PEARL

VOLUME II

DISCLAIMER: THIS DOCUMENT IS PREPARED FROM MANY SOURCES. ITS PURPOSE IS TO ACT AS A GUIDE FOR IMPROVING EXAMINATION SKILL

ALCOHOL DEPENDENCE

Mr O.S., 35 year old male, salesman from Isiolo, with recent, healing forearm fracture, with wife requesting for a referral to an alcohol rehabilitation unit

a) Assessment

History and physical examination:

- Age at which alcohol consumption was started
- The type of alcohol(s) consumed
- Quantity and Frequency of alcohol consumption to calculate the number of units consumed per week
- CAGE questionnaire.
- Alcohol use disorder identification test (AUDIT)
- Availability of alcohol:
    - Occupation: Bartenders, Brewers, Sailors, High executive
    - Legislative controls: Permitted age for use, Prices, Outlets(supermarkets)
- Genetics: Family history of alcohol consumption
- Childhood environment:
    - Alcoholic parents
    - Alcoholic siblings
    - Identification process
    - Non cohesive home environments
    - Abusive parent
    - Neglectful parents
- Culture
    - Religious controls
    - Social guidelines
    - Social approvals
    - Rituals
- Existing psychiatric disorder
- Clinical features of withdrawal
    - Sweating
    - Fever
    - Irritability
    - Agitation
    - Difficulty concentrating
    - Insomnia
    - Abdominal pain
    - Nausea, vomiting, Diarrhea
    - Tachycardia

    - Tachypnea
    - Hypertension
    - Hyperreflexia
    - Tremulousness
    - Worsening of symptoms
    - Seizures
    - Hallucinations: visual or auditory
    - Delirium tremens
- Medical complications:
    - Short term: Hypoglycemia, Dehydration, Delirium, Gastritis, Ulcers
    - Long term: Cirrhosis, Pancreatitis, Alcoholic cardiomyopathy, Neuropathy, Myopathy, Malnutrition
- Social complications:
    - Home: othello syndrome, neglectful parents, separations, divorces
    - Work/education: absentesim, poor productivity, loss of job/school opportunity, poor economy, accidents, thefts, vandalism, insecurity, assaults
- Wernicke-Korsakoff syndrome

b) DSM IV criteria for alcohol dependence:

Maladaptive pattern of substance use, leading to clinically significant impairment or distress, as manifested by three (or more) of the following, occurring at anytime in the same 12-month period:

- Tolerance:
    - Need for markedly increased amounts of alcohol to achieve intoxication or desired effect
    - Markedly diminished effect with continued use of the same amount of alcohol
- Withdrawal:
    - Characteristic withdrawal syndrome
    - Alcohol (or a closely related)is taken to relieve or avoid withdrawal symptoms
    - Alcohol is often taken in larger amounts or over a longer period than was intended
- Persistent desire or unsuccessful efforts to cut down or control alcohol use
- Great deal of time is spent in activities necessary to obtain alcohol (e.g driving long distances), use alcohol, or recover from its effects- **change in priority**
- Important social, occupational, or recreational activities are given up or reduced because of alcohol use
- Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by it

c) Management of alcohol dependence

Investigations:

- **FBC**
- ESR
- RBS
- **LFTs**
- U/E/C
- TFTs
- Amylase
- Folate and Vitamin B12 levels
- Urine analysis with toxicology screen
- **Triple serology esp. HIV**
- **VDRL and RPR**
- CT brain

Treatment: use a Biopsychosocial approach

SUPPORTIVE

- Vitamin supplements: thiamine, vitamin A,C,
- Rehydration: IV normal saline
- Antiemetics
- Anticonvulsants
- Antisychotics: haloperidol for alcohol hallucinosis
- Nutritional support: micronutrients, electrolytes

Pharmacotherapy

- **Withdrawal: chlordiazepoxide, clomethiazole**
- **Urge: Acomprostate**
- **Antabuse: disulfiram**
- **Naltrone**

Psychotherapy

- Alcoholic anonymous
    - Provide **group therapy/support: AL-ANON**
    - Frequent scheduled meetings
    - Peer support
    - Gentle confrontations
    - Receive and give support
    - Learn the nature of alcohol dependence
- Behavior modification: Hypnosis, desensitization, aversion therapy, relaxation training
- **Family therapy**
- Cognitive behavior therapy\
- Adjunctive services: halfway houses, vacational rehabilitation programs, church, NGOs, community groups

Delirium tremens:

- **Poor memory**

- **Poor attention**
- **Poor concentration**
- **Illusions**
- **Tremors**

ANXIETY

I.M. 24 year old, with palpitations and fear, PHYSICIAN HAS RULED OUT MEDICAL CONDITION.

PATHOLOGICAL ANXIETY: An inappropriate response to a given stimulus by virtue of either its intensity or its duration

a) Symptoms and signs of anxiety disorder

- Cognitive components:
  - Subjective feelings of apprehension
  - Restlessness
  - Sense of impending danger
  - Feeling of inability to cope
- Physiological responses:
  - Headache
  - Perspiration
  - Stomach discomfort
  - Diarrhoea
  - Nausea
  - Polyuria
  - Chest tightness
  - Palpitations
  - Tachycardia
  - Tachypnea
  - Increased BP
  - Dry mouth
  - Muscle tension
- Behavioural responses:
  - Avoidance of certain situations
  - Impaired task performance

b) The physician has already ruled out Anxiety disorder due to a general medical condition which is one type of anxiety disorder

Other types of anxiety disorders according to the DSM IV classification include:

i. Panic disorder (with or without agoraphobia)
ii. Agoraphobia without history of panic disorders
iii. Specific and social phobias
iv. Acute stress disorder
v. Obsessive-compulsive disorder (OCD)
vi. Post-traumatic stress disorder (PTSD)
vii. Generalized anxiety disorder (GAD)
viii. Substance induced anxiety disorder

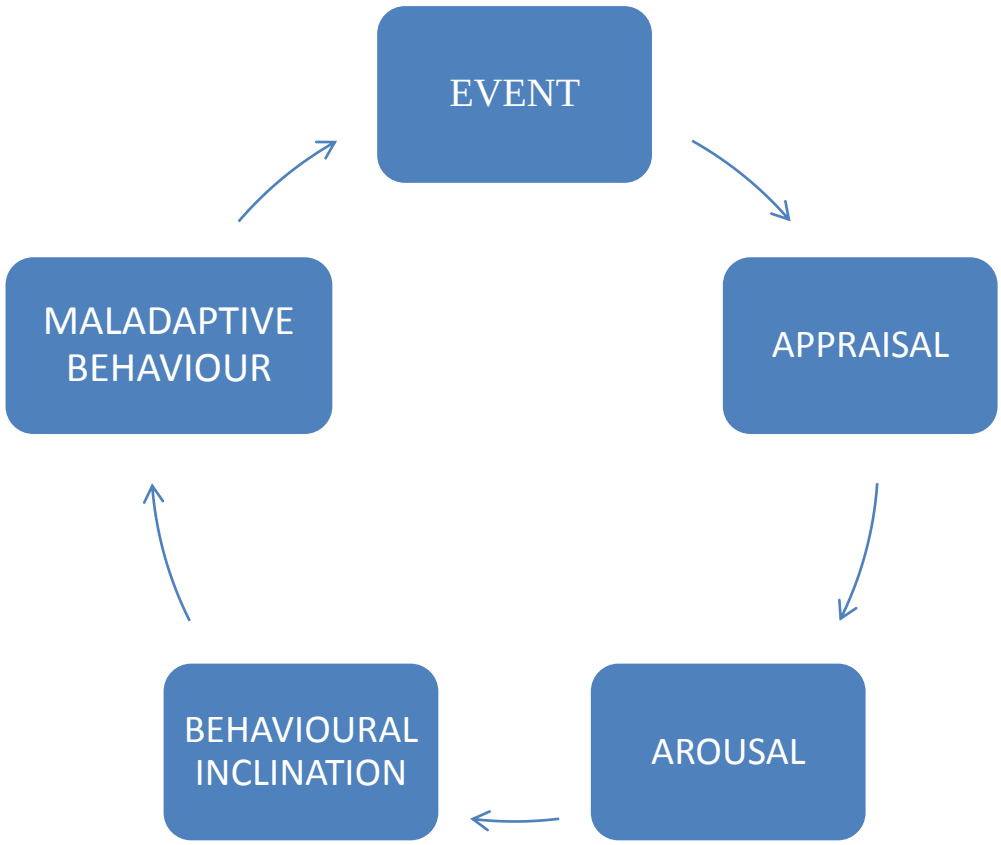
ix. Anxiety disorder due to a general medical condition
x. Anxiety not otherwise specified; including mixed anxiety-depressive disorder

c) Psychosocial problems that need to be enquired:
- Cognitive behaviour theory: patient is responding incorrectly or inaccurately to perceived dangers:
  i. Selective attention to negative details in the environment
  ii. Distortions in information processing
  iii. Overly negative view
- Psychoanalytic theory: anxiety is a symptom of unresolved unconscious conflict

d) COGNITIVE BEHAVIOUR THERAPY

- It is a state-of-the-art form of psychotherapy for treatment of some psychiatric disorders

- It attempts to reduce dysfunctional/distorted emotions and behaviour (arising from biological and psychological influences) by modifying the thinking, beliefs and maladaptive behaviours



CBT is

- Empirically-based
- Structured and focused
- Problem-based
- Collaborative

• Homework is an essential feature.
• It has an educational factor.
• Cognitive and behavioural interventions are integrated.

COURSE OF TREATMENT (CBT)

i. Assessment

ii. A rationale will be provided

iii. Self-monitoring training

iv. Behavioral strategies
    a. Monitor relationship between situation/action and mood.
    b. Applying new coping strategies to larger issues.

v. Identifying beliefs and biases

vi. Evaluating and changing beliefs

vii. Core beliefs and assumptions

viii. Relapse prevention and termination

INTERVENTIONS IN CBT:

BEHAVIORAL INTERVENTIONS	COGNITIVE INTERVENTIONS
Breathing retraining	Monitor automatic thoughts
Relaxation	Teach imagery techniques
Behavioral activation	Promote cognitive restructuring
Interpersonal effectiveness training	Examine alternative evidence
Problem-solving skills	Modify core beliefs
Exposure and response prevention	Generate rational alternatives
Social skills training	Monitor automatic thoughts
Graded task assignment	

BEHAVIOUR THERAPY

a) What is behavioural therapy
   - It is a form of psychotherapy and is based upon classical conditioning developed by Ivan Pavlov and operant conditioning developed by B.F. Skinner
   - A set of *clinical procedures* relying on experimental findings of psychological research
   - Based on principles of learning that are systematically applied
   - Treatment goals are specific and measurable
   - It focuses on the client's current problems so to help the client change maladaptive behaviours
   - This is in order to improve daily functioning, reduce emotional distress, enhance relationships and maximise human potential
   - The therapy is largely educational - teaching clients skills of self-management

b) Five specific techniques of behavior therapy
   - Systemic desensitization
   - Exposure e.g. flooding
   - Aversive procedure
   - Positive reinforcement and extinction (contingency management)
   - Modeling
   - Relaxation training e.g. meditation
   - Self-monitoring

c) Behavioral techniques used in anxiety disorders
   - Relaxation training e.g. meditation; GAD
   - Self-monitoring; PTSD, GAD
   - Exposure; PTSD, GAD
     - Flooding; agoraphobia, OCD
   - Systemic desensitization; PTSD, phobias
   - Modeling; OCD, phobias

DEMENTIA

Mrs. A, 70 year old, female, unconcerned about her appearance, makes rude comments possibly having dementia.

a) Psychosocial history

i. BIODATA: Marital status, Occupation, Residence, Language and Ethnic background, Level of education, Income, Number of children

ii. HPI:

- Memory loss (difficulty in learning and forgetting)
- Difficulty performing daily activities (bathing, shopping, cooking, dressing)
- Poor insight
- Paranoid delusions
- Hallucinations (esp. visual)
- Anxiety, depression and sleep disturbance

iii. PAST PSYCHIATRIC Hx

iv. PAST MEDICAL Hx: Alzheimer's dx, HIV, Parkinson's dx, Huntington's dx, Pick's dx, Brain tumor, head trauma, Epilepsy, MS, CHF, Subacute bacterial endocarditis, SLE, Hypothyroidism, Hyperparathyroidism, DM

v. FAMILY Hx: Hx of dementia in family

vi. PERSONAL Hx: Education

vii. OCCUPATIONAL Hx; is the occupational functioning maintained

viii. SEXUAL Hx

ix. MARITAL Hx

x. SOCIAL Hx: Substance abuse

b) Differential diagnosis

i. Delirium:

- Delirious patients have an altered level of consciousness, demented patients are alert
- Demented patients may develop superimposed delirium

ii. Amnestic disorder: isolate memory disturbance without cognitive disturbances (dementia has both)

iii. Major depressive disorder:

- Depression: mood disturbances precede cognitive deficits
- Dementia: cognitive deficits precede mood disturbances
- Demented patients can develop depression

iv. Age-related cognitive decline

v. Stroke

vi. Trauma/head injury

vii. Schizophrenia

viii. Substance abuse

ix. Mentally handicapped
x. Acute confusional state
xi. Factitious disorder

c) Investigations to be done

i. FHG: Leucocytosis (infection)
ii. LFTs: Hepatic encephalopathy
iii. U/E/Cs: uremia
iv. TFTs: hypothyroidism
v. Urinalysis
vi. Triple serology; HIV
vii. Septic screen; urine m/c/s, blood m/c/s, CSF m/c/s
viii. Serological studies; VDRL and MHA-TP
ix. RBS: DM
x. BGA: Metabolic disturbances
xi. Vitamin B-12 and folate levels
xii. Heavy metal screening: for aluminium levels
xiii. Serum levels of drugs: Alcohol
xiv. EEG: Epilepsy
xv. CT-head; a PET can be done; Alzheimers
xvi. MRI-head
xvii. ECG; HF, Subacute bacterial endocarditis
xviii. Chest radiograph: HF

d) Causes of dementia

i. Alzheimer's type dementia: commonest cause/form of dementia
ii. Vascular dementia: multiple brain infarcts (CVAs)
iii. Dementia due to General medical condition
- Neurological causes: Parkinson's dx, Huntington's dx, Pick's dx, Normal pressure hydrocephalus, Brain tumor, head trauma, Epilepsy, MS, cerebral hypoxia and anoxia
- Vascular: CHF, Subacute bacterial endocarditis, SLE
- Toxicity: Alcohol, radiation, heavy metals (aluminium),
- Infections: HIV, Neurosyphilis, Cryptococcal meningitis, encephalitis, Sarcoid, Creutzfeldt -Jakob dx
- Nutritional: folate deficiency, vitamin B012 dficiency, Thiamine deficiency, Pellagra
- Endocrine: Hypothyroidism, Hyperparathyroidism, DM, pituitary insufficiency
- Metabolic: Uremia, porphyria, hepatic encephalopathy, Wilson's dx

iv. Substance induced persisting dementia

v. Dementia due to multiple etiologies
vi. Dementia not otherwise specified

Management of dementia:

- No known definitive tx
- Treat any underlying cause
- Stop CNS depressants and anticholinergics
- Patients should avoid highly stimulating environments
- **Psychological support for family and/or caretakers**
- NON PHARMACOLOGICAL:
    - Psychotherapy: behavior modification, Environment manipulation
    - Psychosocial management: Repetition, Reassurance, Redirection
    - **Family therapy**
    - **PSYCHOEDUCATION**
- **PHARMACOLOGICAL TREATMENT**
    - Tx of Alzheimer's Dementia: Reversible ACE inhibitor (Donepizel (drug of choice), Rivastigmine, Galantamine, Tacrine) or NMDA receptor antagonist (Memantine)
    - Tx of vascular dementia: Control HTN, Aspirin
    - Tx psychosis: Neuroleptics (Riseperidone, Olanzapine, Haloperidol, fluphenazine)
    - Tx Depression: SSRIs(Vanlafaxine, Buproprion, Trazodone, Nefazodone, Mirtazapine)- AVOID TCAs
    - Tx of aggression and agitation:
        - Anxiolytics: Buspirone, Benzodiazepines (Lorazepam)
        - Neuroleptics: Riseperidone, Olanzapine, Haloperidol

CLINICAL FEATURES OF DEMENTIA

- **Age >65years**
- **Memory loss**
- **Deterioration of personality**
- **Confabulation**
- **Loss of social and occupational functioning**

DEPRESSION

Mr. K, 50year old, school teacher, symptoms of depression and forgetfulness, wife died 9 months ago:

a) Clinical features of depression

- Major depression episode: As indicated by either subjective report and/or observation made by others:
  - Depressed mood most of the day, nearly every day,
  - Irritable mood in In children and adolescents
  - Anhedonia: Markedly diminished interest or pleasure in all, or almost all activities most of the day, nearly everyday
  - Significant weight loss when not dieting or weight gain (e.g., a change of more than 5% of body weight in a month)
  - Decrease or increase in appetite nearly every day.
  - Insomnia or hypersomnia nearly every day
  - Psychomotor agitation or retardation nearly every day (observable by others, not merely subjective feelings of restlessness or being slowed down)
  - Fatigue or loss of energy nearly every day
  - Loss of self-esteem, Feelings of worthlessness or excessive or inappropriate guilt (which may be delusional) nearly everyday (not merely self-reproach or guilt about being sick)
  - Diminished ability to think or concentrate, or indecisiveness, nearly every day (either by subjective account or as observed by others)
  - Recurrent thoughts of death (not just fear of dying), recur rent suicidal ideation without a specific plan, or a suicide attempt or a specific plan for committing suicide
- Psychotic features:
  - Hallucinations may be mood-congruent or mood-incongruent
  - Delusions mood-congruent or mood-incongruent
- Chronic:
  - Major depressive disorder for >2years
- Catatonic features:
  - Motor immobility or stupor
  - Excessive purposeless motor activity
  - Extreme negativism or mutism
  - Bizarre or inappropriate posturing
  - Stereotyped movement
  - Facial grimacing
  - Echolalia
  - Echopraxia
- Melancholic features:
  - Depression + severe anhedonia
  - Mood is worse in the morning
  - Early morning awakening
  - Marked psychomotor slowing
  - Weight loss
  - Excessive guilt
- Atypical features:

- Weight gain
- Hypersomnia
- Leaden paralysis
- Significant social and occupational dysfunction

- Seasonal pattern
  - Recurrence at same time of year
  - Remission at a specific time of year

b) Differential diagnosis
- Bereavement; **ABNORMAL GRIEF**
- **Bipolar 1 mood disorder**
- **HIV neuropsychiatric manifestations**
- Dementia
- Substance induced mood disorder
- Anxiety disorder
- Depressive disorder NOS
- ADHD
- Adjustment disorder with depressed mood
- Schizophrenia and Schizoaffective disorder
- Dysthymia
- Chronic fatigue syndrome
- Mood disorder due to general medical condition
  - Endocrine: Hyperthyroidism, Hypothyroidism, Addison's disease, Cushing's disease, Hypopituitarism, D.M.
  - Infections: Tertiary syphilis, Toxoplasmosis, Influenza; viral pneumonia, Viral hepatitis, Infectious mononeucleosis, HIV
  - Collagen: Rheumatoid arthritis, SLE
  - Nutritional: Pellagra, pernicious anaemia
  - Neurological: Multiple sclerosis, Parkinson's disease, Head trauma, Complex partial seizures, Sleep apnoea, Cerebral tumours, Cerebrovascular disorder
  - Neoplastic: Abdominal malignancies (pancreatic cancer), Disseminated carcinomatosis

c) Differentiate between abnormal grief reaction and depression
- **Presence of past psychiatric illness**
- **Family history of mental illness**
- **Memory loss**
- **Poor concentration**
- **HIV positive diagnosis**

d) Management:

INVESTIGATIONS
- Full haemogram
- ESR
- Random blood sugar
- U/E/Cs

- Calcium
- TFTs
- LFTs
- Drug screen
- ECG
- Urinary copper (Wilson's disease)
- ANF (SLE)
- Infection screen (VDRL, HIV)
- CT/MRI scan
- Treatment
    1) **Pharmacotherapy**
    2) **Psychotherapy; CBT**
    3) **Electro convulsive therapy**
    4) **PSYCHOEDUCATION**

Treatment of Mild depression:

- Watchful waiting: 2 weeks
- Sleep/anxiety management
- Guided self-help
- Computerised CBT
- Psychososical interventions
    - Problem solving therapy
    - Brief CBT
    - Counselling
- Antidepressants
    - Not routinely recommended; use if other interventions fail or previous history of moderate to severe depression

Treatment of Moderate to severe depression

- Offer antidepressants routinely
    - First line: SSRIs
    - Continue for ≥ 6 months after remission
    - Continue for 2 years if ≥ 2 episodes in recent past
- Psychological treatment
    - CBT
    - IPT
    - Couple-focussed therapy

Treatment or Resistance

- Ensure adherence to treatment
- Optimize current treatment
- Switch to antidepressant of different class after 1 month
- Consider combination antidepressants
- Antidepressants with CBT (16-20 sessions over 6-9 months)
- Augmentation
    - ✓ Lithium (continue for 6 months, stop lithium first)

- ✓ Antidepressants
  - SSRI + mirtazapine
  - SSRI + mianserine (risk of agranulocytosis)
- ✓ Antipsychotics in psychotic depression

- Phenelzine (especially atypical depression)
- ECT

ELECTROCONVULSIVE THERAPY

a) Describe the ECT procedure

- Electroconvulsive therapy is a physical treatment that uses small electric current to induce a generalized seizures under general anesthesia with an accompanying therapeutic effect
- Created by Cerletti and Lucio Bini in 1938

INDICATIONS

- Major depressive disorder
- Manic episode
- Schizophrenia
- Catatonia
- Parkionson's disease
- Postpartum depression
- Schizophreniform disorder
- Schizoaffective disorder
- Neuroleptic malignant syndrome
- Acute confusion psychosis

CONTRAINDICATIONS

- NO ABSOLUTE CONTRAINDICATIONS
- Precaution should be taken in patients with
    - Uncontrolled hypertension
    - Increased intracranial pressure; cerebral aneurysm, SOL, CVA
    - Recent MI
    - Pheochromocytoma
    - Retinal detachment

MORTALITY

- 0.01% of each patient; this compares with the risk associated with general anaesthesia

PROCEDURE

- Take informed consent
- A thorough history and examination of the patient should be conducted
- The patient should also be assessed by the anaesthetist
- Patient should be nil by mouth for at least 6hours before the procedure
- Remove any dentures or foreign bodies
- Withdraw any benzodiazepines and lithium in adequate time before the procedure
- Establish an IV access with IV cannula
- Premedications:
    - 100% oxygen by mask at 5L/min
    - Anticholinergic; atropine 0.3-0.6mg IM is given 30-60 minutes before procedure or 0.4-1 mg IV 2-3 mins before anaesthesia
    - IV general anaesthsia is administered; Methohexital, Thiopental or Propofol. Ketamine may be used but it may cause psychotic episodes
    - Muscle relaxant; succinylcholine 0.5-1.0mg/kg
- Insert bite block before electrical stimulation
- Bilateral or unilateral electrodes are placed on the patient's head;
    - To reduce resistance, a conductor gel is applied on the electrodes
    - The area where the electrodes are placed is shaved
- Oxygen is withdrawn temporarily as the electric stimulus is applied

NUMBER OF SESSIONS REQUIRED

- Administered 2-3times a week
- Major depressive illness - 6-12 treatments
- Manic episodes - 8-20 treatments
- Schizophrenia >15 treatments
- Catatonia - 1 treatment

Patient should be treated until maximum therapeutic response is achieved.

Maintence ECT may be effective in some

b) Theories behind mode of action are
    - Neurophysiological: during seizures, the cerebral blood flow, glucose and oxygen consumption and permeability of the BBB increase. The metabolic rate is reduced after the seizure and this correlates with therapeutic response
    - Neurochemical: postsynaptic B-adrenergic receptors are reduced

HIV AND PSYCHIATRY

a) Psychiatric syndromes that a person with HIV-AIDS may suffer from include:
    - Manic disorder
        - 9% of HIV infected patients develop mania (Bipolar affective disorder)
        - Due to the virus itself, opportunistic infections, ARVs and/or a primary affective affliction
        - It presents with elevated mood, excessive energy, rapid thoughts and speech, decreased need for sleep, and delusions and hallucinations
    - Depressive disorder
        - 20% HIV infected patients
        - Depressed mood, decreased interest in activities
        - Anhedonia
        - Clear sensorium
        - Weight loss or weight gain
        - Insomnia or hypersomnia
        - Fatigue or loss of energy
        - Generalised feeling of worthlessness
        - Impaired ability of mental concentration
        - Excessive or inappropriate guilt, recurrent thoughts of death
        - Profound sense of not being well
    - Anxiety disorders
        - Panic disorder presenting with unpredictable attack of sudden anxiety shortness of breath, fear of dying or of going crazy, and an urgent desire to flee regardless of consequences
        - Other anxiety disorders that may occur in patients with HIV-AIDS include; Generalised anxiety disorder, obsessive-compulsive disorder, agoraphobia Adjustment disorder with depressed or anxious mood
    - Schizophrenia
    - HIV-associated dementia; 20-30% HIV infected patients are affected. Sub-acute encephalitis results in progressive sub-cortical dementia without focal neurological signs. Usually when CD4 count is <200. Patient may present with:
        - Apathy, social withdrawal, hyper-reflexia, spastic or ataxic gait, paraesthesias and increased muscle tone
        - Dysarthria
        - Cognitive dysfunction; concentration and memory deficits, inattention, global dementia and mutism
        - Motor deficits; motor incoordination, ataxia and paraplegia, chorea, tremor, tics, dystonia
        - Peripheral neuropathy
    - Delirium
    - HIV associated neurocognitive disorder
    - Alcohol or other substance dependence

    - Maladaptive coping mechanism or it may precede and contribute to infection with HIV.
    - Dependency and craving get out of control
    - Substance reinforces the self-administration behaviour that ultimately leads to dependence
- Suicide and attempted suicide
    - Some risk factors include having friends who have died of HIV, recent discovery of positive HIV status, relapses of disease, problems arising out of HIV stigma and presence of dementia or depression

b) Risk factors that would indicate a high suicidal intent in HIV-AIDS patients include:
    - Having relatives/friends who have died of HIV
    - Recent discovery of positive HIV status
    - Relapses of disease
    - Problems arising out of HIV stigma
    - Presence of other co-morbid conditions e.g. dementia, Schizophrenia or depression
    - Male> females
    - Age
    - Race; whites>non-whites
    - Marital status; separated, widowed, divorced> married
    - Living situation; living alone>living with someone
    - Employment; unemployed>employed
    - Substance abuse
    - Previous suicide attempts
    - Suicidal ideation
    - Warning or indication of committing suicide
    - Family history of suicide
    - Weak religious affiliation
    - Occupation; doctors, lawyers, policemen etc.
    - Interpersonal loss and conflict
    - Life stressors; changes, moves, births, graduations, marriage, retirement and menopause
    - Environment; urban>rural
    - Low level of education

POST TRAUMATIC STRESS DISORDER

2 months ago, 20yr old female witnessed a horrible accident involving her friend. She is distressed and uses another route to go to the lecture halls now.

a) The most likely diagnosis is Post Traumatic Stress Disorder (PTSD) as she experienced an emotionally stressing traumatic event that involved serious injury of a friend, she is distressed and is avoiding the activities related to the traumatic event.

   Additional features to look for are:

   - Persistent re-experiencing the event through intrusive recollection and/or nightmares
   - Reliving the experience through flashbacks
   - Intense distress when exposed to reminders
   - Emotional numbing; efforts to avoid thoughts, feelings, people or conversations that arouse recollection or are associated with the trauma, Anedhonia, Amnesia, Restricted affect
   - Hyper arousal; poor concentration, hypervigilance, exaggerated startle response, irritability, insomnia
   - Impaired occupational and/or social functioning
   - Survivor guilt
   - Poor impulse control
   - Aggression and violence
   - Dissociative symptoms
   - Perceptual disturbances
   - Depression
   - Substance abuse
   - Other anxiety disorders e.g. panic attacks
   - Somatization disorder
   - Suicidal thoughts and ideation
   - Rejection
   - Humiliation
   - Illusions and hallucinations

b) The differential diagnosis are:
   - Depression
   - Malingering
   - OCD

- Anxiety disorder
- Borderline personality disorder
- Head injury
- Epilepsy
- Alcohol use disorders
- Substance related disorders
- Dissociative disorders

c) Comorbid disorders commonly found in PTSD
- Depression
- Substance abuse
- Other anxiety disorders
- Somatization disorder
- Suicide

d) Management of the patient

INVESTIGATIONS

- Full blood count
- U/E/Cs; to assess kidney function for drug administration
- LFTs; to assess liver function for drug administration
- TFTs; to rule out causes of depression
- HIV test
- Blood alcohol level measurement; substance abuse is a comorbid condition
- Urinalysis and drug screen; substance abuse is a comorbid condition
- CT head to rule out Head injury

TREATMENT

- Psychotherapy; offer trauma focused therapy
  - **Trauma focused CBT- 8-12 sessions**
  - **Eye Movement Desensitization Reprogramming (EMDR) - 8-12 sessions**
  - Behavior therapy
  - Family therapy
  - Support groups
- Pharmacotherapy; not first line
  - SSRIs
    - **Fluoxetine**
    - **Sertraline**
    - **Paroxetine**
  - TCAs

        - Amitriptylline
        - Imipramine
    - MAOIs
    - Mirtazapine
    - SNRI; venlafaxine

NOTE; for pharmacotherapy

- If responding; continue treatment for at least 12 months before gradual withdrawal
- If not responding consider increasing the dose within approved limits
- If necessary consider a different class of antidepressant or augment with olanzapine

POSTPARTUM PSYCHOSIS (PEUPERAL PSYCHOSIS)

Njeri, 24yr, gave birth a week ago. Husband finds her crying and child laid on floor next to assorted knives. She in mumbling something about “sacrifice”

a) The most likely diagnosis is Peuperal psychosis (postpartum psychosis)
   The differential diagnosis are:
   - **Depression since she has infanticidal tendencies**
   - **Bipolar mood disorder since postpartum psychosis is basically a bipolar 1 mood disorder**
   - **Schizophrenia since she has hallucinatory behavior**

Other differentials:

- General medical condition
  - Hypothyroidism
  - Cushing syndrome
- Substance induced psychosis
- Infection and toxaemia
- Neoplasm

b) Additional questions that one would ask the husband
   - **Sleep pattern**
   - **Past psychiatric history**
   - **Family history of mental illness**
   - **Number of pregnancies and deliveries**
   - **On mental state examination: mood abnormalities, hallucinations, delusions, suicidal and/or homicidal ideation**

Other symptoms include:

- Fatigue
- Insomnia
- Restless with episodes of fearfulness
- Emotional liability
- Suspiciousness
- Confusion

- Incoherence
- Obsessive concern about baby's health &welfare
- Irrational statements
- Delusion
- Hallucination; auditory
- Inability to move stand or walk is common.
- Feeling of not wanting to care for the baby
- Not loving the baby
- Wanting to harm baby or self or both
- Denial of birth
- Thought of being unmarried persecution

c) Management plan

INVESTIGATIONS

- Full haemogram
- ESR
- Random blood sugar
- U/E/Cs
- Calcium
- TFTs
- LFTs
- Drug screen
- ECG
- Infection screen (VDRL, HIV)
- CT/MRI scan

TREATMENT

It is a psychiatric emergency

- Psychotherapy
    - CBT
- Pharmacotherapy
    - Antimanic agents
    - Atypical antipsychotics
- Physical therapy: ECT
- Avoid breastfeeding when on medications, Nursing care with adequate mother and baby contact and suicidal caution

SCHIZOPHRENIA

Mr Abuto, 24yrs, brought after fighting with another student, accusing the other student has been discussing about him and alleging him of homosexuality. He has thought insertion, thought withdrawal and thought broadcasting

a) The most likely diagnosis is Schizophrenia

   The differential diagnosis are:

   - Psychotic disorder due to general medical condition
     - Neurological infection
     - Neurological trauma
     - Neoplasm
     - Huntington's disease
     - Multiple sclerosis
     - Cushing syndrome
     - Temporal lobe epilepsy
     - Drugs; analgesics, antihistamines, antibiotics, anticholinergics, antineoplastic, steroid hormones, cardiac glycosides
   - Psychotic disorder due to delirium or dementia
   - Brief psychotic disorder
   - Schizoaffective disorder
   - Schizophreniform disorder
   - Schizoid disorder
   - Paranoid disorder
   - Borderline personality disorder
   - Shared psychotic disorder
   - Delusional disorder
   - Mood disorder with psychotic features (depression or mania)
   - Substance induced psychotic disorder

b) Questions to be asked to confirm diagnosis; diagnosis confirmed using DSM IV
   - 2 or more symptoms lasting more than 1 month
     - **Hallucinations**
     - **Delusions**
     - **Disorganized speech**
     - **Grossly disorganized or catatonic behavior**

    - **Negative symptoms (alogia, altruism, affect flattening, anhedonia, avolution, attention deficit)**
- **Social and/or occupational functioning impairment and personality deterioration**
- Continuous signs of illness for at least 6 months with at least 1 month of active symptoms; **ASK DURATION OF SYMPTOMS**
- Schizoaffective and mood disorder should be ruled out
- **Substance abuse** and **general medical condition** should not be the cause
- If autistic disorder or pervasive developmental disorder are present, schizophrenia diagnosed if hallucinations and delusions present for at least one month

c) Clinical features of Schizophrenia
- Positive symptoms
    - Hallucinations; auditory>visual. Tactile, Gustatory and olfactory hallucinations can occur
    - Delusions; usually bizarre
    - Thought disorder: thought block, thought broadcasting, thought insertion, thought withdrawal, neoplogisms, associations, tangentiality, incoherent thoughts, ideas of reference, word salad, derailment
    - Disorganized behavior; catatonic stupor, catatonic excitement, catatonic negativisim, catatonic posturing, catatonic rigidity, echolalia, echopraxia
- Negative symptoms:
    - Anhedonia
    - Altruism
    - Avolution
    - Attention deficits
    - Affect flattening
    - Alogia
- Schneiderian first rank symptoms:
    - Voice; voice commenting, voice discussing or arguing
    - Thoughts; thought withdrawal, thought insertion, thought broad cast, audible thoughts (echo de la pensee)
    - Made; made will, made act(impulses), made affect(feeling), made volution, somatic passivity
    - Delusional perception
- Other clinical features:
    - Past medical history of depression, schizotypal and schizoid personality traits

- Impaired insight and judgment
- Intact sensorium
- The 4 A's of schizophrenia; associations (loosening of association), ambivalence, affect, autism

CLASSIFICATION OF SCHIZOPHRENIA

- Paranoid type schizophrenia
  - Characterized by presence of Delusions and hallucinations
  - Other positive and negative symptoms are absent
- Disorganized type schizophrenia
  - Characterized by disorganized speech, disorganized behavior, flat or inappropriate affect
- Catatonic type schizophrenia
  - Catatonic stupor
  - Catatonic posturing
  - Catatonic negativism
  - Catatonic mutism
  - Catatonic excitement
  - Catatonic rigidity
  - Echolalia and echopraxia
  - Waxy flexibility
- Undifferentiated type schizophrenia
  - Meets criteria of schizophrenia but is not Paranoid, Disorganized or Catatonic type.
- Residual type schizophrenia
  - Absence of delusions, disorganized speech, disorganized behavior
  - Continued negative symptoms or 1 or more attenuated positive symptoms
- Simple type schizophrenia

d) Outline the management of Schizophrenia

INVESTIGATIONS

- Full blood count
- U/E/Cs; to assess kidney function for drug administration
- LFTs; to assess liver function for drug administration
- TFTs; to rule out causes of depression
- HIV test
- Blood alcohol level measurement; substance abuse is a comorbid condition
- Urinalysis and drug screen; substance abuse is a comorbid condition

- Pregnancy test; some antipsychotic drugs are teratogenic
- CT head to rule out neurological impairement

TREATMENT

- Pharmacotherapy
    - Atypical antipsychotics
        - Clozapine
        - Olanzapine
        - Quetiapine
        - Risperidone
        - Ziprasidone
        - Amisulpiride
    - Typical antipsychotics
        - Phenothiazines:
            - Aminoalkyl compounds: Chlorpromazine
            - Piperidine compounds: Thioridazine
            - Piperazine compounds: Trifluperazine; fluphenazine
        - Butyrophenones; Haloperidol
        - Thiothanxines; Flupenthixol; clopenthixol
    - Depot antipsychotics
        - Fluphenazine decanoate
        - Flupenthixol decanoate
        - Zuclopenthixol decanoate
        - Haloperidol decanoate
        - Slow release risperidone
- Psychotherapy:
    - Biopsychosocial approach; social skills training, psychiatric rehabilitation
    - Family therapy, group therapy and individual support psychotherapy
- Physical therapy; ECT
- Hospitalize;
    - Suicidal
    - Markedly impaired normal functioning
    - Harmful to self and others

GOOD PROGNOSIS	BAD PROGNOSIS
Late onset	Early onset
Acute/sudden onset	Insidious onset
Positive symptoms	Negative symptoms
Paranoid or catatonic type	Disorganized or undifferentiated type
Variable course	Chronic course

Absent neuropsychologial impairment	Present neuropsychological impairment
Absent structural abnormalities	Present structural abnormalities
Good premorbid functioning	Poor premorbid functioning
Depressive symptoms	Absent depressive symptoms
Good social support (e.g. married)	Poor social support (e.g. not married)
Precipitating factors are present	Absent precipitating factors
Early treatment	No treatment or delayed treatment

THEORIES OF SCHIZOPHRENIA

1) Neurotransmitter theory
   a) Dopaminergic theory: hyperactivity of dopamine in the brain
   b) Increased epinephrine
   c) Reduced GABA; leads to hyperactivity of dopaminergic activity
2) Neuropathology
   - Increased D2 receptors in basal ganglia and limbic system
   - Reduced volume of amygdala, hippocampus and parahippocampus
   - Increased gliosis and neural atrophy in periventricular diencephalon
   - Reduced cortical neurons in prefrontal area
   - Enlarged lateral and 3rd ventricle
3) Gene theory
   - Incidence in general population is 1%
   - Incidence if present in one 1st degree relative is 10-12%
   - If both parents are schizophrenics; 40% risk in children