Module on Care of Mental, Neurological and Substance Use Disorders for MO, PHC/UPHC
What is Mental Health?

As per the definition of World Health Organization (WHO), health is "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Thus, for an individual to stay healthy, apart from physical health, mental well-being is equally important. It has been proposed by WHO ‘that there can be no physical health without mental health’.
Mental well-being of an individual implies that an individual is able to:

· Realize his or her own potentials,
· Cope with the normal stresses of life,
· Work productively and fruitfully, and
· Make a contribution to her or his community.
BIO-Psycho-Social Cause of Mental Illness

Mental Health Disorders: Combination of Causing Factors

**Biological factors**
- Chemical imbalance in brain
- Genetics
- Brain injury
- Chronic illness
- Medications

**Psychological factors**
- Poor self-esteem
- Negative thinking

**Social factors**
- Family conflict
- Poverty
- Unemployment
- Poor housing
- Having a baby
- Infertility

**Events in childhood**
- Violence and abuse
- Emotional neglect
- Death of a parent
TYPES OF MENTAL DISORDERS

COMMON MENTAL DISORDERS (CMDS)

- Predominantly Depressive Disorder (mild/moderate)
- Predominantly Anxiety Disorder
- Predominantly Somatization Disorder

SEVERE MENTAL DISORDERS (SMDs)

- Psychosis
- Mania/Bipolar Disorder
- Severe Depression

SUBSTANCE USE DISORDERS (SUDS)

- Tobacco Use Disorder
- Alcohol Use Disorder
- Other Substance Use Disorder
SCREENING - IDENTIFICATION – MANAGEMENT OF MENTAL DISORDERS BY MOS

Patient consulting for any complaint/ailment

Screen for Mental Disorders with 3 Golden Questions

If all responses are negative, then treat the medical ailment and manage as usual

If any one or more of the 3 responses are positive

Probe further to categorize/diagnose under CMD vs SMD vs SUD

Consult DMHP Psychiatrist in case of doubt

Treat with appropriate pharmacological management and basic psychoeducation about the disorder

Rule out possible medical comorbidities and order investigations if necessary

Refer to Psychiatrist if indicated

Arrange follow up and/or direct to CHWs in case of any liaison

Review for improvement and/or any side effects with medications
Any case visiting the PHC shall be asked the following **3 GOLDEN QUESTIONS** to screen for Mental Disorders in addition to the regular assessment:

- Feeling sad, worried or anxious (This is generally called the 6th vital sign)
- Disturbance in sleep and appetite
- Recent change in behavior (eg. Found to be talking to self, poor self-care)
The following are the most common physical conditions associated with Mental Disorders that need to be ruled out:

- Endocrine conditions like Hypothyroidism, Diabetes Mellitus, etc
- Cardiovascular Conditions like Ischemic Heart Disease, Essential Hypertension, Stroke, etc.
- Nutritional Deficiencies like Anaemia, Vitamin D3 and B12, etc

If one of the above-mentioned symptoms is present for a substantial period of time (varies with specific disorder) and has been interfering in the daily routine of the patient causing significant subjective distress (or distress to family members in case of SMDs) then the patient is suffering from a mental disorder.
• Educate that it is also a medical illness caused due to chemical changes in the brain, similar to any physical condition like diabetes or hypertension.

• Inform that it is common among general population and assure that it is treatable with medications that are available free of cost at government hospitals.

• However, just like Diabetes and Hypertension, these conditions also require long term treatment in view of long-standing symptoms.

• Medications take 2-4 weeks to help reduce their symptoms, hence avoid discontinuing medications abruptly as it can cause worsening or relapse of symptoms.
• Usually, these medications are safe to use with minimal side effects and does not damage kidney or liver. If any discomfort/side effects of medications are observed, kindly bring it to the notice during next visit.

• Suggestions like maintaining a daily activity schedule, practicing yoga, meditation, exercise, etc. (for CMDs especially) alongside good sleeping and eating habits can be provided as lifestyle modifications measures.

• They will be followed up regularly at the PHC by the Medical Officer and by ASHA/MPW at the doorstep (home visits). If any further requirements in case of worsening or no relief from symptoms, then they will be referred to a Specialist.
MANAGEMENT INCLUDING PHARMACOLOGICAL AND NON-PHARMACOLOGICAL TIPS

• Prudent ordering on investigations as there is no test for confirming a diagnosis.

• Investigations would be required to rule out/check on the current status of comorbid or contributing causes like nutritional deficiencies and endocrine disorders and a few baseline investigations before starting psychotropi.

• Advisable investigations include Complete Blood Count, blood sugar levels, Thyroid function tests, ECG, Liver function tests, Renal function tests, and Lipids as per clinical judgment. Need for a CT or an MRI brain only when necessitates, eg. In case of suspected head injury in a delirious patient due to alcohol withdrawal, etc.
• Drug of choice shall be decided based on existing comorbidity and patient profile

• Always start at low dose and hike further by 3-5 days and avoid polypharmacy within psychotropic medications.

• Duration of prescription shall be for a short term (usually 2-4 weeks) during the first visit and subsequent visits shall be planned accordingly.

• In case of any doubts, either refer or contact the DMHP Psychiatrists.
FOLLOW UPS & REFERRALS (INCLUDING IDENTIFYING CASES FOR EMERGENCY CARE)

• Compliance with treatment plan including confirmation of proper prescription practice.

• Degree of improvement and need for dose titration.

• If improvement is <50% at 4 weeks, increase the dose further and continue the same dose if >50% or satisfactory improvement reported by patient/family.

• Watch for noticeable side effects (as for each drug) and address them accordingly.

• Subsequent follow-ups can be paced between 2-3 months as per clinical judgment.
INDICATIONS FOR REFERRAL

Referrals should be made to secondary or tertiary care mental health services, wherever a psychiatrist is available, for initial diagnosis and initiation of treatment in the following situations:

- Children with developmental health conditions e.g. Autism
- Children with mental health/developmental problems requiring medications e.g. Attention Deficit Hyperactivity Disorder (ADHD)
- Persons requiring initiation of Opioid Substitution Therapy (OST)*
- Persons with severe mental health conditions (SMDs)
• Mental health conditions comorbid with physical disorders e.g. Parkinson’s disease with depression

• Multiple co-existing mental health conditions e.g. Depression with Obsessive-Compulsive Disorder (OCD)

• High risk of self-harm/suicide

• High risk to others (violence)
Referrals from PHC to STC of patients whose treatment has been started at PHC, in following conditions:

- If the person does not respond to adequate dose and duration of more than one class of medication indicated for that disorder, using one medicine at a time
- If acute agitation does not subside despite appropriate treatment
- Serious side effects with pharmacological interventions after emergency management of acute side effects (only if warranted)
COMMON MENTAL DISORDERS
COMMON MENTAL DISORDERS

A. Depressive Disorders

B. Anxiety Disorders

C. Somatization Disorder/ Psychosomatic disorders

Etiology of CMDs

• Common mental health disorders are multi-factorial in origin. The risk for developing these disorders is inherited genetically. At the molecular level there is derangement in serotonin and norepinephrine levels in the brain.
Depressive disorder is characterized by the presence of pervasive and persistent low mood, loss of interest and enjoyment in ordinary/routine things and experiences, and increased fatiguability for at least 2 weeks.

Risk factors:

• Depressive disorder in first-degree relatives.

• Stressful life events.

• Chronic or disabling medical illness. Ex- Diabetes, obesity, cardiovascular diseases.
CLINICAL FEATURES

**CORE SYMPTOMS**

- **Pervasive low mood/sadness** - sadness is present on almost all days, present during all situations (even joyous moments).

- **Loss of interest and enjoyment** - there is loss of interest in daily activities, work, loss of enjoyment of previously pleasurable activities.

- **Reduced energy** - there is feeling of decreased bodily energy, easy fatiguability (disproportionate to work done). All of which leads to reduced activity.
ADDITIONAL SYMPTOMS

- Reduced concentration and attention - during daily activities and work.
- Reduced self-esteem and self-confidence.
- **Hopelessness** - bleak and pessimistic view of the future.
- **Ideas of guilt and unworthiness** - the patient is self-reproachful and self-critical. He/she also feels less worthy.
- Death wishes, ideas, or acts of self-harm or suicide.
- Diminished appetite, disturbed sleep, reduced weight, marked loss of libido

Presence of at least TWO core symptoms and at least THREE additional symptoms for more than TWO weeks is required to confirm the diagnosis of Depressive Disorder.
Differential Diagnosis

• Hypothyroidism

• Anaemia

• Chronic infections - TB, AIDS.

• Parkinson’s disease

• Adjustment disorder

• Grief
ANXIETY DISORDERS COVERED ARE:

- Generalized Anxiety Disorder
- Panic Disorder
- Social Anxiety Disorder
Generalized Anxiety Disorder (GAD) is characterized by excessive fear, tension, stress, anxiety, and worry, about a number of events or activities, occurring on more days than not for a period of at least 6 months.

**Clinical features**

An experience of excessive and **uncontrollable anxiety/tension/worry with no obvious reason or trivial reason**, for many months (>6 months). The characteristics of this anxiety/tension/worry are;

- **Apprehension**—the patient worries about misfortunes (about family, health, finances, work, etc), feels ‘on the edge’, and has difficulty concentrating.
• **Motor tension**- being restless, fidgety, trembling, inability to relax, tension headaches.

• **Autonomic overactivity**- light-headedness, sweating, tachycardia or tachypnoea, epigastric discomfort, dizziness, dry mouth etc.

The above symptoms must be present for at least 6 months to diagnose Generalized Anxiety Disorder.
Differential Diagnosis

- Hyperthyroidism
- Pheochromocytoma
- Alcohol, benzodiazepine, opioid withdrawal
- Social anxiety disorder
- Obsessive compulsive disorder
- Adjustment disorder
- Post-Traumatic Stress Disorder
PANIC DISORDER

Panic Disorder is characterized by recurrent, unexpected attacks of extreme anxiety (panic), accompanied by worry about having another attack for at least one month.

Clinical Features
• Recurrent attacks of intense anxiety (panic), are not restricted to any particular situation and are therefore unpredictable.
  • Anticipatory anxiety- persistent fear of having another attack.
• Panic attack is an abrupt surge of intense fear or discomfort that reaches a peak within minutes and during which time, any of the following symptoms occur:

• Palpitations, sweating, tremors, the sensation of shortness of breath, feeling of choking, chest discomfort, nausea, feeling dizzy, tingling or numbness, fear of losing control or going crazy, fear of dying.

The above symptoms must be present for at least one month and should not be explained by any medical illness.
Differential Diagnosis

• Anemia
• Heart failure
• Paradoxical atrial tachycardia
• Mitral valve prolapse
• Asthma
• Pulmonary embolus
• Epilepsy
• Transient Ischemic Attack
• Cerebrovascular accident
• Alcohol, benzodiazepine, opioid withdrawal
• Hypoglycemia
• Hyperthyroidism
• Pheochromocytoma
• Hypoparathyroidism
• Premenstrual syndrome
• Specific phobias
• Social anxiety disorder
• Agoraphobia
Social Anxiety Disorder is characterized by irrational, excessive and disproportionate fear of humiliation or embarrassment in social settings.

**Clinical symptoms**

- Fear of scrutiny by other people- others are observing my clothes, my hair style, my walking style, my way of speech, my eating style etc.

- Avoidance of social situations (fear of embarrassing oneself)- avoiding eating in public, speaking in public, conversing with people of opposite sex.

- Associated with low self-esteem and fear of criticism.
Associated symptoms

- Blushing, hand tremors, nausea, urgency for micturition, panic attacks.

The above symptoms usually begin in adolescence and take many years before patients seek help.
Differential Diagnosis

• Normal shyness
• Agoraphobia
• Panic disorder
• Generalized anxiety disorder
Somatization disorders are characterized by repeated presentation of physical symptoms without a physical cause. Patients request repeatedly investigations in spite of negative findings and reassurances by doctors.

Clinical symptoms
- Presents with multiple, recurrent physical symptoms for many months.
- **Multiple visits to doctors, (Doctor Shopping) with repeated negative investigations** - persistent refusal to accept advice or reassurance that there is no physical explanation for the symptoms.
Common symptoms

• Gastrointestinal sensations - pain, belching, regurgitation, nausea etc.

• Abnormal skin sensations - itching, burning, tingling, numbness etc.

• Pains - limb pain, back ache, head ache etc.

• Sexual and menstrual complaints.

THE ABOVE SYMPTOMS SHOULD BE PRESENT FOR AT LEAST SIX MONTHS FOR DIAGNOSING SOMATISATION DISORDER.
Differential Diagnosis

• General medical conditions producing similar symptoms. Ex- gastritis, arthritis, anemia, chronic infections (HIV, TB), peripheral neuropathies, endocrinopathies, connective tissue disorders.

• Chronic fatigue syndrome

• Fibromyalgia

• Depressive disorder

• Anxiety disorders
INVESTIGATION GUIDELINES FOR CMDS

• No laboratory investigation is required for making a psychiatric diagnosis.

• Investigations are used to-
  ◦ Rule out any other medical etiology leading to symptoms mimicking psychiatric illness.
  ◦ Help in ruling out co-morbid medical illnesses, so that the medications can be selected appropriately.

• Complete Hemogram, liver functions test, renal function test, serum electrolytes, thyroid function tests and ECG are NOT advised to make diagnosis.
WHEN TO REFER IN CMDs?

• When diagnosis is NOT clear
• No adequate response (less than 50%) despite an increase in initial dose in 4 weeks of pharmacotherapy
• Expressing active suicidal risk
• When multiple comorbid other physical conditions or multiple medications
• Pregnancy or lactating mother
• Children below 16 years
• Hepatic, or renal diseases
The main neurochemical implicated in the etiology of depression is reduced levels of serotonin and to some extent reduced levels of norepinephrine.

So, antidepressants basically inhibit the reuptake of Serotonin and norepinephrine thereby increasing the level of serotonin and norepinephrine in the brain.

The main classes of drugs used in depression include:
- Selective serotonin reuptake inhibitor (SSRI)
- Serotonin-norepinephrine reuptake inhibitor (SNRI)
- Tricyclic antidepressants (TCA)
- Newer antidepressants
• Tricyclic antidepressants, even though very effective, they are not first-line due to their poor tolerability profile.

• Central Government has included Escitalopram, Fluoxetine, Amitriptyline in the National essential drug list.

• Escitalopram and Fluoxetine belong SSRI class of drugs and amitriptyline belongs to TCA class of drugs.
<table>
<thead>
<tr>
<th>Sr.No.</th>
<th>Medication</th>
<th>Adult dose (mg/day)</th>
<th>Side effects</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Amitriptyline</td>
<td>Acute dose: Start with 25-50mg, (Can be increased upto 200mg/d according to tolerability &amp; response)</td>
<td>Maintenance dose: Same as acute dose; Anticholinergic side effects (Dryness of mouth, constipation); Orthostatic hypotension</td>
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<tr>
<td>2</td>
<td>Escitalopram</td>
<td>5-20mg</td>
<td>Same as acute dose: Same as acute dose; Common- gastritis (self limited); Sexual side effects; Hyponatremia in elderly</td>
</tr>
<tr>
<td>3</td>
<td>Fluoxetine</td>
<td>20-40mg/day</td>
<td>Same as acute dose: Same as acute dose; Sexual side effects; Insomnia</td>
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TREATMENT GUIDELINES (PHARMACOLOGICAL INTERVENTION) : SOMATIZATION DISORDER

- Main neurochemical implicated in development of somatization disorder is norepinephrine.
- Therefore leading to reduced pain perception threshold.
- Tricyclic Antidepressants (TCAs) are first line drugs, among which Amitriptyline is first choice.

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NON – PHARMACOLOGICAL INTERVENTIONS (PSYCHOSOCIAL INTERVENTIONS)

1. Psychoeducation (Counselling about illness, medication compliance and follow-ups)

- Counseling is not psychotherapy, counseling is in fact practiced by every doctor in one or the way while dealing with patients of different medical illnesses, similar thing can be practiced for psychiatric illnesses as well.

- Counseling should include information about nature of illness, duration of treatment, important side effects, need of regular follow-ups, setting realistic expectations from treatment and practical tips to handle stressors.

- Explaining about the illness, duration of treatment and the need for strict adherence to treatment.

- Addressing on going stressors with the help of brief supportive counselling.
2. **Follow up care, frequency and follow up assessment at primary care level**

Follow up to be done *every month*

- In follow up need to assess for improvement in symptoms and side effects that are relevant to the medication as mentioned in the table above.

- At the end of 1st month: If improvement is less than 50% then to consider increasing the dosage to next level (from 25mg to 50mg of amitriptyline).

- At the end of 1st month: If improvement is more than 50% then consider observing for a period of another month before deciding on dose titration, and if the improvement remains less than 50% even after 2 months then consider increasing the dosage to 50mg/day.
Patient consulting for any medical ailment

Screen for mental disorder with 3 golden questions

If patient has low mood/reduced sleep & appetite

Screen for depression

If patient has anxious mood/excessive worry/fear

Screen for anxiety

If patient has multiple physical complaints

Screen for somatization disorder

If at least 2/3 core symptoms & 3/9 additional symptoms present for > 2 weeks (see text)

Depressive disorder

SSRI +/- BZDs Counselling

Do regular follow-ups—ensure treatment adherence, assess for symptom improvement

Refer to psychiatrist in case of treatment resistance/partial response, intolerance to medications
Thank You