers of people affected, the associated disability due to mental, neurological and substance use (MNS) disorders, and the fact that effective treatment is available emphasizes the importance of addressing them in primary care. Our goal is to see that mental health is integrated into health care system across the country.

Human resources with adequate and appropriate training are necessary for scaling up all health interventions, and especially for MNS conditions, since care for these conditions relies heavily on health personnel rather than on technology or equipment. Access to health services can be improved by involving multiple cadres at various levels of the health system. For many priority conditions, delivery should be implemented with a stepped-care model, which consists of clearly defined roles for each level of care from primary to highly specialized care. This requires relevant training for each level of health professional.

I am happy to note that the program division is bringing out a training module for General Medical Practitioners on diagnosis, treatment and care of common MNS disorders. It will go a long way in scaling up and expanding District Mental Health Program in all the districts of the country. I congratulate the team for this endeavour. My best wishes for the success of this important initiative.

(Dr. Harsh Vardhan)

MESSAGE

Mental health and well-being are fundamental to our collective and individual ability as humans to think, emote, interact with each other, earn a living and enjoy life. On this basis, the promotion, protection and restoration of mental health can be regarded as a vital concern of individuals, communities and societies throughout the world.

Mental, neurological, and substance use disorders are highly prevalent and burdensome worldwide. The violations of human rights directed towards people with these disorders compound the problem. Much more effort is required to change policy, practice and service delivery systems to ensure mental health needs and concerns receive the level of priority necessary to reduce the burden associated with mental, neurological and substance use disorders. One of the barriers to development of mental health services is the complexity of integrating mental health care effectively with primary care services. The system that provides primary health care is overburdened. Limitations in human resources also contribute to this barrier, because low numbers and types of health professionals have been trained and supervised in mental health care.

I congratulate the program division for bringing out a training module for General Medical Practitioners on diagnosis, treatment and care of common MNS disorders. The module shall facilitate in imparting standardized short-term training to medical officers working at district and sub-district levels.

(Lov Verma)

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MESSAGE

दिनांक/Dated.....

Good mental health is integral to human health and well being. A person's mental health and many common mental disorders are shaped by various social, economic, and physical environments operating at different stages of life. Mental, neurological, and substance use (MNS) disorders are prevalent in all regions of the world and are major contributors to morbidity and premature mortality. The stigma and violations of human rights directed towards people with these disorders compounds the problem.

Development and upgrading of human resources are the backbone of organizational capacity building and one of the primary challenges of scaling up. Human resources with adequate and appropriate training in mental health are necessary for scaling up mental health interventions throughout the country. The goal for human resources is simple but complex to reach – to get the right workers with the right skills in the right place doing the right things.

I am glad that the program division is bringing out a training module for General Medical Practitioners on diagnosis, treatment and care of common MNS disorders. Priority conditions have been identified in the module on the basis that they represented a high burden; caused large economic costs; or were associated with violations of human rights. These priority conditions are depression, schizophrenia and other psychotic disorders, suicide, epilepsy, dementia, disorders due to use of alcohol, disorders due to use of illicit drugs, and mental disorders in children. The module is formulated with the aim of imparting standardized short-term training to medical officers working at peripheral levels.

I wish the team a great success in this endeavour.

(Dr. Jagdish Prasad)

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ASSESSMENT AND MANAGEMENT OF MENTAL HEALTH PROBLEMS IN GENERAL PRACTICE: AN OVERVIEW

Psychiatric disorders are quite common in the community as well as in the attendees of all kind of health care settings including the General Practice. It has been found that about 80-90% patients can be managed efficiently by General Practitioners after appropriate training.

Learning Objectives:

After completing this session, the participants should be able to enlist and understand:

1. **The Psychiatric Problems commonly seen in General Practice**
2. **The scope and need of mental health service delivery in primary care general health clinical practice.**
3. **The principles of assessment, including indicators of “abnormal” behavior, as symptom or sign.**
4. **The principles of management.**

Outline of the Text:

- ❖ Overview of psychiatric disorders in General Practice
- ❖ Scope of Mental Health Service Delivery in Primary General Health Care (What can be done?)
- ❖ Common principles in assessment (How to go about?)
- ❖ Common principles in management (How to do it?)
- ❖ Key points

PREVALENCE OF PSYCHIATRIC DISORDERS IN GENERAL PRACTICE

- ❖ World Health Organization (WHO) Cross-Cultural study at 14 centers all over world found that 25% of the attendees at GP/PHC suffered from one or more diagnosable psychiatric disorders.
- ❖ The Indian Centre of the WHO Cross-Cultural study at Bangalore found that 22.4% of the attendees at GP/PHC suffered from one or more diagnosable psychiatric disorders.

- ❖ The commonest psychiatric disorders found in General Practice are Depression, Anxiety disorder, Alcohol dependence and Somatoform disorders.
- ❖ About one third of the patients with psychiatric problems in GP have coexisting physical illnesses which, if persist, lead to delayed or incomplete recovery from the physical illness.
- ❖ There is an inadequate exposure to psychiatry during undergraduate training in India. It has been observed that only 30-50% of the psychiatric patients are correctly diagnosed by the GPs. The rest remain undetected leading to delay in the treatment, unnecessary investigations for physical illness and the prolongation of overall disability in the patients. It has been demonstrated that the identification rate for psychiatric illnesses in General Practice / PHC can be significantly enhanced after adequate training of GPs in Mental Health. It will also address the poor scenario of mental health manpower in India
- ❖ It has been demonstrated in many countries, including India that a short-term training of GPs can result in improvement in their skills to identify, manage and refer the psychiatric patients visiting them.
- ❖ The main role of GPs include: Identification, Management, Referral & Rehabilitation and follow up care of psychiatric patients.

SCOPE OF MH SERVICE DELIVERY IN PRIMARY GENERAL HEALTH CARE (WHAT CAN BE DONE?)

1. Acute and short term care: for severe & common mental disorders (SMD & CMD)
 - Assessment;
 - Establishing need for the treatment;
 - Initiating pharmacological treatment;
 - Monitoring for improvement & side effects;
 - Counseling, if required.
 - Referral, if required
2. Emergency Care: for persons having suicidal attempts/ ideation, agitated and violent acts
 - For Suicidal Persons:
 - providing Reassurance & support;
 - Offer Hope & Optimism;

- Assessment of Risk;
 - Referral to specialist.
 - For persons with agitation and violent acts:
 - Providing safety of all concerned
 - Providing emergency sedation (Lorazepam /Haloperidol);
 - Monitoring for side effects;
 - Referral to Specialist.
3. Referral: for severe mental illnesses, severe and chronic forms of Common Mental Disorders and Substance Use Disorders, Personality disorders and Mental retardation by providing
 - Initial Assessment;
 - Appropriate advice;
 - Referral;
 - Follow up care & Advice.
 4. After care: for Schizophrenia and Mood disorders on prophylaxis by
 - Assessment & understanding the records;
 - Consulting specialist /Hospital;
 - Follow up Prescriptions, if required;
 - Ensuring compliance;
 - Monitoring for side effects & complications;
 - Helping in Problem Solving.
 5. Advisory: for Consultation, Family and Marital issues, Interpersonal issues by
 - Providing awareness on various options & services;
 - Maintaining contact;
 - Avoiding getting 'involved'.

COMMON PRINCIPLES IN ASSESSMENT (HOW TO GO ABOUT?)

Communication with people seeking care and their carers:

- » Ensure that communication is clear, empathic, and sensitive to age, gender, culture and language differences.
- » Be friendly, respectful and non-judgmental at all times.
- » Use simple and clear language.

- » Respond to the disclosure of private and distressing information (e.g. regarding sexual assault or self-harm) with sensitivity.
- » Provide information to the persons on their health status in terms that they can understand.
- » Ask the person for their own understanding of the condition.

Assessment:

- » Take a medical history, history of the presenting complaint(s), past history and family history, as relevant.
- » Perform a general physical assessment.
- » Assess, manage or refer, as appropriate, for any concurrent medical conditions.
- » Assess for psychosocial problems, noting the past and ongoing social and relationship issues, living and financial circumstances, and any other ongoing stressful life events.

THE HISTORY TAKING

The history taking is much more elaborate, and includes details of family and personal life and patient's personality assessment.

Crucial to establish and maintain rapport and be systematic in obtaining information

Begin with →

Patient's name, age, gender, education, marital status, occupation, religion, and circumstances of referral/ reasons for attending the clinic

History of the present illness →

- ❖ **Patient's complaints: in the patient's own words**
- ❖ **Duration, nature and progression of symptoms**
- ❖ **Precipitating, predisposing and perpetuating factors**
- ❖ **Degree of functional impairment: effect on interpersonal relationships, work, family & other spheres of life**
- ❖ **Biological functions: Sleep & Appetite**
- ❖ **Details of treatment to date**

Family history →

- ❖ **Parent's/ sibling's age, occupations, relationships with the patient**
- ❖ **Enquiry into family history of psychiatric illness, suicide, alcohol & drug abuse, and mental retardation**

Personal history

- ❖ Early life & development
- ❖ Details of present circumstances: Accommodation, occupation, financial status
- ❖ Occupational history: jobs, reasons for change, work satisfaction, relationships with colleagues
- ❖ Sexual practices, relationships, marriage
- ❖ In case of women: menstrual pattern, contraception, miscarriage/ termination of pregnancy

Past Psychiatric and medical history

- ❖ Nature and frequency of previous psychiatric contact
- ❖ Treatment & hospitalizations
- ❖ Past surgical & medical history
- ❖ Alcohol & drug abuse (prescribed and recreational), tobacco consumption
- ❖ Past forensic history

The **Examination methods** mainly involve a mental state examination, which is quite time-consuming and difficult, because symptoms and signs are not easy to understand or interpret. However, Mental State Examination in Psychiatric assessment of a person is as important as Physical Examination in a general medical condition.

MENTAL STATE EXAMINATION

Appearance and behaviour

- ❖ Careful observation of the patient's manner, rapport, eye contact, facial expressions, cleanliness, clothing, self-care, movements,

Mood

- ❖ Changes in the mood states: depression, elation, euphoria, anxiety and anger

Speech

- ❖ Rate, quantity (increased/ decreased)
- ❖ Pattern: spontaneity, coherence
- ❖ Abnormal words (neologisms)

Thought

- ❖ Content: delusions, preoccupations, obsessions, phobias, suicidal intentions
- ❖ Flow
- ❖ Abnormal form of thought may be deduced, for example where connections between statements are difficult to follow

Perception

❖ Hallucinations, illusions

Sensorium & cognition

❖ Consciousness, orientation (time, place, person)
❖ Concentration & attention
❖ Memory
❖ General fund of knowledge & intelligence Educational background must be taken into account

Judgment & insight

❖ Social & Personal Judgement: patient's capability for social judgment, likely understanding of outcome of his/her behaviour
❖ Insight: awareness about being ill; degree of understanding of his/her illness, as well as willingness to accept treatment

Brain- Behavior Relationship

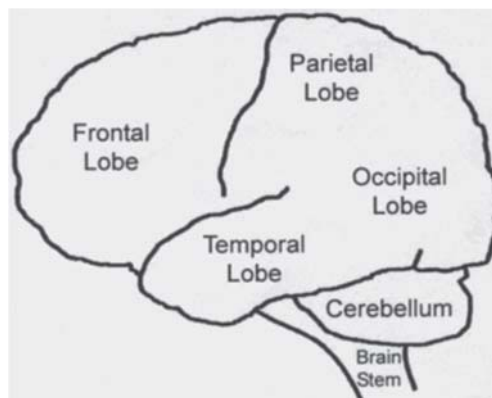
Various parts of brain exhibit varied behaviors. To better understand the relationship of brain and behavior, area-wise functions of various lobes of brain are as follows:

Frontal Lobe

- Problem-solving
- Judgement
- Planning
- Personality/emotions
- Organization
- Attention/concentration
- Speech

Temporal Lobe

- Memory
- Hearing
- Understanding language (receptive language)
- Organization and sequencing



Parietal Lobe

- Sense of touch
- Differentiation: size, shape, color
- Spatial & Visual perception

Occipital Lobe

- Vision

Cerebellum

- Balance
- Coordination
- Skilled motor activity

Brain Stem

- Vital functions-Breathing, Heart rate
- Arousal/consciousness
- Sleep/wake functions
- Attention/concentration

Symptoms of psychiatric illnesses

The patients may present with psychological symptoms. The possible diagnoses are as follows:

| | |
|----------------------------------|--|
| Delirium, Dementia: | Alterations in consciousness, orientation, concentration or memory difficulties etc. |
| Drug Abuse or Dependence: | Craving for or abnormal behavior to acquire addictive substances like tobacco, alcohol, opioids, cannabis, etc. |
| Psychosis: | Odd behavior like wandering aimlessly, aggression, violence, unexplained anger, muttering to self, smiling inappropriately, illogical speech, delusions or hallucinations etc. |
| Depression: | Sadness of mood, hopelessness, helplessness, worthlessness, inability to derive pleasure, easy fatigability etc. |
| Mania, Bipolar Disorder: | Elevated mood, hyperactivity, big talks or big spending etc. |
| Anxiety Disorders: | Obsessions, compulsions, 'ghabrahat', fears, restlessness, agitation etc. |
| Sex Related Disorders: | Sexual problems related to gender identity, sexual orientation, desire, erections, orgasms or perverse sexual behavior etc. |
| Others: | Attention deficit/hyperactivity, impulsivity, difficulty in learning Maths and other subjects, academic decline, stuttering, bed-wetting, lying, stealing, running from school, problems with relationships, school refusal, Malingering, Compulsive |

behaviours like shopping, gambling, stealing or hair pulling, prolonged grief reactions, personality problems beginning in adolescence, stress, repeated attempts at self-harm, mood symptoms before periods, etc.

The patients with psychiatric illnesses may present with somatic symptoms. The possible diagnoses are as follows:

Depression or Anxiety Disorder: Weakness, low energy, vague aches and pains especially headaches, Panic, strange sensations, “ghabrahat”, irritability, tearfulness, etc

Conversion Disorders (“Hysteria”): Pseudo-seizures, motor or sensory deficits, patchy memory lapses, etc

Somatoform Disorders: Multiple pain symptoms, vomiting, diarrhea, genitor-urinary or menstrual disturbances, etc.

Eating Disorders: Eating too little, or excessively with induced vomiting, etc.

Sleep Disorders: Sleeping more, or less, sleepwalking, nightmares, etc.

COMMON PRINCIPLES IN MANAGEMENT (HOW TO DO IT?)

Treatment and monitoring

- » Determine the importance of the treatment to the persons as well as their readiness to participate in their care.
- » Determine the goals of treatment for the affected persons and create a management plan that respects their preferences for care (also those of their carer, if appropriate).
- » Devise a plan for treatment, continuation and follow-up, in consultation with the person.
- » Inform the person of the expected duration of treatment, potential side-effects of the intervention, any alternative treatment options, the importance of adherence to the treatment plan, and of the likely prognosis.
- » Address the person's questions and concerns about treatment, and communicate realistic hope for better functioning and recovery.
- » Continually monitor for treatment effects and outcomes, drug interactions (including with alcohol, over-the-counter medication and complementary/traditional medicines), and adverse effects from treatment, and adjust dosages accordingly.

- » Facilitate referral to specialists, where available and as required.
- » Make efforts to link the person to community support.
- » At follow-up, reassess the person's expectations of treatment, clinical status, understanding of treatment and adherence to the treatment and correct any misconceptions.

Encourage self-monitoring of symptoms and explain when to seek care immediately.

- » Document key aspects of interactions with the person and the family in the case notes.
- » Use family and community resources to contact people who have not returned for regular follow-up.
- » Request more frequent follow-up visits for pregnant women or women who are planning a pregnancy.
- » Assess potential risks of medications on the fetus or baby when providing care to a pregnant or breastfeeding woman.
- » Make sure that the babies of women on medications who are breastfeeding are monitored for adverse effects or withdrawal and have comprehensive examinations, if required.
- » Request more frequent follow-up visits for older people with priority conditions, and associated autonomy loss or in situation of social isolation.
- » Ensure that people are treated in a holistic manner, meeting the mental health needs of people with physical disorders, as well as the physical health needs of people with mental disorders.

Mobilizing and providing social support

- Be sensitive to social challenges that the person may face, and note how these may influence the physical and mental health and well-being.
- Where appropriate, involve the carer or family member in the person's care.
- Encourage involvement in self-help and family support groups, where available.
- Identify and mobilize possible sources of social and community support in the local area, including educational, housing and vocational supports.
- For children and adolescents, coordinate with schools to mobilize educational and social support, where possible.

Protection of human rights

- Pay special attention to national and international human rights standards
- Promote autonomy and independent living in the community and discourage institutionalization.
- Provide care in a way that respects the dignity of the person, that is culturally sensitive and appropriate, and that is free from discrimination on the basis of race, colour, sex, language, religion, political or other opinion, national, ethnic, indigenous or social origin, property, birth, age or other status.
- Ensure that the person understands the proposed treatment and provides free and informed consent to treatment.
- Involve children and adolescents in treatment decisions in a manner consistent with their evolving capacities, and give them the opportunity to discuss their concerns in private.
- Pay special attention to confidentiality, as well as the right of the person to privacy.
- With the consent of the person, keep carers informed about the person's health status, including issues related to assessment, treatment, follow-up, and any potential side effects.
- Prevent stigma, marginalization and discrimination, and promote the social inclusion of people with mental, neurological and substance use disorders by fostering strong links with the employment, education, social (including housing) and other relevant sectors.

Attention to overall well-being

- Provide advice about physical activity and healthy body and weight maintenance.
- Educate people about harmful alcohol use.
- Encourage cessation of tobacco and substance use.
- Provide education about other risky behaviour (e.g. unprotected sex).
- Conduct regular physical health checks. Prepare people for developmental life changes, such as puberty and menopause, and provide the necessary support.
- Discuss plans for pregnancy and contraception methods with women of childbearing age.

Key points:

- **A range of mental health problems exists.**
- **Medical and psychiatric problems often coexist.**
- **Mental health service delivery in primary general health care setting is possible.**
- **Knowledge of principles of assessment & management helps GPs to deal psychiatric problems**

PSYCHOSIS

Learning objectives

1. Identify cases of psychosis
2. Preliminary assessment of psychosis
3. Pharmacological management of psychosis
4. To understand dosages, duration and side effects of commonly used antipsychotics
5. Effective follow-up care of patients with psychosis

Introduction

Broadly, psychiatric illnesses presenting in general health care settings can be classified into two groups, 'Common Mental Disorders'(CMDs) e.g. depression, anxiety disorders and 'Severe Mental Illnesses'(SMIs) which refers to a group of mental illnesses causing marked disruption in socio occupational life i.e. schizophrenia and bipolar disorder.

Psychosis (Greek word, 'psyche" refers to mind/soul; and '-osis' refers to abnormal condition or derangement) means 'an abnormal condition of the mind'. Psychosis refers to a state characterized by an individual's loss of contact with reality. It may involve abnormality in thinking and perceptions, as well as disturbances in emotions. It is categorized as a severe mental disorder causing dysfunction in the life of the patient and family.

Schizophrenia and other forms of psychoses that affect young people represent a major public health problem. It is common myth in general public to consider it due to religious and supernatural causes than illness, which often leads to delay in treatment seeking. Moreover, due to stigma attached to mental health services, there is often a delay in reaching to the psychiatrists. Thus, general physicians can be effective bridge in diagnosing, managing and effectively referring such patients.

Psychosis occurs in a number of psychiatric disorders e.g. depression, bipolar disorder (manic-depressive illness), puerperal psychosis and sometimes with drug and alcohol abuse. It can also occur in a number of medical and neurological conditions and caused due to medications.

Psychosis and neurosis

Psychosis and neurosis terms are commonly used terms for mental disorders. To understand the difference between two, it can be mentioned as:

| | Psychosis | Neurosis |
|---|---|---|
| 1 | It refers to presence of certain characteristic symptoms like delusions, hallucinations and other psychotic symptoms which cause distress/dysfunction to the patient. | It refers to a group of symptoms like palpitation, worries, mood changes, bodily symptoms and other symptoms which cause subjective distress to the patient |
| 2 | Personality and behavior are grossly impaired | Personality and behavior are relatively preserved |
| 3 | Marked impairment in judgment and poor/absent understanding of current symptoms and behavior i.e. insight is absent | Symptom/s is recognized as undesirable/ part of illness i.e. insight is present |
| 4 | Gross impairment in reality testing | Contact with reality is preserved |

Clinical features

Patients can present with following complaints related to psychosis:

- Abnormal/disorganized behavior /unusual appearance
- Un-understandable talk/Non-sensible speech
- False beliefs (e.g. "people are planning to kill me")
- False perception (e.g. hearing voices of people not around)
- Social withdrawal
- Neglect of usual responsibilities related to work/school/domestic chores
- Talking to self
- Violent/aggressive behavior
- Restless and running here and there

Clinical symptoms and signs for evaluation of psychosis for ease of understanding can be divided into following two groups:

1. **Positive symptoms:** They are called 'positive' since the person's thoughts, beliefs or sensations seems to be "abnormally expanded or greater" than normal. They suggest person having lost contact from reality and of having created one's false world. They include:

- **Hallucinations:** It refers to perceiving any sensations in absence of a real stimulus, e.g. hearing or seeing things that are not there.
- **Delusion:** It refers to false beliefs that are held with extraordinarily conviction and are not shared by other members of the society.
- **Formal Thought disorder:** It refers to the disorganization in thought as reflected by speech or sentences which are disjointed or cannot be understood e.g. while speaking person loses chain of thought or one thought has no connection with other.

2. **Negative symptoms:** They are called 'negative' since they involve 'decrease' in a person's usual experiences and functioning. They include:

- Little/ no drive to do things
- Lack of energy and interest
- Little display of feelings
- Speaking very less

Diagnosis

There are no laboratory tests available for diagnosis of psychosis. Diagnosis is entirely clinical. The following set of symptoms when present together can be helpful in making diagnosis:

Schizophrenia

More than two symptoms of the following if present for more than one month duration causing disturbance in functioning:

1. Delusions
2. Hallucinations
3. Disorganized speech
4. Grossly disorganized or catatonic behavior
5. Negative symptoms

Subtypes of schizophrenia

1. **Paranoid Schizophrenia:** Delusions; Hallucinations (e.g. belief people are making plans to kill me or hearing of voices; most common subtype; better prognosis
2. **Catatonic Schizophrenia:** Stupor; Rigidity; Mutism; Maintaining odd postures for long time; Good prognosis
3. **Hebephrenic Schizophrenia:** Disorganized speech; Self care and behavior e.g. vagabonds on street; Poor prognosis
4. **Simple schizophrenia:** Negative symptoms; gradual onset; Long lasting; Poor prognosis
5. **Residual schizophrenia:** Earlier fulfill criteria for Schizophrenia; Partially attenuated form mainly as negative symptoms

Acute Psychosis

It is characterized by appearance of psychotic symptoms within 2 weeks. It usually has rapidly changing clinical picture and complete improvement within 1 to 3 months, spontaneously or with effective treatment.

Persistent delusional disorder

It is characterized by the presence of delusion, usually centered on one theme with absence of hallucinations. Person's social and occupational functioning in all areas other than the theme of delusion is unaffected. Delusion can be persecutory (e.g. suspicious or fearful of being harmed), grandiose (e.g. believes self to be in possession of extra power, worth knowledge, ability or identity) or somatic (e.g. false belief of having an abnormal somatic sensation or illness).

Affective psychosis

Mania with psychotic symptoms

Presence of psychotic symptoms in background of following symptoms for 1 week:

Markedly elevated or irritable mood

Excessive energy and activity

Excessive talking

Usually psychotic symptoms are grandiose delusion and auditory hallucinations

Depression with psychotic symptoms

Presence of psychotic symptoms in the background of following symptoms for 2 weeks:

Depressed mood

Decreased energy and activity

Usually psychotic symptoms are nihilistic delusion (belief of having every body organ inside having decayed) and auditory hallucinations

Organic Psychosis due to general medical condition

Psychosis associated with medical or surgical condition/ drug-induced

Assessment

Good clinical history, thorough medical examination and mental status examination are the keys to make diagnosis. Take history from patient, accompanying caregivers and screen relevant treatment and investigation records. Cover following points in your questions to assess symptoms and other relevant history:

- a. What is the nature of the hallucination or delusion?
- b. What is the time span?
- c. Is there a recurring theme?
- d. Is there insight into it being unreal?
- e. Is there history of any medical illness?
- f. Have there been any recent major life-events?
- g. Is there a history of substance abuse (alcohol or drugs)?
- h. Does the patient's past behavior suggest psychological vulnerability, e.g. irritability, uneasiness, suspiciousness and withdrawn mood?
- i. Is there a family history of mental illness?

While taking the history it is possible to make an assessment of the patient's mental state:

- a. Is there loss of touch with reality; are there delusions or hallucinations?
- b. Is thought or speech disorganized, abstract or vague?
- c. Is emotion normal and appropriate? Remember that such experiences will naturally cause extreme anxiety but are there inappropriate emotional outbursts?
- d. Is there excitement or confusion?
- e. Is there depression or suicidal ideation?

Investigations

Though no specific test is diagnostic, but depending on the possible list of differentials for causes of organic psychosis, investigations can be advised. Look for concurrent conditions e.g. alcohol use, signs or symptoms suggestive of stroke/ diabetes/ hypertension/ HIV or AIDS/ cerebral malaria/ medications usage (e.g. steroids, ATT).

Treatment

A comprehensive treatment program includes:

1. Antipsychotic medication, which forms the cornerstone of treatment of psychosis
2. Education of the individual about his/her illness and treatment
3. Family education and support
4. Support groups and social skills training
5. Rehabilitation to improve the activities of daily living
6. Vocational and recreational support

Pharmacological management

After identification of the case, antipsychotic medications should be started depending on clinical status. The treatment can be broadly divided into two phases acute and maintenance. The goals of acute phase of treatment are to reduce symptoms, to prevent harm to self/others and improve biological functions. The goal of maintenance phase of treatment is to prevent relapse and to help patient improve one's level of functioning.

Selection of antipsychotic drug: Two classes of antipsychotic drugs are available, typical antipsychotics (haloperidol, chlorpromazine, trifluoperazine) and atypical antipsychotics (risperidone, olanzapine, quetiapine). Both the groups are equally effective, but differ in their side effect profiles. In typical antipsychotics, high potency drugs (e.g. haloperidol) have more extrapyramidal side (EPS) effects and low potency drugs (e.g. chlorpromazine, fluphenazine, trifluoperazine) have more anticholinergic side effects (e.g. dryness of mouth, urinary retention, constipation) and cardiovascular side effects (e.g. tachycardia, postural hypotension).

Managing side effects

Monitoring for common acute side effects is essential:

1. Extrapyramidal side effects (drooling of saliva, rigidity, fine tremors in hands), acute dystonia (sudden sustained contraction of a group of muscles, most commonly neck and oral musculatures are affected), oculogyric crisis (sudden up rolling of eyeballs), rabbit syndrome (fine perioral tremors). Manage extrapyramidal side effect by reducing antipsychotic dosage or addition of oral anticholinergic drug e.g. trihexyphenidyl or acutely by giving injection promethazine.
2. Cardiovascular side effects (hypotension, bradycardia, QTc prolongation in ECG): These side-effects require reducing dosage or switching to other agents.

| Antipsychotic | Adult dose range (mg/day) | | Side effects |
|-----------------|--------------------------------|--|---|
| | Acute | Maintenance phase | |
| Chlorpromazine | 100-1600 mg oral; 25-400 mg IM | 50-40 mg oral | Sedation, postural hypotension |
| Trifluoperazine | 4-40 mg oral | 5-20 mg oral | Sedation, extra pyramidal side effects |
| Fluphenazine | | 12.5-50 mg IM (deaconate, fortnightly) | |
| Haloperidol | 5-20mg oral; | 1-5 mg oral; | Sedation, extra pyramidal side effects, dystonia, akathisia, amenorrhea |
| | 5-20mg IM | 25-200 mg IM (deconate, monthly) | |
| Risperidone | 4-6 mg oral | | Sedation, extra pyramidal side effects, amenorrhea |
| Olanzapine | 7.5-30 mg oral | | Sedation, postural hypotension, weight gain |
| Quetiapine | 300-800 mg oral | | Sedation, postural hypotension, dizziness |

Non pharmacological management

Psycho-education: Discuss with the patient and family regarding:

- The person's ability to recover;
- The importance of continuing regular social, educational and occupational activities, as far as possible
- the suffering and problems can be reduced with treatment
- the importance of taking medication regularly;
- the right of the person to be involved in every decision that concerns his or her treatment
- Importance of staying healthy (e.g. following healthy diet, staying physically active, maintaining personal hygiene).
- Additional messages to family members of people with psychosis
- The person with psychosis may hear voices or may firmly believe things that are untrue

- The person with psychosis often does not agree that he or she is ill and may sometimes be hostile
- The importance of recognizing the return/worsening of symptoms and of coming back for re-assessment should be stressed
- The importance of including the person in family and other social activities should be stressed
- Family members should avoid expressing constant or severe criticism or hostility towards the person with psychosis.
- person with psychosis may have difficulties recovering or functioning in high-stress working or living environments.
- It is best for the person to have a job or to be otherwise meaningfully occupied.

Follow up care

People with psychosis require regular follow-up. In this phase, particularly general physicians can be of great help. Once a patient is in remission, or behaviourally stable, can continue to follow up locally with nearest general physician. Subsequently, patient can be referred to specialised mental health services only on need basis.

Follow up frequency:

Acute phase: Follow up once or twice weekly.

Maintenance phase: Follow up every one to three month.

Follow up assessment: During follow up visits, assess for the following:

- Level of symptoms
- Side-effects of medications
- Treatment adherence: Treatment non-adherence is common, address it
- Assess for and manage concurrent medical conditions
- Assess for the need of psychosocial interventions at each follow-up
- Maintain realistic hope and optimism during treatment
- Involvement of carers is critical during such periods

Referrals

In following situations, consider need for referral to specialized mental health services:

1. Nature of illness

- Severe level of symptoms and distress

- Suicide or risk of harm to others
- Marked violent aggressive behavior
- Catatonic symptoms
- Poor general medical status
- Refusal to accept orally (meals/ medications)

2. Nature of treatment

- Partial or no response to treatment
- Need to start modified electroconvulsive therapy
- Need to start clozapine
- Need of specific psychological therapies or vocational rehabilitation

3. Support system

- Poor social support system (e.g. homelessness)
- Family needs psycho-education about nature of illness and need of treatment

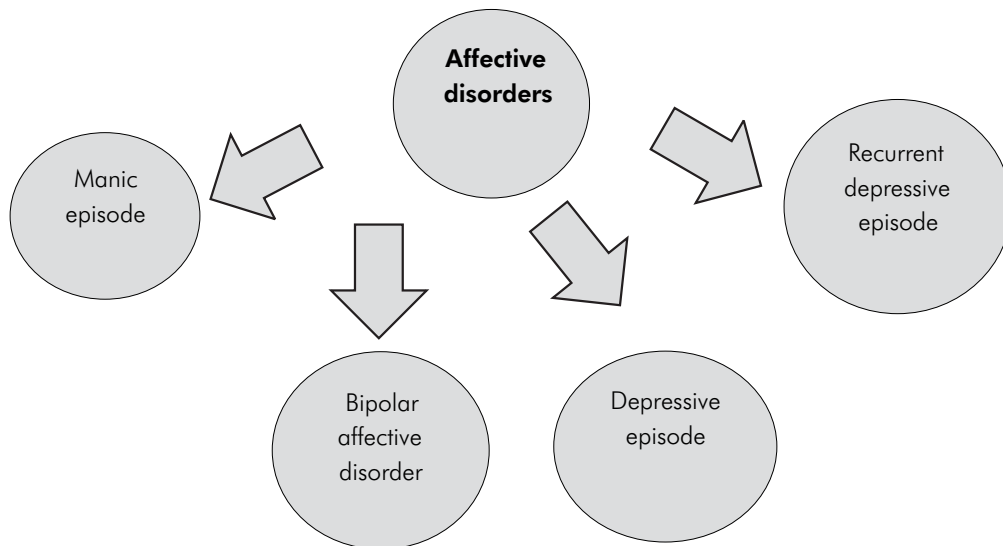
Case vignette

History: Mr. S., 25 year young male brought to emergency by family and neighbors with 8 months of behavioral complaints. Initially he become withdrawn, he would often lock himself up in the room. At times, he would be often found vacantly staring in space, smiling purposelessly and speaking alone as if in conversation with someone. He would neglect his self care and meals and would decline to meet anyone. After evaluation, he admitted hearing voices of his neighbors discussing regarding plot to kill him. He stopped taking food as he would believe that all his family members are trying to poison his food. He would refuse to acknowledge it as any illness.

Findings: On examination, patient had auditory hallucinations, delusion of persecution and absent insight into the illness. He was diagnosed as case of psychosis and started on antipsychotics.

DEPRESSION AND OTHER AFFECTIVE DISORDERS

Affective disorders encompass all disorders of mood that are persistent and pervasive and lead to socio- occupational dysfunction. By far, Depression is the most commonly encountered mental disorder by a general practitioner and hence a comprehensive understanding of the disorder is indispensable. This is the broad classification of affective disorders.



DEPRESSION

OUTLINE OF TEXT

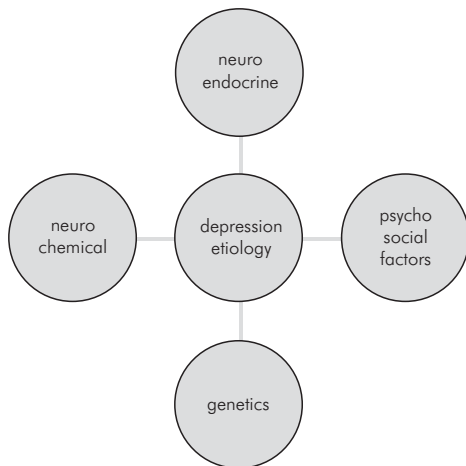
- Learning objectives
- Introduction and Epidemiology
- Case vignette
- Diagnosis
 - a. Criteria
 - b. Clinical features
 - c. Mental status examination
- Differential diagnosis (general medical conditions overlapping with depression)
- Management
 - a. Pharmacological
 - b. Non pharmacological
 - c. Special population
 - d. When to refer
- Explaining the case vignette

LEARNING OBJECTIVES

- to be able to identify depression in outpatient settings
- to distinguish between unipolar depression and bipolar mood disorders
- to be able to assess and decide treatment for depression
- to understand the dosages, duration and side effects of antidepressants
- to know when to refer

INTRODUCTION AND EPIDEMIOLOGY

Mood disorders mainly manifest as either manic or depressive episodes. The lifetime risk of depression varies from 10-15% with the risk being twice more in women than men. Depression has a multifactorial aetiology as depicted below. The disorder may manifest at any age but the incidence seems to peak in 20s. The disorder may have a variable course but if untreated can run a chronic and disabling course. Thus early identification and treatment increases the likelihood of remission and recovery.



Risk factors for depression

- Female sex
- Age <40 years
- Impaired interpersonal relationships
- Divorced, widowers
- Family history of depression
- Negative life events

CASE VIGNETTE

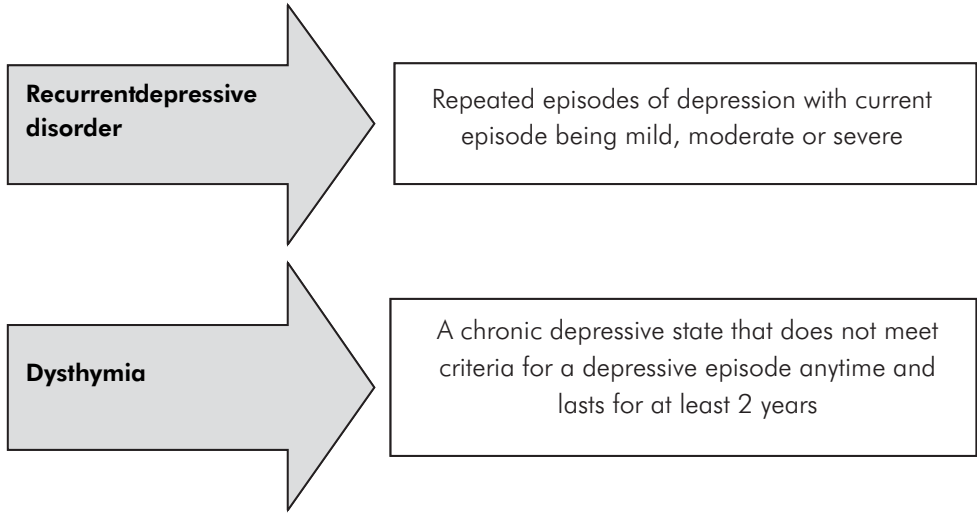
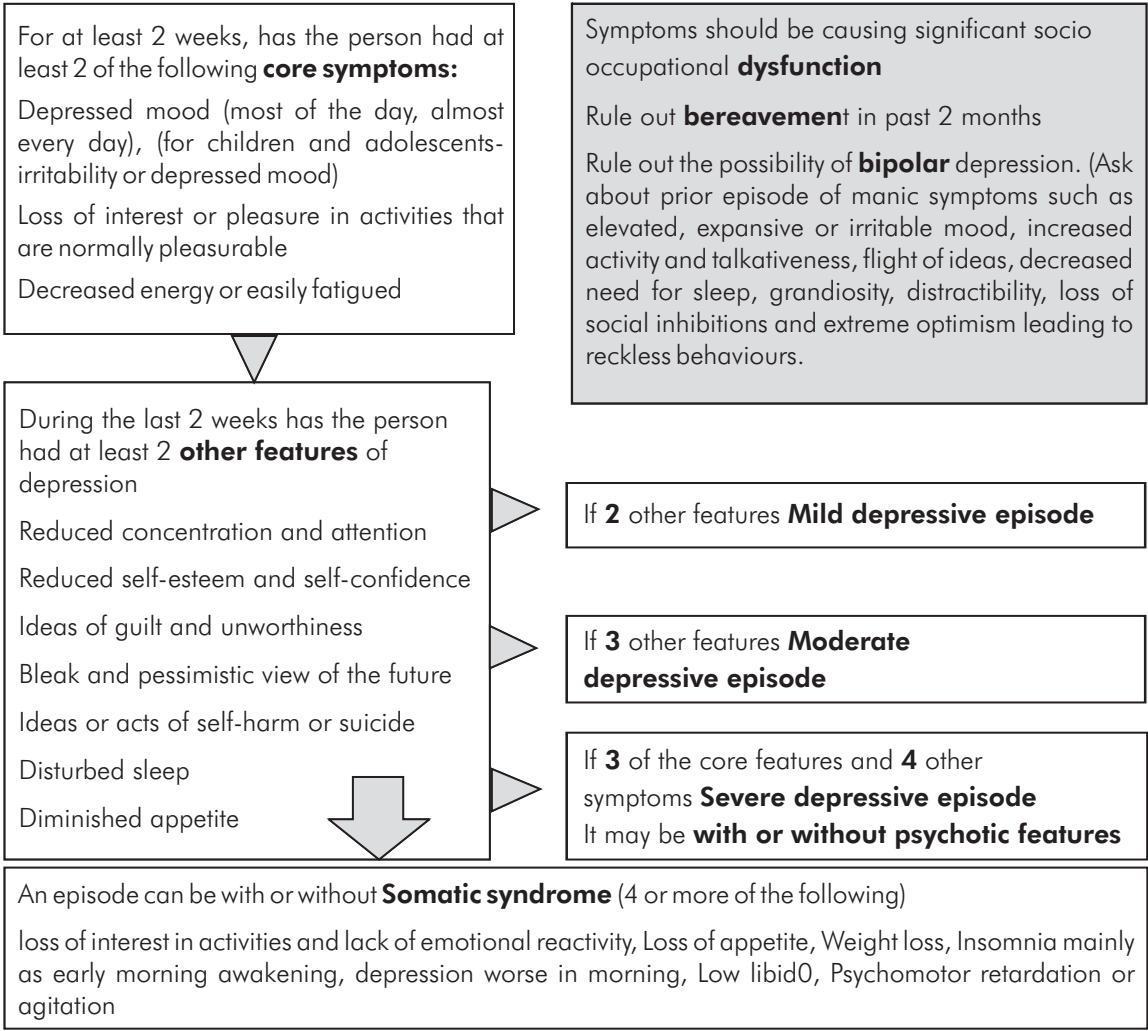
Mrs T, 30 years old female, housewife presented with chief complaint of headache manifesting as heaviness of head throughout the day. She had consulted a general practitioner earlier and was diagnosed as a case of hypothyroidism for which she was on thyroxin but still the headache persisted. All other investigations were normal. While interviewing, the patient appeared tearful. On being inquired, patient started crying and reported that she does not feel happy anymore. This happened after she lost her job 6 months before. She reported that she does not feel happy even if something good happened. World did not seem interesting anymore and she had lost interest in her old hobbies. Household work seemed like a burden now and she barely managed it and she was slower than before in her routine chores. She stopped visiting her friends and was having frequent altercations with husband as he felt she was not interested in home like before. She felt she would never improve again and that she was burden on her family now. She used to hold herself responsible for the same. On being asked proactively, patient reported contemplating suicide once, but never acted on it. Along with this she was hardly able to sleep for 2-3 hours at night and felt fatigued in daytime. Husband reported she seemed to have lost weight in past 3 months.

Explaining the vignette

Somatic complaints could be a depressive equivalent and should always be explored like headache in this case. Patient's episode was precipitated by loss of job that is a psychosocial stressor. Suicidal ideations could have gone unnoticed if not enquired about proactively. The case depicts the signs and symptoms of depression and the depressive cognitions of worthlessness and hopelessness.

DIAGNOSING DEPRESSION

For a depressive episode: diagnostic criteria



Clinical features

As seen in the diagnostic criteria the clinical features of depression encompass domains of psychological, somatic and psychotic symptoms if severe.

| psychological | somatic | psychotic | suicidal thoughts |
|---|--|--|--|
| <ul style="list-style-type: none"> • sadness • hopelessness • helplessness • worthlessness • guilt • pessimism • anhedonia • difficulty concentrating • loss of interest | <ul style="list-style-type: none"> • weight loss or gain • insomnia or hypersomnia • loss of libido • psychomotor slowing or agitation | <ul style="list-style-type: none"> • delusions (pertaining to ideas of sin, poverty, deserved punishment, imminent disasters for which patient feels responsible) • hallucinations(usually auditory of accusations and defamation or olfactory of rotting things) • stupor (if marked slowing) | <ul style="list-style-type: none"> • always enquire about ideas of self harm proactively • present plan • available means • previous attempt • family history of suicide • any impulsive act • how impulse is resisted • any psychotic feature leading to such ideas • overall risk of suicide |

Following medical conditions, drugs and psychiatric disorders may be comorbid with depression and should always be explored and only then can the patient be treated holistically.

| General medical conditions | Other psychiatric disorders |
|---|--|
| <p>Endocrine Thyroid / glucocorticoid disturbance</p> <p>Infections Meningitis, encephalitis, syphilis, HIV Systemic(UTI, pneumonia, sepsis)</p> <p>Cardiovascular Shock, cardiac failures</p> <p>Cerebrovascular Infarcts, haemorrhage</p> <p>Metabolic Dyselectrolytemia, renal/hepatic failures, hypo/hyperglycaemia</p> <p>Nutritional Vitamin B12, Folate deficiency</p> <p>Tumours Cerebral/systemic</p> <p>Trauma Subdural haematoma, cerebral contusions</p> | <p>Anxiety disorders</p> <p>Substance use disorders</p> <p>Drugs</p> <p>Withdrawal of caffeine, nicotine, sedatives, amphetamines</p> <p>Prolonged use of Antihypertensive drugs Anti-inflammatory/ analgesics Steroids Antineoplastic drugs Anti-parkinsonism drugs Antipsychotics Sedatives Many antibacterial/ antifungals</p> |

Mental status examination

Generalised psychomotor retardation (or agitation in elderly), stooped posture, slow spontaneous movements, downcast gaze, decreased rate of speech with increased reaction time, depressed mood and restricted affect, with delusions or hallucinations in perceptual disturbance may be seen. Thought process may be slow with poverty of ideas. Though sensorium is intact memory may be impaired with increased impulsivity (assess for suicide) with impaired judgement (too pessimist) and insight may be impaired. Usually the classic triad of pessimist thoughts about self, future and others may be seen.

A differential diagnosis needs to be done from the comorbid conditions as listed above as treating the underline cause may change the course of Depression. Also the distinction of unipolar and bipolar depression is inevitable for optimal treatment.

MANAGING DEPRESSION

Goals

- Psychoeducation
- Relieve the symptoms of present episode (remission)
- Frequent follow ups until remission and also later
- Restore premorbid functioning of individual
- Maintain treatment to prevent relapse (usually if no or minimal depressive symptoms for 9 – 12 months and ability to carry out routine activities for that time period consider tapering and stopping the antidepressant)

PHARMACOLOGICAL

Tricyclic antidepressants(TCA):

Imipramine, Amitriptyline

Selective Serotonin Reuptake Inhibitors(SSRI):

Fluoxetine, Sertraline, Escitalopram

Serotonin Norepinephrine receptor

inhibitors: Venlafaxine

Others: Mirtazepine

PSYCHOLOGICAL

Psychoeducation, cognitive behavioural therapy (CBT)

PSYCHOSOCIAL

Psychoeducation, address current psychosocial stressors, reactivate social networks, activity scheduling, physical activity

At primary health care level, it may be feasible to

- Select a drug from national formulary and give according to instructions given below.
- Give psychosocial interventions along with, depending on severity of depressive symptoms.
- Exploring the psychosocial stressors of patient in privacy, empathetically and helping problem solve them may be needed. Family and friends can be used to build up support system for patient. Any pertinent stress like abuse may need to be dealt with in patient's environment.
- Patient should be encouraged to resume the earlier pleasurable hobbies and social meetings to reactivate his social circuits.
- Patient may need to be helped with a schedule according to his strengths and weaknesses and appropriately rewarded and applauded for the same with the help of family members initially.
- Some sort of physical activity or yoga may be advised (45 minutes 3-5 times/week)
- Any comorbid medical condition should be treated adequately at primary health care level

Select an antidepressant from the **WHO Formulary**. Fluoxetine and amitriptyline (as well as other tricyclic antidepressants (TCAs) are antidepressants mentioned in the WHO Formulary.

In the **national list of essential medicines** Fluoxetine, Imipramine and Amitriptyline have been mentioned.

National formulary of India advises use of Fluoxetine, Escitalopram, Imipramine and Amitriptyline.

Following table summarises the drug information.

| SSRI's | TCA |
|---|--|
| <p>Common side-effects (mostly self-limiting) Restlessness, nervousness, insomnia, anorexia, gastrointestinal disturbances, headache, sexual dysfunction Risk of switching to mania in people with bipolar disorder.</p> <p>Time to response: 4 - 6 weeks after adequate dose</p> <p>Dose for fluoxetine: Initiate treatment with 20 mg daily (if not tolerated even 10 mg) once daily and increase to 20 mg if the medication is tolerated. If no response in 4 - 6 weeks or partial response in 6 weeks, increase dose by 20 mg (maximum dose 60 mg)</p> <p>For children and elderly start with 10 mg and increase gradually to 20 mg. wait for 6-12 weeks before up titration.</p> <p>Monitor for emergence of suicidal ideation in adolescent population and refer to specialist if no response.</p> | <p>Common side-effects (mostly self-limiting) Orthostatic hypotension (fall risk), dry mouth, constipation, difficulty urinating, dizziness, blurred vision and sedation.</p> <p>Serious side-effects: cardiac arrhythmia. Risk of switching, lethal in overdose, sedating</p> <p>Time to response: 4 - 6 weeks after adequate dose</p> <p>Dose of amitriptyline: Start with 50 mg at night and reach up to 100-150 by 4-6 week and if no/partial response increase further(maximum 200 mg)</p> <p>Do not prescribe for adolescent population</p> <p>For elderly start low with 25 mg and go slow with wait up to 12 weeks and maximum dosage being 100 mg.</p> <p>DO NOT prescribe TCA to people at risk of serious cardiac arrhythmias or with recent myocardial infarction. Monitor blood pressure for all cardiovascular patients on TCA.</p> |

Special population

| Individuals with concurrent conditions | Pregnancy and breast feeding | children | Elderly |
|--|---|--|---|
| Treat both the depression and the concurrent condition | Avoid psychotropic in pregnancy, and manage with non-pharmacological means, however weigh the risk benefit ratio of continuing an antidepressant during pregnancy. Avoid long acting fluoxetine during breast feeding | Offer pharmacotherapy with fluoxetine (only if non pharmacological treatments fail. Monitor for emergence of suicidal ideation. | Avoid Tricyclic antidepressants, watch for drug interactions, expect slower response, increase dosages gradually and treat with lower dosages |

When to refer

- Patient has severe depression with psychotic features
- Suicidal ideations
- Failure of 2 or more antidepressants
- Psychological intervention needed (lack of resources)
- Bipolar affective disorder
- Multiple comorbid conditions
- Special population if not manageable
- Any other emergency comorbid with mood disorder

BIPOLAR AFFECTIVE DISORDER (BAD)

BAD is characterised by an episode of mania or hypomania. It may or may not be followed by a subsequent mood episode. About 5-10% of patients with initial diagnosis of major depressive episode have a manic episode later on.

CASE VIGNETTE

A 30 year old female patient presented to a physician with chief complaints of sadness, loss of interest, increase in sleep and feeling more hungry than usual since last 6 months. She felt fatigued mostly and had difficulty concentrating due to which her work as a teacher was suffering. Also at home husband reported she remained lost and occasionally cried alone. On interviewing, patient reported suicidal ideations. Considering it to be a case of depression, she was given sertraline 50 mg and called after a week. Patient came after 2 weeks and she was very cheerful, more talkative, and energetic. Husband reported that she has become very argumentative and keeps on roaming around in the locality talking to strangers, cracking jokes. She spent Rs 10,000 in shopping that was very unusual of her. Further, husband reported a year before also she had such episode for 2 weeks but it subsided on its own with some traditional treatment.

Explaining the vignette

This case shows a classic case of antidepressant induces mania because the GP failed to enquire about the prior manic episode and thus misunderstood bipolar depression for unipolar depression. The patient had atypical features in present depressive episode that pointed towards bipolarity. Thus a thorough enquiry of prior manic/hypomanic episodes is inevitable while treating depression.

DIANOSTIC CRITERIA

Mania

Elevated, expansive or irritable mood + 3 of the following
(4 if mood is irritable)

- Increased activity, restlessness, excitement
- Increased talkativeness
- Loss of social inhibitions
- Decreased need for sleep
- Overspending or other reckless behaviours
- Distractibility
- Elevated sexual energy

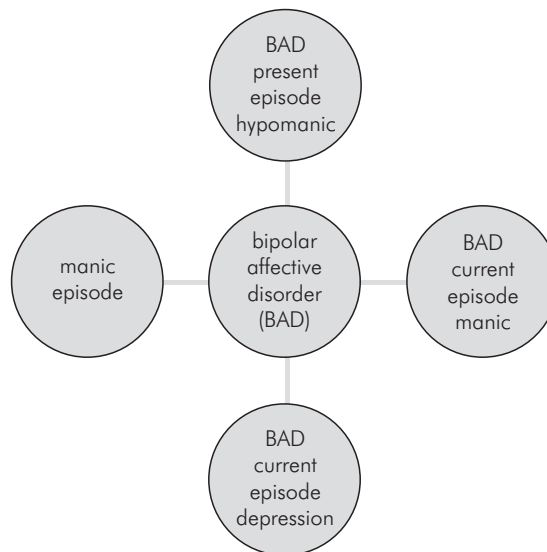
Multiple symptoms, lasting for at least 1 week
Severe enough to interfere significantly with work and social activities or requiring hospitalization

Hypomania

Same features as mania but with a lesser severity and duration.

Some symptoms, lasting for at least 4 days
Cause some interference with work and social activities but do not require hospitalization or have psychotic features

So a bipolar disorder may manifest as single manic episode or a manic/hypomanic episode with depression.



Clinical features and MSE

Mood Changes as elation, euphoria or Irritable. The level of goal directed and pleasurable activities increase that are usually reckless and involve risk. Patient is distractible with poor concentration. Speech is rapid and patient jumps from one topic to another. Patient may have delusions mainly grandiose delusions of power, worth or identity. There is decrease in need of sleep and still high levels of energy, increased appetite, increased libido and sexual activity, increased desire for substances. Also the disorder may be comorbid with other general medical conditions as depicted under depression. Comorbid psychiatric conditions and substances are mentioned here.

Other psychiatric disorders
Anxiety disorders
Substance use disorders

Drugs

Withdrawal of

Sedatives, alcohol

Prolonged use of

Amphetamines, cocaine

Stimulants (methylphenidate)

Steroids

Bromocriptine, levodopa

Baclofen

opioids

PREDICTORS OF BIPOLARITY

- Early age of onset with marked psychomotor retardation)
- Postpartum depression
- Rapid onset and offset of depressive episodes
- Recurrent depression (5 or more episodes)
- Atypical symptoms (increase in appetite and sleep)
- Bipolar family history
- Antidepressant induced hypomania
- Seasonal episodes

MANAGEMENT

Goals

- Psycho education
- Treat the present episode
- Prevent relapse by maintenance treatment (at least 2 years after last bipolar episode)
- Know when to refer
- rehabilitation (appropriate economic, social, cultural and educational activities)

If present episode is mania/hypomania

Begin treatment of acute mania with mood stabilizer (lithium, valproate, and carbamazepine) or with antipsychotics*

Consider short-term benzodiazepine* such as diazepam for behavioural disturbance or agitation.

Discontinue any antidepressants.

If present episode is depression but there is history of past bipolar affective disorder or past manic /hypomanic episode in history

Begin treatment with a mood-stabilizer

Consider antidepressant combined with mood stabilizer for moderate / severe depression with monitoring of switching to mania. However, referral to a specialist should be done. Consider non pharmacological management of mild bipolar depression along with mood stabilizer.

*National formulary of India- Antipsychotics for acute mania (Olanzapine, Haloperidol, Chlorpromazine, Fluphenazine) and short term Benzodiazepines (Diazepam, Lorazepam, Alprazolam, Nitrazepam)

When to refer

- If acute episode is severe and not being controlled at primary health care setting
- A patient with bipolar depression
- Medical emergencies comorbid with Bipolar mood disorder
- Special population like elderly, pregnant women and children and adolescent
- Toxicity with drugs

| Lithium* | valproate | Carbamazepine* |
|--|---|---|
| <p>Starting dose: 300 Usual dose : 600-1200</p> <p>Levels: 0.6 - 1.0 mEq / litre Mania: 0.8 - 1.0 mEq / litre Maintenance: 0.6 - 0.8 mEq / litre. Regular serum level monitoring critical. Monitor TSH and S. creatinine levels also.</p> <p>Side effects: Tremors, sedation, weight gain Impaired coordination, polyuria, polydipsia, cognitive problems, cardiac arrhythmias, diabetes insipidus, hypothyroidism</p> <p>START only if clinical and laboratory monitoring is available. Effective against the relapse of both mania and depression Educate about lithium toxicity</p> | <p>Starting dose: 500 Usual dose : 1000-2000</p> <p>Tremors, sedation, weight gain, hepatotoxicity, leukopenia. Watch for hepatitis, pancreatitis, thrombocytopenia,</p> <p>No level monitoring required. Get hepatic status before initiating. Explain the signs and symptoms of blood and liver disorders. Monitor hepatic and blood indices.</p> | <p>Starting dose: 200 Usual dose : 400-600</p> <p>Avoid in pregnancy and advice contraception to woman of child bearing age along with folate supplementation. Lithium also associated with birth defects (mainly cardiac) though at a lower rate than antiepileptic drugs</p> <p>Tremors, sedation, weight gain, leukopenia, hepatotoxicity. Watch for diplopia, impaired coordination, rash, liver enzyme Elevations, Stevens-Johnson syndrome, aplastic anaemia. START if both lithium and valproate ineffective or not tolerated. Monitor blood and hepatic parameters.</p> |

Primary mood stabiliser can be lithium, valproate or carbamazepine as shown in the table below.

- Take plenty of fluids (summers) with no salt restriction
- Reduce or stop lithium temporarily on developing fever, loose motions, vomiting or any condition leading to fluid loss
- ACE inhibitors, diuretics and NSAIDs along with Lithium increase risk of toxicity
- Gastrointestinal upset, dysarthria, ataxia, coarse tremor followed by impaired consciousness, fasciculation, myoclonus, seizures, and coma are signs of toxicity
- Monitoring for features of lithium toxicity should be routinely done and appropriate referral done accordingly.

*Carbamazepine and Lithium carbonate are included in National formulary of India while Lithium and Valproate are mentioned in national list of essential medicines.

Special population should be referred to psychiatrist. Females of child bearing age on antiepileptic mood stabiliser should receive folate supplementation and be advised to practice contraception. Even for Lithium a risk benefit assessment needs to be done before continuing in pregnancy as it is also associated with teratogenic effects though less than that of antiepileptic mood stabilisers. Thus a referral needs to be done.

PEARLS TO REMEMBER

- Depression is the commonest psychiatric morbidity in General Practice and should not be overlooked
- A depressed patient usually presents with physical symptoms that should be explored
- Comorbid psychiatric and general medical conditions are common and should be treated
- It is also important to ask about prior manic or hypomanic episode to avoid misinterpreting bipolar disorder for unipolar depression.
- Physicians should not be reluctant to ask about suicide as proactive questioning may be life saving
- Not just short term treatment but maintenance treatment, relapse prevention and psycho social rehabilitation should be the goal
- Any comorbid medical illness needs to be addressed adequately by the general practitioner

ANXIETY DISORDERS

Outline of the text:

- Learning objectives
- Introduction and Epidemiology
- Types of Anxiety Disorders
- For individual anxiety disorder

- Phobic anxiety disorder
- Panic disorder
- Generalised anxiety disorder
- Obsessive compulsive disorder
- Acute stress disorder
- Post-traumatic stress disorder

- a) Case vignette
 - b) Brief mention of diagnostic criteria (ICD 10) and clinical features
 - c) Explaining the vignette
 - d) Differential diagnosis (including general medical conditions and substances inducing anxiety)
- Management
 - a) Pharmacological
 - b) Non pharmacological
 - c) When to refer

**PEARLS TO
REMEMBER**

Learning objectives

- To understand the whole range of anxiety disorders
- To identify and differentiate various anxiety disorders
- To understand the other conditions that may masquerade as anxiety disorders and vice versa
- To be able to treat adequately these disorders

Introduction and Epidemiology

ANXIETY : diffuse, vague, unpleasant sense of apprehension that is felt as psychic tension and restlessness or autonomic arousal like palpitation, perspiration, headache, chest tightness, abdominal discomfort, inability to sit still. It is usually insidious to an unknown, internal, vague, conflictual threat.

FEAR: response to external, known, definite, non conflictual threat that alerts the individual

Anxiety is **normal** if it is alerting in response to external stress and leads to optimal performance. However, if anxiety leads to excessive arousal and impairment in the ability to function normally it is **pathological** and should be treated.

It is said that the 12-month prevalence rate of anxiety disorder is 17.7 percent with women having more prevalence than men. Patients seeking treatment for somatic and cognitive symptoms of anxiety may be most commonly encountered by a GP.

Types of Anxiety Disorders

- Phobic anxiety disorder
- Panic disorder
- Generalised anxiety disorder
- Obsessive compulsive disorder
- Acute stress disorder
- Post-traumatic stress disorder
- Anxiety disorders due to general medical condition and substances

Phobic anxiety disorder

These are by far one of the commonest mental disorders, with females more afflicted than males and onset usually seen in teens.

It can be of 3 types broadly

1. **Agoraphobia**
2. **Social phobia**
3. **Specific phobia**

Agoraphobia

CASE VIGNETTE

25 year old male patient was brought to the GP as he refuses to go out of the house alone. On being enquired patient reported feeling excessively apprehensive in going out alone especially in crowded place. Patient reported feeling chest discomfort, breathlessness, palpitations, tremulousness and a feeling that he will faint in such situations and thus he avoided going out alone. Due to this he avoided going to his workplace, travelling in bus, going to marketplace and since last 6 months was completely home bound. Patient feels extremely distressed with this but cannot come over it. He reported sadness, hopelessness, worthlessness due to these symptoms.

DIAGNOSTIC CRITERIA AND CLINICAL FEATURES

Agoraphobia

Marked and consistent fear or avoidance of at least two of the following situations: crowds; public places; travelling alone; travelling away from home.

Symptoms of anxiety in the feared situation at some time since the onset of the disorder, with at least two symptoms

Autonomic arousal symptoms

Palpitations, Sweating Trembling, Dry mouth

Symptoms concerning chest and abdomen

Difficulty breathing, Feeling of choking, Chest pain or discomfort, abdominal distress

Symptoms concerning mental state

Feeling dizzy or light-headed. Feelings that objects are unreal (derealisation), or that one's self is unreal (depersonalization), Fear of losing going crazy, Fear of dying.

General symptoms

Hot flushes or cold chills, Numbness or tingling sensations.

Significant emotional distress due to the avoidance or the anxiety symptoms, and a recognition that these are excessive or unreasonable.

Symptoms predominate in the feared situations or when thinking about them.

Agoraphobia CAN BE without panic disorder

Social phobia

CASE VIGNETTE

20 year old female patient was brought to a GP with the complaint from school that she does not participate in any group activities and has become irregular in school. On being enquired patient reported that she felt extremely nervous in groups where she was expected to perform. She felt she will embarrass herself and people will mock at her and she will end up making a fool of herself. So she avoided any school group activities to avoid this embarrassment. However she felt pensive as she felt she is missing out on a lot of stuff but she cannot do it as she has apprehension, trembling, palpitation, dizziness and she goes blank whenever she tries to do it. Even thinking about it gave her butterflies in stomach and she felt like going to bathroom.

DIAGNOSTIC CRITERIA AND CLINICAL FEATURES

Social phobias

A. Either (1) or (2):

(1) Marked fear of being the focus of attention, or fear of behaving in a way that will be embarrassing or humiliating

(2) Marked avoidance of being the focus of attention or situations in which there is fear of behaving in an embarrassing or humiliating way.

These fears are manifested in social situations (eating or speaking in public; encountering known individuals in public; or entering or enduring small group situations, such as parties, meetings and classrooms)

At least two symptoms of anxiety in the feared situation at some time since the onset of the disorder, as defined in Agoraphobia and in addition one of the following symptoms: Blushing; Fear of vomiting; Urgency or fear of micturition or defecation.

Significant emotional distress due to the symptoms or to the avoidance and recognition that the symptoms or the avoidance are excessive or unreasonable.

Symptoms predominate in the feared situation or when thinking about it.

Specific phobia

CASE VIGNETTE

An 18 year old boy was brought to OPD with chief complaint of fainting spell when he was in the lift. Father reported that patient is extremely reluctant of lifts and would instead climb several floors to avoid it. Patient reported having excessive fear of enclosed spaces as he felt choking, breathlessness, palpitations, dizziness and fear that he will die whenever he was in enclosed spaces. Patient lives on 12th floor and daily used to take stairs to avoid lift that he found extremely tiring after college. On parents persistence he tried going in lift once and fainted.

DIAGNOSTIC CRITERIA AND CLINICAL FEATURES

Specific (isolated) phobias

Either (1) or (2):

(1) marked fear of a specific object or situation other than agoraphobia or social phobia (2) marked avoidance of such objects or situations (animals, birds, insects, heights, thunder, flying, small enclosed spaces, sight of blood or injury, injections, dentists and hospitals) B. Symptoms of anxiety in the feared situation at some time since the onset of the disorder, as defined in agoraphobia.

Significant emotional distress due to the symptoms or the avoidance, and a recognition that these are excessive or unreasonable.

Symptoms are restricted to the feared situation, or when thinking about it.

It can be: animal type (e.g. insects, dogs); nature-forces type (e.g. storms, water); blood,

EXPLAINING THE VIGNETTES

As seen in the vignettes individuals may present with refusal or reluctance to go out or attend school or use lifts. However on exploration these turn out to be the cases of phobic anxiety disorder with typical fear followed by avoidance and associated symptoms of anxiety under exposure. These individuals want to pursue normal lives as they recognise their fears as irrational, excessive but cannot control them. Also, secondary depressive features should always be explored as people may get depressed due to the handicaps these disorders bring upon them.

DIFFERENTIALS

Phobias need to be differentiated from normal shyness, substance induced anxiety symptoms, central nervous symptoms pathologies. Schizophrenia patients may have specific or social phobia but as part of their broader psychosis.

Panic disorder

The lifetime prevalence of this disorder is 1-4% with women being twice more likely to be affected. Mean age of presentation is 25 years.

CASE VIGNETTE

30 year old male patient was brought to emergency with complaints of chest pain, palpitations, dizziness, tingling numbness in limbs and a fear that he will die. Initial examination and tests revealed no major cardiac pathology. Son reported he had similar symptoms on several occasions before where he had to be rushed to the emergency but every time all his workups were clean. These episodes began suddenly with no prior warning and within few minutes he would be incapacitated and had to be rushed to the hospital. Symptoms would subside within an hour. When normal patient used to have fear of having it again and sometimes he used to take alcohol to relieve the fear.

DIAGNOSTIC CRITERIA AND CLINICAL FEATURES

Recurrent panic attacks that are not consistently associated with a specific situation or object and often occurring spontaneously

The panic attacks are not associated with marked exertion or with exposure to dangerous or life-threatening situations.

A panic attack is characterized by all of the following: (a) it is a discrete episode of intense fear or discomfort; (b) it starts abruptly; (c) it reaches a crescendo within a few minutes and lasts at least some minutes; (d) at least four symptoms of anxiety must be present as described in phobic disorder above

Panic disorder is characterised by unexpected discrete episodes of fear and physical symptoms of anxiety that swarm in a few minutes and subside in next few. Usually they are mistaken for acute cardiac events and patients may have several emergency visits before being diagnosed as panic disorder as seen in this case. So a detailed history and thorough medical workup may help bring upon timely intervention for the patient. Also, this patient is self-treating his anticipatory anxiety with alcohol. Substance abuse may be comorbid with anxiety disorders.

COMMON DIFFERENTIALS

Mostly panic attacks are confused with acute cardiac syndromes like anaemia, cardiac failure, arrhythmias or angina and most of the initial workup is done on that line. Respiratory emergencies like asthma should be ruled out. Endocrine disorders like thyrotoxicosis, Pheochromocytoma, hypoglycaemia, menopausal or premenstrual syndromes may manifest as extreme anxiety. Some drug intoxication or withdrawal states or allergic states like anaphylaxis should be ruled out

Generalised anxiety disorder (GAD)

They constitute one fourth of all anxiety disorder with onset seen in late adolescence and more in females.

CASE VIGNETTE

A young teenage girl came with the complaint that her "mind is always on the go" since last one year. She worries about everything under the sun from things as minute as doing her homework to things like preparing for exam. She was always anticipating things and worrying about them all day that killed her time but she could not ease off. Due to this she was having trouble sleeping off late. She used to have palpitations, tightness in chest and felt her body is always tense and her mind heavy with worries. She found it difficult to relax, due to which she was having frequent irritability over family members and her grades were suffering as she could hardly concentrate on studies. This all made her sad, hopeless.

DIANOSTIC CRITERIA AND CLINICAL FEATURES

A period of at least six months with prominent tension, worry and feelings of apprehension, about every-day events and problems.

Four symptoms out of the following list

Autonomic arousal symptoms

Palpitations, Sweating Trembling, Dry mouth

Symptoms concerning chest and abdomen

Difficulty breathing, Feeling of choking, Chest pain or discomfort, abdominal distress

Symptoms concerning mental state

Feeling dizzy or light-headed. Feelings that objects are unreal (derealisation), or that one's self is unreal (depersonalization), Fear of losing going crazy, Fear of dying.

General symptoms

Hot flushes or cold chills, Numbness or tingling sensations.

Symptoms of tension

Muscle tension or aches and pains, Restlessness and inability to relax, Feeling keyed up, or on edge, or of mental tension, A sensation of a lump in the throat, or difficulty with swallowing.

Other non-specific symptoms

Being startled easily, Difficulty in concentrating, or mind going blank, because of worrying or anxiety, Persistent irritability, Difficulty getting to sleep because of worrying.

So as seen in vignette GAD is characterised by prominent worries and apprehensions, physical anxiety like muscle tension and cognitive symptoms like increased startle, all of which should be present on most of the days for at least 6 months. Depressive symptoms should always be explored. Differentials are the same as in panic disorder.

Obsessive compulsive disorder

It is the fourth most common psychiatric disorder with equal prevalence in men and women and mean age of onset in 20 years.

CASE VIGNETTE

A 30 year old male patient was brought to OPD he appeared unkempt. Relatives report that since last 10 years he is preoccupied with cleanliness and initially he used to feel that he was dirty and so was everything around him. He used to wash his hands multiple times after touching anything and even if anyone touched him. Bathing took almost an hour. He told he knew his doubt was unreasonable and excessive. He tried not to act on it but doing this would make him extremely uncomfortable and he was driven to clean. This all wasted a lot of his time and his skin was all dry and shrivelled but he could not stop. This caused him marked distress and he used to cry a lot. Since last few months to resist all this he had stopped going out and used to go for bathing and defecation only once in 4 days so that he would have to spend less time in cleaning. Patient appeared sad and dejected and reported contemplating suicide to end his present state of affairs.

DIANOSTIC CRITERIA AND CLINICAL FEATURES

Either obsessions or compulsions (or both), present on most days for a period of at least two weeks. Obsessions (thoughts, ideas or images) and compulsions (acts) share the following features

- (1) They are acknowledged as originating in the mind of the patient and are not imposed by outside persons or influences.
- (2) They are repetitive and unpleasant, and at least one obsession or compulsion must be present that is acknowledged as excessive or unreasonable.
- (3) The subject tries to resist them but at least one obsession or compulsion must be present which is unsuccessfully resisted.
- (4) Carrying out the obsessive thought or compulsive act is not in itself pleasurable.

The obsessions or compulsions cause distress or interfere with the subject's social or individual functioning, usually by wasting time.

EXPLAINING THE VIGNETTE

As seen this patient has one of the 4 major symptom clusters in OCD (symmetry, doubts, intrusive thoughts and contamination). Marked delay in treatment seeking, counterintuitive unkempt presentation and severe secondary depressive features are noteworthy in this case.

Acute stress disorder

A young male patient was brought to the OPD as he was very agitated after hearing the news of death of his wife suddenly in an accident few minutes back. Relatives reported on hearing the news he did not respond and after a while started saying irrelevant things and occasionally misnamed relatives. On being asked he even abused and became violent with his brother. Patient appeared confused, disoriented, dizzy and restless and every now and then used to pace around in the room. He had tachycardia, flushing and sweating and shortness of breath. He had no past history of any illness.

Exposure to an exceptional mental or physical stressor.

Followed by an immediate onset of symptoms (within one hour) (Two groups of symptoms) are given

- (1) The criteria for symptoms as mentioned in generalized anxiety disorder
- (2) Withdrawal from expected social interaction; narrowing of attention; apparent disorientation; anger or verbal aggression; despair or hopelessness; purposeless over-activity; uncontrollable and excessive grief (judged by local cultural standards).

If the stressor is transient or can be relieved, the symptoms must begin to diminish after not more than eight hours. If the stressor continues, the symptoms must begin to diminish after not more than 48 hours.

Post-traumatic stress disorder

A male patient 23 year old was brought to OPD by family members with symptoms of increased irritability and avoiding driving after he survived a fatal car accident that killed 2 of his friends. Parents reported that patient hardly remembered the details of accident. Patient reported having flashbacks of the accident that started after 2 months of accident during which he was recuperating from physical injuries. Parents reported many episodes of patient shouting at night and getting up due to dreams of accident. Also he appeared very vigilant and any loud sound startled him easily. He was having difficulty in falling asleep. Even after recovery patient avoided driving car, going on road as he said going there reminded him of the accident and the flashbacks increased that he could not endure. This all was causing a lot of distress to patient and he appeared to be irritable most of the time in last 4 months.

Exposure to a stressful event or situation of exceptionally **threatening or catastrophic** nature, which is likely to cause pervasive distress in almost anyone.

Persistent **remembering or reliving** the stressor by intrusive flash backs, vivid memories, recurring dreams, or by experiencing distress when exposed to circumstances resembling or associated with the stressor.

Avoidance of circumstances resembling or associated with the stressor

Either (1) or (2):

(1) **Inability to recall**, either partially or completely, some important aspects of the period of exposure to the stressor

(2) Persistent symptoms of increased psychological sensitivity and **arousal** shown by any two of the following: difficulty in falling asleep, irritability, difficulty in concentrating; hyper-vigilance; exaggerated startle response.

Symptoms occurred within six months of the stressful event, or the end of a period of stress.

MANAGEMENT

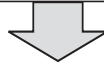
Goals

- Identify the anxiety disorder by keeping high degree of suspicion
- Rule out any medical cause of the symptoms
- Provide psycho education
- Provide appropriate psychological or pharmacological intervention for immediate relief as well as long term treatment
- Know when to refer

MANAGEMENT MODALITIES

| Pharmacological | Non pharmacological |
|--|---|
| <ul style="list-style-type: none"> ❖ Short term treatment with benzodiazepines (BZD's) ❖ Withdraw BZD's after initial 2-4 weeks. ❖ Always taper BZD's ❖ Long term treatment with antidepressants preferably Selective Serotonin Reuptake Inhibitors(SSRI's) followed by tricyclic antidepressants and MAO inhibitors | <ul style="list-style-type: none"> ❖ Psycho education about the disorder ❖ Exploring the concomitant stressors and addressing the worries in a reassuring, empathic and neutral manner ❖ Cognitive behavioural therapy (CBT) (include relaxation, biofeedback and addressing cognitive distortions) ❖ Supportive psychotherapy ❖ Insight oriented psychotherapy ❖ Regular exercises, yoga, breathing exercises may be advised along with |

**SPECIAL CONSIDERATIONS
DISORDER WISE**



Phobic anxiety disorder: pharmacotherapy with SSRI's, beta blockers (performance anxiety) or CBT (systematic desensitisation)

Panic disorder: pharmacotherapy with SSRI's, beta blockers or CBT involving relaxation training and cognitive remodelling

Generalised anxiety disorder : short term management with BZD's + long term CBT or SSRI's

Obsessive compulsive disorder: Either CBT as Exposure and Response Prevention (ERP) or antidepressants (SSRI's or Clomipramine) or a combination of both

Acute stress disorder: short term BZD's + Debriefing in groups post trauma or pharmacotherapy

Post-traumatic stress disorder: CBT (systematic desensitisation), eye movement desensitisation and reprocessing (EMDR) or pharmacotherapy (SSRI's or imipramine, amitriptyline)

COMORBID CONDITIONS WITH ANXIETY DISORDERS

| General medical conditions | Other psychiatric disorders |
|---|---|
| <p>Endocrine Hyperthyroidism, hypoparathyroidism, Cushing's syndrome, hypoglycaemia, Pheochromocytoma, Addison's disease</p> <p>Pulmonary Asthma, hyperventilation</p> <p>Cardiovascular Anaemia, cardiac failures, mitral valve prolapse, hypertension, angina, myocardial infarction</p> <p>Neurological Infarcts, haemorrhage, epilepsy, migraine, Wilson's disease, basal ganglia disease like Sydenham's chorea and Huntington's disease(OCD)</p> <p>Metabolic Dyselectrolytemia, renal/hepatic failures</p> <p>Nutritional Vitamin B12, Folate deficiency</p> <p>Tumours Cerebral/systemic</p> | <p>Substance use disorders</p> <p>Schizophrenia</p> <p>Mood disorders</p> |
| | <p>Drugs</p> <p>Withdrawal of Alcohol, opiates, sedatives, hypnotics</p> <p>Intoxication Nicotine, amphetamine, cocaine, theophylline, amyl nitrite, hallucinogens</p> |

The following table is an outline for the use of drugs for treating anxiety disorders.

| Group of drug | Dosages (mg/day) | Adverse effects |
|--|---|--|
| Selective serotonin reuptake inhibitors (SSRI's) Sertraline Escitalopram* Paroxetine Citalopram Fluoxetine* Fluvoxamine Tricyclic antidepressants (TCA) Clomipramine Imipramine* Amitriptyline | 50-200 10-20 20-50 20-40 20-60 100-300 75-300 75-300 75-200 | Sleep disturbance, gastrointestinal side effects, headache, anxiety, prolonged bleeding time, hyponatremia, sexual dysfunction, discontinuation syndrome sedation, hypotension, cardiac side effects mainly prolonged QT interval, anticholinergic effects, weight gain |
| Benzodiazepines (BZD's) Clonazepam Alprazolam* Lorazepam* | 0.5-2 0.5-4 1-4 5-15 | On long term use-Tolerance, dependence and withdrawal, ataxia, dizziness, daytime drowsiness, amnesia, in overdose respiratory depression |
| Beta-blockers Propranolol | 10 – 20 mg bid or tds | Hypotension, bradycardia, worsening of asthma and hypoglycaemia, GI side effects |

*In National formulary of India

WHEN TO REFER

- If 2 adequate trial of treatments {antidepressant(usually 8-16weeks) or psychotherapy or combination} fails
- Need for specialised psychological intervention and lack of resources
- Severe or chronic disorders or those with comorbid psychiatric conditions that need multidimensional approach
- Secondary depressive features are severe enough to warrant independent

Pearls to remember

- Anxiety disorders are very common in general practice
- It may often be overlooked or misdiagnosed as a medical disorder
- Proactive exploration may lead to timely treatment and improved quality of life
- BZD's should not be overused and should be tapered over few weeks

SOMATOFORM DISORDERS

Objectives

The General Medical Practitioner/Medical Officer should be able to –

- 1) Identify and diagnose Somatoform Disorders
- 2) Counsel the patient and initiate treatment
- 3) Identify when to refer to Psychiatrist

Introduction

Somatoform Disorders are a broad group of illnesses that have bodily signs and symptoms as a major component. According to ICD – 10 [International Classification of Diseases – 10th revision], Somatoform Disorders are described as 'Repeated Presentation of physical symptoms together with persistent requests for medical investigations, although patients have been reassured by their Physicians that the symptoms have no physical basis'. In people who have a somatoform disorder, history and physical examination do not indicate the presence of a medical condition. Medical test results are either normal or do not explain the person's symptoms. Patients are convinced that their symptoms result from some type of undetected and untreated bodily derangement. These complaints are not imaginary and patients do actually experience these symptoms. These disorders encompass mind – body interactions in which the brain sends various signals that impinge on the patient's awareness, indicating a severe problem in the body.

Epidemiology

Somatoform Disorders are more common in females as compared to males with approximate ratio of 4: 1. The overall prevalence of these disorders varies from 1-5 %. It is found in 5-10 percent of patients presenting to General Practitioners, hence it is important to identify at primary level. Usually, the symptoms begin appearing during adolescence, and patients are diagnosed before the age of 30 years. They are more common in people with low education & low income. Symptoms are sometimes similar to those of other illnesses and may last for several years before initial presentation. Symptoms may occur across cultures and gender.

Clinical Features

The ICD – 10 classifies Somatoform Disorders into various categories with a common underlying pre-occupation with bodily signs and symptoms. These categories are Somatization disorder, Hypochondriacal disorder, Undifferentiated somatoform disorder, Somatoform autonomic dysfunction, Persistent somatoform pain disorder and others.

Somatization disorder - The main features are multiple, recurrent, and frequently changing physical symptoms, which have usually been present for several. The patients believe they have been sick most of their lives. Most patients have a long and complicated history of contact with both primary and specialist medical services, during which many negative investigations or operations may have been carried out. Symptoms commonly involve gastrointestinal sensations (pain, belching, regurgitation, vomiting, nausea, etc.), abnormal skin sensations (itching, burning, tingling, numbness, soreness, etc.), headache and blotchiness. Sexual, menstrual and neurologic problems may also be reported.

The course of the disorder is chronic and fluctuating. People with this disorder tend to be referred to various specialists, and have many tests and investigations. Dependence upon or abuse of medication (usually sedatives and analgesics) is often found.

Hypochondriasis - This is a disorder where people fear that minor symptoms may be due to a serious disease. For example, that a minor headache may be caused by a brain tumor, or a mild rash is the start of skin cancer. People with this disorder have many such fears and spend a lot of time thinking about their symptoms.

Body dysmorphic disorder - People with this disorder are obsessed and exaggerate a physical flaw. Patients may also imagine a flaw they don't have. The preoccupation may involve any part of the body such as wrinkles, hair, or the size or shape of the eyes, nose, or breasts. Some people consult a cosmetic surgeon to have the imagined or trivial defect corrected.

Pain disorder - The predominant complaint is of persistent, severe, and distressing pain, which cannot be explained fully by a physiological process or a physical disorder. Pain usually starts with a psychological stress or trauma. For example, they develop an unexplained, chronic headache after a stressful life event.

Somatoform autonomic dysfunction - The symptoms are presented by the patient as if they were due to a disorder of a system or organ that is under autonomic innervations i.e. the cardiovascular, gastrointestinal, or respiratory system although there is no evidence of a significant disturbance. Presenting symptoms usually are palpitations, sweating, flushing, tremor, sensations of fleeting aches and pains, burning, heaviness, tightness, and sensations of being bloated.

Somatoform disorder not otherwise specified - People with this type do not meet the full criteria for any other somatoform disorders. Example includes pseudocyesis (mistaken belief of being pregnant based on other signs of pregnancy, including an expanding abdomen; feeling labor pains, nausea, fetal movement etc.)

Somatoform Disorders are commonly associated with other psychiatric disorders, namely Personality Disorders, Substance related Disorders, Generalized Anxiety Disorder and Phobia. Suicidal threats are common but actual suicide is rare. Patient's medical histories are usually vague, inconsistent and confusing. Patients classically described their complaints in a dramatic, emotional and exaggerated fashion. They would emphasize the need for further investigations or examinations.

Assessment and Diagnosis

The general practitioners and medical officers play a vital role in the management of patients with somatoform disorders. They act as the 'gatekeeper' and have the potential to limit the patient's access to specialized hospital resources, many of which are not only expensive, but also carry the possibility of iatrogenic harm. Appropriate and timely diagnosis in primary care combined with collaborative psychiatric and medical interventions may decrease significant long-term morbidity and suffering.

The assessment aims to clarify patient's somatic symptoms and their effects on daily life, Understand what patient wants from treatment, Elicit fears and beliefs about illness, Exclude organic disease, Identify relevant psychosocial Stressors, Identify co-morbid psychiatric disorders, Risk of suicide and Dependence on medications. Previous referrals, investigations and treatment history needs detailed assessment (Box - 1). Doctors may need to perform laboratory tests to rule out other possible causes before they diagnose somatoform disorder.

Box - 1: Objectives in assessment interview

- Clarify patient's complaints
- Understand what patient wants
- Elicit fears and beliefs about illness
- Previous referrals, investigations and treatments
- Exclude organic disease
- Identify relevant psychosocial Stressors
- Order relevant investigations
- Identify drug misuse
- Identify psychiatric disorders and risk of suicide

Differential Diagnosis

- Malingering (Intentionally producing symptoms to achieve an environmental goal)
- Factitious disorder (Fabrication of symptoms or self-inflicted injury to assume the sick role)
- Psychosomatic illness (A real medical condition affected by stress or psychological factors)
- Depression

Treatment of Somatoform Disorders

Somatoform disorders are difficult to treat as patients often cling to the belief that their symptoms have an underlying physical cause. Reassurance by a doctor does not usually help as they feel their doctors cannot find the cause for their symptoms.

A strong doctor-patient relationship is a key to getting help in patients with somatoform disorders. Seeing a single health care provider with experience managing somatoform disorders can help cut down on unnecessary tests and treatments (Box - 2).

The focus of treatment is on improving daily functioning, not on managing symptoms. Stress reduction is often an important part of getting better. Stress management techniques, Counseling for family and friends, Promotion of self-care activities, Relaxation and breathing exercises, Lifestyle change and Occupational Counseling may be useful and can be done at primary level. Medications do not have much of a role except if the disorder is associated with underlying mental illnesses such as depression, anxiety or substance abuse. Still, antidepressants such as amitriptyline, imipramine and selective serotonin reuptake inhibitors (SSRIs) along with short-term antianxiety agents such as benzodiazepines have been found effective.

Box - 2 : Specific treatments for somatoform disorders

- *General advice*
 - Lifestyle change
 - Relaxation
- *Drug treatments*
 - Antidepressants
 - Anti-Anxiety drugs (short duration)
- *Occupational and social*
 - Occupational counseling
 - Problem-solving for social problems
- *Psychological treatments*
 - Cognitive-behavioral and other therapies
- Regular appointments at fixed, pre-arranged intervals
- Minimize use of drugs

A case vignette further clarifying the presentation and management of these patients is given below.

Ms. X, a 37-year-old separated woman presented to Surgery OPD with recurrent multiple somatic complaints. Her list of symptoms included gastrointestinal difficulties, painful menstruation, nausea, weakness, malaise, fatigue, headaches, back pain, and disturbed sleep. She reports that she has suffered from chronic abdominal pain and headache since her adolescence. Her physical examination, vital signs, and laboratory examination, including CBC, urinalysis, chemistry profile, and ultrasound abdomen are within normal limits. Treatment history reveals consultations with numerous physicians in an attempt to find solutions to her complaints for many years. Multiple diagnostic procedures were performed, yet no organic cause was found. She was referred to Psychiatry department for evaluation. Psychiatric assessment included a complete history of the current complaints, associated symptoms, and behaviors. Information was also obtained about her childhood, family, education, and medical and psychiatric treatment. She expressed frustration that several doctors told her that she was a chronic complainer who didn't have anything wrong with her. A diagnosis of somatization disorder was made. The treatment plan included regular visits to monitor her chronic pain complaints. Use of medication with addictive potential was restricted. Outpatient visits focused on identifying sources of stress and encouraging healthy coping mechanisms through supportive psychotherapy. Pharmacological management included Fluoxetine 20-40 mg/day. The patient was followed up regularly at specified intervals.

When to Refer?

Some important indicators that should guide the primary care provider to refer to psychiatrists include;

- Diagnostic dilemma
- Chronic & Severe illness
- Suicidal threats and attempts.
- Co-morbid Psychiatric problems like severe depression and substance abuse.
- No relief on initial treatment

EMOTIONAL AND BEHAVIOURAL PROBLEMS IN CHILDREN & ADOLESCENTS

Learning Objectives:

After completing this session, participants should be able to:

1. Evaluate and recognize common childhood psychiatric disorders
2. Learn few behavioural principles used in management of childhood psychological problems
3. Enlist the indications for referring the patient for specialist care

Outline of the Text:

- Introduction:
 - Prevalence of childhood psychiatric disorders
 - Range of psychological problems observed in children /adolescent
 - Aetiology of childhood psychological problems/disorders
- Clinical picture:
 - Emotional problems in children and adolescents
 - Behavioural problems in children and adolescents
- Management:
 - Assessment
 - Pharmacological treatment
 - Non-pharmacological approaches
 - Preventive approaches
- Guidelines for referral
- Case vignettes

INTRODUCTION

The child is continually developing. Symptoms & Behaviour problems change with developmental changes, as do emotional needs. The developmental stage can influence the presentation, significance & course of a psychiatric disorder. It is essential that all individuals involved in the care of children have at least a basic understanding of 'normal' and 'abnormal' childhood experience and behaviour.

Transient symptoms and behavioural disturbances are common in children of all ages. Parents are becoming increasingly aware of emotional health problems in Children and seek help for various concerns regarding their children.

Parents may seek help for various concerns regarding their children. These concerns may include children not able to sit still, not able to pay attention, not able to engage in verbal, non-verbal, or social communication with others, seems to be withdrawn, depressed, angry, and violent, poor scholastic performance, drug abuse etc.

The major epidemiological features of childhood psychiatric disorder are:

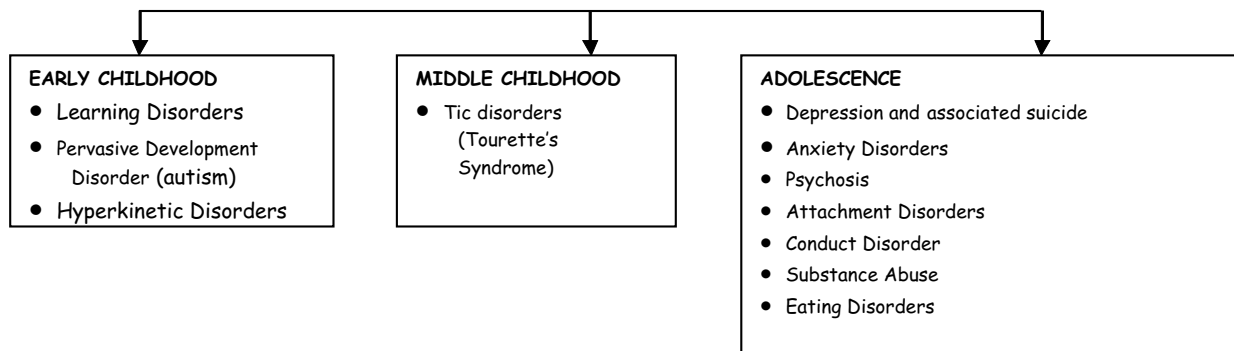
- Boys are affected twice as often as girls for most diagnoses.
- Commonest diagnoses are emotional and conduct disorder.
- Disorders are commoner in children with mental retardation, epilepsy or medical illness.

ETIOLOGY IN CHILD PSYCHIATRY

- The same broad range of etiological factors operates in childhood as in adulthood.
- There is a genetic component to most disorders, mediated partly through its influence on intelligence & temperament. The disorders involve interplay of genetic and environmental factors.
- The major environmental factors are the family & social circumstances. The family factors include parenting styles, parental conflict/ separation and social factors include deprivation. A deprived child is one who is: Without proper parental care or control, subsistence, education as required by law, or other care or control necessary for his physical, mental, or emotional health or morals, has been placed for care or adoption in violation of law, has been abandoned by parents or other legal custodian, is without a parent, guardian, or custodian.
- Other factors like medical disorder (Epilepsy) might also increase the risk.

RANGE OF CHILDHOOD PSYCHIATRIC DISORDERS

The Mental Health problems affecting children and adolescents may be considered from a number of perspectives. The disorders listed below are identified as priority areas based on higher frequency of occurrence and degree of associated impairment, therapeutic possibilities and long-term care consequences.



Behavioural problems in children can be "Internalising" or "Externalising."

Externalising behavioural problems are characterised by an undercontrol of emotions and include those items covering difficulties in interaction with other children and at home, difficulties in concentration, having a strong temper and being

Internalising behavioural problems are characterised by an overcontrol of emotions and include being withdrawn, demanding attention, being too dependent or clingy and feeling worthless or inferior.

DESCRIPTION OF CHILDHOOD PSYCHIATRIC DISORDERS

(A) LEARNING DISORDERS:

Learning disorders have a high incidence and prevalence with serious implications for future productivity.

Learning disorders are diagnosed when the individual's academic achievement in reading, mathematics, or writing is substantially below what would be expected for age, schooling and intellectual ability (APA, 1994).

Specific Learning Disorder (SLD) is a disorder in one or more of the basic psychological processes involved in understanding or in using spoken or written language. The disability may be exhibited as an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations.

Types of Learning Disorders:

| | |
|--------------------------------|---|
| Reading disorders: | <ul style="list-style-type: none">• Reading skills significantly below expectancy• Significantly interferes with academic achievement or activities requiring reading skills |
| Mathematics disorders: | <ul style="list-style-type: none">• Mathematics skills significantly below expectancy• Significantly interferes with academic achievement or activities requiring mathematics skills |
| Disorder of written expression | <ul style="list-style-type: none">• Writing skills significantly below expectancy• Significantly interferes with academic achievement or activities requiring mathematics skills |

The most common treatment for learning disabilities is special education. Other professionals such as speech and language therapists also may be involved. This usually requires referral to a higher center.

(B) PERVASIVE DEVELOPMENTAL DISORDERS

These are Developmental disorders where the development follows a deviant path and there is a deviation in development of communication and socialization.

The disorders included in this category are

- Autism
- Aspergers disorder
- Retts disorder
- Other disintegrative disorders
- PDD unspecified

AUTISM:

Autism is a pervasive developmental disorder and characterized by significant problems in all three domains of:

- Communication
- Social interactions
- And stereotyped patterns of behaviour

Characteristic features:

- Difficulties with social interactions
- Marked impairment in the use of non-verbal behaviours, such as eye-to-eye gaze, facial expression, body postures, and gestures to regulate social interaction
- A decrease or lack of spontaneous seeking to share enjoyment, interests, or achievements with other people
- Decreased or lack of social or emotional reciprocity
- Failure to develop peer relationships appropriate to developmental level
- Impairments in communication
- Delay or total lack of development of spoken language
- Stereotyped or repetitive use of language or idiosyncratic language
- Lack of varied, spontaneous make-believe play or social imitative play appropriate to developmental level.

Common co-occurring conditions in autism:

- Mental Retardation: up to 75% of people with autism have mental retardation
- Seizures: 25% of autistic individuals also develop seizures, some in early childhood and others as they go through puberty

Treatment:

- Behavioural, psychotherapeutic as well as pharmacologic approaches can be used to address numerous problems, but unfortunately there is no cure for the core disorder
- The goal of treatment is not merely to lessen symptoms, but to help the individual achieve the maximally feasible quality of life

(C) MENTAL RETARDATION/ INTELLECTUAL DISABILITY:

Mental retardation is one of the most prevalent of the developmental disorders, occurring in approximately 1 – 3% of school-aged children and estimated to be 2.5%.

- Mental Retardation or Intellectual disability involves impairments of general mental abilities that impact adaptive functioning in three domains, or areas. These domains determine how well an individual copes with everyday tasks:
- The conceptual domain includes skills in language, reading, writing, math, reasoning, knowledge, and memory.

- The social domain refers to empathy, social judgment, interpersonal communication skills, the ability to make and retain friendships, and similar capacities.
- The practical domain centers on self-management in areas such as personal care, job responsibilities, money management, recreation, and organizing school and work tasks.

| CATEGORY | IQ RANGE | LEVEL OF FUNCTIONING |
|-------------|--------------|---|
| Mild MR | 50-70 | <ul style="list-style-type: none"> • Individuals educable. • Can be minimally self supporting. • Can acquire basic social and vocational skills. |
| Moderate MR | 35-49 | <ul style="list-style-type: none"> • They are trainable. • Able to perform academic activities comparable to a child in Grade two. |
| Severe MR | 20-34 | <ul style="list-style-type: none"> • Seriously impaired in their motor and speech development • Only learn basic language and practice hygiene after age six. Usually permanently dependent on others and therefore spend their lives with family, in community homes or in institutions. |
| Profound MR | Less Than 20 | <ul style="list-style-type: none"> • Fully reliant on caregivers. • Often diagnosed with a neurological disorder and epilepsy, spasticity and mutism. |

Etiology:

Mental retardation may be the end result of one of the following categories of risk.

- Biomedical- these are factors that have a deleterious impact on the child's central nervous system
- Social- inadequacies in the social and/or family environment can diminish cognitive and social growth and development
- Behavioral- these include trauma, maternal substance abuse
- Educational- the availability and quality of training programmes can affect intellectual development and influence whether or not the child functions in the range of mental retardation.
- Interaction between risk factors

Assessment of mental retardation:

The diagnosis of the cause of mental retardation involves pediatricians and pediatric neurologists

The assessment of a child with suspected mental retardation encompasses:

- Making the diagnosis
- Evaluating concurrent psychiatric problems

Management:

Mental retardation is rarely treatable and management is aimed at maximizing potential and quality of life, and treating concurrent psychiatric problems. The physician should help the family to prepare for the future. The clinician should ensure, that over time, the family accepts the prognosis and has realistic expectations for the child's future.

(B) HYPERKINETIC DISORDER:

- It is also called **ADHD**: Attention Deficit Hyperactivity Disorder.
- Prevalence of this disorder is estimated to be around 3-5% in pre-pubertal children.
- It is much more common in boys than girl (4:1)
- The onset is usually in early childhood (before age 7) but the problem is usually identified when the child starts going to school.

Characteristic features: This disorder is characterized by: Hyperkinetic behaviour and poor attention span.

| | |
|---|---|
| <ul style="list-style-type: none">• The main feature is hyperkinetic behaviour: As children they are:<ul style="list-style-type: none">- Restless and cannot sit still.- Fiddle with everything around- Emotionally excitable- Show episodes of rage or crying- Impulsive- Show temper tantrums | <ul style="list-style-type: none">• The second characteristic is poor attention span<ul style="list-style-type: none">- These children do not concentrate on any task and leave most tasks unfinished.- These patients may have many other associated symptoms like impulsivity, emotional lability, poor scholastic progress and antisocial behaviour. |
|---|---|

Etiology

- *Genetic factors* seem to play some part.
- Majority of these patients do show developmental delays. Soft neurological signs are common.
- Others believe that the disorder occurs due to maturational lag of the central nervous system. The condition improves with maturation.
- Psychosocial factors may play some part. This disorder is more common in orphanages where proper rearing atmosphere is not available.

Diagnosis:

- Based on presence of hyperactivity and poor attention span, which is out of proportion of the age and intelligence of the child.
- Some children may show conduct disorders in form of truancy, lying, aggression etc.

Course and Prognosis:

- About three - fourths improve by adolescence.
- Some may continue to have poor attention span.
- Others may continue showing both hyperactivity and poor attention.
- However, a small group may develop dissocial personality disorder and other may persist with difficulties in social adaptation.

MANAGEMENT

• **Pharmacotherapy:**

- The CNS stimulants: These drugs reduce hyperactivity and improve attention span.
- Dextroamphetamine and Methylphenidate are the drug of choice. They are to be given in the morning and at noon because nighttime dose may produce sleep difficulty.
- Dextroamphetamine is given in a dose of 5-10 mg/day.
- Methylphenidate in doses of 0.25-1 mg/kg/day is effective.
- Non-stimulant: Atomoxetine (1 - 1.4 mg/kg qd)

• **Psychological Treatment**

The parents and teachers are advised not to retaliate against the child but their hyperactivity could be channelized into outdoors sports and their poor attention can be improved by appropriate educational technology.

(E) CONDUCT DISORDER:

Characterized by repetitive and persistent dissocial and aggressive/ defiant behaviour. This behaviour should be persistent and should not be limited to one or two situations. 0.5 to 1% children may show conduct disorder before 18 years of age.

Etiology:

- i) Genetic Factors
- ii) Familial Factors
- iii) Socio-cultural Factors
- iv) Psychological Factors
- v) Neurological Factors

Clinical Features

These children may show any one or more of the following:

- excessive level of fighting or bullying;
- cruelty to animals or other people;
- fire setting;
- stealing;
- repeated lying;
- truancy from school and running away from home
- frequent and severe temper tantrums; defiant provocative behavior and persistent severe disobedience

Conduct disorders

Conduct disorders can be further subdivided into the following:

- a) *Conduct disorder confined to family context* - Dissocial acts in relation with their family members
- b) *Unsocialized Conduct Disorders* – These children find it difficult to develop enduring relationship with peers. They are usually isolated.
- c) *Socialized Conduct Disorder* – These children become part of a delinquent group and indulge in antisocial activities as described earlier. Basically these children are able to form stable relationship with other children. They may establish relationships with normal children or with children from delinquent gangs.

Management:

- Conduct disorders require psychological management. Following principles are to be kept in mind:
 - If conduct disorder is associated with family disruption or poor parenting, the child may have to be shifted to some other place or a children's home
 - Family should always be involved and attempt should be made to help the family to provide consistent upbringing
 - These children may be involved with a group of normal children which may provide them proper role models to emulate
 - Behaviour modification with positive reinforcement may be helpful
- Medication may be needed to control aggressiveness or hyperactivity. Haloperidol in small doses & anticonvulsant (carbamazepine) may be helpful.

(F) DISORDER OF SOCIAL FUNCTIONING WITH ONSET SPECIFIC TO CHILDHOOD AND

ADOLESCENCE

These disorders usually develop in response to disturbed environment. Common disorders included are:

- **Non-Organic Enuresis:** Majority of children become dry by 4 to 5 years. Enuresis is seen in around 1% of children after this age. Enuresis is characterized by involuntary voiding of urine by day or night. If it is caused by neurological or other organic factors then it is called organic enuresis. Enuresis is divided into primary and secondary:

Etiology

Definite etiology is not known. Genetic factors may play a role. Some children may have excessive production of urine due to reduced activity of antidiuretic Hormone. Psychological factors are more important in secondary enuresis. In primary enuresis, reactive psychological problems may lead to poor self-image and familial tensions.

Clinical Picture

These children wet the bed at night or in the daytime. The frequency can be varying from daily to once or twice a week. These children usually become self-conscious and tense. They may avoid going to places where they have to pass the night. Family tensions may also develop.

Differential Diagnosis

Organic causes of enuresis like spina-bifida-occult, cystitis, seizures etc. should be excluded.

Management

- Behavioural treatment has been found effective. The children should be made to void urine before going to bed. Evening intake of fluid should be restricted. The child may be woken up in the middle of night and made to pass urine..
- **Pharmacology:** Imipramine in dosage of 25 to 50 mg at bedtime reduces enuresis. But many children relapse after stopping the drug.
- **Psychological Treatment:** This is effective only in secondary enuresis. These children should be helped to overcome their anxiety and feelings of insecurity by providing them stable parental relationship.

- **Non-Organic Encopresis:**

This is characterized by passing of stools at inappropriate places even after the age of bowel control has been attained (5 years). These children may pass stool in their underwear. This condition should be differentiated from organic encopresis e.g. overflow incontinence resulting from constipation and, ganglionic megacolon (Hirschprung's disease). These children do not have any desire to defecate yet they may have incontinence. Encopresis is usually associated with some other psychiatric disorders like pervasive developmental disorders.

Management:

These children are usually very tense and families are disturbed. The tension should be eased out by explaining to them that this is a disorder and we should help the child to have change of underwear's without much fuss. Behavioural training is useful. Treatment of associated psychiatric condition can be helpful.

G. Emotional Disorders (with specific onset to childhood)

Separation anxiety disorder

Anxiety on separation from a primary care giver is a developmentally normal phenomenon in children less than 1 yr and may last until 2 yrs of age.

When developmentally inappropriate and excessive anxiety concerning separation from home or primary care

giver occurs, it is referred to as Separation Anxiety Disorder.

Clinical features:

Its onset may be during preschool years or commonly between age of 6-7 yrs. The onset has to be prior to 18 yrs of age

The anxiety is expressed as:

- Excessive distress when separation occurs
- Excessive worry about anticipated separation
- Reluctance to be in a situation in which separation is anticipated. Eg: School, sleeping alone
- Physical symptoms as stomachache, headache etc.

Management:

- Detailed assessment of child's temperament, Mothers attitude towards the child and their bonding as well as the psychosocial background in the family
- Multimodal treatment is advised – includes CBT, family education, and psychosocial intervention with the family.
- Graded contact as a form of behaviour modification

SCHOOL REFUSAL

Many children try to avoid going to school from time to time. Some do it regularly. School refusal is not a psychiatric disorder, but it is a common cause of referral to child psychiatrists and is frequently attributable to an emotional disorder.

ASSESSMENT OF SUSPECTED SCHOOL REFUSAL

- Why is the child absent from school?
- What does the school refusal reflect?
 - Reluctance to leave home (i.e. secondary to separation anxiety)
 - A specific 'school-phobia' (e.g. of getting there or of being bullied)
 - A more generalized disorder (e.g. social phobia, depressive disorder)
- What are the other factors affecting the presentation of management?
 - Recent life events (e.g. bereavement)
 - Recent events at school (e.g. change of class)
 - Parental characteristics: (e.g. overprotective).

Management is aimed at a rapid return to school before avoidance is too ingrained. Sometimes a graded re-exposure is needed. Address any specific fears of stresses, and treat any associated psychiatric disorder.

The prognosis in younger children is good. In older children, the problem may become prolonged and other psychiatric problems may emerge.

CHILDHOOD AND ADOLESCENT DEPRESSION

Childhood major depressive disorder (MDD) is characterized by a significant, often recurrent emotional and behavioral change from baseline to a dysphoric or irritable mood, loss of pleasure or fun, and with decreased functioning at home, school and with peers.

Incidence figures are hard to measure in this population.

- Infants and preschoolers- 1%. It mainly presents as failure to thrive, as well as attachment, separation and behavioral problems
- School age children- 2%. Closer fit to adolescent/ adult criteria. It typically has a more protracted, recurrent or severe course. Suicide attempts and completions uncommon to rare.
- Adolescents- 5% or more. Presents more like the adult syndrome and typically require evaluation of suicidality and substance use.

Etiology and contributing factors

These include genetic factors(biological offspring's of depressed parents more likely to have depression), environmental factors, organic factors, developmental and transactional factors.

Making the diagnosis-

- Infant/ toddler- both the persistently passive, unresponsive infant and the irritable, unsoothable, crying infant may suffer from the mood dysregulation associated with depression. Their clinical presentation may evolve into a quiet, inhibited toddler with arrested social development or an overactive, impulsive and irritable preschooler.
- School age- in school age children with MDD there may be humiliation, defeat, irritability and self-doubt. The child may become sad, isolated, rejected and accident-prone. Temper tantrums or morbid preoccupations with bodily injury, illness, abandonment or death may emerge. There may be multiple somatic complains.
- Adolescents- they may have difficulty containing intense negative feelings. They may have direct negative actions inwards towards themselves by disregarding food, sleep and hygiene. Some turn to alcohol and drugs or engage in self-destructive behavior. Adolescents with MDD often appear irritable, angry and resentful. This age group should be given special attention considering the harmful behavior they may indulge in.

Management

Mild or moderate cases of depression can be safely cared for as outpatients. Urgent psychiatric consultation is indicated when the child or adolescent might be acutely suicidal, abusing substances, having psychotic features or otherwise difficult to manage. The treatment strategies include-

- Medications –SSRI's (Fluoxetine) are the drugs of choice for this population, but they have to be used with caution
- Cognitive behavior therapy
- Family therapy
- Environmental manipulation
- Parental guidance.

Psychological issues related to Adolescence:

Adolescence is not just a blend of childhood and adulthood; it is a stage with unique biological and social characteristics of its own. Biological factors defining adolescence includes the achievement of sexual maturity as well as the physical and cognitive changes resulting from hormonal shifts. Behavioural problems and disorders during this period of “stress and storm” often represent exaggerations or unresolved versions of the normal development tasks of adolescence. Some of the psychological and social tasks of adolescence include : identity formation (a strong sense of differentiated self in the individual and includes a social/sexual/work and moral identity), self determination, and the dual process of exploration (“keeping options open”) and commitment .Some societies provide structured rituals to assist adolescent with the transition from childhood to adulthood.

Disorders of adolescence are classified in terms of:

- Residual childhood problems (e.g. conduct disorder)
- Problems of adolescent transition (eating disorder, Para suicide, drug abuse)
- Early adult disorders (e.g. Schizophrenia, bipolar disorder, OCD)

| <u>Consider referral when:</u> | |
|--|---|
| <u>Problem</u> | <u>Refer to</u> |
| Mental retardation | Pediatrician, neurologist, Psychologist |
| Autism | Psychiatrist, Psychologist |
| Significant learning/ academic problems | Psychiatrist |
| Suicidal or self-injurious behaviour, severe aggression, Substance abuse | Psychiatrist |
| Psychotic symptoms | Psychiatrist |
| Attention Deficit hyperactivity disorder | Psychiatrist, psychologist |
| Mood disorder, anxiety disorder | Psychiatrist, psychologist |

Referral Criteria :

GENERAL PRINCIPLES OF MANAGEMENT IN CHILD PSYCHIATRY

Management of children with psychiatric disorder is based upon several principles:

- Take the child's developmental stage and overall level of functioning into account.
- Most problems are treated initially with reassurance, support and behavioural interventions.
- Whatever the treatment, involve the family.
- Avoid removal from school or home wherever possible
- Medication has a limited role in most disorders.

General principles of behaviour therapy: Behaviour therapy may not be feasible at PHC level and might require referral to a higher centre. However, some of the following principles may be useful in management:

- Behaviour modification in children can be brought about by using behavioural principles.
- Every behaviour is determined by an Antecedent (what happens before a behaviour) and a Consequence (what happens after a behaviour).
- Antecedent or Consequence can be altered to alter a behaviour.
- Desired behaviours need to be reinforced and unwanted behaviour should be decreased
- Positive reinforcement is used to promote desired behaviours. It involves the use of rewards which include Tangible rewards as food,objects,etc and social rewards as praise.

- Initially tangible rewards may be used as reinforcement and later replaced by social rewards to sustain the change in behaviour. Rewards must be chosen on the basis of child's preferences .
- Unwanted behaviours can be decreased by ignoring them or taking away existing privileges or reinforcement. For example: withholding TV viewing or a regular excursion.
- Punishment should not be used or only sparingly used to bring about a behaviour change
- If wanted behaviours are reinforced at the same time ignoring the unwanted behaviours, which is also called differential reinforcement the benefits may be marked.
- One has to be consistent in providing reinforcements and they should be contingent to the behaviour .

Case Vignette:

I. A 13yr old boy who has stopped attending school has been brought for assessment. According to his mother, since he moved to a new school he has become withdrawn and as the time of school approaches he becomes sweaty, complains of diarrhea, starts to breathe heavily and absolutely refuses to go to school. On two occasions, within the last month, when his father who is usually abroad, put him in the car and took him to school, he managed to stay there all day.

- a. How would you assess the situation?
- b. What factors do you need to know to confirm the diagnosis?
- c. How would you manage him?
- d. What is his long-term prognosis?

II. A 40yrs old women, telephones to ask for an assessment of her 6-year-old daughter as an emergency questioning, she reveals that the main problem is bed-wetting. Her daughter has been dry for 6 months & has started bed wetting again, and mother says that she cannot cope with "all this nonsense". When told that there was no emergency & that the child could be seen he following morning in the OPD, the mother refuses for the arrangements and insists on emergency assessment. The mother and daughter reach 1 hour late because they were stuck in traffic Jam.

Question:-

- a. What kind of question do you want to ask?
- b. What do you make of the mother?
- c. Outline your management plans?
- d. What role will medication play in managing this child?

III. Mohan, a 6-year-old boy in Class – I finds it difficult to sit quietly. He keeps roaming in the class and teacher has to repeatedly call his name. Parents also report that he frequently gets angry and threaten, whenever his demands are not met. In school if he gets into fights easily, breaks other children's things and shouts. He was brought by his parents to the pediatrician with complaints of anger outburst and aggressive behaviour.

Question

- a. What are Mohan's Problems?
- b. What are the details you would want for a comprehensive assessment?

PSYCHIATRIC PROBLEMS IN ELDERLY

Learning objectives

1. Burden of psychiatry problems in elderly
2. Identify psychiatry disorders in elderly
3. Assessment of psychiatry disorders in elderly
4. Pharmacological & non pharmacological management of psychiatry disorders in elderly

Introduction

The elderly population of India is steadily increasing. It is projected that by 2050, proportion of persons who are of age 60 years and above living in India will rise to 19% from current 8% of total population (United Nations Population Division, 2010). The demographic profile depicts that in the years 2000-2050, the overall population in India will grow by 55% whereas aged population 60 years and above will increase by 326% (United Nations 2002). This has resulted in "Greying of India".

Despite improvement in health care system, Indian elderly is facing a huge burden of communicable and non-communicable diseases. This vulnerable population is more prone to psychiatric problems. These psychiatric problems in elderly are more complex and challenging than those encountered in young- and middle-aged patients due to host of medical and environmental conditions. Most common psychiatric illnesses in Indian elderly population are depression, dementia and anxiety disorders which need attention of General Practitioners.

Clinical picture

Dementia

Dementia is also known as '*chronic brain failure*', more frequent after 65 years of age. Dementia is a syndrome characterised by concurrent impairment in cognition, behaviour and activities of daily living. Its cardinal feature is memory impairment in the presence of clear consciousness. It can be understood through 'ABC of dementia':

- A- Problems in Activities of Daily Living (ADL)
- B- Problems in Behaviour i.e. Behavioral & Psychological symptoms of Dementia (BPSD)
- C- Problems in Cognition i.e. memory impairment

A: Dementia interferes with activities of daily routine like dressing, washing, eating, personal hygiene & toilet training.

B: Psychological symptoms in dementia assessed on the basis of interviews with patients and caregivers include delusions, paranoia, hallucinations, anxiety and depressed mood. Behavioural symptoms identified on the basis of observation of the patient include physical aggression, screaming, restlessness, agitation, wandering, sexually inappropriate behaviours, and hoarding.

C: Patients with dementia have problems in cognition i.e. memory, more particularly learning new information. There is a definitive decline in memory from previous state reported by caregivers. Other problems associated with cognitive decline include language, orientation, judgment, executive function and thinking. Memory loss is usually progressive with prevalence doubling every 5 years after the age of 60 years.

Delirium

Delirium or acute confusion is a transient organic brain syndrome, a type of medical emergency encountered in health care settings, characterised by an alteration in consciousness caused due to underlying medical conditions. This clinical condition is acute in onset and shorter in duration (few hours to days). Patient with delirium is presented with global impairment of cognitive function (i.e. confused state of mind, disorientation to time/place and disturbance in sleep-awake cycle). This condition has a diurnal variation, more worsening in night hours ('Sun downing phenomenon'). Emotional disturbances like anxiety, fear, irritability, anger, apathy and withdrawn, may be associated with delirium in elderly. Mortality among hospitalized patients is high as much as 40%. Hence, clinicians need serious attention to identify and manage this medical emergency

Depression

Depression is considered to be 'Disorder of losses'-loss of mood (sadness of mood); loss of interest in pleasurable activities (anhedonia); and loss of energy (easy fatigability). Depressed/sad mood remains the most common presentation of depression in elderly but may not be spontaneous complaint. In addition to weight loss, persistent anhedonia is common reported symptom in elderly. Psychotic symptoms may also present in elderly depressives. Appetite loss and suicidal ideation or acts may also present in old age depression. Depression may be associated with medical conditions. Elderly patients often report bodily symptoms (aches & pains, gastro-intestinal disturbances) rather than sadness of mood. They also report subjective experience of forgetfulness or memory loss and slow thinking (Pseudo-dementia; 'dementia of depression') which should be differentiated from dementia. They may also present with anxiety symptoms, agitation and psychotic symptoms. There is always a high risk of suicide associated with depression in late life.

Late-onset anxiety disorders

Anxiety disorders in elderly may be associated with medical disorders or exist as independent disorders (Generalised anxiety disorder, panic disorder & obsessive compulsive disorder). They may be presented with *physical symptoms like palpitation, chest pain, choking, giddiness, and tingling numbness; and psychological symptoms like worrying, nervousness, tension, apprehension, anticipatory fear, lack of concentration.*

Late-onset psychosis

Elderly may also prone to psychosis like young adults. In late-onset psychosis (also called 'Paraphrenia'), delusions of persecution & reference and auditory & visual hallucinations are usually present.

Management

Assessment

Dementia

Diagnostic exercise of patient with memory problem starts with a good history from both family members and the patient regarding chronological presentation of symptoms and problem behaviours. Evaluation includes questions related to memory loss like becoming lost in a familiar place, asking food again and again, and losing objects. A thorough evaluation of medical history and examination of bodily systems, including neurological examination is must for patient with memory loss. The nature and degree of the cognitive function and activities of daily living should be assessed with Hindi adaptation of Mini-Mental State Examination (HMSE) and Everyday Abilities Scale for India (EASI). The laboratory tests to rule out reversible causes for dementia are: thyroid stimulating hormone, vitamin B12 & folate levels, electrocardiogram, blood sugar & creatinine. Computed tomography of brain is required for patients with memory loss.

Delirium

Delirium is seen more in intensive medical and surgical units and among patients recovering from surgery or on multiple medications. It needs thorough clinical evaluation, including intoxication, electrolyte disturbances, infections, hypoxia, hypoglycaemia, physical restraint, bladder catheter use and concomitant medications.

Depression

Older persons may not reveal depressive symptoms so easily, hence needs good observation and clinical skills. More focus of interview is towards motor activity, hopelessness, worthlessness, hallucinations, suicidal ideations and memory problems. The laboratory tests to rule out co-morbid medical conditions are: complete blood counts, thyroid stimulating hormone, vitamin B12 & folate levels (vegetarians), electrocardiogram, Fasting blood sugar, serum electrolytes, blood urea & creatinine. Computed tomography of brain is optional for suspected cases of cerebro-vascular lesions.

Late-onset anxiety disorders

Anxiety symptom may be part of medical and psychiatric disorders like hypoglycaemia, hyperthyroidism, cardiac arrhythmias, pulmonary emboli, delirium, depression, dementia and psychotic disorder. It could be related to medications like ephedrine, anticholinergic drugs and benzodiazepine withdrawal.

Late-onset psychosis

Psychotic symptoms in the form of suspiciousness, delusions, hallucinations and agitation are present in schizophrenia and delusional disorders. Family members should be interviewed to explore behavioural disturbances.

Treatment approaches

Once the psychiatric problem is formulated by the clinician, the usual treatment approaches must be individualized depending on clinical status and also targeted to reverse the underlying disorder. Emphasis should be on identifying above mentioned problems early and referring appropriately. Also, the assessment should include evaluation of psychiatric and comorbid medical illnesses, which is a rule rather than exception in the elderly. It is also essential to include drug history keeping in mind the drug-drug/ drug-disease interactions. Counselling & education regarding disorder as well as diet and medicines is the mainstay for the successful treatment.

Dementia

Early identification and treatment may delay or arrest the process of cognitive decline. Treatment of dementia is based on the cholinergic hypothesis of memory. Cholinesterase inhibitors like donepezil, rivastigmine and galantamine are indicated for patients with dementia. Donepezil should be started with dosage of 5mg/day which may titrate to 10mg/day in 2 weeks. Antipsychotics may be indicated for controlling aggressive behaviour, psychotic symptoms and severe agitation. Risperidone(1 to 3 mg) and quetiapine (25 to 400 mg) may be used.

Delirium

For patients with delirium, initial treatment includes medical support i.e. maintenance of vital parameters (adequate airway, blood pressure, pulse and temperature). The cause of delirium is established through history, physical examination, and laboratory tests. Specific therapy/intervention is started after identification of precipitant of confusional state. Clinicians also look after and manage excess and confused environmental stimuli present in the vicinity of patient. Patient should be kept in quiet, well-lighted and simply furnished room. Family members and hospital staff should regularly acquaint the patient regarding time, place and person. Restraints should be avoided. For agitated behaviour, low dose antipsychotics (Haloperidol or Risperidone, either oral or intramuscular) may be prescribed.

Depression

Antidepressants remain mainstay for treatment of geriatric depression. Newer antidepressants, Specific Serotonin Reuptake Inhibitors (SSRIs) like fluoxetine, sertraline, citalopram and escitalopram can be initiated at lower doses (preferably half of young adult dosage). Gastrointestinal disturbances, weight loss and agitation are commonly reported side effects with SSRIs. Tricyclic antidepressants may be avoided due to postural hypotension and anticholinergic side-effects. Elderly depressives who do not respond to or tolerate antidepressants may better respond to Electroconvulsive Therapy (ECT). Families should be involved for support building and motivating patient in activities.

Late-onset anxiety disorders

Short-acting benzodiazepines like alprazolam (0.125-0.25mg) and lorazepam (2-4mg) may be indicated in patients with anxiety disorders. SSRIs (Escitalopram, citalopram and sertraline) are useful in treatment of anxiety disorders.

Late-onset psychosis

Patient with psychosis requires a safe environment. Agitated and suspicious elderly needs inpatient hospitalization. Antipsychotic medications used in late-onset psychotic disorders are risperidone (1-3 mg/day), quetiapine (25-300mg/day) and haloperidol (0.5-10mg/day).

Guidelines for referral

Refer patients of following conditions to specialist care:

1. Dementia with behavioural and psychological symptoms
2. Complicated delirium
3. Depression not responding to antidepressants
4. Suicidal patient
5. Depression with psychotic/cognitive symptoms
6. Anxiety disorders not responding with medications
7. Agitated and suspicious elderly patient

Case vignette

History: Mr S 66 years elderly male, was referred to the outpatient clinic for complaint of forgetfulness. Since retirement at the age of 60, he has been unable to carry out household chores properly; he constantly loses objects and forgets names of his relatives. Although he has been staying in his locality since 10 years, but, now would often forget his way to home. He would ask for food again and again. Gradually he even started to forget name of common articles and since last 1 year has been dependent on his wife for his daily activities of living.

Findings: On examination, patient was in clear consciousness and fully oriented. He scored 15/31 on Hindi adaptation of Mini Mental status examination. He was unable to follow instructions properly. Lab investigations were within normal limit, computed tomography scan of brain showed generalised diffuse cerebral atrophy. He was diagnosed as a case of dementia and was started on tablet Donepezil.

EPILEPSY

Outline of the Text:

- Learning Objectives
- Introduction:
 - Prevalence data
 - Aetiology of Epilepsy
 - Classification of Epilepsy
- Clinical picture:
 - Symptoms & signs of Epilepsy
 - Diagnosis and differential diagnoses
- Management:
 - Assessment
 - Pharmacological approaches
 - Non-pharmacological approaches
 - Preventive approaches
- Guidelines for referral
- Case vignettes

Learning Objectives:

After completing this chapter, the participants should be able to:

1. Identify a case of Epileptic seizure
2. Classify the patients in different types of epilepsy
3. Understand about the management strategy of epilepsy:
 - How long the medications (AED) is to be continued
 - When to initiate and stop the treatment
 - When to Refer the cases of epilepsy

INTRODUCTION

- Epilepsy is one of the common neuropsychiatric conditions encountered in general practice. It is a diagnosis which carries social stigma and hence the diagnosis should not be made without thorough consideration. For some patients, epilepsy might be a lifelong disorder requiring indefinite treatment.
- Epilepsy is characterized by Recurrent Seizures. Seizures occur due to episodic excessive, abnormal neuronal activity in the brain that produces a sudden change in the neurological functions.
- Its incidence is about 5-8/1000. However, increased incidence is seen in neonates, children, and elderly.

CLASSIFICATION

Summary of international classification of epileptic seizures

I. Partial (Focal) seizures

- a) Simple partial seizures (consciousness not impaired)
- b) Complex partial seizures (temporal lobe or psychomotor seizures, consciousness impaired)
- c) Partial seizures evolving to secondarily generalized seizures [tonic-clonic (grand mal), tonic or clonic]

II. Generalized seizures (convulsive or nonconvulsive)

- a) Absence (petit mal) seizures
- b) Myoclonic seizures
- c) Tonic seizures
- d) Atonic seizures
- e) Clonic seizures
- f) Tonic-clonic (grand mal) seizures

III. Unclassified epileptic seizures

CLINICAL FEATURES

SIMPLE PARTIAL SEIZURES

- Sudden onset and cessation
- Due to focal cortical pathology
- No alteration in consciousness
- Focal symptoms or signs:
 - Motor
 - Sensory or special sensory
 - Psychic (dysphasic, dysmnestic, cognitive, affective, illusions, hallucinations)
- Partial seizures may progress to Complex Partial Seizure (CPS) or to generalized tonic clonic seizures

COMPLEX PARTIAL SEIZURES (TEMPORAL LOBE/ PSYCHOMOTOR EPILEPSY)

Seizure may begin with no warning or with motor, sensory, autonomic, psychic signs & symptoms

- Sudden onset and gradual recovery
- Aura (focal symptoms/signs as in simple partial seizures)
- Altered consciousness-motionless stare & unresponsiveness
- Automatism (chewing, lip smacking, fiddling, rubbing of hands, circling, running, mimicry, gestural, ambulatory, verbal, responsive), co-ordinated involuntary motor activity
- Amnesia
- CPS patients may have combination of Aura and altered consciousness and automatism
- CPS may progress to generalized tonic clonic seizures
- Due to focal cortical pathology
- Temporal lobe CPS-60% extra temporal, especially frontal cortex -30%

TYPICAL ABSENCE SEIZURES (PETIT MAL)

- Sudden onset and cessation, (few seconds, average:10 seconds)
- Cessation of motor activity: Blank stare
- Blinking of eyes, jerking and brief automatism may be present
- Impaired responsiveness, Posture and tone preserved
- Several 100/day especially with sleep awake cycle
- EEG –Generalized 3/sec spike and wave pattern
- Precipitated by hyperventilation
- Easily controlled with AED

ATYPICAL ABSENCE SEIZURES

- Absence (blank stare)

- impaired responsiveness
- Focal signs prominent, include tone changes, clonic jerking, motor spasm, automatism
- Onset and cessation often gradual, and seizure may be prolonged
- In-patients with diffuse cerebral damage, mental retardation
- Difficult to control

MYOCLONIC SEIZURES

- Brief jerk, singly or in series + induced by stimulus
- Intensity varies from slight tremor to massive jerk
- Distribution varies, from single muscle to generalized jerking
- Consciousness preserved
- Rapid onset and cessation on waking or going off to sleep
- Myoclonus may precede a generalized tonic clonic seizure
- EEG generalized spike and polyspike and wave discharge
- Occurs as part of: Idiopathic generalized epilepsy (JME), progressive myoclonus epilepsy; or in patients with diffuse cerebral damage associates with mental retardation

PRIMARILY GENERALIZED TONIC-CLONIC SEIZURES (GRAND MAL)

Ictus

- Loss of consciousness-shrill cry-tonic phase (10-30 sec)
- Respiration ceases
- Clonic phase, labored breathing,
- Tongue bite, frothing, incontinence, cyanosis, vocalization, autonomic features (30-60 sec)
- Flaccidity of muscles (2-30 minutes)
- Sudden onset and gradual recovery

Post ictal

- Confusion, drowsiness, sleep, headache, muscle pain
- May be modified with treatment-tonic, clonic or atonic
- May have precipitating factors or diurnal variation

FEBRILE CONVULSIONS

- Seizures are associated with fever
- Common (2-5% of all children) (3 months-6 years)
- Peak age of onset (6 month-2 years)
- Simple, complex types, febrile SE-young children
- Recurrence – early age of onset & positive febrile history
- Seizure usually at onset of febrile illness
- Complex febrile convulsion: > 30 min; partial seizure, recur within 24h
- Risk of continuing epilepsy is small

DIAGNOSIS

The first step in the evaluation of a patient with possible epilepsy is to determine whether the patient does or does not have seizures.

- **History** from the patient and eyewitness: The history obtained from the patient and a reliable informant/eye witnesses is often the most important information in establishing diagnosis of a seizure disorder.

- Questions related to parts of a seizure: Begin by asking in detail about the events before, during and after the seizure, namely
 - Prodrome
 - Aura
 - Ictus
 - Post-ictal
 - Inter-ictal
 - To determine the cause (etiology) of the seizure, determine:
 - Whether there is a family history of epilepsy
 - Personal history of head trauma, birth complications, febrile convulsions, middle ear or sinus infection, alcohol or drug abuse or symptoms of cancer
- **Physical examination:** A thorough physical examination: look for disorders associated with epilepsy as well as signs of head trauma, infections of middle ear or sinuses, congenital malformations, alcohol or drug abuse and symptoms of cancer.
- **Electroencephalographic studies (EEG):** In approximately 50% of patients with epilepsy, a single EEG may show no abnormalities at all. An EEG provides information about:
 - Confirmation regarding presence or absence of abnormal electrical activity
 - Information regarding type of seizure disorder
 - Location of seizure focus

Laboratory tests and Neuro-imaging: The following tests are done to determine the cause of newly diagnosed seizure disorder:

- Electrolyte and liver function test
- EEG in sleeping and waking states
- MRI or CT brain: to rule out serious structural lesion
- Screening tests for toxic substances if alcohol or drug abuse or withdrawal is suspected
- Lumbar puncture performed if fever or cancer suspected

Note: The request for the investigations by the medical officers should be judicious. A high degree of clinical suspicion should govern the need for investigations for the patients with seizure disorder. These should include for eg. Cases of recurrent seizures even on regular & adequate treatment, persons with first episode of seizure, post encephalitic sequelae, history of head injury etc.

DIFFERENTIAL DIAGNOSIS:

Disorders that must be differentiated from epilepsy:

- Non-epileptic attack disorder (Pseudo seizures)
- Syncopal attacks
- Transient Ischaemic attacks (TIA)
- Breath holding spells

Non Epileptic Attack Disorder or Pseudo-seizure

- Attacks with motor phenomenon
- Thrashing of limbs (people around)
- Prominent pelvic movements and back arching
- Distractability/interactions with the environment

- Excessive salivation, teeth clenching
- Commoner in females than males
- Obvious secondary gains
- Overt psychiatric illness may be there

Syncopal Attacks

- Evidence of precipitant factors
- Lightheadedness, dizziness, nausea
- Ringing in the ears
- Bilateral loss of vision
- Pallor & Collapse
- Some twitching tonic movement
- Irregular myoclonic jerking
- Rapid recovery when supine
- Sweating, subsequent flushing

Transient Ischaemic Attacks

- Focal Neurological Deficit
- Loss of consciousness – rare
- May not be repetitive

Breath Holding Spells

Causes of Seizures According to Age:

| Neonate-3 years | 3-20 years | 20-60 years | > 60 years |
|---|---|--|---|
| <ul style="list-style-type: none"> - Prenatal injury - Perinatal injury - Post natal trauma - Metabolic def. - Congenital - Malformation. - CNS Injury | <ul style="list-style-type: none"> - Genetic - predisposition - Infection - Trauma - Cong. - Malformation - Metabolic def. | <ul style="list-style-type: none"> - Brain tumor - Trauma - Vascular disease - Infection | <ul style="list-style-type: none"> - Vascular disease - Brain tumors - Trauma - Metabolic Disorders - Infections |

Features of in increased risk of seizure recurrence

- Seizure types (e.g. partial, tonic and atypical absence seizures etc).
- High previous seizure frequency
- Long duration of epilepsy
- Structural abnormality or Psychiatric disorder
- Epileptic syndromes (e.g. JME, LGS etc)
- Inadequate AED/Misdiagnosis

Neuro-imaging in Epilepsy: Indications for structural imaging include:

- Partial seizures or grossly abnormal EEG
- Fixed/progressive neurological or psychological deficit
- Generalized seizures before the age of 1 year and after 20 years
- Refractory seizures/status epilepticus/seizures in elderly

Treatment:**The initiation of antiepileptic drug treatment:** *Always ask*

- Is the diagnosis of epilepsy certain?
- What are the risks of recurrence of seizures without treatment?
- What are the risks of recurrence of seizures with treatment?
- Are the presences of precipitating factors relevant?
- Are the seizure characteristics relevant?
- What are the risks of side effects to treatment?

Consider drug therapy after a first unprovoked seizure if:

- The patient has a neurological deficit
- The EEG shows unequivocal epileptic activity
- The patient or their family/carers consider the risk of having a further seizure unacceptable
- Brain imaging shows a structural abnormality

Choice of Anti Epileptic Drugs (AEDs) for different seizure types:

| Seizure type | First choice | Second choice |
|---|-----------------------------|---|
| Partial seizures Simple partial, complex partial, secondarily generalized | Carbamazepine, valproate | Phenytoin, Lamotrigine, Clobazam, Phenobarbitone |
| Generalized seizures Tonic-clonic, clonic | Valproate Carbamazepine | Lamotrigine, Clobazam, Phenobarbitone |
| Absence | Valproate, Ethosuximide | Lamotrigine, Clonazepam Acetazolamide |
| Atypical absences, atonic, tonic | Valproate | Lamotrigine, Clobazam Clonazepam, Acetazolamide Phenobarbitone, Phenytoin |
| Myoclonus | Valproate | Clonazepam, Phenobarbitone |

The newer drugs (gabapentin, lamotrigine, levetiracetam, oxcarbazepine, tiagabine, topiramate, and vigabatrin) are recommended for managing epilepsy in people who have not benefited from treatment with the older antiepileptic drugs or for whom the older antiepileptic drugs are unsuitable. However this should be carried out at higher centres under specialist care.

Anti Epileptic Drugs: starting and maintenance doses for adults

| AED | Starting dose (mg) | Average maintenance dose (total mg/day) | Doses/day |
|----------------|--------------------|---|----------------|
| Carbamazepine | 100 | 600-1800 | 2-3 (retard:2) |
| Clobazam | 10 | 10-30 | 1-2 |
| Clonazepam | 0.5 | 0.5-3 | 1-2 |
| Ethosuximide | 250 | 500-1500 | 1-2 |
| Lamotrigine | 50 | 200-400 | 2 |
| Oxcarbazepine | 300 | 900-2400 | 2-3 |
| Phenobarbitone | 60 | 60-180 | 1 |
| Phenytoin | 200-300 | 200-400 | 1-2 |
| Valproate | 500 | 1000-2500 | 1-2 |

Note:

- The clinician should be aware of the special populations with seizure disorders (children elderly and women with pregnancy). The doses of antiepileptics need to be adjusted accordingly. Also the common drug interactions with AEDs like Phenytoin, Carbamazepine and valproate should be made note of, while prescribing them.
- All women on anticonvulsants should start taking folic acid supplements of 5 mg per day well before the pregnancy.
- Anticonvulsant drugs can increase the risk of fetal malformation, although the absolute risk is low. The risk is particularly increased in women taking valproate and phenytoin.
- Women with epilepsy (and their partners if appropriate) should receive accurate information and counseling about contraception, conception, pregnancy, caring for children, breast feeding, and the menopause.

STEPWISE 'AED' PLAN FOR NEWLY DIAGNOSED PATIENT

Step 1: Precipitating factors: fever, fatigue, alcohol and drug abuse

Step 2: Reasons for AED treatment, expectations, limitations, duration of therapy, need for regular tablet taking, AED do not provide a cure for epilepsy, have to be taken for a long time, 70-80% of patients seizures controlled by regular medication

Step 3: Start with small dose of AED (1st line), dose increments gradually to therapeutic level, may increase to the maximum tolerated dose, if necessary

Step 4: If seizures continue in spite of maximally tolerated dose of a first-line AED:

- Review the diagnosis of epilepsy
- If there is any underlying structural lesion: imaging of the brain
- Whether patient is compliant by non-confrontational enquiry of patient and carers
- Counting the number of tablets, measurement of serum drug level: Low serum AED suggests non-compliance.
- Start the 2nd AED and taper the first AED.

Duration of treatment:

- Patients are more likely to remain free from seizures if they have been free from seizures for more than two years while taking antiepileptic drugs
- Decision to withdraw anticonvulsant should be done under the guidance of a specialist.

Referral to specialist care:

- Refer patients with first episode seizure to specialist care
- Refer patients with prolonged seizures, status epilepticus
- Refer if there may be difficulties in monitoring the patient's condition

Case Vignette:

A 25-year-old woman comes to see the doctor with her husband because something strange happened to her at home. She could smell burning rubber and then felt strange. Her husband reported that she went blank for a few moments and then started to smack her lips and twitch. But the patient could not remember this. She was confused for one hour after the episode.

1. What is the most likely diagnosis?
2. What is the first line treatment?
3. What other advice should you give to a female patient with epilepsy?

PSYCHIATRIC EMERGENCIES

Objectives:

After completing this section the doctor should be able to:-

1. identify psychiatric emergencies.
2. understand and evaluate the cause of the emergent psychiatric presentation.
3. be able to do a risk assessment of the clinical scenario.
4. manage the emergency keeping the safety of the patient, others and oneself
5. stabilize the patient without getting intimidated or afraid
6. timely coordinate and mobilize other staff for bringing the situation under control
7. choosing appropriate pharmacotherapeutic and other interventions
8. make appropriate referrals

Introduction:

A psychiatric emergency is defined as any disturbance in thoughts, feelings or actions for which immediate therapeutic interventions are necessary. Such patients may cause harm to themselves or others or suffer immense acute distress which is intolerable. These are clinical situations which are unique as they may pose risk and danger not only for the patient but also for the people around him. The emergent task at hand is triage, evaluation, formulation and disposition or thereafter referral. The challenge is ensuring the safety of the patient, others and oneself. The handling of a psychiatric emergency can be very intimidating for a medical professional, however the management becomes much simpler if they understand the nature of the underlying psychiatric disorder and follow some simple steps. The management of a psychiatric emergency is a team effort in which both medical professionals and hospital staff have crucial roles. Prompt and appropriate management of psychiatric emergencies saves lives.

A psychiatric emergency can include any of the following clinical scenarios:-

Box No. 1: PSYCHIATRIC EMERGENCIES

1. Suicidal patient
2. Violent patient
3. Substance withdrawal
4. Severe anxiety / panic attack.
5. Drug toxicity / intoxication
6. Drug induced parkinsonism

The following text discusses the presentation and management of two of the most common and important psychiatric emergencies in detail, namely suicide and violence and briefly discusses the others.

SUICIDE

Introduction

Suicide is the termination of one's life intentionally. It is the third leading cause of death between ages 15 and 24. A suicidal patient is one who has attempted or tried to attempt or frequently thought of attempting suicide. A suicidal patient needs emergent intervention as this can prevent a completed suicide. As opposed to popular belief suicide is more often a culminating event of an underlying psychiatric disorder (in 95% of cases) than of any circumstantial life event. The prevalence of suicide is 10-15% in patients of depression, 10% in schizophrenia and this number rises when alcoholism complicates the picture. Hence the evaluation for an underlying psychiatric disorder is a must in all such patients. Slitting of wrist, hanging, overdose of sleeping pills are some common means applied by such patients. Risk assessment is an integral part of evaluation and management.

Presentation of a suicidal patient :

Such patients have either frequently thought of/ contemplated suicide or have planned the act or have attempted suicide .

They are often brought by family.

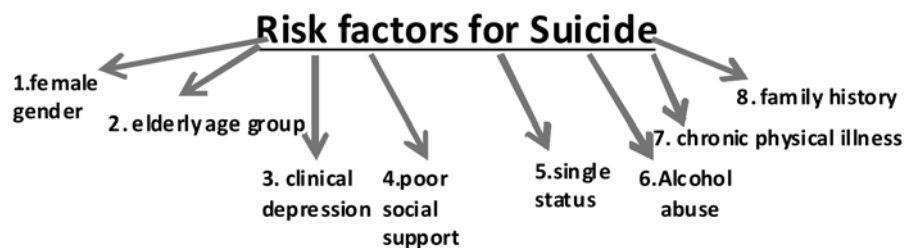
Box No. 3- Warning signs of suicide

Warning signs of suicide

- A person talks about death , threatens of committing or discusses suicide.
- Discusses different methods of suicide.
- A person mentions suicidal ideation.
- A person attempts any act of deliberate self harm.
- A person is seen making goodbye gestures or communications, writing of will or other acts suggestive of a suicidal plan.
- A person has suffered recent major loss of life or property .
- Hopelessness.
- Severe agitation/anxiety

Suicidal risk: anyone can attempt suicide however a few risk factors pre-dispose an individual to attempt / commit suicide. The presence of a psychiatric disorder however is the single most important and common risk factor for suicidal behavior.

Fig.No. 1 enlists the risk factors increasing the risk of suicide:



Suicidal Risk-Assessment: this is an integral part of management of such patients. This establishes the severity of the situation and the likelihood of future death by suicide.

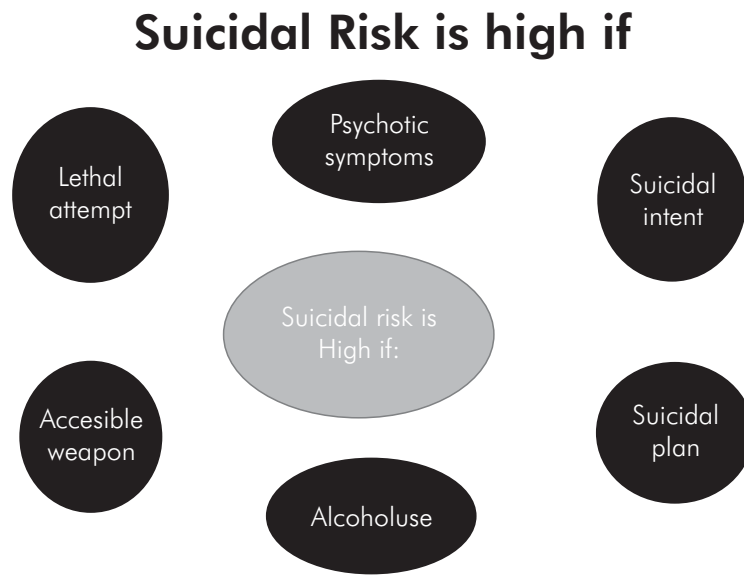
Box No. 4 –Types of suicidal risk

- Low suicidal risk: such patients have less severe psychiatric illnesses, better social support , fewer attempts, have employed attempted less lethal means of suicide like superficial cut marks on wrist.
- Moderate suicidal risk: presence of psychiatric disorder, multiple attempts , attempts in last few days, low-moderate lethality attempts like pills , alcoholism +/-
- High suicidal risk : severe psychiatric illness, attempt in last few hours, lethal attempt like hanging/gunshot/ pesticide, poor social support

Two important terms in suicide:

1. Intentionality: this refers to the intent to commit suicide. Patients with high intentionality make elaborate plans and try to ensure that the attempt of suicide leads to definite death.
2. Lethality: this refers to the means adopted to commit suicide. High lethality of suicide is indicative in the use of firearms, hanging or use of pesticide as means.

Fig No 2- factors associated with high suicidal risk.

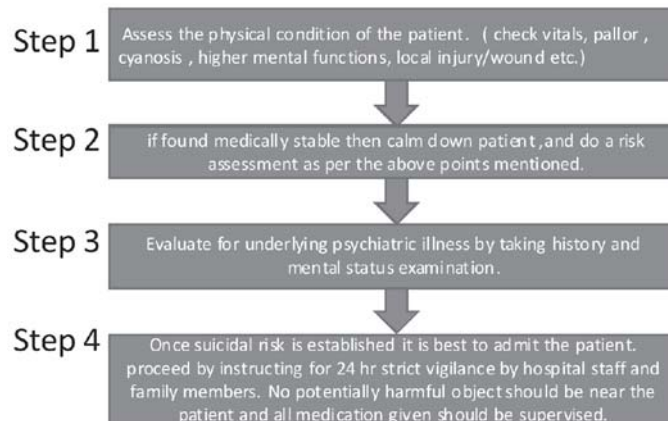


Management of a Suicidal patient

- A suicidal patient either thinks attempting suicide or has already attempted suicide.
- The goal of intervention is to prevent completed suicide.
- Suicide is preventable if intervention is done timely.
- Assessment of suicidal risk is important.

Following simple steps must always be followed:-

Steps in Management of Suicide



Prevention of Suicide

Suicide is preventable condition. Early recognition of risk factors for suicide .Early diagnosis and prompt treatment of mental disorders like depression, schizophrenia, bipolar disorder and substance abuse .Not ignoring warning signals such as talks, threats, thoughts or previous attempts of deliberate self harm. Directly asking patient about death wishes, suicidal ideation and intentions helps in assessing the risk.24 hr strict vigilance is advised till the underlying psychiatric illness responds to treatment.

Case Vignette- Suicidal Patient

35 yrs /female, housewife, mother of two, is brought to the Casualty by her parents with complaints that she has slit her wrist with a knife few hours ago. As per informants she had taken an overdose of sleeping pills 5 days back and was treated for the same. The patient repeatedly says "I don't want to live, I want to die". Family informs that the patient's husband died one month back and that she is grief-stricken since then. She is unable to take care of herself or her two children ever since. She keeps crying and her oral intake and sleep are decreased. On interview patient appears depressed and informs that she is hopeless and doesn't want to live anymore. Patient's vitals are stable and her wrist wound is dressed. Suicidal Risk is assessed and found to be moderate in view of recent past attempts, hopelessness and stressor. She is given supportive counseling and Tab escitalopram 10mg. & tab clonazepam 0.5mg orally. She and her family are explained that she requires Psychiatric evaluation and treatment.. Family asked to ensure 24 hrs vigilance on the patient and remove any potentially harmful objects from her reach. She is then referred to psychiatry department for further management.

When to Refer a suicidal patient ?

- All suicidal patients require psychiatric evaluation once medically stable.
- Hospitalization in psychiatric ward is recommended for all patients who have made lethal attempts of deliberate self harm or who exhibit high risk of suicide.
- Early psychiatric intervention can prevent suicide.

Violent patient

Introduction:

Violence is associated with many psychiatric disorders. Violence may include physical assault/ threat or breaking of property and verbal abuse. Serious threat may be posed to others and the treating team by a violent patient .Violence can occur in any psychiatric disorder however is more common in patients of psychosis, mania, schizophrenia or substance intoxication .Organic causes like neurological insult can also present with violence. These patients are sufferers themselves first and perpetrators of violence only later. Also care should be taken not to violate the human rights of any patient by forceful restraint or injection unless as last resort.

Causes of violence in medical practice:

Box No. 4

Some medical conditions that can present with violence

- **Ictal or post ictal states**
- **Head injuries**
- **Frontal & temporal lobe pathologies**
- **Dyselectrolemias**
- **Delirium and dementiasrenal / hepatic failure**
- **Endocrine disorders etc**

Psychiatric factors that underlie violent behavior include :-

- Manic hyper excitement and agitation
- Exacerbation of psychosis
- Paranoid delusions and fear
- Substance intoxication or withdrawal
- Delirium
- Catatonic hyperexcitement
- Mental retardation with behavioral problems

Management of violent behavior in clinical settings

The management of a violent patient can be challenging. It requires patience, vigilance, team effort and preparedness. Following box enlists steps in the approach to a violent patient.

Box No. 5:

Approach to a violent patient includes

- Ensuring the safety of others including oneself
- Restrain or seclusion may be required
- To rule out organicity and look for treatable medical cause
- Medication oral or parenteral to control agitation
- Psychiatric assessment by history and MSE to establish underlying diagnosis
- Treat underlying psychiatric disorder

Special precautions in dealing with a violent patient:

- Do not approach a violent patient alone. Other staff should be present.
- Ensure the removal of potentially harmful objects with the patient or in the vicinity.
- Assess for the possibility of possession of weapon by the patient.
- In case of uncontrollable violence a suitable escape door must be present
- Do not intimidate, argue or pose any threat to the patient
- Approach the patient in a benign , non threatening and calm manner.
- Maintain atleast 3 to 6 feet distance from the patient.
- If patient agrees to speak with you sit him down and ask him about his problem. Listen to him and let him know u are there only to help him and he need not fear .

Steps in Management of violence in clinical settings:

- 1) Try to talk to the patient if possible and calm him with your words.
- 2) Urge or convince him to take oral medication.
- 3) If he declines your request consider injectable drugs to calm him down.
- 4) Restrain or seclusion may be required in very severe cases. However keep a concern for the human rights of the patient.

Box No. 6: – psychotropic drugs used in management of violence

| MEDICATION AND DOSAGE | NOTES |
|--|--|
| <ul style="list-style-type: none">Lorazepam , 2-4mg, PO or I/M or diazepam psychotic 5-10mg iv/ im | effective particularly in non |
| <ul style="list-style-type: none">Olanzapine ,10 mg, PO or I/M | indicated in psychosis |
| <ul style="list-style-type: none">Haloperidol ,5-10mg + Promethazine 25-50mg in IM psychotic agitation | very effective in rapid effect rapid control of |

Case Vignette

25 Y/M, Unmarried, Engineer is brought to the casualty by family members with complaints of assaulting behavior, verbally abusive and vandalism since 2 days. He has not slept for last 10 days. No history of drug intake present. In the casualty, he is held by 4 of his male relatives. He is constantly shouting and reciting prayers and claiming he is God. He is restless and struggles to get himself free also attempts to assault by-standers. All attempts to verbally calm him down or engage him in conversation fail and provoke him more. A provisional diagnosis of Mania is made. As patient refuses completely to take oral medication, he is given injection Haloperidol 10mg with Promethazine 50mg IM using restrains. He is also simultaneously explained why restrain/medications are being used. After he calms down, his family is explained regarding his condition and need for Psychiatric treatment and hospitalization. He is then referred to Psychiatry department for further management.

When to refer a violent patient

- All suspected cases of organicity should be investigated and referred to concerned speciality.
- All others should be stabilized and referred to psychiatrist for evaluation and management.
- The medical condition must be examined and stabilized before a psychiatric referral.
- Very severe cases need inpatient management.

Other psychiatric emergencies

Substance withdrawal particularly complicated alcohol withdrawal is an emergency where patient may have seizures or in rare instance go into delirium tremens (DT). 20% of untreated cases of DT die hence prevention and timely intervention is crucial. Patients dependent on opioids may also have very distressing withdrawal symptoms but they are less likely to cause serious consequences like alcohol withdrawal. Management is with benzodiazepines and thiamine oral or in injection in alcohol withdrawal.

Panic attacks are discrete episodes of severe anxiety associated with autonomic symptoms like breathlessness, palpitations , heaviness of head and sense of impending doom. Such patients frequent casualty settings often thinking they're having a heart attack. Use of benzodiazepines is indicated. Patients should be referred thereafter to psychiatrist.

Drug induced acute dystonias, oculogyric crisis, extrapyramidal symptoms often present as psychiatric emergencies. Such patients are usually on an antipsychotic (mostly typical antipsychotics like haloperidol). IM/IV Promethazine 25-50 mg is treatment of choice.

ALCOHOL USE AND DRUG USE DIORDERS

INTRODUCTION

Almost all cultures have used psychoactive substances to facilitate social interaction, to alter consciousness, to heal. Our society's expanded chemical manipulation simply represents large technical capacity, more wealth, leisure and individual choice. Among many ills which have plagued the human society today, the drug abuse is of greatest social relevance.

To begin with, let us understand what a drug is. World Health Organization (WHO) defines a drug as any substance that, when taken into the living organism, may modify one or more of its functions. This definition conceptualizes 'drug' in a very broad way, including not only the medicines but also the other pharmacologically active agents. A psychoactive drug is one that is capable of altering mental functioning.

Drug-addiction is a chronic, often relapsing brain disease characterized by compulsive drug seeking and use despite harmful consequences to the user and the people around. Repeated drug exposure leads to changes in structure and function of the brain. Initial decision of drug-intake may be voluntary but repeated drug exposures affect person's self-control and ability to make sound decisions.

There are four important patterns of drug use disorders, which may overlap each other. These are as follows:

1. Acute Intoxication
2. Withdrawal State
3. Dependence Syndromes
4. Harmful Use

1. **Acute Intoxication** is a transient condition following the administration of alcohol or other psychoactive substance, resulting in disturbances in level of consciousness, cognition, perception, affect or behaviour, or other psycho-physiological functions and responses. This is usually associated with high blood levels of the drug. Sometimes even a low dose of the drug or alcohol is sufficient to cause intoxication. This may occur either due to low threshold (i.e. chronic renal failure) or due to idiosyncratic sensitivity. As the time passes, the intensity of intoxication lessens and the symptoms eventually disappear in the absence of further use of the substance. The recovery is generally complete except in cases where tissue damage or other complications have occurred.
2. **Withdrawal State** comprises a cluster of symptoms that are specific to the drug used and develops on total or partial withdrawal of the drug usually after repeated and/or high-dose use. Withdrawal syndrome is generally short lasting ranging from few hours to few days. Withdrawal symptoms are relieved if the drug is taken. The withdrawal states are further classified as:
 - (i) Uncomplicated
 - (ii) With convulsions
 - (iii) With delirium
3. **Dependence syndrome** is a condition, which generally develops on regular and continued use of a drug. When a person becomes dependent on a particular drug, he has a compulsive need to obtain and use the drug, each time requiring a higher dose of the drug to get the same effect because of development of tolerance. In case the drug is not available or available in lesser quantity, withdrawal symptoms develop. This behaviour is detrimental to personal and social life of the individual. According to the International

Classification of Diseases (ICD-10), the dependence syndrome is a cluster of physiological, behavioural, cognitive phenomena in which the use of a substance or a class of substances taken on a much higher priority for a given individual than other behaviours that once had greater value. The dependence syndrome is characterized by a strong, often over-powering desire to take a psychoactive drug (may or may not have been prescribed medically). The definite diagnosis of dependence should usually be made only if at least three of the following have been experienced or exhibited at some time during the previous year;

- (i) A strong desire or sense of compulsion to take the substance.
- (ii) Difficulties in controlling substance-taking behaviour in terms of its onset, termination or levels of use.
- (iii) A physiological withdrawal state occurs when the substance use has ceased or reduced,
- (iv) Evidence of tolerance is seen in dependent users. In order to achieve the effects of the drug obtained with low doses initially, he person has to take the higher doses.
- (v) Progressive neglect of alternative pleasures o interests because of substance use occurs and the individual spends more time in procuring and using the psychoactive drug.
- (vi) There is persistence with the substance despite of harmful effects caused by the drug on various body organs

4. **Harmful Use** of a drug can be classified as follows:

- (i) Continuous drug use, despite the awareness of harmful medical and/ or social effect of the drug being used.
- (ii) A pattern of physically hazardous use of drug 9i.e. driving during intoxication)

The diagnosis of 'Harmful use requires that the actual damage is caused to the physical or the mental health of the user. If the patient qualifies for the diagnosis of dependence syndrome then harmful use is not diagnosed. ICD-10 includes other syndromes associated with psychoactive substance use such as psychotic disorder, amnesic syndrome, and residual and late-onset psychotic disorder. The major dependence producing drugs are as shown in Table I.

TABLE I: PSYCHOACTIVE SUBSTANCES

1. Alcohol
2. Opioids i.e. opium, heroin
3. Cannabinoids, i.e. Cannabis, Marihuana
4. Cocaine
5. Amphetamines and other sympathomimetic drugs
6. Hallucinogens i.e. Lysergic acid diethylamide (LSD), Phencyclidine (PCP)
7. Sedatives and hypnotics i.e. barbiturates
8. Inhalants i.e. volatile solvents
9. Nicotine, and
10. Other Stimulants i.e. Caffeine

Aetiology of Substance Use Disorder is a complex interplay of multiple factors. Biological, Psychological and social factors are implicated and shown in Table II.

TABLE II: AETIOLOGICAL FACTORS IN SUBSTANCE USE DISORDERS

| |
|---|
| 1. Biological Factors |
| (i) Genetic Vulnerability |
| (ii) Co-morbid psychiatric disorder or personality disorder |
| (iii) Co-morbid medical disorders |
| (iv) Reinforcing effects of the drugs |
| (v) Withdrawal effects and craving |
| (vi) Biochemical factors |
| 2. Psychological Factors |
| (i) Curiosity, need for novelty seeking |
| (ii) General rebelliousness and social non-conformity |
| (iii) Early initiation of alcohol and tobacco |
| (iv) Poor impulse control |
| (v) Sensation-seeking (high) |
| (vi) Low self-esteem (anomie) |
| (vii) Concerns regarding personal autonomy |
| (viii) Poor stress management skills |
| (ix) Childhood trauma or loss |
| (x) Relief from fatigue or boredom |
| (xi) Escape from reality |
| (xii) Lack of interest in conventional goals |
| (xiii) Psychological distress |
| 3. Social Factors |
| (i) Peer pressure (often more important than the parental factor) |
| (ii) Role model: imitating the ego-ideal. |

ALCOHOL DEPENDENCE

Complications

Alcohol dependence has its effect not only on the consumer's body but also on the social and personal life of the individual leading to several complications both medical and social. These are as follows:

1. Acute Intoxication

After initial excitation for a brief period, there is generalized Central Nervous System depression with alcohol use. With increasing intoxication, there is increased reaction time, slowed thinking and distractibility and poor motor control. Later, dysarthria, ataxia and in-co-ordination occur. There is progressive loss of self control with frank disinhibited behaviour. The duration of intoxication depends on the amount and the rapidity with which alcohol is ingested. The signs of intoxication are obvious with blood alcohol levels of 150-200 mg%. Increasing drowsiness followed by coma and respiratory depression develop at the blood level of 300-450 mg%. When the blood levels reach between 400-800 mg%, death is likely to occur (Table III).

TABLE III: BLOOD ALCOHOL LEVELS AND BEHAVIOUR

| Blood Alcohol Concentration | | Behavioural Correlated | |
|-------------------------------|----------------|---|--|
| 25-100 mg% | | Excitement | |
| 80 mg% | | Is the legal limit for driving in UK whilr in India this limit is | |
| 100-200 mg% | | Serious intoxication, slurred speech, in-coordination, nystagmus. | |
| 300-350 mg% | | Hypothermia, dysarthria, cold sweats | |
| 350-400 mg% | | Coma | |
| >400 mg% | | Death may occur | |
| Urinary alcohol Concentration | Diagnostic Use | Equivalent Blood Alcohol Concentration | |
| > 120 mg% | Suggestive | 80 mg% | |
| >200 mg% | Diagnostic | 150 mg | |

Sometimes a small dose of alcohol may produce active intoxication in some persons. It is an idiosyncratic reaction to alcohol and not related to blood levels. This condition is known as *pathological intoxication*. Sometimes an individual develops complete amnesia of the acute intoxication known as *blackouts*.

2. Withdrawal Syndrome

In a dependent alcoholic when the blood levels decrease withdrawal symptoms appear. The most common with drawal syndrome is a hangover on the next morning. Mild tremors, nausea, vomiting, weakness, irritability, insomnia and anxiety are other common withdrawal symptoms. Sometimes withdrawal syndrome is more severe characterized by one of the following three: alcoholic hallucinosis, alcoholic seizures, and delirium tremens.

- (i) *Alcoholic hallucinosis*: During partial or complete abstinence, a dependent alcoholic experiences hallucinations (usually auditory). The hallucinations are generally accusatory or threatening in nature. It occurs in about 2% of the cases. These hallucinations persist after the withdrawal syndrome is over, and classically occur in clear consciousness. Usually recovery occurs within one month and the duration is very rarely more than six months.
- (ii) *Alcoholic seizures (rum fits)*: Generalized tonic clonic seizures occur in about 10% of alcohol dependent patients, usually 12-48 hours after a heavy bout of drinking. Often, these patients have been drinking alcohol in large amounts on a regular basis for many years. Multiple seizures (2-6 at one time) are more common than single seizures. Sometimes status epilepticus may be precipitated. In about 30% of the cases, delirium tremens follows.
- (iii) *Delirium tremens (DT)*: It is the most severe alcohol withdrawal syndrome. It occurs usually within 2-4 days of complete or significant abstinence from heavy alcohol drinking in about 5% of patients, as compared to acute tremulousness which occurs in about 34% of the cases. The course of delirium tremens is short and recovery generally occurs within 37 days. This is an acute organic brain syndrome with the following characteristic clinical features:
 - (a) Clouding of consciousness with disorientation in time and place.
 - (b) Poor attention span and distractibility

- (c) Visual (and also auditory) hallucinations and illusions, which are often vivid and very frightening. Tactile hallucinations of insects crawling over the body may occur.
- (d) Marked autonomic disturbance with tachycardia, fever, sweating, hypertension and papillary dilatation are the usual features encountered.
- (e) Psychomotor agitation and ataxia may be present.
- (f) Insomnia, with a reversal of sleep-wake pattern can be seen.
- (g) Dehydration with electrolyte imbalance is present.

Death may occur due to cardiovascular collapse, infection hyperthermia or self-inflicted injury. At times, medical illness like pneumonia, fractures, liver disease and pulmonary tuberculosis may complicate the clinical picture.

3. Neuropsychiatric complications of chronic alcohol use

- (i) Wernicke's encephalopathy: This is an acute reaction occurring in response to severe deficiency of thiamine, commonest cause being chronic alcohol intake. The onset of this disorder characteristically occurs after a period of persistent vomiting. The important clinical features are:
 - (a) Ocular signs: Course nystagmus and ophthalmoplegia, with bilateral external rectus muscle paralysis occur early. In addition, papillary irregularities, retinal hemorrhages and papilledema can occur, causing an impairment of vision.
 - (b) Higher mental function disturbance: Disorientation, confusion, recent memory disturbances, poor attention span and distractibility are the common impairments of higher mental functions. Other early symptoms seen are apathy and ataxia. Peripheral neuropathy and serious malnutrition are generally co-existent. Neuropathological findings show neuronal degeneration and hemorrhage in thalamus, hypothalamus, mammillary bodies and midbrain.
- (ii) Korsakoff's psychosis: Korsakoff's psychosis often follows Wernicke's encephalopathy and together they are referred as the Wernicke-Korsakoff Syndrome. Clinical manifestations of Korsakoff's psychosis include an organic amnesic syndrome, characterized by gross memory disturbances with confabulation and impaired insight. Neuropathological findings show widespread lesion and the most consistent changes are seen in bilateral dorsomedial nuclei of the thalamus and mammillary bodies. The changes are also seen in periventricular and periequiductal grey matter, cerebellum and parts of brainstem. The cause is usually severe, untreated thiamine deficiency secondary to chronic alcohol use.
- (iii) Marchiafave-Bignami disease: This disorder is probably caused by alcohol-related deficiency with pathological changes in the form of wide-spread demyelination of corpus callosum, optic tract and cerebellar peduncles. Clinical manifestations include disorientation, epilepsy, ataxia, dysarthria, hallucinations, spastic limb paralysis, and deterioration of personality and intellectual functions. This is a rare disorder.
- (iv) Other Complications of Alcohol Use include
 - (a) Alcoholic dementia
 - (b) Cerebellar degeneration

- (c) Peripheral neuropathy
- (d) Central Pontine myelinosis
- (e) Optic atrophy (particularly with methyl alcohol)

Treatment:

Following steps should be considered before starting treatment for alcohol dependence:

- (i) Look for the possibility of a physical disorder.
- (ii) Look for the possibility of a psychiatric diagnosis.
- (iii) Patient's motivation to undergo treatment should be assessed.
- (iv) Assessment of the social support the patient enjoys should be done.
- (v) Personality characteristics of the patient should be assessed in details.
- (vi) Level of current and past occupational and socials functioning should be assessed.

The treatment comprises two broad components i.e. detoxification and treatment of alcohol dependence.

1. Detoxification

Treatment of alcohol withdrawal symptoms is detoxification. Symptoms that are produced due to non-availability or lesser availability of alcohol to a dependent alcohol user are withdrawal symptoms and the constellation of symptoms form withdrawal syndrome. The usual duration of uncomplicated withdrawal syndrome is 7-14 days. The aim of detoxification is the symptomatic management of the emergent withdrawal symptoms.

Benzodiazepines are the drugs of choice for symptomatic detoxification. Chlordiazepoxide is generally used in the dosage range of 80-200 mg per day in three to four divided doses. Another drug used is diazepam, its dose being 40-80 mg per day in divided doses. The typical dose of chlordiazepoxide in moderate alcohol dependence should be as follows:

- 1st day, 20 mg four times
- 2nd day 15 mg four times
- 3rd day 10 mg four times
- 4th day 5 mg four times
- 5th day 5 mg two times and then stop.

In severe dependence, higher doses are required for longer period (up to 10 days. In some countries drugs like chlormethiazole (1-2 g/day) and carbamazepine (600-1600 mg/day) are also used for detoxification. These drugs follow a standard dose regime with dosage steadily decreasing and stopping on 10th day. Nutritional deficiency is generally associated with alcohol dependence therefore, vitamins should be given.

2. Treatment of alcohol dependence After the detoxification process is over further management is done with the aim to prevent the patient from restarting alcohol consumption. Several methods are available to choose that suit best to the patient. Some of these important methods are as follows:

- (i) Behaviour therapy
- (ii) Psychotherapy
- (iii) Group therapy
- (iv) Deterrent therapy
- (v) Other medications
- (vi) Psychosocial rehabilitation

OPIOID USE DISORDER

The natural alkaloids of opium and their synthetic preparations are highly dependence producing drugs (Table IV). The dried exude obtained from unripe seed capsules of *Papaver somniferum* is a highly dependence producing and is abused for centuries. In the last few decades, the use of opioids has tremendously increased all over the world. India being the transit point for illicit drug trade between golden triangle (Burma-Laos-Thailand) and golden crescent (Iran-Afghanistan-Pakistan) is among the worst effected countries. Addition of heroin to Indian streets some two decades ago has caused devastating effects on the adolescents and thee youth of the country.

TABLE IV: OPIOID DERIVATIVES

| | |
|--------------------------------------|------------------------|
| 1. Natural Alkaloids of opium | |
| (i) | Morphine |
| (ii) | Codeine |
| (iii) | Thebaine |
| (iv) | Noscapine |
| (v) | Papaverine |
| 2. Synthetic Compounds | |
| (i) | heroin |
| (ii) | Nalorphine |
| (iii) | Hydromorphone |
| (iv) | Methadone |
| (v) | Dextropropoxyphene |
| (vi) | Meperidine (Pethidine) |
| (vii) | Cyclazocine |
| (viii) | Levallorphan |
| (ix) | Diphenoxylate |

Morphine and heroin are the most potent dependence producing derivatives; they bind to mu opioid receptors. The other opioid receptors are kappa (for pentazocin), delta (for a type of enkephalin), sigma (for phencyclidine), epsilon and lamda. Heroin (diacetyl-morphine) is two times more potent than morphine in injectable form. Apart from the parenteral mode of administration, heroin can also be smoked or chased (chasing the dragon), often in impure form (popularly known as smack or brown sugar in India. Due to its higher addictive potential than morphine, heroin causes dependence after a short period of exposure. Tolerance to heroin occurs rapidly and can be increased to up to more than 100 times the first dose needed to produce an effect.

Acute Intoxication

Acute intoxication due to opioids is characterized by apathy, bradycardia, hypotension, respiratory depression, sub-normal core body temperature and pin-point pupils. Subsequently, reflexes become delayed, pulse becomes thready and coma may occur in case of a large overdose. In severe intoxication, mydriasis may occur due to hypoxia.

Withdrawal Syndrome

Withdrawal symptoms generally appear within 12-24 hours, reach their peak within 24-72 hours and subside within 7-10 days of the last dose of opioids. He characteristic symptoms include lacrimation, rhinorrhoea, papillary dilatation, sweating, diarrhea, yawning, tachycardia, mild hypertension, onsomnia, raised body temperature, muscle cramps, generalized bodyache, severe anxiety, piloerectio, nausea, vomiting and anorexia. There can be marked individual differences in manifestation of withdrawal symptoms. Withdrawal syndrome with heroin is more severe as compared to the one seen with morphine.

Complications

Chronic opioid use may lead to several complications. The important ones are listed here. One may experience one or more of the following complications:

- (i) Complications due to illicit use are quite common. Illicit drug is usually contaminated with some toxic additives. Complications generally seen are, parkinsonism, degeneration of globus pallidus, peripheral neuropathy, amblyopia, transverse myelitis.
- (ii) Complications due to intravenous use are quite common if the needles are exchanged. The user gets exposed to the risk of various infections. The complications generally seen are, AIDS, skin infections, thrombophlebitis, pulmonary embolism, septicemia, viral hepatitis, tetanus, endocarditis.
- (iii) Drug pedaling and criminal activities may become a part of chronic users' life leading to various social and legal complications. Production, manufacture, import, export, sale, purchase and even use of opioids is illegal and is liable to be penalized with severest of punishment (under Narcotic Drugs and Psychotropic substances Act 1985 in India). Chronic use also leads to financial and occupational difficulties leading to marital discord and other social problems.

Treatment

Before starting treatment correct diagnosis should be established on the basis of detailed history of drug intake, the examination and laboratory tests. These tests provide an evidence of drug use. These tests include, Naloxone challenge test to precipitate withdrawal symptoms and urinary opioid testing with radio-immunoassay (RIA), free radical assay technique (FRAT), thin layer chromatography (TLC), gas liquid chromatography (GLC), high pressure liquid chromatography (HPLC) or enzyme-multiplied immuno-assay technique (EMIT). After confirming the diagnosis, the treatment can proceed on three lines:

1. Treatment of overdose
2. Detoxification
3. Maintenance therapy

1. Treatment of opioid overdose

Narcotic antagonists (i.e. naloxone, naltrexone) are generally used to treat opioid overdose. Intravenous injection of 2 mg Naloxone followed by repeated injection in 5-10 minutes, causes reversal of overdose. Since naloxone has a short half-life, repeated doses are required every 1-2 hour. General supportive care should be provided along with.

2. Detoxification is the process in which an opioid dependent person is "freed" from opioids. This is usually done by abruptly stopping the opioid, and managing the emergent withdrawal symptoms. Detoxification of opioid dependents is highly successful, relatively cheaper, applicable on a very large scale, associated virtually with no morbidity or mortality and acceptable to almost all patients. Following methods are available for the management of the withdrawal symptoms:

- (i) Use of substitution drugs such as methadone is quite common though this drug is not available in India, to control withdrawal symptoms. Methadone is relatively less addicting, has longer half-life, decreases possible criminal behaviour and has much milder withdrawal symptoms when stopped. The aim is to gradually taper the patient from methadone. Relapse rates are quite high when methadone is stopped. It is also argued that one dependence is replaced by another.
- (ii) Clonidine is an α^2 agonist that acts by inhibiting norepinephrine release at the presynaptic α^2 receptor. The usual dose of clonidine is 0.3-1.2 mg. Per day, and it is tapered off within 10-14 days. It is started after stopping the opioid. Clonidine causes excessive sedation and postural hypertension, therefore the treatment is ideally started in the indoor setting. Regular blood pressure monitoring should be done.

- (iii) Naltrexone in combination with clonidine is used for the treatment of opioid dependence. Naltrexone is an orally available narcotic antagonist blocking the action of opioids in a dependent person and thus causing withdrawal symptoms. These withdrawal symptoms are managed with addition of clonidine for a period of 10-14 days and then stopping it. Subsequently the patient continues on naltrexone alone. Now if the person takes an opioid, there are no pleasurable experiences as the opioid receptors are blocked by naltrexone. Therefore, this method can be regarded as the combination of detoxification and maintenance treatment. The usual dose of naltrexone is 100 mg orally, administered every alternate day.
- (iv) Other drugs are also used as detoxification agents. These are:
- LAAM (levo-alpha-acetyl-methadol) is not in wide use for opioid dependence and its use as a long-term treatment agent began in late 1960s. Its analgesic effect and delayed action and longer duration of action were first noted in animals in 1948. With subcutaneous injection of 10-30 mg LAAM analgesic effect is produced after 4-6 hours lasting for 48-72 hours. Intravenous administration also produces similar results, while with oral administration effect appears much quicker (within 1-2 hours) and persists for 72 hours.
 - Propoxyphene
 - Diphenoxylate
 - Buprenorphine is a long-acting partial mu-agonist and is commonly used for both detoxification and maintenance treatment.
 - Lofexidine is an alpha² agonist like clonidine

3. Maintenance therapy

After the patient is detoxified, the next step is to put the patient on maintenance therapy. The patient is maintained on one of the following regimes:

- Methadone maintenance (Agonist substitution therapy)
- Opioid antagonists
- Other methods
- Psychosocial rehabilitation

CANNABIS USE DISORDER

Cannabis is derived from hemp plant *Cannabis sativa* and different parts of the plant yield the products popularly known as grass, hash or hashish, marijuana, charas, bhang etc. The plant carries more than 400 identifiable chemicals of which about 50 are cannabinoids, the most active being

TABLE V: CANNABIS PREPARATION AND THC CONTENT

| Cannabis preparation | Part of the plant from where It is obtained | THC content (%) | Potency as compared to Bhang |
|----------------------|--|-----------------|------------------------------|
| Hashish/Charas | Resinous exudates from the flowering tops of cultivated plants | 8-14% | 10 |
| Ganja | Small leaves and brackets of inflorescence of highly cultivated plants | 1-2% | 2 |
| Bhang | Dried leaves, flowering shoots and cut tops of uncultivated plants | 1% | 1 |
| Hash oil | Lipid soluble plant extract | 15-40% | 25 |

COCAINE USE DISORDER

Cocaine is an alkaloid derived from the coca bush, *Erythroxylum coca*, found in Bolivia and Peru. It was isolated by Albert Neimann in 1860 and was used by Karl Koller, a Friend of Sigmund Freud in 1884 as the first effective local anaesthetic agent. In the last few decades, cocaine has gained popularity as a street drug, crack and can be administered in the body orally, intranasally, by smoking or parenterally, depending upon the preparation available. Commonest forms used are, cocaine hydrochloride and free base alkaloid. Both intravenous use and free base inhalation produce a 'rush' of pleasurable sensations.

Cocaine is central stimulant, which inhibits the reuptake of dopamine, along with the reuptake of norepinephrine and serotonin. In animals, cocaine is the most powerful reinforcer of the drug-taking behaviour. Cocaine is sometimes used in combination with opiates like heroin ('speed ball') or at times amphetamines. Cocaine has started making its presence felt in India's bigger cities.

Acute effects are due to central stimulant and sympathomimetic effects as euphoria, confidence, increased energy, increased heart rate and blood pressure, dilated pupils, constriction of peripheral blood vessels and rise in body temperature and metabolic rate. In an intoxicated state, the user presents with papillary dilatation, tachycardia, hypertension, sweating and nausea or vomiting. A hypomanic picture with increased psychomotor activity, grandiosity, elation of mood, hypervigilance and increased speech output may be present. Later, judgment is impaired and there is impairment of social and occupational functioning.

In various trials it has been found that the effects of cocaine on heart, blood pressure respiratory rate, and mood increase as the dose is raised from 4 mg. To 30 mg. Major effects are observed with the dose 16 mg and above. In higher doses cocaine can cause depression of the medullary centres and death from cardiac, and more often respiratory arrest. Because cocaine causes increased energy and confidence and can produce irritability and paranoia, it may lead to physical aggression and crime.

Chronic effects are generally not marked if cocaine is used for 2-3 times a week for recreational purposes. Taken daily in fairly large amounts, it can disrupt eating and sleeping habits, produce minor psychological disturbances including irritability and difficulty in concentration, and create a serious psychological dependence. Perceptual disturbances (especially pseudohallucinations), paranoid thinking and rarely psychosis also occur in chronic users of cocaine. A runny and clogged nose is common to be seen and that can be treated with nasal decongestant sprays. Less often, the nose can become inflamed, swollen or ulcerated. Rarely, perforated nasal septum is also reported.

Dependence potential varies with the route of administration. Intravenous cocaine use is most powerful drug-reinforcer.

Withdrawal syndrome

Cocaine does not produce physical dependence in the sense that alcohol and heroin does but sometimes- mild withdrawal symptoms such as anxiety and depression arise. Physical dependence is very mild if it is there but the psychological dependence is very strong.

TABLE VI: COMPLICATIONS DUE TO COCAINE USE

| |
|--|
| The complications of chronic cocaine withdrawal include: |
| 1. Acute anxiety reaction |
| 2. Uncontrolled compulsive behaviour |
| 3. Psychotic episode (with persecutory delusions and tactile and other hallucinations) |
| 4. Delirium and delusional disorder |
| 5. seizures (especially with high dose) |
| 6. Respiratory depression |
| 7. Cardiac arrhythmias |
| 8. Coronary artery occlusion |
| 9. Myocardial infarction |
| 10. Lung damage |
| 11. Gastrointestinal necrosis |
| 12. Fetal anoxia |
| 13. Nasal septum perforation. |

INHALANTS

Volatile solvents have the capacity to intoxicate those who deliberately inhale them. Hundreds of intoxicating volatile products are available in the homes as well as market place much within the reach of adolescents and young people. Use of inhalants is found more common among school going adolescents and inhalation of these agents is a peer-originated and peer-perpetuated activity. There is a wide range of inhalants commonly abused:

- (i) Airplane glue
- (ii) Fingernail polish remover
- (iii) Gasoline
- (iv) Paint thinner
- (v) Liquid shoe polish
- (vi) Plastic cement
- (vii) Cleaning fluid
- (viii) Wax strippers
- (ix) Petrol
- (x) Kerosene oil

Causes

- (i) Indulgence in inhalant use behavior is generally caused by unsuccessful and unrewarding school experiences.
- (ii) Personality deficiencies are reported to be important predisposing factors in confirmed inhalant abusers.
- (iii) Youngsters overwhelmed with anxiety, depression, or both; boarder-line or over schizophrenia; and those with character disorders employ inhalants in effect at self-treatment for their intrapsychic and interpersonal distress.
- (iv) Social disorganization within the community also contribute to this practice

Consequences

- (i) Psychiatric features of acute intoxication resemble those of alcohol intoxication except for its brief duration. The period of relative stimulation and of disinhibited behaviour is also similar to that of alcohol. This can result in accidental injury or death and the releasing of aggressive impulses against one's self or others. Cognitive deficit may occur with extensive and prolonged inhalant abuse. Psychological maturation gets arrested and aberrant behaviour is not uncommon. School-dropout is a usual consequence of inhalant abuse.
- (ii) Physical symptoms may occur due to the toxic effects of the inhalants. Some of the volatile solvents are the known poisons. Carbon tetrachloride is so toxic that it has been removed from the commercial trade, and benzene's use is limited for the same reason. Hexane and leaded gasoline can cause a serious polyneritis, and the latter is capable of producing encephalopathy. Toluene is involved in dysfunction of kidney, nervous system and bone marrow. Metallic spray paints and other aerosols may have dangers caused by secondary ingredients rather than by solvent themselves. Sudden sniffing deaths have been reported. Ventricular fibrillation and other arrhythmias occur.

BENZODIAZEPINES AND OTHER SEDATIVE-HYPNOTIC USE DISORDER

These drugs are generally used in the treatment of anxiety and insomnia. Currently, these are the most often prescribed drugs. Chlordiazepoxide was discovered by Sternbach in 1957 and since then benzodiazepines have replaced other sedative-hypnotic drugs. Benzodiazepines produce their effects by acting on benzodiazepine receptors (GABA-Benzodiazepine receptor complex), thereby indirectly increasing the action of GABA, the chief inhibitory neurotransmitter in the human brain.

Benzodiazepine (or other sedative-hypnotic) use disorder can either be iatrogenic or originating with illicit drug use. Dependence, both psychological and physical, can occur and tolerance is usually moderate.

TOBACCO

Tobacco is a plant product derived mainly from *Nicotiana tobaccum* and *Nicotiana rustica* grown all over the world and used by people in almost all countries. Tobacco plant is a native of Americas and was brought by the European navigators on their discovery of Americas in 1492. Tobacco leaves contain an active alkaloid, which is highly toxic and develops resistance to its own action and hence highly addictive. Tobacco is used in smokeless form and it is smoked as cigarette, beedi etc. Withdrawal symptoms include restlessness, nervousness, anxiety, insomnia, increased weight. For tobacco-cessation, pharmacological and behavioural techniques are used. First line treatment includes Bupropion (150 mg per day for 3 days and then 150 mg twice a day for 6-7 weeks). Nicotine replacement therapy in the form of nicotine patches, nicotine spray, nicotine lozenges is available. Second-line treatment includes clonidine and amitriptyline. Behaviour therapy and counseling are used along with pharmacotherapy or independently

LEGAL, ETHICAL AND DISABILITY ISSUES IN PSYCHIATRY

INTRODUCTION

Because of the unique nature of some mental disorders in which the patient loses contact with reality and lacks insight, there is vulnerability to exploitation. The stigma attached to the mental illness leads to differential treatment to the mentally ill in the society. Suicidal and homicidal behavior in mentally ill is viewed differently by the law. Some chronic mentally ill who are unable to manage their affairs need state protection. For these reasons it is necessary to understand the legal provisions for the mentally ill.

Patients who are treated in psychiatric hospitals are governed by Mental Health Act 1987 for their admission, care, discharge, human rights protection etc. In general hospitals, issues such as restraint, confidentiality, and malpractice are quite pertinent. Criminal responsibility of a psychiatric patient in case of homicide, suicide, and ability to stand trial needs to be understood. Civil responsibility of such patients, such as marriage, contract, adoption, right to vote, transfer of property, witness etc are important issues which a clinician should know.

Historically, patients with mental illness were dumped in mad houses/lunatic asylums, mental hospitals, locked; they were chained, flogged and maltreated. Laws were enacted to regulate admission, care and discharge; these Acts came to be known as Lunacy Acts. No medical treatment was available, only the custodial care was provided by these institutions.

CARE OF MENTALLY ILL IN PSYCHIATRIC HOSPITALS

With the introduction of general hospital psychiatry units and electro-convulsive therapy in 1930s, treatment of mentally ill became a possible reality. Introduction of anti-psychotic medication in 1950s and anti-depressants in 1960s brought a revolution in the management of mentally ill. Replacing the Indian Lunacy Act, 1912, Mental Health Act 1987 brought many changes to safeguard the mentally ill, protecting their human rights. Admission procedure is simplified. A watch-dog body, Mental Health Authority to supervise the care of mentally ill, is created through this Act. No patient during treatment can be subjected to any indignation. No research can be done on a patient unless it is of direct benefit in diagnosis and treatment of the patient. Voluntary patient can give consent for the research. Letters or other communications cannot be intercepted, detained or destroyed. The Act provides for the punishment for detention of a patient in a hospital other than the licensed ones. There is penalty for those appointed to manage property and not discharging their duty properly. This Act is a major departure from Indian Lunacy Act 1912 of custodial care to treating the mentally ill in psychiatric hospitals.

CARE OF MENTALLY ILL IN GENERAL HOSPITALS

Mentally ill are treated at par with other medically ill patients in the general hospitals. Mental Health Act is not necessarily followed. Any voluntary patient can seek treatment in a general hospital. Bringing mentally ill from the confines of Psychiatric (mental) hospitals is a revolutionary step helping to reduce the stigma of the illness to a significant extent.

CRIMINAL RESPONSIBILITY

Law considers everyone to be sane unless proved otherwise. For defense contrary has to be proved.

Criminal responsibility is based on McNaughten Rule(s) and governed by Section 84 Indian Penal Code (Act 45 of 1860). It says, "Nothing is an offence, which is done by a person, who at the time of doing it, by reason of unsoundness of mind, is incapable of knowing the nature of the act, or that he is doing what is either wrong or contrary to law."

Patient with mental illness is not protected ipso fact by the law.

Under the IPC, certain acts are exempt from criminal liability. A crime committed by a person with unsound mind is one such instance. Section 84 of the IPC states that if a person who has committed a crime is incapable of understanding the consequences of their acts and was unaware of the fact that the act was wrong under law, then such a person would not be punished. The plea of insanity is generally raised in murder cases.

Before a judgment is passed, various issues surrounding the crime are examined by the Court. Motive, planning, behavior prior to and during the crime, nature of the crime, circumstances which lead to the crime, history of mental illness and so on are some of the factors considered. In certain cases, the apparent absence of a motive assumes great significance – for example as in a case where a child is murdered by a parent.

In fact, the Court goes to the extent of even examining the actions of the accused after the crime has been committed. For instance, acts like running away, hiding the weapon indicates that the accused was conscious of the nature of the crime and hence wanted to hide it.

Circumstantial evidence is also taken into account especially if the accused has a history of mental illness. In addition, the psychiatric evaluation of the accused after the crime is considered to be as important as the history of mental illness. In certain cases, the Court can refer the person to a mental hospital where a doctor examines the mental status and submits a report. The Magistrate then acts on the basis of this report, taking great care to be very vigilant before passing any order.

Another important point considered is the degree of the mental illness. Needless to say, all forms of mental illness are not recognized by the law as a defense in murder and has its own parameters of definitions. In fact, the Court even makes a distinction between legal insanity and medical insanity and accepts only the parameters of legal insanity while pronouncing judgment.

Legal insanity is much narrower in scope. Within its ambit, it is necessary to prove that the individual did not understand the nature of what was being done and that it was wrong in the eyes of the law. In this matter the Court is very stringent and does not recognize certain acts of eccentricity as indicating unsoundness of mind.

What happens if a person is found to be of unsound mind?

Here, the procedure followed is entirely different if the accused is not in a position to understand the proceedings of the trial because of his or her mental status. At this point, the trial is postponed till the time the mental condition of the accused improves. On the other hand, if it were found that the accused was still unable to understand the proceedings, then the case would be conducted according to Section 341 of the Criminal Procedure Code. That is, the trial Court is in a position to convict the person, but cannot pass sentence. If the person has been found to be of unsound mind by the Court, then it is standard practice to keep him or her in 'safe custody' till it is observed that they are not harmful to themselves and others. In certain cases, the Court can also grant the custody of the accused to a NGO or a family member.

ATTEMPTED SUICIDE

Section 309 of Indian Penal Code states, “whoever attempts to commit suicide and does any act towards the commission of such offence, shall be punishable with simple imprisonment for a term which may extend to one year and shall also be liable to fine.”

CIVIL RESPONSIBILITY

MARRIAGE

According to the Hindu Marriage Act, (Act 25 of 1955) Conditions for Marriage in relation to mentally ill are as follows:

Section 5(ii) of the Act says, “Neither party is ----(i) incapable of giving valid consent due to unsoundness of

mind.(ii) though capable of giving consent, is suffering from an illness making him unfit for marriage and procreation. (iii) recurrent attacks of insanity or epilepsy

Section 13(iii) of the Act says, "divorce on grounds of incurable unsound mind, continuous or intermittent illness to the extent that the petitioner cannot live with accused, can be granted.

ADOPTION

According to the Hindu Adoption and Maintenance Act, (Act 78 of 1956) following provisions are there for adoption in case of a mental illness:

Section 7 of the Act says, "Any Hindu male with sound Mind (not minor) can adopt a child with the consent of his wife." Any Hindu female with sound mind (not minor) and not married can adopt a child.

WITNESS

According to the Indian Evidence Act 1872 following are the provisions for the mentally ill for witness:

Section 118 of the Act says, "A lunatic is not competent to give evidence if he is prevented by virtue of his lunacy from understanding the questions and giving rational answers." Such a person can give evidence during a lucid interval on discretion of jury/judge

TESTAMENTARY CAPACITY:

According to Indian Succession Act (Act 39 of 1925) any person (not a minor) can make a will in writing, (may not be registered), signed by the testator and the two witnesses. A legatee cannot attest a will. Executor(s) are appointed by the testator. It can be revoked or modified during the lifetime before death. A will is effective only after the death of the testator. The testator must be of a sound mind (Section 59), he should know the extent of his property, should know about the beneficiaries and the consequences of the will..

TRANSFER OF PROPERTY

According to the Transfer of Property Act 1882 provisions lie in Section 7 of the Act which says, "Only persons competent to contract are authorized to transfer property.

CONTRACT

Indian Contract Act 1872 governs the provisions of Contract. According to Section 11, "A person is competent to contract who is major & of sound mind. A person is of sound mind, if at the time of making contract he is capable of understanding it and of forming a rational judgment as to its effects upon his interests.

RIGHT TO VOTE

Under Article 326 of the Constitution of India, no person declared to be of unsound mind (by a court) can vote. Under Article 102 of the Constitution of India, a person is disqualified from being chosen as or for a Member of either House of Parliament, , if he is of unsound mind and stands so declared by a competent court.

THE PERSONS WITH DISABILITIES (Equal Opportunities, Protection of Rights and Full Participation) ACT 1995

Section 2(i) of this Act recognizes Mental Illness and Mental Retardation as a disability. A Medical Board comprising (i) Medical Superintendent/his nominee (ii) a Physician and (iii) a Psychiatrist, competent to issue disability certificate.

Psychiatric Disability Evaluated and Assessment Scale (IDEAS) is the instrument used to quantify disability. Benefits are available for those above 40% disability. This Act is also helpful in psycho-social rehabilitation. Two years of continuous mental illness is required for disability. Four areas: Personal Care, Communication, Interpersonal

Relations and Occupation, are assessed to measure disability. Four mental illness are recognized for disability: Schizophrenia, Bipolar Disorder, Obsessive Compulsive Disorder and Dementia.

ETHICAL ISSUES IN PRACTICE OF PSYCHIATRY

What is Ethics?

It is derived from the word Ethikos meaning rules of conduct that govern natural disposition in human beings. According to Britannica Encyclopedia it is systematic study of the ultimate problems of human conduct. Dorland's dictionary defines it as the values and guidelines that should govern decisions in medicine. Aim of the ethics is to deal with relations between people in different groups and often entail balancing rights.

- Professional Ethics is the appropriate way to act in a professional role.
- Medical Ethics includes standards of professional conduct that derive from special influence that doctors have as a result of trust people place in them.
- Ethical Conflicts is the tension between what one wants to do and what is ethically right.
- Ethical Dilemmas is the conflict between ethical perspective or values

Ethical Requirements

- Need for accountability
- Optimization of quality and quantity
- Choices we make have consequences, both for ourselves and for others
- To avoid or resolve ethical conflicts
- To think through ethical dilemmas
- The Hippocratic Oath – paternalism in doctor patient relationship
- Relatively conservative approach of the society
- Domination of one way of ethical thinking (Deontology, utilitarianism)
- Parallel development of philosophical ethics

Ethics in Psychiatry

- Line of demarcation between normal and abnormal is hazy, validity of diagnosis and treatment can be questioned
- Psychiatric treatment can be used for vested interests
- Close relationship between therapist & the patient can lead to intense transference which could be maliciously utilized
- Poor insight may affect patient's decision making
- Confidence reposed in therapist may be exploited

Basic Principles of Ethics

- Respect for autonomy
- Beneficence
- Non-maleficence
- Justice

Respect of autonomy

- Sufficient time and information is given to understand the benefits, risks and cost of all reasonable options.
- Honoring individual's right not to hear every detail, even choosing someone else to decide the best course of the treatment
- Influence limited to persuasion, not coercion.

Therapist

- Promoting the well-being of the patient and the society
- Heed to the patients' interests even to the neglect of our own.
- Have limits to act in a beneficent manner.
- should not manipulate by controlling information

Non-Beneficence

- Primum non nocere/ First do no harm
- Careful in decision making and action and should be adequately trained in what is being done.
- Open to seeking second opinions
- Avoid creating risk by action or inaction.
- Helpful effects should outweigh the harmful ones.

Justice

- Aristotle wrote, "Justice involves treating equals equally and those not equal differently."
- Concerns issues of reward and punishment and equitable distribution of social benefits.
- Important for research.

Code of Medical ethics

- Physician should uphold the dignity and honor of his profession with prime objective of rendering service to humanity.
- Physician should try continuously to improve medical knowledge and skills
- Should maintain the medical records of the patients
- Should display the registration number in clinic, on prescription, certificate etc.
- Rational prescription with generic name of drug.

Professional Misconduct

- Advertisement and touting
- Association with drug companies – favours
- Employer-fee splitting
- Alcoholic behaviour
- Adultery
- Human rights violation
- Prescribing or dispensing secret medicines

- Breach of confidentiality without an appropriate reason.
- Not taking appropriate written consent
- Violation of guidelines while conducting the research
- Conducting procedures without sufficient training.

Medical Malpractice

- Guiding principal is, "No person shall be harmed by the act of other person.
- A non-criminal civil wrong arising from patient/caregiver's perception that the highest standards of medical care were not maintained, there is alleged negligence on the part of the practitioner. 4 elements of malpractice are:
 - Duty,
 - Deviation,
 - Damage and
 - Direct causation
- For any charge of malpractice:
 - Doctor-patient relationship: putting the doctor in a caring role
 - Acceptability and standard of care provided.
 - Deviation from standards and norms
 - In psychiatric practice: invasion of privacy, voluntary admission, seclusion, restraint (human right violation of the patient).

TO AVOID POSSIBLE MALPRACTICE:

- A good doctor-patient relationship
- Psycho-education
- Continuing dialogue with caregivers
- Adhere to standards of care
- Proper documentation